GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL AND DIAMOND DRILL REPORT ON THE MUREX CLAIM GROUP

NANAIMO MINING DIVISION
92F/11 & F14
49° 45' 30" N 125° 15' 00" W
WORK PERFORMED IN 1988

TEXT

Part 1 of 2

19581

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49°45'30"N 125°15'00"W

WORK PERFORMED IN 1988

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Dennis R. Bull
Lyndon Bradish
February 1989

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1.1 Location and Access

The Murex property is located on the southeast flank of Mt. Washington, which lies along the eastern margin of the northwest trending Vancouver Island Ranges in the Insular Belt.

The property is approximately 20 km due west northwest from Courtenay on Vancouver Island, B.C. Road access from Courtenay to the south boundary of the property is by paved road for the first 10 km, followed by approximately 20 km of well maintained gravel logging road which eventually leads up to the Mt. Washington alpine ski area. This road is maintained throughout the year and is ploughed free of snow during the winter.

The location of and the road access to the Murex property are shown in the Property Location Map (Figure #1).

Once on the property, travel is facilitated by several logging roads which are still, for the most part, in good condition. However, access via these roads is only possible from late spring to early winter, as during the winter months they are not ploughed free of snow.

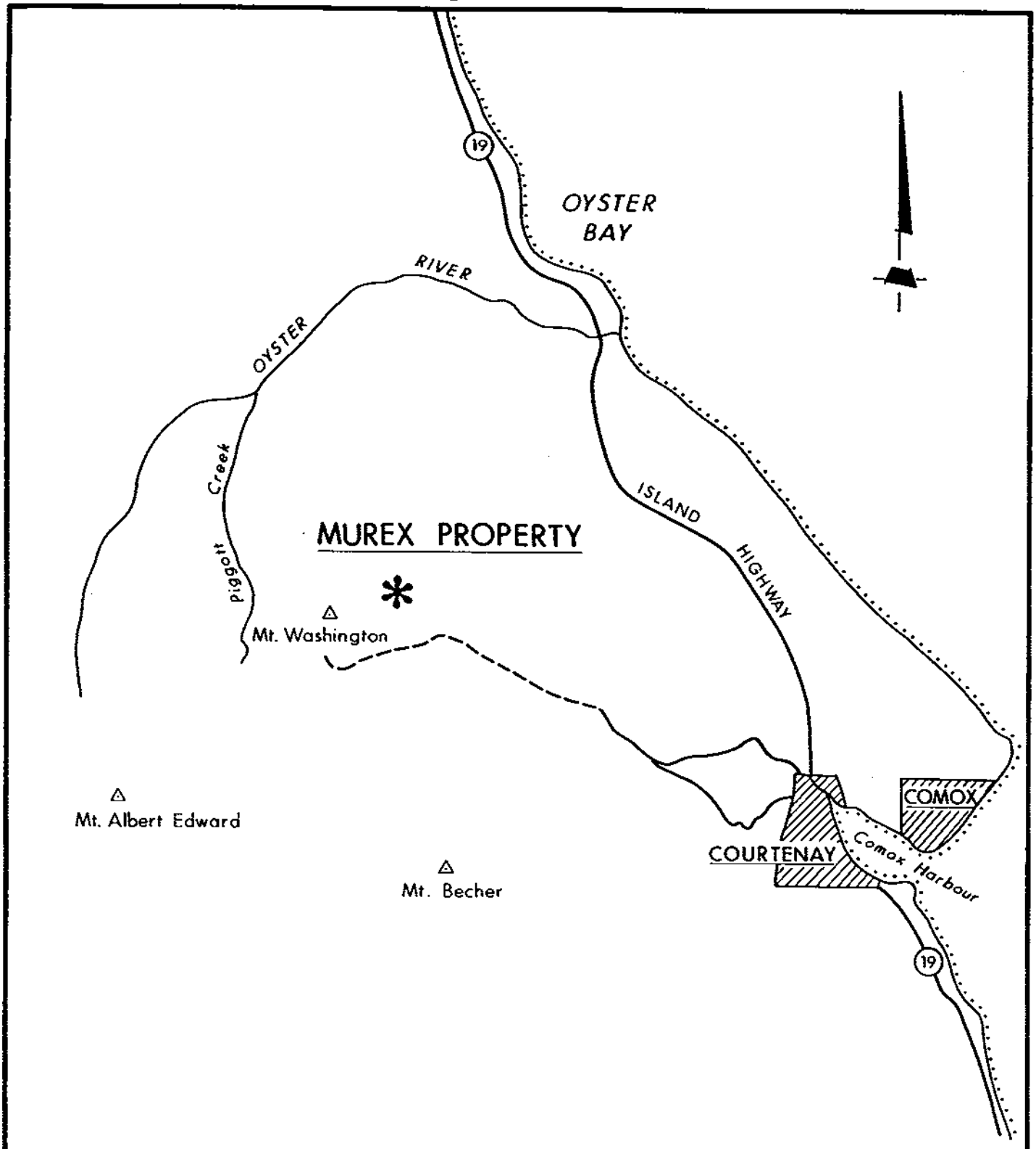
1.2 Physiography, Climate & Vegetation

Topographically, the Mt. Washington area varies from moderate to precipitous. To the east, the coastal plain, approximately 6 km wide, rises from sea level to an average elevation of 80 metres. Small towns and farmlands cover this coastal plain.

From the coastal plain, Mt. Washington rises with increasing steepness towards the west.

The Murex property spans the north eastward draining Murex Valley on the southeast flank of Mt. Washington. At its eastern end, the Murex Valley is gently sloping towards the east. Moving westward, topography becomes increasingly steep, terminating in cliffs ~100 m high.

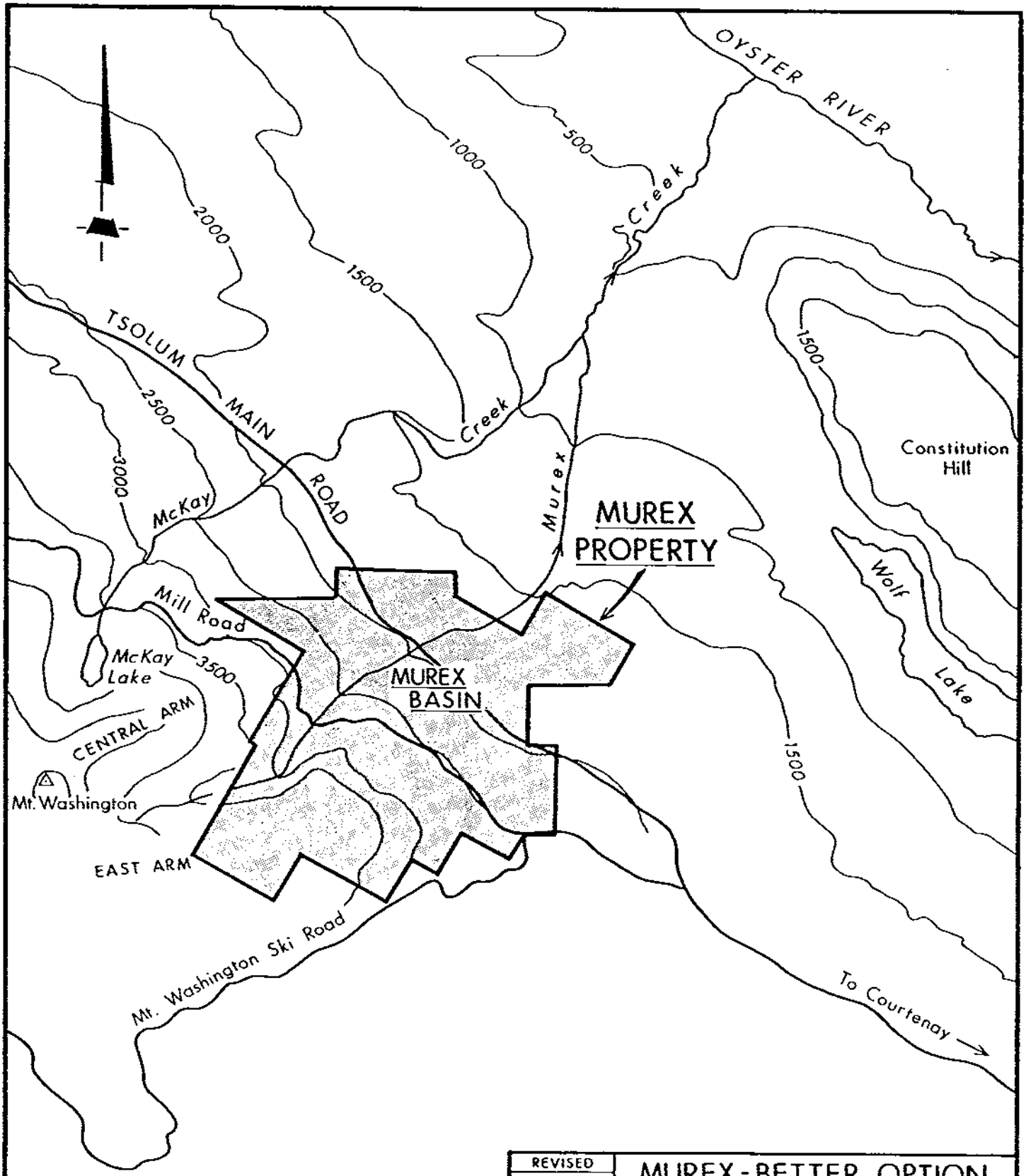
In the Mt. Washington area, evidence of recent glaciation is noted by cirque development, glacial striae, and a thin but pervasive blanket of glacial till.



Km. 5 2.5 0 5 10 Km.

REVISED	MUREX-BETTER OPTION
	PROPERTY LOCATION
PROJ. No. 177	SURVEY BY: D.R. Bull DATE: June 1988
N.T.S. 92F/14	DRAWN BY: J. Serwin SCALE: 1:250,000
DWG. No. 1	NORANDA EXPLORATION OFFICE: VANCOUVER

VANCAL 11927



REVISED	MUREX - BETTER OPTION
	CLAIMS LOCATION
PROJ No. 177	SURVEY BY: D.R. Bull DATE: Sept. 1988
N.T.S. 92F/14	DRAWN BY: J. Serwin SCALE: 1:50,000
DWG. No. 2	NORANDA EXPLORATION
	OFFICE: VANCOUVER

VANCAL 11927

The Murex Valley is a glaciate "U" shaped valley, situated between the central and east arms of Mt. Washington, as shown in Figure #2. The basin is open to the northeast and is drained by Murex Creek which has cut a narrow but steep walled V-shaped valley in the basin floor.

Elevations on the Murex property vary between 460 m at the NE end, up to 1400 m at the west end.

October to May is cold and wet with significant snowfall at higher elevations. Snow accumulations often exceed 5 metres and persist well into late spring and early summer. For this reason, work in the upper part of the Murex Basin would be extremely difficult prior to mid-June, whilst at lower elevations work can normally commence a month earlier.

During most summer seasons, bright sunny days and dull rainy days occur in approximately equal numbers, with daytime temperatures averaging 18~20°C and occasionally reaching 25~30°C. In spring and fall the days are cooler, and generally more rainy. Yearly precipitation averages 100 cm.

The vegetation in the Mt. Washington area consists of a mixed coniferous forest of Hemlock, Red & Yellow Cedar, Douglas Fir and Balsam Fir. Considerable logging activity has occurred in the region and much of the land is now in various stages of re-growth.

The transition from forest to alpine vegetation occurs at approximately 1500 m, with trees becoming progressively smaller and giving way to krumholtz, heather and grasses.

On the Murex property all of the ground is below timberline and a considerable amount of logging activity has taken place. The lower half of the property has been logged off and is presently in various stages of re-growth between 5 to 20 years. The 5 year re-growth areas are fairly easy to traverse on foot, except for an abundant amount of deadfall. The 10 to 20 year re-growth areas have not yet been thinned out and foot travel is difficult due to the extreme thickness of the re-growth. The upper half of the property is primordal forest and foot travel is moderately difficult, due to dense undergrowth of salal, huckleberry, salmonberry and alders.

1.3 Property Description

1.3.1 Claims

The Murex group, situated in the Nanaimo Mining Division, is comprised of the following claims:

NAME	RECORD NO.	TYPE	UNITS	EXPIRY DATE
Fox 1	002401	Two Post	1	June 11, 1998
Fox 2	002402	" "	1	" " "
Fox 3	002403	" "	1	" " "
HKR 1	002404	" "	1	" " "
HKR 2	002405	" "	1	" " "
HKR 3	002406	" "	1	" " "
HKE 4	002407	" "	1	" " "
HKR 5	002408	" "	1	" " "
HKR 6	002409	" "	1	" " "
HKR 7	002410	" "	1	" " "
McKay 1	002825	MG	6	Nov. 25, 1998
Mike 6	002399	Two Post	1	June 11, 1998
Mike 7	002400	" "	1	" " "
Mink 1	001580	" "	1	Sept 27, 1998
Mink 2	001581	" "	1	" " "
Mink 3	001582	" "	1	" " "
Mink 4	001583	" "	1	" " "
Mink 5	001584	" "	1	" " "
Mink 6	001585	" "	1	" " "
Mink 7	001586	" "	1	" " "
Mink 8	001587	" "	1	" " "
Murex 1	002824	MG	4	Nov. 25, 1998
MWC 101	037196	Two Post	1	Sept 13, 1998
MWC 102	037197	" "	1	" " "
MWC 103	037198	" "	1	" " "
MWC 104	037199	" "	1	" " "
MWC 105	037200	" "	1	" " "
MWC 106	037201	" "	1	" " "
MWC 115	037210	" "	1	" " "
MWC 116	037211	" "	1	" " "
MWC 117	037212	" "	1	" " "
MWC 143	037078	" "	1	" " "
MWC 144	037079	" "	1	" " "
MWC 147	037082	" "	1	" " "
MWC 148	037083	" "	1	" " "
MWC 151	037227	" "	1	" " "
MWC 152	037228	" "	1	" " "
MWC 153	037229	" "	1	" " "
MWC 294	037131	" "	1	" " "
Stoat 1	001576	" "	1	Sept 27, 1998
Stoat 2	001572	" "	1	" " "

With the exception of the McKay 1 and Murex 1 claims, which were staked and are owned by Noranda, all claims listed above are owned by Better Resources Limited. The rights to base metal belong to Better Resources by virtue of their agreement with Fording. The rights to precious metals belong to Better Resources by virtue of their staking of Crown lands.

Noranda is the current operator and has the option to earn a 51% interest in the Murex claims owned by Better Resources, with Better Resources retaining a 49% interest.

1.3.2 Crown Forest Licence Agreement

A summary of the Licence Agreement between Noranda and Crown Forest is shown in Appendix 1.

1.4 History and Previous Exploration Activity

Mount Washington has been the focus of precious and base metal exploration for almost 50 years. During the great depression era of the 1930's gold panning was a popular occupation on the creeks around the Mount Washington area. Various prospectors searched the area for the sources of the gold found in the creeks.

In 1940 the Mackay brothers discovered and staked gold bearing veins on the central and west arms of Mt. Washington. Following this discovery, K.J. Springer, in 1941, performed trenching of the veins. During 1944 & 1945 the Granby Consolidated Mining, Smelting & Power Company expanded the trenching programme and drove several short adits. At that time the amount of gold mineralization found was considered sub-economic.

From 1951 to 1960 Noranda explored the Mt. Washington area and discovered a flat lying zone of copper bearing mineralization west of McKay Lake (Figure 2). During 1963 & 1964 Consolidated Mining & Smelting Company carried out diamond drilling on the zone previously discovered by Noranda, and also in the Murex Basin where low grade Cu mineralization was intersected within the Karmutsen basalts.

From 1965 to 1966 the Mount Washington Copper Company mined, by open pit method the deposit west of McKay Lake. They mined and processed a total of 400,000 tons of ore grading 1.16% Cu, 0.01 oz/ton Au and 0.5 oz/ton Ag. In 1969 Marietta Resources carried out an exploration programme on the West Arm, Central Arm and in

the Murex Basin of Mount Washington. The exploration programme included 16 diamond drill holes totalling 6947 feet (2118 metres) some of which encountered minor Au, Ag, & Mo mineralization.

During the period from 1972 to 1980 Imperial Oil conducted an extensive exploration programme on Mt. Washington, in order to evaluate the potential for Cu-Au deposits. Their comprehensive programme included geological mapping, soil, stream sediment and water geochemistry, airborne and ground geophysics and diamond drilling. From the results of this work, the conclusion was drawn that the potential for a large tonnage deposit of suitable grade for mining was low. They then performed leaching tests but concluded that leaching would not be economic.

From 1983 to 1986 Better Resources conducted an exploration programme focused on various parts of Mount Washington including the Murex Basin. The programme in the Murex Basin consisted of grid establishment, soil geochemistry surveys and diamond drilling. Significant intersections of Cu and Au mineralization were discovered in several of the diamond drill holes.

Thirty-nine claim units in the Murex Basin were optioned by Noranda from Better Resources in September 1987. During the fall of 1987, grid establishment and preliminary geophysical, geochemical and geological surveys were performed by Noranda. (See report: Murex-Better Option 1987).

1.5 Personnel & Contractors

The following Noranda personnel were involved in the Murex exploration programme at various times during the 1988 field season:

D.R. Bull (Project Geologist), D. Dempsey, C.D. Frew, T. McIntyre (Party Chief), D. Lewis, S. Louden, I. Saunders.

The personnel listed above performed line grid establishment, soil sampling, geological mapping and rock sampling, diamond drilling programme supervision, core logging, photography, and splitting for assay.

Geophysical surveys were conducted by Pacific Geophysics Ltd., as well as W. Kerby and S. Kaiser of Noranda.

Diamond drilling was performed by M & B Drilling Ltd. of Powell River, B.C. Drill access roads and pads were prepared by Dennis Phye Bulldozing of Courtenay, B.C.

2.0 OBJECTIVES, TECHNIQUES AND PRODUCTION

2.1 Overview

The objectives for the 1988 field programme were as follows; (1) follow-up of target areas identified during the fall of 1987. (2) identification of additional target areas. (3) test targets by drilling.

Target areas were named Zones A, B, C, D and E. They are shown on Figure 3 and are described below.

2.2 Zone "A" and Murex Creek

During 1987 Zone "A" was identified as an area of elevated Cu, Au, Ag and As values in soils, at least 900 m long by 500 m wide, trending approximately Az 100°. This geochemical anomaly is matched by an E.M. anomaly of similar proportions and orientation.

In 1988 follow-up work was as follows:

Since both the geochemical and geophysical anomalies were oblique to the original grid lines (Az 330°) a mini grid was established with lines perpendicular to the trend of the anomalies.

The Zone "A" mini grid consisted of 1.1 km of scope-corrected baseline at Az 110° and 11.25 km of cross lines spaced every 100 metres. The base line (200+00N) was put in using compass bearing and nylon chain, the cross lines were installed using compass and hip chain measurements. Lines were marked with flagging tape and cutting of underbrush was done as necessary. Stations were erected every 25 metres, using flagged and labelled wooden pickets. Electromagnetic and magnetometer surveys were then run over all cross lines of the mini grid. Following the results of this work, an Induced Polarization survey was performed on Lines 203E, 205E and 207E.

Geological mapping on the lines of the new mini grid was done to compliment the mapping performed on the original grid lines in 1987. Unfortunately, outcrop in this area is sparse due to overburden.

Three diamond drill holes (NMX-16, 17 & 18) were drilled to test the targets identified by the geochemical and geophysical (E.M. & I.P.) surveys.

Detailed geological mapping and rock sampling was performed in the bed and walls of Murex Creek where Cu-Ag sulfide mineralization occurs within the matrix of basalt fragment breccias.

Panel samples of 1m x 1m were taken in order to obtain representative Cu-Ag values from the breccias exposed in the creek. Chip samples were taken across mineralized quartz veins and bounding host rock. The results of this mapping and sampling are shown in Figure 5.

Zone "A" and Murex Creek Production Summary

Grid Establishment	12.35 km	
Mag	11.25 km	
E.M.	11.25 km	
I.P.	1/20 km	
Geological Mapping	26 mandays	
Detailed Rock Sampling	10 mandays }	panel and
Detailed Rock Sampling	58 samples }	chip
Topo Profiles	0.95 km	
Diamond Drilling	540.99 metres	
Core Split & Analyzed	297 samples	

2.3 Zone "B"

During 1987, Zone "B" was identified as an area of elevated Au, Ag, Cu and As values in soils, approximately 500 metres long by 200 metres wide and trending Az 060°. No significant E.M. response was obtained over this area, but the geochemical anomaly overlies the south flank of an elongate mag high which trends Az 060°.

Outcrop exposure in this area is sparse, due to overburden. In 1988, follow-up work consisted of further geological mapping and an I.P. survey on Line 506E.

Zone "B" Production Summary

Line Rehab	0.7 km
I.P.	0.7 km
Geological Mapping	4 mandays

2.4 Zone "C"

Previous soil geochemistry in 1987 identified Zone "C" as an area of elevated Cu values.

During the 1988 season, geological mapping was performed in this area, together with I.P. surveys on Lines 506E and 509E.

Zone "C" Production Summary

Line Rehab	0.6 km
I.P.	0.6 km
Geological Mapping	6 mandays

2.5 Zone "D"

Previous drilling by Esso in 1974, and Better Resources in 1986 intersected significant Au & Cu mineralization hosted within the matrix of mixed lithology breccia in this area. During 1987, soil and rock geochemistry surveys produced anomalous but erratic results.

E.M. & I.P. geophysical surveys were performed during the 1987 season. Results of the E.M. surveys were masked by graphite and pyrrhotite in sediments, and I.P. results were enigmatic.

The purpose of the 1988 programme was to better identify the zone of mineralization. Detailed geological mapping and rock (channel and chip) sampling was followed with the drilling of 6 diamond drill holes (NMX 88-19, 20, 21, 22, 23, 24).

This work was completed by late fall, when it was recognized that a better control was required. For this purpose a new mini grid was planned, together with detailed soil sampling, and geophysics. Approximately half of the new grid was established and 4 soil horizon test pits were dug before deteriorating weather conditions necessitated shutting down the field programme for the winter months.

Zone "D" Production Summary

Detailed Geological Mapping	37 mandays
Trenching & Rock Sampling	22 mandays
Rock Geochem	53 samples
I.P.	1.40 km
Diamond Drilling	525.91 metres
Core Split & Analysis	278 samples
New Line Grid (Contractor)	6.45 km
Soil Profile Test Pits	4 pits
Soil Sampling	43 samples

2.6 Zone "E"

Zone "E" was identified following additional line grid establishment and soil sampling on the Main Grid.

The Main Grid baseline (100+00N) was extended from 525E to 536E and 14.3 km of cross lines were run. On the new cross lines, "B" horizon soil samples for geochemistry were collected at 25 m intervals and analyzed for Cu, Ag, Au, As by Noranda's Vancouver laboratory.

Geological mapping, at a scale of 1:5,000 was performed on the new lines.

Zone "E"

Line Establishment	15.4 km
Soils	583 samples
Geological Mapping	10 mandays

TOTAL 1988 PRODUCTION

Line Grid Establishment	35.5 km
Mag	11.25 km
E.M.	11.25 km
I.P.	3.90 km
Geological Mapping	83 mandays
Rock Sampling (including hand trenching)	41 mandays
Rock Geochem	211 samples
Soil Pits	4 pits
Soil Samples	626 samples
Diamond Drilling	1066.9 metres
Core Split & Assays	575 samples

2.8 Geological Surveys

Geological mapping of the Murex property was continued in order to cover those areas not examined during the fall 1987 programme, and to map in greater detail those areas of greatest economic interest.

General mapping was carried out at a scale of 1:5,000 by traversing along grid lines, logging roads and stream beds.

Detail mapping and rock sampling in Murex Creek was done at a scale of 1:500 and in the D-Zone at a scale of 1:1,000.

The geological mapping was conducted by T.J. McIntyre, with contributions by D.R. Bull.

Outcrop exposure in the Murex Basin is moderate to sparse. In the western part of the basin, where the topography is steeper, exposure is approximately 10% of the land surface. Towards the east, the topography progressively flattens out and glacial drift covers most of the bedrock, reducing exposures to less than 5%.

The results of this seasons work have been added to an updated version of the Property Geology Map, Figure 4a, scale 1:5000. The detailed Murex Creek mapping and rock sampling is shown in Figure 5. The detailed "D-Zone" mapping and sampling is shown in Figures 6a & 6b respectively.

Please refer to Section 3, "Property Geology" of this report and the accompanying maps for a complete discussion of the programmes geological efforts.

2.9 Geochemical Surveys

Soil and rock sampling, for geochemical analysis, constituted a major part of the 1988 programme. Soils of the "B" horizon were collected at 25 metre stations over the new grid lines at the northeast end of the property. In the "D-Zone", 4 soil test pits were dug and large (2 kg) samples taken from each soil horizon. These samples from the test pits were sieved into coarse (+40/-10), medium (+80/-40), and fine (-80) fractions, and analyzed separately for Cu, Ag and Au. Coarse and medium fractions were then pulverized and run for Cu, Ag, Fe and Au. The purpose of this work was to determine the distribution of metallic elements within the

different size fractions of each horizon, with a view to more effective sampling techniques in this zone of interest.

Rock samples for Geochemical analysis were collected during mapping, wherever significant mineralization was observed or suspected. In Murex Creek, detail rock sampling from 1m x 1m panels was designed to obtain representative samples of the mineralized breccias. In addition, grab samples were taken from the quartz-sulfide matrixes of these breccias. In the "D-Zone" a programme of outcrop stripping and trenching by hand was carried out in preparation for detailed rock sampling. Channel samples were then taken, using a gasoline driven rock saw and masonry chisels. This technique was designed to obtain representative samples. In addition, several chip samples were taken across outcrops.

A total of 626 soil and 211 rock samples were collected during the 1988 programme. Soil samples were analyzed primarily at Noranda's geochemical laboratory in Vancouver. Rock samples were analyzed by Acme Analytical Laboratories Ltd., of Vancouver.

2.10 Geophysical Surveys

During April 1988, a small SE-88 E.M. and magnetometer survey pair were completed on the "A-Zone" detail grid. The purpose of these surveys was to define possible sources of an anomalous soil geochem response defined in a 1987 soil survey.

As the results obtained were somewhat ambiguous due to the low resistivities encountered, three of these lines (205E, 207E & 209E) were then surveyed in June 1988 with Induced Polarization. The purpose of the I.P. survey was to define specific drill targets.

Areas "B" and "C" were surveyed with limited coverage I.P., during October 1988, by Pacific Geophysical Contractors of Vancouver. The purpose of these surveys was to identify the source of soil geochemistry anomalies defined in a 1987 soil survey.

During June 1988, 1.40 km of Induced Polarization survey were run over four lines of the "D-Zone". The purpose of these surveys was to attempt to define the source of Au-Cu mineralization discovered through soil and rock geochemistry surveys in 1987.

2.10.1 Instrumentation

Induced Polarization System

The I.P. survey employed standard Frequency Domain equipment manufactured by Phoenix Geophysics of Ontario (IPV-1, IPR-1). Dipoles of 25 metres in length were used in a Dipole-Dipole array configuration with readings recorded down to the fourth separation (n=4).

SE-88 Electromagnetic System

The SE-88 system is a Horizontal Loop E.M. system manufactured by Scintrix of Concord, Ontario. This unit differs from the normal HLEM systems such as the MaxMin II in that it measures without regard to phase the ratio of signal amplitudes between a reference frequency of 112 Hertz and individual signal frequencies of 337 Hz, 1012 Hz and 3037 Hz. The signal difference is integrated over a period of 16 seconds in order to obtain an acceptable signal to noise ratio. The survey employed a 100 metre coil separation with readings recorded at 25 metre intervals.

Magnetometer System

The magnetometer surveyed employed a field and base station package also manufactured by Scintrex of Concord, Ontario. The IGS/MP-3 system records the Total Magnetic Field with a field accuracy of about 2 nano Teslas. All applicable corrections have been applied to the data to maintain this accuracy. Readings were recorded at 12.5 metre intervals.

2.10.2 Summary of 1988 Surveys

Zone A: SE-88 electromagnetic survey and magnetometer survey was carried out on Lines 199+00E through 210+00E inclusive. Induced Polarization surveys were conducted on Lines 203+00E, 205+00E and 207+00E.

Zone B: An Induced Polarization survey was carried out on Line 506+00E.

Zone C: An Induced Polarization survey was carried out on Line 509+00E.

Zone D: Induced Polarization surveys were conducted on Lines 509+50E, 511+50E, 512+50E and 513+00E.

2.11 Diamond Drilling

The 1988 diamond drilling programme consisted of 9 "NQ" holes totalling 1066.9 metres. The drilling was performed by M & B Drilling Ltd. of Powell River, B.C. Three holes; (NMX 88-16, 17, 18) were drilled on the "A-Zone" using a Boyles 25A. Six holes (NMX 88-19, 20, 21, 22, 23 & 24) were drilled on the "D Zone", using a Boyles 15A machine. The use of the smaller machine was necessary on the "D-Zone", due to steeper topography and limited room for maneuvering.

Table I summarizes drill hole information.

TABLE I 1988 DIAMOND DRILLING SUMMARY

Hole No.	Collar Northing	Collar Easting	Collar Elevation	Azimuth	Dip	Depth
NMX-16	198+78N	203+00E	807.7 m	018°	-50°	174.64 m
-17	200+00N	205+00E	735.1 m	198°	-45°	213.96 m
-18	199+50N	207+00E	712.3 m	198°	-45°	152.39 m
-19	95+90N	510+63E	937.2 m	332°	-45°	41.15 m
-20	95+69N	510+76E	936.6 m	016°	-45°	65.37 m
-21	96+00N	509+79E	974.4 m	330°	-45°	76.20 m
-22	95+37N	513+50E	826.6 m	150°	-45°	138.37 m
-23	95+69N	510+76E	937.2 m	320°	-45°	92.96 m
-24	95+70N	510+76E	937.2 m	355°	-45°	111.86 m

All holes were drilled to completion. Appendix II contains the drill logs for all 9 holes and Appendix III is a copy of drill core sample analyses.

3.0 RESULTS AND INTERPRETATION

3.1 Geology

3.1.1 Regional Geology

The Murex-Better option property is within the Alberni map area (92F) which was most recently mapped by J.E. Muller & D.J.T. Carson (G.S.C. Paper 68-50 Map 17-1968). Earlier mapping in the region was done by J.E. Muller (1964), D.J.T. Carson (1960), and H.C. Gunning (1930). In particular, the MSc Thesis work done by D.J.T. Carson (1960) contributed much to the understanding of the geology of the Mt. Washington area. In addition, in his BSc Thesis P.J. McGuigan (1975) studied and mapped the breccias and associated geology of Mt. Washington.

Most of the region in and around the project area is underlain by basaltic lavas of the Karmutsen Formation which is Upper Triassic and older, and forms the lowest unit of the Vancouver Group. The rocks of the Karmutsen Formation are mostly massive flows and pillow lavas of partly amygdaloidal basalt, with minor tuffs, volcanic breccias, and agglomerates.

A major unconformity, with considerable topographic relief, separates the Karmutsen Formation from the overlying Nanaimo Group. The Upper Cretaceous Nanaimo Group Haslam and Comox Formations consist of fine to coarse grained detrital sedimentary rocks. The Benson Member is a pebble-cobble-boulder conglomerate which in some areas marks the unconformity between the Karmutsen Formation and the Nanaimo Group.

Hornblende quartz diorites, of Late Cretaceous to Tertiary age, have intruded the Karmutsen Formation and Nanaimo Group rocks, forming stocks, sills and dykes. These intrusives have, in some cases, caused the formation of breccias composed of various combinations of basalt, sedimentary, and diorite fragments in a fine to medium grained siliceous matrix, sometimes with accompanying sulfide mineralization.

It is these breccias which are the prime target of economic interest, as they have been found to contain base and precious metal mineralization within the matrix. In addition, some of the Comox Formation sandstones on Mt. Washington have been hydrothermally altered and brecciated by the action of the Tertiary intrusions, and have been found to host sulfide mineralization.

3.1.2 Property Geology

Figure 4 (1:5,000) is a composite map showing the results of geological mapping during 1987 and 1988. Figure 5 shows the detailed geology of the Murex Creek Valley. Figure 6a shows the detailed geology of the "D-Zone". Figure 6b shows the detailed rock sample locations and results on the "D-Zone".

3.1.2.1 Karmutsen Formation Basalt

On the Murex property, the Karmutsen Formation consists of mostly massive flows of basaltic lava, 1 to 5 m thick, interbedded with lesser amounts of pillow basalts and basaltic agglomerate. The flows and pillow lavas are typically aphanitic to fine grained, dark greenish grey to black in colour, and weather buff to rusty

brown. They are generally equigranular, but frequently porphyritic with phenocrysts of plagioclase feldspar up to 4 mm long. These lavas are quite often amygdaloidal, with zeolites, quartz, chlorite and carbonate fillings. Occasionally, vesicles were also observed. Pillow structures, ovate in cross section and averaging 20cm x 75cm in size with chilled margins, were observed at a few outcrops.

These basalts are almost always chloritized as evidenced by their green colour. Epidote is common, especially in fractures, and manganese staining is pervasive. They are almost always magnetic, and occasionally very magnetic.

In several localities, a sub-unit of the Karmutsen was recognized. This sub-unit was previously observed during mapping to the west of Mt. Washington and was given the field name basaltic agglomerate. The basaltic agglomerate is composed of sub-angular to rounded, pebble to small cobble sized clasts of chloritic green, fine grained, often amygdaloidal basalt, in a basaltic matrix. This basaltic agglomerate should not be confused with basaltic breccia, to be described below in Section 3.1.2.4(a).

Lithological similarities from one flow to the next makes determination of attitudes difficult. Strike and dip measurements were taken wherever possible and in general were found to be within 10~15° of horizontal. The Karmutsen is pervasively fractured throughout. Joint, fault and shear zone orientations were measured wherever they were observed in outcrop. Fractures are sometimes filled with quartz-carbonate and occasionally, minor pyrite, pyrrhotite and very minor chalcopyrite. This fracturing was observed to increase significantly in locations close to bodies of basaltic breccia, (see Section 3.1.2.4(a)) so that the boundary between highly fractured basalt and basaltic breccia is transitional.

3.1.2.2 Nanaimo Group Sedimentary Rocks

Within the Murex claim block, Upper Cretaceous Comox Formation Nanaimo Group sediments outcrop on the higher ground in the south and west part of the property. The Benson Member conglomerate, which usually occurs at the base of the Comox Formation, lying immediately above the unconformity, has not been observed within the Murex Property.

The Comox Formation, observed in the Murex Valley, is composed mostly of medium grained feldspathic sandstones, sub quartzose sandstones, and lithic sandstones. Mudstones and siltstones, sometimes graphitic, are interbedded with the sandstones.

The Comox sandstones are variously cemented with silica, calcium carbonate and clays, however, on most of the Murex property this has been overprinted by extensive silicification and hornfelsing up to biotite grade, probably due to the activity of dioritic intrusions of Tertiary Age (Section 3.1.2.3). The silicified and hornfelsed sandstones are very hard (5) and form prominent outcrops. They are, in some localities, mineralized with sulphides; pyrite, pyrrhotite and minor chalcopyrite averaging 3~5% total but occasionally as high as 20%, disseminated throughout the rock as fracture fillings. Interbeds of graphitic argillites and siltstones were observed in the southwest part of the property.

Bedding orientations are generally within 5° to 10° of horizontal, although, in some outcrops, dips as great as 25° were recorded. During 1988 mapping in the "C-Zone", on the south flank of the Murex Valley, large down faulted blocks of Comox sandstones were recognized. These blocks have moved down by normal faulting and add support to the theory of the Murex as a collapse basin, as discussed in the 1987 report.

The sulphide mineralized sandstones and the graphitic argillites and siltstones were tested for conductivity with a hand held ohm meter, and were found to be weakly to moderately conductive. Some sandstone containing 10~20% pyrrhotite and pyrite were found to be very conductive (= 0). The conductivity of these sedimentary units has had the effect of masking the results of the electromagnetic survey performed in this part of the property.

3.1.2.3 Intrusives

Dioritic intrusions of Mid-Tertiary Age (Wanless et al 1967, 1968; in Muller & Carson 1968) occur throughout the Mt. Washington area.

On the Murex property, several diorite bodies were mapped within the Karmutsen basalt and Nanaimo Group sediments. In addition, dykes of dioritic composition were mapped in the Murex Creek bed and walls, where they were in contact with fluidized breccia, described below in Section 3.1.2.4(e). Contact relationships suggest that the diorites in Murex Creek and in the "D-Zone" post date the breccias with which they are in contact.

The diorites observed within the Murex property are light grey to off-white in colour, weathering to light brown. They are fine to medium grained, generally equigranular but occasionally porphyritic, with phenocrysts of plagioclase feldspar up to 4 mm long. Biotite mica and hornblende make up 5~10% of the rock, giving it a speckled appearance. Sulfide mineralization, in the form of pyrite and pyrrhotite, disseminated and as fracture fillings, was occasionally observed, but was generally minor, being less than 1% of the rock.

The diorites mapped on the property all appear to be in the form of sub-vertical dykes. In several outcrops, angular to sub-angular pebble to cobble sized xenoliths of basalt were observed within the diorites. Minor xenoliths of pre-existing dioritic to granodioritic lithologies were also observed in some outcrops.

The two intrusive lithologies (diorite and granodiorite) as well as the xenoliths of intrusive within diorite dykes indicate that multiple stage intrusion has occurred within the Murex property. Associated with this intrusive activity was the formation of breccias of various compositions, described below.

3.1.2.4 Breccias

During the 1987 season several breccia bodies were mapped on the Murex property. These breccias were initially sub-divided on the basis of their fragment lithologies. Descriptions below are taken from the 1987 report. During subsequent detailed mapping in 1988 a breccia sub-type was recognised. This is discussed below in Section 3.1.2.4(e).

3.1.2.4(a) Basaltic Breccia

The basaltic breccia is composed of fragments of Karmutsen basalt, in a rusty, vuggy, fine to coarse grained quartz rich matrix. The basalt fragments are sub-angular to rounded, and range in size from granules to large boulder sized foundered blocks, but are mostly pebble to cobble size.

Fragments range from 80 to >95% and matrix ranges from 20 to <5% of the breccia. There appears to be a gradational transition from highly fractured basalt with quartz infilling, to true basaltic breccia. The quartz rich matrix is mineralized with up to 10% sulphides Cpy, Py, Po, in varying proportions.

The breccia is quite well consolidated, but the matrix breaks more easily than the basalt fragments. As a consequence, representative sampling is difficult.

3.1.2.4(b) Comox Breccia

The Comox breccia is composed of fragments of Comox sandstones, siltstones, and argillites in a siliceous matrix. In some locations, the matrix is medium grained rusty, vuggy quartz, whilst in others it is a mixture of fine grained quartz and biotite. The sedimentary fragments are generally angular to sub-angular and range in size from pebbles to large cobbles. Fragments generally make-up 85% of the rock, with approximately 15% matrix.

In some cases, there is a transition from highly fractured, silicified sandstones with pervasive quartz fracture fillings, to a true breccia. Sulphide mineralization is generally restricted to the matrix but was occasionally observed to have invaded the sedimentary fragments. In most cases sulphide content is less than 1% but was observed as high as 3% of the rock. This mineralization is mostly in the form of small blebs of pyrite, chalcopyrite and pyrrhotite.

Several rock samples, taken from outcrops of Comox breccia, gave anomalous values for Cu, Ag, Au and As though none were spectacular.

3.1.2.4(c) Intrusive Breccia

The intrusive breccia is composed of fragments of diorite in a fine grained siliceous matrix containing up to 10% biotite. The diorite fragments are angular to sub-angular and range in size from small pebbles to large cobbles. Outcrops of diorite close to outcrops of intrusive breccia are often highly fractured with up to 5% of the rock being quartz-biotite fracture fillings. It therefore appears that the boundary between highly fractured diorite and intrusive breccia is transitional. The fragment to matrix ratio in the intrusive breccia is generally 90% to 10%, respectively.

Sulphides, mostly Py with minor Po & Cpy occur within the matrix, but rarely exceed 2% of the whole rock. Rock geochemistry analyses of samples from outcrops of intrusive breccia gave only background values for Cu, Ag, Au and As. However, a sample (R-27583) taken from an outcrop on the Mill Road, approximately halfway between the old millsite and the point where the road crosses Murex Creek, gave very anomalous results. This sample was taken from a hydrothermally altered zone within the intrusive breccia. The zone has been altered mostly to clays and Fe-oxides, and contains >5% pyrite. The elevated metal values in this zone are probably the result of secondary enrichment, caused by the hydrothermal activity, following breccia formation.

3.1.2.4(d) Mixed Lithology Breccia

The mixed lithology breccias consist of fragments of basaltic, sedimentary and dioritic lithologies, in varying proportions, in a siliceous, often biotite bearing matrix. The transition from a breccia with fragments of a single rock type to one of fragments of mixed lithologies is often gradational. Most monolithological breccias, described above, have minor amounts of fragments of other lithologies. The only real exception to this is the basaltic breccia exposed in Murex Creek.

In the mixed lithology breccias, the fragments vary from angular to sub-rounded and range in size from pebbles to large cobbles. The matrix varies from rusty, vuggy medium grained quartz to fine grained silica with 10~25% biotite. Fragment to matrix ratio averages 90% vs 10% respectively, but in one outcrop on the Mill Road, halfway between Murex Creek and the old millsite, the ratio was approximately 50/50.

Minor sulphides (Py, Po, Cpy) occur interstitially within the matrixes of these breccias, but rarely exceed 2% of the whole rock. Geochemical analyses of rock samples from mixed lithology breccias generally returned only background to slightly anomalous values for Cu, Ag, Au and As.

3.1.2.4(e) Fluidized "Milled" Breccia. Relationship with Diorite Dykes, and Related Mineralization.

During the 1988 season, in the course of detailed mapping in Murex Creek and the "D-Zone", another breccia sub-type was recognised. This breccia is identified by the increased rounding and alteration of the fragments and the increase in matrix to fragment ratio.

The fragments are sub-angular to rounded and range in size from granule to cobble. Mean fragment size is medium to large pebble. The rims of the breccia fragments are corroded to a depth of up to 5 mm, visible in hand specimens.

This breccia is composed of 80~85% fragments and 15~20% matrix. Fragment lithologies vary from basaltic in Murex Creek to basaltic, sedimentary and dioritic in the "D-Zone". The matrix is quartz +/- minor carbonate and sulphides Cpy, Po, Py in varying proportions.

This breccia type was recognized in outcrops in Murex Creek and the "D-Zone" as well as in core from holes drilled in the "D-Zone". In most cases it was observed in contact with or proximal to sub-vertical diorite dykes. Contact relationships suggest that the intrusions post date the breccia.

It is the writer's opinion that this breccia type was produced by fluidization causing milling and subsequent rounding of pre-existing brecciated rock fragments. This fluidization was caused by the hydrothermal activity associated with the dioritic intrusions. During this process, the fragments become rounded by the milling action of fluid streaming, and corroded by the hydrothermal fluids. The quartz-sulphide mineralization is subsequently deposited, forming the breccia matrix. For a discussion of fluidization processes, the reader is referred to a paper by M.E. McCallum: "Experimental Evidence for Fluidization Processes in Breccia Pipe Formation" in: Economic Geology 1985, Vol. 80, pp 1523-1543.

In Murex Creek the fluidized breccia was observed in contact with sub-vertical diorite dykes. This fluidization or milling was only observed occurring within approximately 2-3 metres of the contact with the dykes. Beyond this, there is a rapid transition to non-fluidized breccias, which are characterized by more angular fragments, a lower matrix to fragment ratio (5:95%) and lower matrix sulphide content.

In the "D-Zone", fluidized breccias were observed in some outcrops. However, nowhere in outcrop were they observed in contact with, or proximal to diorite dykes.

In DD Holes NMX 88-19, MX 86-1 and MW 74-3, breccias of basaltic and mixed lithology fragments are in contact with a diorite dyke. Some of the fragments show varying degrees of rounding which may have been caused by the milling action of fluidization processes. The quartz-sulphide (Po, Py, Cpy) matrix of these breccias increases with proximity to the dyke as, in general, does the gold content. Contact relationships and xenoliths of breccia within the dyke suggest that the dyke post-dates the original breccia. Just west of, and uphill from the area drilled, a diorite dyke in contact with Karmutsen basalts and Nanaimo Group sediments was observed in outcrop. This dyke is thought to be the same one as seen in drill core. However, very little mineralization was observed in these outcrops, and rock samples returned only slightly elevated Au values.

In both Murex Creek and the "D-Zone", mineralization is contained within fluidized, milled breccias in contact with or proximal to diorite dykes.

The writer believes that the processes involved were as follows:

1. Initial brecciation of country rocks was associated with explosive igneous activity of dioritic intrusions during the Tertiary.

2. Fluidization processes associated with subsequent intrusive activity caused "milling" of the brecciated fragments. Hydrothermal processes caused alteration of the breccia fragment rims, and deposition of the breccia's quartz-sulphide matrix.

The combination of fluidized, milled breccia and diorite dykes is necessary to produce mineralization of economic significance.

In conclusion, targets for economic mineralization are fluidized, milled breccias in contact with or at least proximal to dioritic intrusions.

3.2 Geochemistry

3.2.1 Soil Geochemistry

The results of soil geochemistry surveys are shown in Appendix IV and in Figures 7a, 7b, 7c and 7d for Cu, Ag, Au and As respectively. Figures 8a, 8b, 8c and 8d are value magnitude (bullseye) plots for Cu, Ag, Au and As.

These maps are compilations of soil sampling done during both the 1987 and 1988 field programmes. The date shown at the end of each line indicates the year in which the work was performed.

From the 1988 soil geochemistry surveys, the following observations are made:

Au: Background values are generally less than 30 ppb. Anomalous values up to 800 ppb or greater, are somewhat erratic, but two trends are evident: (1) on LInes 519E, 521E & 523E there is an anomalous trend between 91N and 100N. This area is part of the "D-Zone". (2) on Lines 527E, 528E, 529E & 531E there is an anomalous trend between 96N and 100N. This area is identified as the "E-Zone".

Cu: Background values are in the 100 to 250 ppm range, with clusters of anomalous values up to 1000 ppm or greater. On Lines 517E, 519E, 521E and 523E from 90N to 98N the elevated Cu values for a fan which appears to emanate from the "D-Zone".

Ag: Background values are generally less than 0.5 ppm. Clusters of anomalous values up to 4 ppm occur over approximately the same two areas as those covered by the Au anomalies.

As: Background values are generally less than 150 ppm, with anomalous values up to 1700 ppm over the same areas as those covered by the Au and Ag anomalies on the "D" and "E" Zones.

Interpretation

The polymetallic (Au, Cu, Ag, As) anomaly on Lines 519E, 521E and 523E may be the result of downslope movement of material from the "D-Zone". However, the good local correlation of these values suggests a nearby source. This is an area of sparse outcrop underlain by Karmutsen basalts and dioritic dykes, but with no observed mineralization.

With the presence of the old Mt. Washington copper millsite in this area the temptation exists to blame the anomalies on contamination. However, these polymetallic anomalies continue past and upslope of the old millsite. It is therefore possible that these anomalies overlay a bedrock extension of the "D-Zone", where known Au-Cu mineralization exists.

On Lines 527E, 528E, 529E, 530E & 531E there is an anomalous trend between 96n and 100N. Although outcrop is also sparse in this area, geological mapping, mostly in creek beds, has revealed that the Karmutsen basalts have been intruded by diorite dykes and a stockwork of (presumably) associated quartz-carbonate veinlets. The minor amounts of associated sulphide (Py, Po) mineralization observed do not appear to justify the strength of these polymetallic anomalies.

"D-Zone" Test Pits

As described in Sections 2.5 and 2.9, four soil test pits were dug in order to determine the distribution of metallic elements Cu, Ag, Fe & Au, within the different size fractions of each horizon. The locations of these pits is shown in Figure 9 and the results of geochemical analysis are shown in Table II.

From the results the following observations are made:

i) In general, only Au values are anomalous, Cu & Ag values are background for the area.

ii) Samples from Pits #1 and #4 are very anomalous throughout, regardless of soil horizon or sieve fraction analyzed. Samples from Pits #2 and #3 yielded background or only slightly elevated values.

iii) Pulverized samples generally produced higher values than non-pulverized samples. However, the anomalies are still easily recognizable in non-pulverized samples.

TABLE II

"D-ZONE" SOIL TEST PITS & RESULTS

Results shown are for Au in pulverized coarse, medium, and fine fractions. Complete results are shown in Appendix IV.

Soil Pit #1			Au ppb		
			+40/-10	+80/-40	-80
0.1 m	A Horizon: Grey-Brown	P.57894	825	300	580
0.2 m	40% org. 20% rock frags	P.57895	110	150	175
0.3 m	20% sand 20% clay	P.57896	2250	150	250
0.4 m	B Horizon: Reddish-Brown	P.57897	150	180	45
0.5 m	20% org. 10% rock frags.	P.57898	70	60	45
0.6 m	20% sand 50% clay	P.57899	275	90	5
0.7 m					
0.8 m	C Horizon: Dark Brown	P.57900	280	80	15
0.9 m	0% org. 80% Clay	P.57901	70	90	140
1.0 m	10% sand 10% rock frags.	P.57902	75	60	10
Soil Pit #2					
0.1 m	A Horizon: Light Brown	P.57903	15	35	15
0.2 m	40% org. 30% clay	P.57904	20	30	25
	20% sand 10% rock frags.	P.57905	65	10	30
0.3 m	B Horizon: Brown	P.57906	25	15	10
0.4 m	20% org. 50% clay	P.57907	20	40	30
0.5 m	20% sand 10% rock frags.	P.57908	30	10	5
0.6 m	C Horizon: Black-Brown	P.57909	30	10	20
0.7 m	0% org. 70% clay				
0.8 m	20% sand 10% rock frags.	P.57910	5	10	5
0.9 m					
1.0 m		P.57911	90	10	10

Soil Pit #3			Au ppb +40/-10	+80/-40	-80
0.1 m	A Horizon: Light-Medium Brown	P.57885	70	5	10
0.2 m	60% org. 10% rock frags.	P.57886	15	5	5
0.3 m	30% sand 0% clay	P.57887	20	25	25
0.4 m	B Horizon: Reddish Brown	P.57888	10	10	15
0.5 m	40% org. 5% rock frags.	P.57889	5	5	5
0.6 m	30% clay 25% clay	P.57890	5	5	5
0.7 m	C Horizon: Dark Brown	P.57891	5	10	5
	5% org. 10% rock frags.	P.57892	5	100	10
0.8 m	25% sand 60% clay	P.57893	5	5	5
Soil Pit #4					
0.1 m	A Horizon: Light Brown	P.57876	335	2300	950
0.2 m	40% org. 30% rock frags	P.57877	110	150	325
0.3 m	0% clay 30% sand	P.57878	600	625	175
0.4 m					
0.5 m	B Horizon: Reddish Brown	P.57879	6750	215	375
0.6 m	10% org. 60% clay	P.57880	500	210	1300
0.7 m	20% sand 10% rock frags.	P.57881	3900	375	450
0.9 m	C Horizon: Dark Brown	P.57882	5400	185	400
1.0 m	20% sand 80% clay	P.57883	60	150	65
1.1 m		P.57884	170	70	90
1.2 m					

iv) Where Au is present, anomalous values show up in A, B & C horizons. This could be due to downslope soil movement, causing mixing. It is notable that Fe content of the three horizons does not vary sufficiently to make horizon identification possible on this basis.

Similarities in Cu values between the horizons also suggest that mixing has occurred.

v) Analysis of coarse (+40/-10) and medium (+80/-40) fractions produced consistently significantly higher results than the fine (-80_ fraction. This may be due to the Au being held in coarser rock particles, proximal to source.

The ramifications of these results are discussed in Section 4.4; "D-Zone" Conclusions and Recommendations.

3.2.2 Rock Sample Geochemistry

Table III shows rock sample descriptions and results for Au, Ag, As, & Cu.

Appendix V shows I.C.P. 30 element analyses for these rock samples.

Rock sample locations and results are shown on maps, described below under the various zones of interest.

"A Zone"

Sample locations and results are shown in Figure 4b.

Only one sample (R-28042) collected within the "A Zone" returned anomalous values of 12,430 ppb Au, 27.8 ppm Ag, >99999 ppm As, 3587 ppm Cu.

This sample was found in float, close to an old drill site. Nowhere was similar mineralization found in outcrop. It is possible that this sample was transported from outside the property. No mineralization of economic significance was found in outcrop in this area.

TABLE III

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT 177 N.T.S. 92F/14

LAB REPORT # DATE December 1988

PROPERTY MUREX ('A ZONE' & MUREX CREEK)

ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-27630	Basalt, Py, Po (Cpy) in frac -tures	2	Grab		1	0.2	2	185				Dempsey
31					6	0.2	2	454				
32					125	1.9	10	2735				
33					3	0.5	40	638				
34					9	1.0	15	1257				
35	Basaltic breccia, Py, trace Cpy in fractures	2	Grab	-	24	0.9	2	1190				Dempsey
36	Basaltic breccia, Py, Aspy	5	Grab	-	38	1.9	2	2735				Dempsey
37	Fault Gouge, limonite-rich	-	Grab	7 cm	32	1.1	74	2574				Dempsey
38					11	0.5	2	881				
39					2	0.1	17	69				
40					4	0.3	2	538				
41	1983 Sample, not on this property	-	-	-	-	-	-	-				-
42	Basalt	nil	Grab	-								Dempsey
43	Basalt	nil	Grab	-								Dempsey
44	Basalt	trace	Grab	-								Dempsey
45	Basalt	nil	Grab	-								Dempsey
R-28001	Massive Py, Po from basaltic breccia	100	Grab	-	1322	63.3	6	51374				McIntyre
002	Vein Cpy plus wallrock from basaltic breccia	-	Grab	-	560	26.1	5	22418				McIntyre
003	Basaltic breccia	-	Grab	-	113	2.7	2	2203				McIntyre
004	Basaltic breccia, Po, Cpy	10	Grab	-	315	10.5	5	11087				McIntyre
R-28035	Diorite, Po	2	Float	-	3	0.1	14	233				McIntyre

TABLE III

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT 177 N.T.S. 92F/14

LAB REPORT # DATE December 1988

PROPERTY MUREX ('A ZONE' & MUREX CREEK)

ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-28036	Basalt, Mn stained	nil	Float	-	2	0.2	2	121				McIntyre
037	Basalt, Py in thin fractures	1-2	Float	-	5	0.3	24	470				McIntyre
038	Basalt, Po, Cpy	4	Float	-	1	0.2	2	94				McIntyre
039	Basalt, Po, Py, Cpy in shear	4	Float	-	10	0.7	2	2014				McIntyre
040	Basalt, Mag, Py	3	Float	-	4	0.1	2	447				McIntyre
R-28042	Basalt, Aspy, Py	7	Float	-	12430	27.8	99999	3587				McIntyre
043	Basaltic breccia, Po & Cpy in quartz matrix	5	Grab	-	106	3.5	130	4375				McIntyre
044	Basaltic breccia, Po & Cpy as vug/frature filling	3-4	Grab	-	137	2.7	972	3966				McIntyre
R-28048	Basalt, Py, Po in thin shear	2	Grab	-	13	0.5	6	1050				McIntyre
049	Mixed lithology, breccia, Po, Mag	10	Panel	1x1	15	0.4	53	995				T.McI/S.L.
050	Mixed lithology, breccia, Po	2-3	Panel	1x1	1	0.1	10	707				T.McI/S.L.
051	Mixed lithology, breccia, Po, Py, Cpy	6	Panel	1x1	64	8.2	9	7238				T.McI/S.L.
052	High-grade matrix sample of R28052				122	17.3	2	24735				T.McI/S.L.
R-28142	Basaltic breccia, Cpy, Mag	3	Panel	1x1	83	2.3	2	2861				McIntyre
143	Basaltic breccia, Cpy, Mag, limonite, hematite	3	Panel	1x1	1	0.1	2	321				McIntyre
144	Basaltic breccia, Cpy, Mag, limonite, hematite	3	Panel	1x1	9	0.2	10	904				McIntyre
145	Basaltic breccia, Cpy, Mag	3	Panel	1x1	2	0.1	9	689				McIntyre
146	Basaltic breccia, Cpy, Mag	3	Panel	1x1	14	0.2	14	1013				McIntyre

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PROPERTY MUREX ('A ZONE' & MUREX CREEK)

ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-28147	Basaltic breccia, Cpy, Mag	3	Panel	1x1	3	0.2	27	787				McIntyre
R-43901					3	0.2	2	169				
902	-no data entered											
903	-no data entered											
904					9	0.2	62	207				
905	Diorite, Py, Po, tr Cpy	2	Grab	-	41	0.8	5	1173				T.McI/S.L.
906	Comox breccia, Py, Po, tr Cpy	4	Grab	-	98	1.3	7	1966				T.McI/S.L.
R-43932	Basaltic breccia	2-5	Chip	1	18	1.6	2	1911				Northcote
R-44001	Basaltic breccia	2-5	Grab	-	5	0.1	10	355				D.L./B.N.
002	Basalt	1	Grab	-	4	0.2	2	179				D.L./B.N.
003	Basalt	1	Grab	-	4	0.6	10	765				D.L./B.N.
004	Basalt, highly fractured with quartz, sulphides	15	Grab	-	240	26.8	9	21872				D.L./B.N.
005	Quartz vein, Py	10	Chip	10 cm	114	33.5	147	39816				Lewis
006	Basalt, quartz-rich shears, Py	1	Chip	1	7	1.3	7	1538				Lewis
007	Basalt, quartz-rich shears, Py	1	Chip	50 cm	5	0.6	2	674				Lewis
008	Quartz vein, Py in vugs	10	Chip	10 cm	75	13.5	61	21964				Lewis
009	Basalt, quartz-rich shears, Py	1	Chip	1	7	1.2	3	1394				Lewis
010	Sheared basalt, Py	1	Chip	50 cm	10	1.7	2	1066				Lewis
011	Quartz vein, Aspy, Py in vugs	30	Chip	8 cm	2	0.8	52	1140				Lewis
012	Basalt, Py	1	Chip	1	1	0.6	12	901				Lewis
013	Basalt, Py	1	Chip	50 cm	3	0.1	8	335				Lewis

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ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-43014	Quartz vein, Py	10	Grab	3 cm	47	3.4	22	3878				Lewis
015	Basaltic breccia, Py in shears	3	Panel	1x1	16	0.5	4	851				Lewis
016	Basaltic breccia, Py	6	Grab	-	34	2.8	7	3306				Lewis
017	Basaltic breccia, Aspy, Py	4	Panel	1x1	1420	17.0	4	18674				Lewis
018	Basaltic breccia, Aspy, Py	4	Panel	1x1	41	2.6	3	2688				Lewis
019	Basaltic breccia, Py	5	Panel	1x1	205	10.4	5	13253				Lewis
R-44026	Basaltic breccia, wall rock surrounding quartz vein	-	Chip	1	13	0.9	3	1028				T.McI/S.L.
027	Basaltic breccia, Py, Aspy	4	Panel	1x1	63	6.2	4	6193				T.McI/S.L.
028	High grade matrix sample of R44027	-	Grab	-	740	31.5	8	37610				T.McI/S.L.
029	Basaltic breccia, Cpy, Py, Mag in matrix	3	Panel	1x1	38	4.9	5	5479				T.McI/S.L.
030	High grade sample of matrix in R44029	4	Grab	-	330	16.5	9	20125				T.McI/S.L.
R-44201	Milled breccia, qtz-sulfide matrix Cpy, Po, Py	4	Panel	1x1	87	4.7	5	3721				Louden
202	Milled breccia, qtz-sulfide matrix Cpy, Po, Py	4	Panel	1x1	64	2.7	6	2204				Frew
203	Milled breccia, qtz-sulfide matrix Cpy, Po, Py	4	Panel	1x1	7	0.9	10	898				Louden
204	Diorite dyke, Cpy, Po	2	Grab	-	2	0.3	26	148				Frew
205	Milled breccia, qtz-sulfide matrix, Po, Cpy	3	Panel	1x1	44	2.1	5	1641				Frew

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ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-44206	Milled breccia, qtz-sulfide matrix Cpy, Py, Po	4	Panel	1x1	270	3.5	12	3402				Louden
207	Milled breccia, qtz-sulfide matrix Cpy, Py, Po	4	Panel	1x1	67	4.0	7	3035				Louden
208	Basaltic breccia, Py	3	Panel	1x1	60	3.7	2	3132				McIntyre
209	Basaltic breccia, Py	3	Panel	1x1	155	2.8	2	2894				McIntyre
210	Quartz/sulphide matrix of basaltic breccia, Po, Cpy	2	Panel	1x1	20	0.3	2	381				McIntyre
211	Basaltic breccia, Cpy, Py	3	Panel	1x1	16	1.3	2	1342				McIntyre
212	Basaltic breccia, Cpy, Py	3	Panel	1x1	144	3.4	3	3688				McIntyre
213	Basaltic breccia, Cpy, Py	3	Panel	1x1	41	2.3	2	2174				McIntyre
214	Basaltic breccia, Cpy, Py	3	Panel	1x1	9	1.0	2	941				McIntyre
215	Basaltic breccia, Cpy, Py	3	Panel	1x1	77	2.1	2	1575				McIntyre
216	Basaltic breccia, Cpy, Py	3	Panel	1x1	1	0.1	2	149				McIntyre
217	Basaltic breccia, Cpy, Py	3	Panel	1x1	59	1.9	5	2085				McIntyre
218	Basaltic breccia, Cpy, Py	3	Panel	1x1	27	1.2	3	1089				McIntyre
219	Basaltic breccia, Cpy, Py	3	Panel	1x1	7	0.4	4	444				McIntyre
220	Basaltic breccia, Cpy, Py	3	Panel	1x1	19	0.7	20	1063				McIntyre
221	Basaltic breccia, Cpy, Py	3	Panel	1x1	79	5.1	6	5897				McIntyre

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ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-27603	Basaltic breccia (float), Py, Po, Cpy	2	Grab	Float	7	1.5	2	2986				T. McI.
604	Mixed lithology breccia Po	1	Grab	-	11	0.5	7	843				T. McI.
605	Mixed lithology breccia Py, Cpy	1	Grab	-	9330	124.7	21	69953				T. McI.
606	Mixed lithology breccia, Py, Cpy	2	Grab	-	6905	2.1	2	2288				T. McI.
607	Basalt Py (Cpy)	3	Grab	-	28	3.0	2	1668				T. McI.
608	Basaltic breccia, Py, Po, Cpy	3	Grab	-	56	4.2	4	2507				T. McI.
609	Altered shear zone in basalt	1	Grab	-	2035	3.8	53	2109				T. McI.
610	Quartz vein in basalt (Cpy, Mo)	2	Grab	-	2	0.1	2	136				T. McI.
611	Fault gouge zone in basalt, Cpy, Py	3	Grab	-	6	0.3	10	411				T. McI.
612	Quart vein in basalt, Py	<1	Grab	-	1	0.1	7	132				T. McI.
613	Basalt, Py, Po	3	Grab	-	2	0.1	8	185				T. McI.
614	Alteration zone in basalt	NV	Grab	-	5	0.1	294	320				T. McI.
615	Basaltic breccia, alteration zone	NV	Grab	-	4	0.1	9	207				T. McI.
616	Basaltic breccia, alteration zone, Cpy, Py	S	Grab	-	105	1.0	16	2703				T. McI.
617	Basaltic breccia (float), Cpy, Py	4	Grab	Float	985	10.3	7	16796				T. McI.
618	Mixed lithology 'open' breccia, Py	2	Grab	-	7	0.1	2	123				T. McI.

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ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-27619	Mixed lithology 'open' breccia, Py	1	Grab	-	15	1.0	2	1101				T. McI.
620	Shear zone in mixed lithology breccia, Po	2	Grab	-	6	0.2	11	383				T. McI.
621	Mixed lithology 'open' breccia, Po, Cpy, Py	10	Grab	-	4	0.1	6	386				T. McI.
622	Alteration zone in mixed lithology breccia	NV	Grab	-	6	0.1	74	271				T. McI.
623	Alteration zone in basaltic breccia, Po	3	Grab	-	7	0.1	3	263				T. McI.
624	Basaltic breccia "open"	NV	Grab	-	260	0.1	3	140				T. McI.
625	Alteration zone in diorite breccia Py Cpy	3	Grab	-	68	82.9	430	44856				T. McI.
626					1	0.1	2	112				
627	Mixed lithology breccia, quartz in vugs, Py, Cpy	6	Grab	-	1	0.1	2	48				T. McI.
628	Alteration zone, quartz veinlets, Py, Cpy	5	Grab	-	3410	53.8	56	24623				T. McI.
629					1	0.4	41	807				
R-27648	Shear zone in basalt, Py, Po, Cpy	1-8	Chip	5	77	0.7	3	1068				Dempsey
R-28005	Mixed lithology breccia, Po, Py, Cpy	6	Grab	-	2	0.3	2	453				T. McI.
006	Mixed lithology breccia, Po, Py	3	Grab	-	1	0.1	2	194				T. McI.
007	Mixed lithology breccia, Po	3	Grab	-	1	0.1	2	85				T. McI.

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ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-28008	Mixed lithology breccia, Py	1-2	Grab	-	6	0.7	2	980				T. McI.
009	Alteration in shear	-	Grab	-	9	0.1	2	172				T. McI.
010	Basaltic breccia, Py, Cpy in shear	6	Grab	7 cm	4838	128.1	73	57188				T. McI.
011	Basalt, Py, Po	2	Grab	-	860	1.6	2	546				T. McI.
012	Porphyritic basalt, Py, Po	3	Grab	-	17	1.8	15	1098				T. McI.
013	Mixed lithology breccia, Py, Po	1	Grab	-	1	0.2	2	203				T. McI.
014	Mixed lithology breccia, Py Cpy	5	Grab	-	38	4.4	2	3150				T. McI.
015	Mixed lithology breccia, Py, Po, Cpy	8	Grab	-	9	1.0	2	1137				T. McI.
016	Mixed lithology breccia, Py, Po, Cpy	8	Grab	-	92	5.6	2	6101				T. McI.
017	Mixed lithology breccia, Po, Cpy, Py	8	Grab	-	7	1.6	2	2643				T. McI.
R-28018	Mixed lithology breccia, quartz-filled vugs	-	Grab	-	51	6.1	10	2703				T. McI.
R-28021	Shear zone in Basalt, Po	1	Grab	-	1	0.1	2	35				T. McI.
022	Altered quartz vein in basalt	-	Grab	7cm	4	0.6	279	533				T. McI.
023	Diorite dyke, Po, Py, Cpy	2	Grab	-	1	0.2	11	189				T. McI.
024	Basalt, mionr Po	1	Grab	-	51	0.3	2	277				T. McI.
025	Quartz-rich iron oxide clay & gouge	-	Chip	12 cm	2390	0.5	56	672				T. McI.

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PROPERTY MUREX ('D ZONE')

ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-28026	Basalt, quart & iron oxide - rich shear	-	Chip	27 cm	7355	0.5	56	672				T. McI.
027	Basaltic rubble	-	Grab	-	23	0.4	2	391				T. McI.
R-28028	Mixed lithology breccia	3-5	Float	-	106	2.5	2	2787				T. McI.
R-28031	Alteration zone with thin sulphide stringers, Py	3-5	Grab	-	950	9.6	6369	3443				D.D./S.L.
032	Alteration zone with sulphide stringers, Py	3-5	Grab	-	3	0.4	11	498				D.D./S.L.
033	Alteration zone with sulphide stringers, Py	3-5	Grab	-	15	1.5	86	2038				D.D./S.L.
034	Quartz vein with pyrite	60	Grab	5 cm	64	6.8	57	9994				D.D./S.L.
R-28089	Basaltic breccia "open", Py, Cpy, Po	3	Grab	-	8960	4.9	2	2650				D.R.B.
090	10cm quartz vein, Py, Cpy	3	Grab	-	690	25.2	2	5083				T. McI.
091	Basalt wallrock beside qtz vein, Py	Tr	Channel	0.5	80	3.4	7	2055				T. McI.
092	Altered shear zone in basalt breccia, Py, Cpy	4	Channel	0.88	3960	31.5	52	9838				D.L./D.D.
093	Altered shear zone in basalt breccia, Py, Cpy	2	Channel	0.88	120	3.2	12	2476				D.L./D.D.
094	Basalt wallrock		Channel	1.0	26	0.7	7	1094				D.L./D.D.
094	Basalt wallrock		Channel	0.25	290	3.1	8	1495				D.L./D.D.
096	Altered shear zone		Channel	0.28	1990	10.6	16	5548				D.L./D.D.
097	Basalt wallrock		Channel	0.81	227	4.2	15	4861				D.L./D.D.
098	Altered shear zone		Channel	0.19	3995	16.5	42	10017				D.L./D.D.
R-28099	Basalt wallrock		Channel	0.25	145	1.6	10	2272				D.L./D.D.

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PROPERTY MUREX ('D ZONE')

ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-28100	Basalt wallrock		Channel	0.5	230	5.0	50	2750				D.L./D.D.
101	Altered shear zone		Channel	1.0	510	18.1	55	7610				D.L./D.D.
102	Basalt Wallrock		Channel	0.5	138	2.8	14	4066				D.L./D.D.
103	Silicified basalt beside qtz	<1	Channel	0.5	21	1.2	9	1453				D.L./D.D.
104	10cm wide quartz vein, Py, Cpy	15	Channel	0.1	2255	22.3	29	27886				D.L./D.D.
105	Silicified basalt beside qtz vein, Po, Cpy	<1	Channel	0.5	180	0.7	7	1628				D.L./D.D.
106	Basalt wallrock	Tr	Channel	0.5	65	2.8	15	5555				D.L./D.D.
107	Quartz vein with sulfides, Py, Cpy	5	Channel	0.6	650	10.3	34	7478				D.L./D.D.
108	Basalt wallrock	Tr	Channel	0.5	155	2.4	4	3133				D.L./D.D.
109	Altered zone in mixed lithology breccia, Py, Po, Cpy	Tr-3	Channel	0.5	39	1.6	10	1742				D.L./D.D.
110	Altered zone in mixed lithology breccia, Py, Po, Cpy	Tr-3	Channel	1	18	1.5	36	2109				D.L./D.D.
111	Altered zone in mixed lithology breccia, Py, Po, Cpy	Tr-3	Channel	0.1	35	0.6	61	727				D.L./D.D.
112	Altered zone in mixed lithology breccia, Py, Po, Cpy	Tr-3	Channel	0.5	25	0.3	20	490				D.L./D.D.
113	Altered zone in mixed lithology breccia, Py, Po, Cpy	Tr-3	Channel	0.5	4	0.1	22	315				D.L./D.D.
114	Altered zone in mixed lithology breccia, Py, Po, Cpy	Tr-3	Channel	0.5	22	0.7	8	315				D.L./D.D.
115	Altered zone in mixed lithology breccia, Py, Po, Cpy	Tr-3	Channel	1	8	0.5	37	477				D.L./D.D.

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ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-28116	Altered zone in mixed lithology breccia, Py, Po, Cpy	Tr~3	Channel	0.5	5	0.3	53	368				D.L./D.D.
117	Altered zone in mixed lithology breccia, Py, Po, Cpy	Tr~3	Channel	0.5	5	0.5	7	617				D.L./D.D.
118	Altered zone in mixed lithology breccia, Py, Po, Cpy	Tr~3	Channel	0.45	310	0.6	20	1216				D.L./D.D.
119	Altered zone in mixed lithology breccia, Py, Po, Cpy	Tr~3	Channel	0.5	22	0.5	11	638				D.L./D.D.
120	Basaltic breccia "Tight"	<1	Channel	0.5	4995	2.1	33	1277				D.L./D.D.
121	Basaltic breccia "Open"	1	Channel	0.4	2240	5.4	16	4761				D.L./D.D.
122	Basaltic breccia "Tight"	<1	Channel	0.5	10360	1.5	3	1314				D.L./D.D.
R-28123	Basaltic breccia "Tight"	<1	Channel	0.5	4325	28.3	2	13840				D.L./D.D.
124	Massive sulfide pod in basaltic breccia, Cpy, Py,Po	50	Channel	0.1	4430	105.6	10	58776				D.L./D.D.
125	Basaltic breccia "Tight"	1	Channel	0.5	199	5.2	2	3022				D.L./D.D.
R-28140	Open space breccia, Py, Po, Cpy	1	Chip	3	1030	2.2	15	1179				D.R.B.
141	Mixed lithology breccia, Cpy, Po, Py	<1	Chip	3	510	1.2	5	422				D.R.B.
R-43001					136	4.4	45	1231				
R-79776	Mixed lithology breccia, Py, Po, Cpy	1-5	Chip	5	13	0.1	4	92				D.L./D.D.
777	Mixed lithology breccia, Py, Po, Cpy	1-5	Chip	5	185	0.2	2	224				D.L./D.D.
778	Mixed lithology breccia, Py, Po, Cpy	1-5	Chip	5	2380	1.7	5	669				D.L./D.D.

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ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-79779	Mixed lithology breccia, Py, Po, Cpy	1-5	Chip	5	1850	0.7	6	404				D.L./D.D.
780	Mixed lithology breccia, Py, Po, Cpy	1-5	Chip	5	228	0.8	8	420				
781	Mixed lithology breccia, Py, Po, Cpy	1-5	Chip	5	370	2.1	2	721				D.L./D.D.
782	Mixed lithology breccia, Py, Po, Cpy	1-5	Chip	5	1620	1.8	4	715				D.L./D.D.
783	Mixed lithology breccia, Py, Po, Cpy	1-5	Chip	5	880	1.3	3	476				D.L./D.D.
784	Mixed lithology breccia, Py, Po, Cpy	1-5	Chip	5	8520	4.3	4	1208				D.L./D.D.
785	Mixed lithology breccia, Py, Po, Cpy	1-5	Chip	5	174	0.2	2	295				D.L./D.D.
786	Mixed lithology breccia, Py, Po, Cpy	1-5	Chip	5	230	0.5	8	372				D.L./D.D.
787	Mixed lithology breccia, Py, Po, Cpy	1-5	Chip	5	8	0.2	21	192				D.L./D.D.
788	Altered shear zone in mixed lithology breccia, Py	1-3	Chip	0.6	13	0.5	17	570				D.L./D.D.
789	Altered shear zone in mixed lithology breccia, Py	1-3	Chip	0.5	69	1.6	40	1543				D.L./D.D.
790	Altered shear zone in mixed lithology breccia, Py	1-3	Chip	0.6	16	0.8	22	1048				D.L./D.D.
791	Altered shear zone in mixed lithology breccia, Py	1-3	Chip	0.5	18	0.7	14	917				D.L./D.D.

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PROPERTY MUREX ('D ZONE')

ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-79792	Altered shear zone in mixed lithology breccia, Py	1-3	Chip	0.5	11	0.9	41	1196				D.L./D.D.
793	Altered shear zone in mixed lithology breccia, Py	1-3	Chip	0.5	211	0.3	71	404				D.L./D.D.
794	Altered shear zone in mixed lithology breccia, Py	1-3	Chip	0.4	23	1.4	94	1784				D.L./D.D.
795	Altered shear zone in mixed lithology breccia, Py	1-3	Chip	5	470	1.4	25	494				D.L./D.D.
796	Basalt with shear zone & qtz vein, Py, Po, Cpy	1-8	Chip	5	22	0.7	11	899				Lewis
797	Basalt with shear zone & qtz vein, Py, Po, Cpy	1-8		5	1090	27.7	44	28422				Lewis
798	Basalt with shear zone & qtz vein, Py, Po, Cpy	1-8		5	58	1.2	7	1516				Lewis
799	Basalt with shear zone & qtz vein, Py, Po, Cpy	1-8		3.5	420	10.8	27	10687				Dempsey
R-79800	Basalt with shear zone & qtz vein, Py, Po, Cpy	1-8		5	7	0.3	2	433				Dempsey

TABLE III

NORANDA EXPLORATION COMPANY, LIMITED

PROJECT 177 N.T.S. 92F/14

LAB REPORT # DATE December 1988

PROPERTY MURREX ('E ZONE')

ROCK SAMPLE REPORT

SAMPLE NO.	DESCRIPTION	% Sulph.	TYPE	WIDTH (m)	GEOCHEM Au ppb	Ag ppm	As ppm	Cu ppm				SAMPLED BY
R-28045	Basalt, Py in quartz vein	1	Grab	2 cm	11	0.3	6	144				T.McI/D.D.
28047	Diorite, quartz vein at contact with basalt	-	Grab	4 cm	2	0.1	193	540				T.McI/D.D.

Murex Creek Detail Area

Figure 5 shows sample locations and results of detail panel (1 x 1 m) and chip sampling of the mineralized breccias exposed in Murex Creek, as described in Sections 2.3 and 2.9. The results of this show that within the breccia matrix, Cu & Ag values are quite high, averaging approximately 1.6% Cu and 19 g/tonne Ag. However, the 1 x 1 m panel samples, which better represent the whole rock (ie. fragments 90%, matrix 10%) the values are considerably lower. The whole rock panel samples averaged approximately 0.26% Cu, and 0.5 g/tonne Ag.

The best values obtained were from the hydrothermally altered "fluidized" breccias, in contact with the diorite dykes, as described in Section 3.1.2.4e.

"D-Zone"

As described in Section 2.5 detailed geological mapping and rock sampling was carried out in the "D-Zone" during the 1988 programme. The rock sample locations and results are shown in Figure 6b.

As may be seen in Figure 6b, several highly anomalous values were obtained from this detailed rock sampling programme. The higher values for Cu, Ag & Au, occur within the mixed lithology, partly fluidized, open spaced breccias.

Whilst the best values were obtained from small pods of semi-massive sulfides (Py, Cpy, Po) with the breccias, samples from hydrothermally altered shear zones and narrow quartz veins with minor visible sulfides also produced significant values. In addition, several 5 metre chip samples, across the faces of outcrops of breccia, produced Cu, Ag & Au values of economic significance. The best of these 5 metre chip samples (R-79784) ran 0.12% Cu, 4.3 g/tonne Ag, and 8.52 g/tonne Au.

In most cases, the outcrops covered by 5 metre chip samples displayed gossanous surface weathering but otherwise had little or no visible signs of the amount of mineralization which they host.

In these outcrops, samples representative of the whole rock appear to indicate that economically significant amounts of mineralization are present.

"E Zone"

Only two samples were collected during reconnaissance mapping in the E-Zone. Their locations are shown in Figure 4b. In both cases, the samples consisted of quartz vein material with minor pyrite mineralization. Both samples returned only slightly anomalous values for Cu, and background values for Au, Ag, & As.

3.3 Geophysics

3.3.1 E.M. Survey "Zone A":

The E.M. survey has mapped a number of low conductivity, short strike length conductors all located at the corners of the grid. The most outstanding conductor response is located at L.209--E/19790N which has a conductivity of 30 Siemens and a depth to current axis of approximately 20 metres. The response of this zone decreases to the east, however, to the west on Line 20700E the E.M. response suggests a wide zone of lower but discrete conductivity as indicated on the SE-88 E.M. map. An end response is noted on L.20700E suggesting that the west end of the source lies between Lines 20700E and 20600E. This conductive package lies at the interface between a low resistivity and an intermediate resistivity unit as mapped by the E.M. system and which is indicated as a feathered line on the E.M. and magnetic maps.

Magnetometer Survey "Zone A":

The magnetometer survey recorded a low amplitude "core" over the greater portion of the grid with a rim of higher magnetics seen at the edges of the gridded area. Definition of discrete magnetic domains or signatures is not possible with this data set due to the lack of magnetic contrast.

Induced Polarization Surveys "Zone A":

On the detail grid three lines were completed in order to better define targets that were originally but poorly mapped by the SE-88 E.M. survey. Notwithstanding chainage errors, the two data sets provide good confirmation and detail of the target anomaly. The I.P. survey has defined the zone as an exceptionally low resistivity source (1 ohm-m) with a high PFE of 15-20% FE. This target is recommended for additional follow-up with trenching (if possible).

Line 20300E: The resistivity and PFE data define a sharp contact at Station 19975N with an obvious "layering" seen in the PFE data north of this contact suggesting increasing polarizable material and/or decreasing grain size with increasing depth. South of this contact the PFE values are high and occur in a

highly variable resistivity source. The narrow low resistivity zone centered at 19962.5N is suggestive of a fault and/or contact structure with the possibility of a second source located at 19912.5N/n=4 at a depth of approximately 34 to 40 metres.

Line 20500E: The same contact as defined on Line 20300E is mapped at Station 19950N, coincident with a discrete low resistivity/high PFE anomaly centered at 19937.5N The same "layering" is seen to the north of this contact in the PFE data whereas the associated resistivity data is somewhat more homogeneous. South of the contact the PFE background is elevated and the resistivity data is complex with high resistivities recorded at near surface.

Line 20700E: The I.P. "contact" is mapped at Station 19950N, coincident with a low resistivity/high PFE zone centered at 19925N. The overall signature recorded on this line is similar to that of Line 20500E above. Note that the exceptionally low resistivities continue to be mapped to the south of the defined contact.

3.3.2 Zone B

Line 50600N: The survey on this line has identified a large PFE, low resistivity anomaly at the extreme west end of the survey line. The west limit of the zone has not been defined.

3.3.3 Zone C

Line 50900E: A PFE zone is mapped between 9712.5N and 9775N which for the most part is on the flank of a significant low resistivity package. A second item of interest is the low resistivity zones, one of which is quite complex and lies west of Station 9725E indicating a distinct change in the geology. A narrow low resistivity source is recorded at 9975E and there is no appreciable PFE anomaly associated with this structure.

3.3.4 Zone D

The work completed on this zone expands upon the I.P. work completed late last year. The results indicate this target to be a low resistivity (1-5 ohm-m) source with a PFE response of greater than 15% FE. The background in this environment is high, at 10 to 15% FE, and that it is the resistivity and metal factor that best

define the target anomaly. As for Zone A, trenching should be considered as method of further evaluation.

Line 50950E: Exceptionally low resistivities are evident south of Station 9587.5N and are typically 1 ohm-meter. Coincident with part of this conductive unit are high PFE's occurring between 9500N and 9650N. What is really anomalous on this section are the two high resistivity zones which appear as islands in a low resistivity environment.

Line 51150E: A discrete low resistivity source is defined at 9512.5N. This appears as a single discrete source, however, there is very limited coverage to the south to confirm this. Coincident with the low resistivity zone there are no PFE readings due to the low signal current as a result of low resistivities. Adjacent to this zone however, there is a noticeable increase in the PFE values which would suggest anomalous values would be associated with the low resistivity anomaly.

Line 51250E: A wide low resistivity zone is defined between 9400N and 9450N. A puzzling picture of the PFE data is seen coincident with the conductor in that the first separation values are anomalous as are the pant-legs emanating from the 9400N-9425N and 9425N-9450N dipoles but within this boundary the PFE values show a marked decrease. This still presents a valid target.

Line 51350E: The low resistivity feature that has been mapped across all of the survey lines continues to this line, however, it's character has changed somewhat in that the target zone has increased in width and the target resistivity has increased by a significant amount. Overall the signature (9462.5N - 9525N) has degraded in comparison to that recorded on lines to the west but is still a valid target.

3.3.5 Recommendations

Both target areas "A" & "D" are recommended for further work in order to determine their source. Due to the interpreted near surface occurrence of these anomalies, trenching should be considered as an alternative to drilling. Specifically the expected (near) surface location of the sources in order of decreasing priority for each zone are as follows:

Zone A:	Line 20500E/19937.5N	Depth: <10 metres to top of source.
	Line 20300E/19962.5N	Depth: <10 metres to top of source
	Line 20700E/19925.0N	Depth: <10 metres to top of source.
Zone D:	Line 50950E/9587.5N	Depth: <10 metres to top of source.
	Line 51150E/9512.5N	Depth: <10 metres to top of source.
	Line 51250E/9425.0N	Depth: <10 metres to top of source.
	Line 51350E/9500.0N	Depth: <10 metres to top of source.

3.4 Diamond Drilling

As stated in Section 2.11, 9 "NQ" holes totalling 1066.9 metres were drilled on the property during 1988. Three holes were drilled in the "A Zone" and six holes were drilled in the "D Zone". Drill hole locations are shown in Figure 4a. Drill logs are shown in Appendix II. Drill sections are shown in Figures. Core stored in Courtney

3.4.1 Drilling on the "A Zone"

Diamond drill holes NMX 88-16, 17 and 18 were drilled to test coincident Induced Polarization, Electromagnetic, and Polymetallic soil geochemistry (Cu, Ag, Au, As) anomalies.

Hole NMX 88-16 intersected Karmutsen Formation basaltic flows, pillow lavas and volcanic agglomerate, with pervasive fracturing throughout. Fractures were generally 0.5 ~ 3 mm wide, with quartz-carbonate fillings and minor sulfides Po, Py (Cpy), totalling less than 3%. Geochemical analysis of the basalts returned only background or slightly elevated values for Cu, and only background values for Ag, As & Au. A narrow quartz vein from 80.72 to 81.30 metres returned slightly anomalous Cu-Ag values and only background As-Au values.

Two diorite dykes were intersected at from 110.41 to 129.84 and from 164.50 to 165.84. Analyses of the dykes and the surrounding wallrock returned only slightly elevated Cu, Ag values and background As, Au values.

Silicification of the basalt increased slightly, proximal to the quartz vein and dykes.

Hole NMX 88-17 intersected Karmutsen Formation basalts, with quartz carbonate fracture fillings and minor sulfides Po, Py (Cpy) <3%. Geochemical analyses returned only background values for Cu, Ag, As & Au. A narrow quartz vein, from 83.51 to 84.45 metres composed of very fine grained bull quartz with minor pyrite returned slightly elevated values for Cu, Ag, As & Au.

A massive sulfide vein, composed of <30% Cpy and >70% Po was intersected from 196.96 to 197.21 metres. Contact measurements were 30° upper and 35° lower (measured from core axis). Geochemical analysis of this short section returned 96926 ppm Cu, 46.4 ppm Ag, 126 ppm As, and 3670 ppb Au.

A 46 cm section immediately above the massive sulfide returned elevated Cu, Ag values, but below the massive sulfide section the core returned only background values.

Hole NMX 88-18 intersected Karmutsen basalts with quartz fracture fillings and very minor sulfides Po, (Py-Cpy) less than 2% total. Geochemical analyses returned only slightly elevated Cu values and only background Ag, As, Au values.

Two minor quartz veins, from 45.52 to 42.67 m and from 77.72 to 78.82 metres contained minor sulfides Po, Cpy, Py. Geochemical analyses from these intersections returned slightly elevated Cu & Ag values.

The results from the above three drill holes explain the coincident geochemical and geophysical targets, although better intersections of sulfide mineralization were anticipated.

Overall, the geology observed in the drill holes consists of fractured basalts which may represent the transitional stage between basaltic breccias (Section 3.1.2.4a) and massive basalts (Section 3.1.2.1). The basalts observed in these drill holes have been subjected to insufficient breakage and hydrothermal activity to host mineralization of economic significance. However, the short section of massive sulfide intersected in Hole #17 is of interest, since a similar occurrence was reported by earlier workers, occurring in outcrop in Murex Creek. An old D.D. Hole MW 74-1, was drilled by Imperial Oil Ltd., to intersect "a massive Cpy-Po vein up to 3 feet thick, quartz veins and intrusive breccia mineralization exposed in (Murex) creek". Hole MW 74-1 failed to intersect this target, but its location is shown in Figure 5. The occurrence was not observed during Noranda's mapping programme but from the location of the drill hole and the E.M. survey signature, this occurrence could be connected to the massive sulfide

intersection in Hole #17. The fact that no similar intersection was encountered in Hole #18 may be due to discontinuity or a change in direction of the host structure.

3.4.2 Drilling on the "D-Zone"

Diamond drill holes NMX 88-19, 20, 21, 23 & 24 were drilled to test continuity of Au mineralization in fluidized, mixed lithology breccias, previously encountered by Better Resources MX 86-1 and Imperial Oil's MW 74-3 holes.

D.D. Hole NMX 88-22 was drilled to test a coincident Induced Polarization and soil geochemical anomaly.

Hole NMX 88-19 intersected Karmutsen Formation basalt, diorite dykes and mixed lithology breccias. The breccias are composed of medium to large pebble sized, sub-angular fragments of basaltic, sedimentary and dioritic lithology within a quartz-sulfide matrix Po (Cpy). Fragment to matrix ratio is approximately 4:1. The matrix is generally 50% quartz, 50% sulfides, but sulfide content occasionally reaches 80%.

Best intersections were as follows:

From	To	Width	Cu (ppm)	Ag (ppm)	Au (ppb)	Au (g/T)
11.73	12.73	1.0m	276	0.1	320	0.44
12.73	13.73	1.0m	327	0.2	4310	3.15
13.73	14.73	1.0m	832	0.2	6770	6.89
14.73	15.73	1.0m	687	0.1	3210	2.81
15.73	16.73	1.0m	724	0.1	2180	2.02
16.73	17.73	1.0m	374	0.1	2010	1.85
17.73	18.73	1.0m	638	0.3	590	0.58
18.73	19.73	1.0m	313	0.1	152	0.24
19.73	20.73	1.0m	606	0.2	970	0.72
20.73	21.73	1.0m	957	1.1	12020	11.45
21.73	22.73	1.0m	1997	1.3	16880	8.95
22.73	23.73	1.0m	3512	1.8	6190	6.61
23.73	24.73	1.0m	1529	0.8	78	0.13

For the above values, ppm & ppb are from geochemical analyses, whilst grams per tonne Au values are from fire assays.

Hole NMX 88-20 intersected Comox sandstone, Karmutsen Formation basalts and mixed lithology breccias. These breccias appeared very similar in fragments and matrix composition as Hole #19, but results received from analyses of the core were generally much lower.

Best intersections were as follows:

From	To	Width	Cu (ppm)	Ag (ppm)	Au (ppb)	Au (g/T)
28.9	29.9	1.0m	620	0.1	1920	1.64
29.9	30.9	1.0m	2840	4.7	415	0.79
30.9	31.9	1.0m	1990	2.0	2840	2.67
31.9	32.9	1.0m	1332	2.5	3160	3.53
32.9	33.5	0.6m	901	0.4	750	1.06
33.5	34.31	0.81m	3272	3.5	795	0.99
34.31	35.31	1.0m	465	0.2	345	0.34
36.31	37.31	1.0m	1494	1.5	885	0.96
37.31	38.31	1.0m	1621	2.1	285	0.34
38.31	39.31	1.0m	1529	2.0	1505	0.58
40.31	41.31	1.0m	1291	0.7	320	0.38
42.31	43.31	1.0m	812	0.4	83	0.34
47.67	48.67	1.0m	1913	2.1	6190	2.47
48.67	49.67	1.0m	2149	2.6	550	0.65
49.67	50.67	1.0m	3413	3.8	1150	1.23
50.67	51.67	1.0m	1891	2.1	485	1.06

Where ppm & ppb values are from geochemical analyses and g/t Au are fire assay results.

D.D. Hole NMX 88-21, which was drilled to test the uphill (westward) extension of the breccia, encountered sandstones and basalt with diorite dykes. However, only background values for Cu, Ag & Au were returned from geochemical analyses of the core.

D.D. Hole NMX 88-22 intersected basalt with thin (~0.5 m) quartz veins and a narrow (~0.75 m) diorite dyke. Minor sulfides Po (Py, Cpy) totalling 2% occurred as fracture fillings within the basalt and diorite and as interstitial grains within the quartz veins. Only background values for Cu, Ag & Au were returned from geochemical analyses.

Hole NMX 88-23 encountered basalt, diorite, mixed lithology breccia and ended in basalt.

Whilst the breccia in this hole had the same appearance as that in Holes #19 & #20, geochemical analyses returned only two anomalous sections. These were as follows:

From	To	Width	Cu (ppm)	Ag (ppm)	Au (ppb)
55.26	56.75	1.49	1661	2.4	420
72.48	74.02	1.54	15711	19.1	73

Drill Hole NMX 88-24 consisted of mixed lithology breccias, intruded by several narrow diorite dykes. The breccia fragments and matrix composition are similar to those in holes #19 & #20, but geochemical analyses returned only minor sections of elevated Cu, Ag, & Au values.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 A-Zone and Murex Creek

The geochemical and geophysical anomalies tested with drill holes NMX 88-16, 17 & 18 were explained by the occurrence of sub-economic sulfide mineralization associated with diorite intrusives and related quartz veining.

The intersection of massive sulfide in Hole #17 is considered too small to be economically important unless it could be proven to have considerable continuity along strike.

The E.M. conductor on Line 209E has not as yet been drill tested. This conductor is considered to have a signature typical of a massive sulfide body, and should be tested by drilling.

It is possible that the massive sulfide in Hole #17 and the cause of the E.M. conductor on Line 209E are connected. The fact that no massive sulfide was intersected in Hole #18 may be explained by such a sulfide body pinching and swelling along strike.

Murex Creek

The breccias mapped and sampled during the detailed work in Murex Creek returned sub-economic values for Cu & Ag. This area is therefore considered to be a low priority target.

4.2 B-Zone

The I.P. survey run over this zone to test a low level polymetallic soil geochemistry anomaly produced no identifiable drill targets. This area is therefore assigned to low priority status.

4.3 C-Zone

The I.P. survey, run over this area to test a Cu anomaly in soil geochemistry, produced no identifiable drill targets. Geological mapping in this area, during 1988, identified only silicified and hornfelsed Comox Formation sandstones, with minor Po, Py mineralization. No further work is recommended in this area.

4.4 D-Zone

Detailed geological mapping, rock sampling and drill testing have identified significant Au mineralization within the breccias in this part of the property. The D-Zone is therefore the #1 target area for future work.

Recommendations for future work are as follows:

i) The new detail grid, begun in the late fall of 1988 should be completed, so as to give good control over future work.

ii) Soil sampling, of "B" horizon, at 10 metre intervals over the new grid. Samples should be large enough to be representative, 1 kg per sample is recommended. These should be screened to 10 mesh, (<2.0 mm) thereby retaining the coarse and medium, as well as the fine fraction for digestion and analysis. The screened material should then be pulverized and 30 grams (instead of the normal 10g) should be digested to produce the solution for analysis.

iii) A magnetometer survey should be run over the new grid, with readings taken every 5 metres. The purpose is to identify those areas underlain by breccia with the quartz-sulfide (Po, Py, Cpy) matrix observed in drill core.

iv) An Induced Polarization survey should then be run over selected areas of the new grid. Areas should be selected on the basis of results from detailed soil geochemistry and magnetometer surveys, as well as geological mapping.

v) Further detailed geological mapping should be performed, together with trenching and rock sampling. Channel and panel samples should be taken, in order to obtain representative samples.

vi) Depending upon results of the work recommended above, new drill targets should be identified.

4.5 E-Zone

The results of soil geochemistry surveys, geological mapping and rock sampling have not produced any identifiable drill targets. This area is therefore assigned to low priority status.

APPENDIX I

CROWN FOREST LICENCE AGREEMENT

CrownForest

5 July 1988

File: General 129-I

Noranda Exploration Company, Limited (No Personal Liability)
1050 Davie Street
Vancouver, B.C. V6E 1M5

(the "Licensee")

Attention: Regional Manager

Dear Sirs:

RE: Block 13 TFL 47 Comox Land District;
Piggot Creek and Brown's River

Crown Forest Industries Limited (the "Licensor") hereby grants the Licensee a non-exclusive licence to enter and occupy those lands marked in yellow on Schedule "B" hereto (the "Lands") for the purpose of mineral exploration (the "Work") upon the following terms and conditions:

1. Subject to Paragraph 16 of Schedule "A" hereto, this Licence shall be for a term commencing on 1 January 1988 and ending on 31 December 1988.

2. The Licensee will pay upon execution of this License, and in addition to any other monies payable by the Licensee hereunder:

   (a) $300.00 to the Licensor for the rights granted the Licensee hereunder and as a document processing fee; and

   (b) $5,000.00 to the Gold Commissioner pursuant to Section 9 of the Mineral Act, which, at the termination of this Licence, will be applied against any damages suffered by the Licensor as a result of the Licensee's use and occupation of the Lands, and the remainder, if any, will be returned to the Licensee.

3. The Licensor's authorized representative for the purpose of this Licence is Mr. R.D. (Don) Jones, Operations Engineer (hereinafter referred to as the "Authorized Representative").

4. The Licensee shall not conduct or perform any:

   (a) clearing, trenching, scraping or other activities causing soil disturbance on the Lands;

   (b) ditching, culverting, clearing or other road upgrading activities on the Roads; or

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(c) repairs, alterations or changes to any bridges, culverts or other structures,

without the prior approval of the Authorized Representative which approval may be granted in the sole discretion of the Authorized Representative. For the purposes of this provision the Licensor may require a site inspection and a review of the Licensee's plans.

5. The Licensee shall notify the Licensor prior to conducting any blasting on the Lands. The Licensor may restrict or regulate blasting by the Licensee.

6. The Licensee shall conduct its blasting operations in compliance with all federal, provincial and municipal laws. Without limiting the generality of the foregoing, the Licensee shall comply with the Transport of Dangerous Goods Act of B.C. and the Workers Compensation Act of B.C.

7. Where the Licensee's activities may pose a hazard to other users of the Lands or the Roads, the Licensee shall post warning signs.

8. Schedules "A" and "B" attached hereto form a part of this Licence.

Kindly indicate your agreement with the terms and conditions contained in this Licence in the space designated on the enclosed copy hereof and return the copy to us together with your cheque in the amount of $300.00 and your confirmation of the deposit required by Paragraph 2(b) above.

Yours very truly,

CROWN FOREST INDUSTRIES LIMITED

GERRY YOUNG

(Title) Manager - Johnstone Strait

The Common Seal of NORANDA EXPLORATION COMPANY, LIMITED was hereunto affixed in the presence of:

c/s

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SCHEDULE "A"

GENERAL TERMS AND CONDITIONS

CERTIFICATE AND WORK

1. The Licensee will, before commencing work or exercising any of its rights hereunder (the "Work"), deliver to the Licensor a true copy of its Free Miner Certificate issued under the Mineral Act, R.S.B.C. 1979, c. 259, and any renewals or replacements thereof, which the Licensee will maintain as valid and subsisting throughout the terms of this Licence.

   Work shall mean any mineral exploration activity, but shall not include activity which may result in damage to forest soils, immature trees, standing timber or felled and bucked timber unless approval has been granted under Paragraph 6(b) hereto.

LOCATION OF OPERATIONS

2. The Licensee's Work and operations hereunder shall be limited to the Lands outlined in yellow on the map attached as Schedule "B" hereto and shall be conducted in a manner which does not interfere with the Licensor's operations.

ROAD USE

3. The Licensee may use the Licensor's roads located on or providing access to the Lands (the "Roads"), subject to the Licensor's right, in its sole discretion, to prohibit the Licensee from using particular Roads from time to time. The Licensee will keep the Licensor informed of its use of the Roads, will use the Roads in a manner which does not interfere with the Licensor's use of the Roads, and will advise the Licensor at least two days in advance of any equipment movement on the Roads other than passenger vehicles.

ROAD CONSTRUCTION AND MAINTENANCE

4. The Licensee will not alter, modify, repair, maintain, extend, or construct Roads on the Lands without the prior written approval of the Licensor and, having obtained such approval, the Licensee will carry out such work at its expense and to the standards established by the Licensor.

PRIOR APPROVAL

5. The Licensee will not commence mechanical work on or clear any site without the prior approval of the Licensor's authorized representative which approval will not be unreasonably withheld or delayed.

WORK SITES

6. The Licensee will:

(a) mark all Work sites in the field;

(b) have all Work sites reviewed by the Licensor's Authorized Representative prior to commencing Work;

(c) upon completion of the Work, leave the Work sites in a safe and environmentally sound condition, provided however the Licensee shall not be liable to correct or repair any condition not attributable to its activities; and

(d) where the Work might result in soil disturbance or damage to immature, mature or felled timber, obtain the approval of the Licensor's Authorized Representative and agree with the Licensor on the amount of compensation to be paid by the Licensee for such disturbance or damage, all before the commencement of work.

SITE REHABILITATION

7. Should the Licensee cause damage to soils or vegetation, the Licensee will, at its expense, carefully pile in an orderly manner consistent with standards of the Licensor all slash and forest debris which results from the Work and the Licensee's occupation of the Lands. Prior to the end of the Licensee's occupation, but at times specified by the Licensor, will burn and dispose of all such slash and debris and will restore and reclaim those areas of timberland on the Lands disturbed by the Licensee's occupation so that they are placed in such states of topography and fertility as in the reasonable opinion of the Licensor are necessary for good timber growing purposes, and will replant those areas with seedling stock approved by the Licensor.

RIGHTS RESTRICTIONS

8. THe Licensor may at any time and from time to time prohibit or restrict the exercise of any of the rights hereby granted to the Licensee for such period or periods of time as the Licensor may in its absolute discretion determine should the Licensor consider such prohibition or restriction justified on account of hazardous weather conditions or unreasonable interferences with the Licensor's operations and the Licensee will at all times observe and conform with such prohibitions or restrictions.

COMPLIANCE

9. The Licensee will comply with the provisions of all laws and regulations passed in pursuance thereof, of Canada, of British Columbia and of the municipal and regional authorities having jurisdiction over the Lands and the Work, and the Licensee hereby acknowledges that the provisions of this Licence are in addition to such laws and regulations and, without limiting the generality of the foregoing, the Licensee will obtain such permission as may be required under the Forest Act of British Columbia and from other landholders to conduct the Work and use the roads contemplated to be used in connection with the

Licensee's Work hereunder and the Licensee will comply with the requirements of the Licensor and with the requirements of all persons acting under the Minister of Forests and Lands in respect to fires, including slash disposal.

RISKS AND RELEASE

10. The Licensee will and does hereby accept all risks associated with its entry to and occupation of the Lands, and of its use of all of the Licensor's roads leading to the Lands, as its own risks and, without limiting the generality of anything contained herein, the Licensee for itself and its directors, officers, employees, agents, contractors, sub-contractors, and invitees and for any persons acting in concert with it hereby releases and discharges the Licensor and its directors, officers, employees, agents, contractors, sub-contractors, and invitees (collectively the "Licensor's Representatives") from any and all responsibility and liability, whether arising in tort, contract or otherwise, in respect of all loss, damage, personal and property injury and death arising out of or attributable to the state of the Lands, to the design, layout or condition of the Licensor's roads and trails thereon and the other lands upon which the Licensor's roads are situate on Vancouver Island, or the Licensor's or the Licensor's Representatives' conduct on such lands or roads whether or not such loss, damage, personal or property injury, or death is attributable to negligence of the Licensor or the Licensor's Representatives save and except the negligent operation of a motor vehicle by the Licensor or the Licensor's Representatives.

INDEMNITY

11. The Licensee will indemnify and save harmless the Licensor from and against all claims, losses, costs, damages, demands, actions, and causes of action made against the Licensor, against the Licensee or through the Licensee against the Licensor, or suffered by the Licensor in respect of the Licensee's occupation of the Lands and use of all the Licensor's roads or trails on the Lands or leading to the Lands;

and the Licensee will immediately cause to be removed all liens and other charges which purport to charge the Lands in consequence of the Licensee's activities hereunder.

INSURANCE

12. The Licensee will obtain and maintain throughout the term hereof public liability insurance and property damage insurance in the minimum amount of $2,000,000.00 with respect to death or injuries to persons or property caused by or arising out of or attributable to the exercise of the rights granted hereunder, proof of which insurance shall be delivered to the Licensor upon request.

COMPENSATION

13. In addition to all other payments by or obligations of the Licensee hereunder, the Licensee may be required to pay to the Licensor compensation for the value of any timber taken from the Lands, the amounts in respect of any interruption to timber growing cycles, an amount for injurious affection to adjacent lands, and generally for damage to roads, timber, and lands resulting from the Licensee's activities.

TAXES

14. In addition to any compensation that may be payable in respect of those matters described in Paragraph 13 and in addition to any other monies payable hereunder, the Licensee shall pay to the Licensor an amount equal to any land use taxes imposed on the Licensor as a result of the Licensee's Work and improvements constructed on the Lands by the Licensee.

CLEAN UP

15. Immediately upon the termination of this Licence, the Licensee will remove all equipment, structures and improvements placed on the Lands

by it and leave the Lands and Roads in a condition reasonably consistent with that in which the Licensee found them.

DEFAULT

16. If the Licensee is in default hereunder, the Licensor may deliver to the Licensee, either personally or by registered mail, at the above-mentioned address, notice of such default, which notice will be deemed to have been received when delivered, if delivered, and five days after mailing, if mailed, and if the default is not rectified within five days of receipt of such notice, the Licensor may immediately terminate this Licence by giving further notice to the Licensee in the same manner as above.

NO WAIVER OF RIGHTS

17. Nothing contained herein is or should be construed as a waiver by either party of any rights which that party has or which may accrue to that party at law, in equity, or by statute.

ASSIGNMENT

18. This Licence may not be assigned by the Licensee.

SUCCESSORS AND ASSIGNS

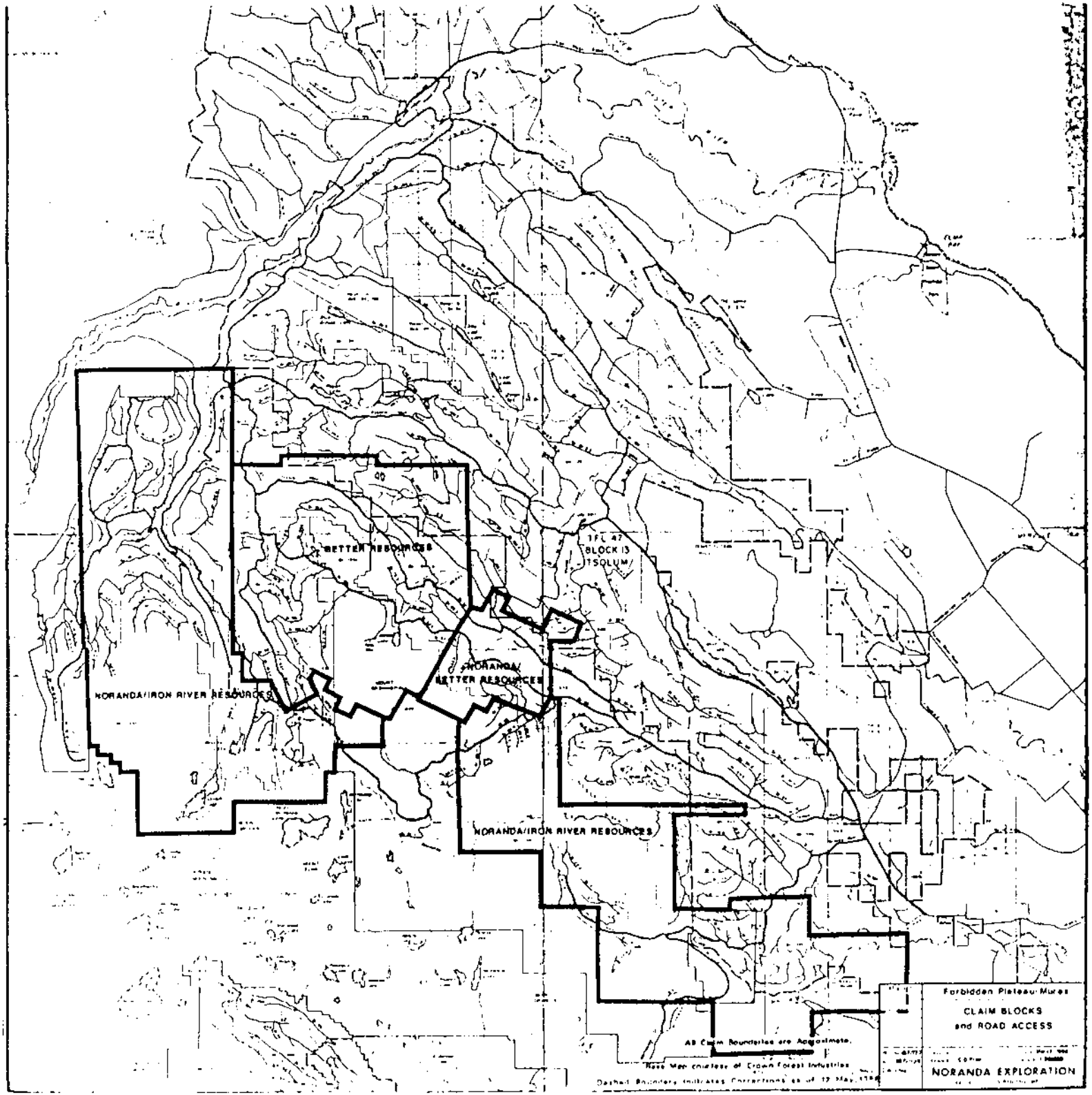
19. This Licence is binding upon and shall enure to the benefit of the successors of the Licensee and Licensor and the assigns of the Licensor.

PARAGRAPH HEADINGS

20. The paragraph headings in this Licence are for ease of reference only and are not to be used in the construction of this Licence.

NOTICE

21. Any notice required hereunder will be deemed to have been properly and sufficiently given if delivered in person or sent by prepaid registered mail to the address of the parties first above written and shall be deemed to have been received when delivered, if delivered in person, or 5 days after date of mailing if mailed.


BETTER RESOURCES
TFL 47
BLOCK 13
(TSOLUM)
NORANDA/
BETTER RESOURCES
NORANDA/IRON RIVER RESOURCES
NORANDA/IRON RIVER RESOURCES
All Claim Boundaries are Approximate.
Base Map courtesy of Crown Forest Industries
Dashed Boundary indicates Corrections as of 12 May, 1986
Forbidden Plateau Area
CLAIM BLOCKS
and ROAD ACCESS
NORANDA EXPLORATION

APPENDIX II

DIAMOND DRILL LOGS

NMX 88-16, 17, 18, 19, 20, 21, 22, 23, 24

LATITUDE : 19878.000
DEPARTURE: 20300.000
ELEVATION: 807.700
DIP AT COLLAR: -50.00 DEG
AZIMUTH : 18.00 DEG
TOTAL DEPTH : 174.64

D I A M O N D D R I L L L O G
MUREX DRILL PROJECT

HOLE NO.: NMX88-16

DATE LOGGED: --/--/--
LOGGED BY :

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
0.00	174.64	0.00	6.10	OVERBURDEN
		6.10	26.58	BASALTIC AGGLOMERATE Subrounded to rounded fragments of basalt, 1/2cm-4cm in a matrix of porphyritic basalt. Dark green basalt white feldspar phenocrysts, 1-2mm size, f.g. weakly magnetic. Basaltic agglomerate: A flow top breccia consisting of fragments of basalt in a basalt matrix structure. 7.98m Fault 40 deg aca, Chl alteration. 8.44m Jnting 42, 20 deg aca. 8.53m Jnting 35 deg aca. Jnting 80 deg (/= 1% Po, (/= 1% Py 8.83m Jnting 15-30 deg aca. 8.99m Frac 35 deg aca, sulf str 1% Po ff 9.20m Sulf f.f. 30 deg aca, Po plating frac surfaces, Joint 35 deg aca 9.80m Sulf f.f. 80 deg aca, (/= 1% Po 10.06m Po f.f. (/=1% Po 75 deg aca (/= 1% Po 85 deg aca. 10.80m QFF 1mm 30 deg aca 11.00m (/= 1%Po ff 80 deg aca 12.19m Jnting 40-46 deg aca Q in filling 40 deg aca 12.80m Jnt 39 deg aca sulf f.f. (/= Py, Tr Po, 80 deg aca 14.00m Sulf f.f. 70-80 deg aca Frac 30 deg aca, 62 deg aca same sulf as

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
				before 14.34-16.71m Frac moderate 20 deg aca, 80 deg aca, 30, 25, 40, 50, 60, 80 deg aca. 17.07-17.80m mod two int frac QCC FF 60 deg aca width 1mm to 1cm QCC FF 45 deg aca 1mm 17.69-17.79m Int Frac CC FF 19.30-20.57m Mod frac 45, 30, 70, 85, 50, 40, degrees aca, Joint 40 & 45 deg aca, frac 30 deg aca. 55 deg aca 19.80m 1% Po Tr Cpy FF 35 deg - sulfs 21.03m Int 15 deg aca frac 50 deg aca 22.28-22.89m Mod fracing 40 deg aca, 35, 30 deg (/= 1% Po, Tr Cpy 22.60m Jnts 80 deg aca 45 deg, 22 deg aca 24.08-24.80m 1-2% Po As FF 60, 40 deg aca. Solishus minor QFF, 1% Po, AS FF Tr Cy 70 deg aca 24.25-25.90m Core badly broken 26.34m Jnt 45 deg aca, 1% Po, AS FF 22 deg aca minor frac (/= 1% Po, 50 deg aca 1mm. 26.58m Agglom text changing to a more fractured basalt 26.82m Q FF 50 deg aca 26.82-28.77m Moderate to intense frac well healed sulf 1%-2% Po as FF 1mm 55 deg aca & 80 deg aca 28.77-32.60m 1-3% Po (/= 1% Cpy As FF 40 deg aca, 80 deg aca. 45 deg aca.

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
				Po FF frac parallel to CA, 1-2mm Off 1-2% Po parallel to ca (/= 1% Py Tr Cpy? 31.60m Po FF 38 deg aca 32.26m Frac 28, 30, 33 deg aca, Po FF 45 deg aca Q FF 32.92m Jnting 55,32,25 deg aca 33.20m Py (/= 1% FF 35 deg aca 35.05m Frac 35 deg aca 80 deg aca, Tr Po FF very sil 36.04-36.12m Q,2% Po,1% Py. 30 deg aca 37.07m Q sulf, FF 27 deg aca, 1% Po width 1cm 37.65m 1-3% Po. As FF 15 & 50 deg aca Note: core bec increasingly silic going down the core.
		26.58	45.90	BASALT Ints frac with Q sulf. FF. FF 20 deg aca
		45.90	64.69	AGGLOMERITIC BASALT 50.59-51.20m Str of c.c. & q & sulfides 30 deg aca, some qtz crystals 50.45m c.c. f.f. minor sulf 20 deg & 33 deg aca 54.50m Joint 35 deg aca 55.05-56.84m Core quite fractured, 30, 40 deg & 25 deg aca. 57.90m 15, 25 & 45 deg Jointing aca 58.57-58.80m Sulf f.f. 30 deg aca, hairline sulf f.f. 22 deg aca 58.80-62.78m Hairline fracs q, calcite. sulfides f.f. 35 deg aca.

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
				62.78m Hairline fract filled with Po (/= 40 & 30 deg aca.
		64.69	67.60	BASALT Has a bedded appearance bedding angle 30,35,42 degrees aca.
		67.60	80.72	PORPHYRITIC BASALT Sulf f.f. 20 degrees aca, hair line f.f. 72.57-73.37m sulf f.f. 65 deg aca, Q FF 25 degrees aca. 74.74-75.73m Q sulf f.f. Q FF 15 degrees aca. S FF 42 dec aca, 35 deg aca. 78.63m Frac 35 & 30 deg aca. 75.73-80.65 Q FF 35 deg, sulf FF 40 deg aca.
		80.72	81.30	QUARTZ VEIN 17 degrees aca, Bull Q vgy Upper contact 40 degrees aca, lower contact 17 degrees aca to 81.30
		81.30	110.41	BASALT Fine grained porph dark green basalt weakly mag. Sulf f.f. 30 & 85 deg aca, Qtz & sulf f.f. 35 deg aca. 88.54m Frac slightly chl, 30 degrees aca 92.22-93.50m Slt chl, f.f. 50 deg aca 96.37-98.21m Q f.f. 42 deg, chl f.f. 50 deg & sulf f.f. 32 degrees aca. 99.15-100.38m Sulf f.f. 35 degrees aca. 104.38-104.85m Fault, blocky core 104.84-105.80m Q ff 40 deg & cpy f.f. 30 deg aca, chl f.f. 35 deg aca

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
				105.80-107.29m Minor ch f.f. 40 deg aca joint/fracture 30 & 45 degrees aca 108.05-108.56m Sulf f.f. 25 deg aca.
		110.41	129.84	DIORITE DYKE Porph at margin, f.g. diorite. Upper con 22 deg aca, Po & Cpy min as f.f. 25 deg aca, qtz as f.f. 20 to 25 deg aca, magnetic 111.55-112.51m Core broken, fracts 22 deg 30, 18 deg aca. Chl along fracts, Chl & sulf as f.f. 111.41-129.84m Actinolite as f.f. bright green in color & consisting of needle like crystals, 30 deg aca. 118.13-119.53m Quartz-carbonate f.f. 25 deg aca. & 40 deg aca. Lower contact 35 degrees aca.
		129.84	164.50	BASALT F.G. dark green basalt, magnetic, porphyritic near upper contact with the diorite. 129.84-131.21m Sulf f.f. with Po & Cpy occurring together in fracts, 40 deg and 15 deg aca. Chl (minor) along fracts. 144.44-157.57m Core badly broken with occasional comp peices (/= 21 cm in length. Frac surfaces are chloritic, 32 deg, 52 deg aca, & also parallel to CA. Fault. 134.61-136.17m Sulf f.f. 30 deg aca. 157.00-158.50m Sulf f.f. 80 deg aca 160.01-181.50m Sulf f.f. 45 deg aca.

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
		164.50	165.84	DIORITE DYKE F.G. salt & pepper color, magnetic. Sulf dissem & in fracts 50 & 35 deg aca. 165.43m Small quartz str 30 deg aca, Upper contact 65 deg & lower contact 40 deg aca.
		165.84	174.64	BASALT f.g. dark green in color, weakly to moderately magnetic, quite siliceous becoming porphyritic towards the end of the hole. 167.00-168.50m Sulf f.f. 55 deg aca. 170.00-171.50m Sulf f.f. 35 deg aca.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-16

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
40704	41.45	42.45	1.00	918.	0.3	14.
40705	48.22	48.85	0.63	614.	0.3	8.
40706	49.81	50.48	0.67	69.	0.1	4.
40707	50.48	51.05	0.57	241.	0.1	2.
40708	51.05	51.54	0.49	147.	0.1	24.
40709	51.54	52.05	0.51	451.	0.5	3.
40710	52.05	52.66	0.61	291.	0.1	5.
40711	52.66	53.15	0.49	64.	0.1	1.
40712	57.99	58.51	0.52	93.	0.1	1.
40713	58.51	58.80	0.29	307.	0.1	4.
40714	58.80	59.34	0.54	51.	0.1	1.
40715	68.00	69.00	1.00	114.	0.1	1.
40716	69.00	70.46	1.46	293.	0.3	3.
40717	70.46	71.00	0.54	135.	0.1	4.
40718	71.00	72.57	1.57	141.	0.3	2.
40719	72.57	73.37	0.80	181.	0.1	6.
40720	73.37	74.74	1.37	142.	0.2	2.
40721	74.74	75.73	0.99	278.	0.1	4.
40722	79.22	80.72	1.50	251.	0.2	3.
40723	80.72	81.30	0.58	2312.	3.0	19.
40724	81.30	82.17	0.87	1119.	1.4	12.
40725	82.17	83.67	1.50	231.	0.2	3.
40726	83.67	85.17	1.50	283.	0.2	4.
40727	85.17	86.07	0.90	78.	0.2	1.
40728	86.07	88.17	2.10	170.	0.2	1.
40729	88.17	89.54	1.37	501.	0.6	2.
40730	89.54	91.12	1.58	63.	0.1	1.
40731	91.12	92.22	1.10	312.	0.4	1.
40732	92.22	93.50	1.28	648.	0.5	2.
40733	93.50	94.82	1.32	173.	0.1	1.
40734	94.82	96.37	1.55	170.	0.2	1.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-16

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
40735	96.37	98.21	1.84	109.	0.2	1.
40736	98.21	99.15	0.94	81.	0.1	1.
40737	99.15	100.38	1.23	11526.	6.1	156.
40738	100.38	101.88	1.50	117.	0.1	1.
40739	101.88	103.38	1.50	227.	0.1	1.
40740	103.38	104.84	1.46	437.	0.5	5.
40741	104.84	105.80	0.96	1723.	2.1	1.
40742	105.80	107.29	1.49	158.	0.2	2.
40743	107.29	108.05	0.76	493.	0.6	1.
40744	108.05	108.56	0.51	118.	0.2	1.
40745	108.56	110.41	1.85	217.	0.4	4.
40746	110.41	111.41	1.00	589.	0.5	6.
40747	111.41	112.51	1.10	758.	0.7	13.
40778	112.51	113.98	1.47	687.	0.1	18.
40779	113.98	115.05	1.07	886.	1.0	31.
40780	115.05	117.00	1.95	359.	0.1	6.
40781	117.00	118.13	1.13	812.	1.3	9.
40782	125.30	125.80	0.50	372.	0.3	3.
40783	125.80	126.82	1.02	480.	0.7	12.
40784	126.82	128.18	1.36	373.	0.1	14.
40785	128.18	129.84	1.66	844.	0.1	11.
40748	129.84	131.21	1.37	489.	0.5	9.
40749	131.21	132.88	1.67	3560.	4.8	29.
40750	132.88	134.61	1.73	2045.	2.7	28.
40751	134.61	136.17	1.56	568.	0.5	4.
40752	136.17	137.69	1.52	355.	0.3	8.
40753	137.69	139.17	1.48	170.	0.1	3.
40754	139.17	139.97	0.80	326.	0.4	2.
40755	139.97	141.48	1.51	398.	0.4	1.
40756	141.48	143.00	1.52	238.	0.1	1.
40757	143.00	144.09	1.09	3003.	3.0	39.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-16

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
40758	144.09	145.50	1.41	1681.	1.5	27.
40759	145.50	147.00	1.50	1065.	0.7	31.
40760	147.00	148.50	1.50	1639.	1.7	14.
40761	148.50	149.50	1.00	3170.	4.2	31.
40762	149.50	151.00	1.50	835.	1.0	8.
40763	151.00	152.50	1.50	2735.	4.6	27.
40764	152.50	154.00	1.50	531.	0.6	3.
40765	154.00	155.50	1.50	384.	0.4	4.
40766	155.50	157.00	1.50	160.	0.1	6.
40767	157.00	158.50	1.50	275.	0.1	1.
40768	158.50	160.01	1.51	1825.	1.8	19.
40769	160.01	161.50	1.49	213.	0.1	1.
40770	161.50	163.00	1.50	1576.	1.7	22.
40771	163.00	164.50	1.50	2132.	2.7	31.
40786	164.50	165.84	1.34	1361.	0.7	39.
40772	165.84	167.00	1.16	640.	0.5	5.
40773	167.00	168.50	1.50	966.	1.0	12.
40774	168.50	170.00	1.50	617.	0.6	30.
40775	170.00	171.50	1.50	331.	0.2	194.
40776	171.50	173.00	1.50	2417.	3.2	69.
40777	173.00	174.50	1.50	1769.	2.6	94.

DRILL HOLE NUMBER : NMX88-16

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
40704	41.45	42.45	1.00		918.			0.3			
40705	48.22	48.85	0.63		614.			0.3			
40706	49.81	50.48	0.67		69.			0.1			
40707	50.48	51.05	0.57		241.			0.1			
40708	51.05	51.54	0.49		147.			0.1			
40709	51.54	52.05	0.51		451.			0.5			
40710	52.05	52.66	0.61		291.			0.1			
40711	52.66	53.15	0.49		64.			0.1			
40712	57.99	58.51	0.52		93.			0.1			
40713	58.51	58.80	0.29		307.			0.1			
40714	58.80	59.34	0.54		51.			0.1			
40715	68.00	69.00	1.00		114.			0.1			
40716	69.00	70.46	1.46		293.			0.3			
40717	70.46	71.00	0.54		135.			0.1			
40718	71.00	72.57	1.57		141.			0.3			
40719	72.57	73.37	0.80		181.			0.1			
40720	73.37	74.74	1.37		142.			0.2			
40721	74.74	75.73	0.99		278.			0.1			
40722	79.22	80.72	1.50		251.			0.2			
40723	80.72	81.30	0.58		2312.			3.0			
40724	81.30	82.17	0.87		1119.			1.4			
40725	82.17	83.67	1.50		231.			0.2			
40726	83.67	85.17	1.50		283.			0.2			
40727	85.17	86.07	0.90	1.	78.	4.	28.	0.2	39.	11.	189.
40728	86.07	88.17	2.10	1.	170.	3.	26.	0.2	29.	10.	171.
40729	88.17	89.54	1.37	1.	501.	6.	54.	0.6	37.	13.	211.
40730	89.54	91.12	1.58	1.	63.	4.	47.	0.1	31.	9.	207.
40731	91.12	92.22	1.10	1.	312.	3.	34.	0.4	50.	27.	215.
40732	92.22	93.50	1.28	1.	648.	4.	53.	0.5	109.	60.	168.
40733	93.50	94.82	1.32	1.	173.	4.	35.	0.1	24.	9.	214.
40734	94.82	96.37	1.55	1.	170.	4.	26.	0.2	24.	9.	219.

DRILL HOLE NUMBER : NMX88-16

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
40735	96.37	98.21	1.84	1.	109.	6.	20.	0.2	27.	8.	178.
40736	98.21	99.15	0.94	1.	81.	3.	20.	0.1	31.	10.	174.
40737	99.15	100.38	1.23	6.	11526.	12.	309.	6.1	59.	49.	213.
40738	100.38	101.88	1.50	1.	117.	5.	20.	0.1	31.	10.	215.
40739	101.88	103.38	1.50	1.	227.	4.	23.	0.1	28.	10.	169.
40740	103.38	104.84	1.46	1.	437.	2.	30.	0.5	26.	22.	153.
40741	104.84	105.80	0.96	1.	1723.	5.	111.	2.1	41.	20.	275.
40742	105.80	107.29	1.49	1.	158.	4.	27.	0.2	26.	10.	189.
40743	107.29	108.05	0.76	1.	493.	5.	58.	0.6	43.	17.	221.
40744	108.05	108.56	0.51	1.	118.	5.	20.	0.2	40.	11.	173.
40745	108.56	110.41	1.85	1.	217.	5.	19.	0.4	44.	21.	141.
40746	110.41	111.41	1.00	1.	589.	9.	37.	0.5	7.	18.	133.
40747	111.41	112.51	1.10	1.	758.	19.	80.	0.7	6.	16.	181.
40778	112.51	113.98	1.47	2.	687.	2.	41.	0.1	7.	17.	111.
40779	113.98	115.05	1.07	1.	886.	7.	44.	1.0	6.	19.	135.
40780	115.05	117.00	1.95	1.	359.	6.	28.	0.1	7.	16.	108.
40781	117.00	118.13	1.13	2.	812.	6.	69.	1.3	10.	22.	217.
40782	125.30	125.80	0.50	2.	372.	2.	40.	0.3	7.	13.	113.
40783	125.80	126.82	1.02	3.	480.	4.	41.	0.7	7.	12.	132.
40784	126.82	128.18	1.36	1.	373.	2.	35.	0.1	7.	9.	132.
40785	128.18	129.84	1.66	2.	844.	2.	39.	0.1	18.	20.	102.
40748	129.84	131.21	1.37	1.	489.	7.	73.	0.5	46.	17.	212.
40749	131.21	132.88	1.67	2.	3560.	2.	221.	4.8	49.	32.	284.
40750	132.88	134.61	1.73	1.	2045.	3.	124.	2.7	43.	19.	246.
40751	134.61	136.17	1.56	1.	568.	8.	35.	0.5	31.	12.	164.
40752	136.17	137.69	1.52	1.	355.	7.	30.	0.3	19.	6.	144.
40753	137.69	139.17	1.48	1.	170.	6.	19.	0.1	28.	8.	131.
40754	139.17	139.97	0.80	1.	326.	8.	28.	0.4	47.	18.	136.
40755	139.97	141.48	1.51	1.	398.	4.	22.	0.4	53.	20.	87.
40756	141.48	143.00	1.52	1.	238.	6.	27.	0.1	46.	16.	172.
40757	143.00	144.09	1.09	1.	3003.	2.	165.	3.0	59.	27.	231.

DRILL HOLE NUMBER : NMX88-16

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
40758	144.09	145.50	1.41	1.	1681.	4.	75.	1.5	42.	19.	157.
40759	145.50	147.00	1.50	7.	1065.	6.	55.	0.7	46.	16.	273.
40760	147.00	148.50	1.50	6.	1639.	8.	118.	1.7	59.	18.	564.
40761	148.50	149.50	1.00	1.	3170.	5.	210.	4.2	55.	24.	289.
40762	149.50	151.00	1.50	1.	835.	3.	62.	1.0	48.	17.	243.
40763	151.00	152.50	1.50	1.	2735.	2.	165.	4.6	63.	30.	195.
40764	152.50	154.00	1.50	1.	531.	3.	53.	0.6	52.	17.	289.
40765	154.00	155.50	1.50	4.	384.	2.	38.	0.4	59.	18.	226.
40766	155.50	157.00	1.50	1.	160.	2.	19.	0.1	37.	10.	187.
40767	157.00	158.50	1.50	1.	275.	3.	27.	0.1	57.	18.	163.
40768	158.50	160.01	1.51	1.	1825.	4.	92.	1.8	57.	31.	141.
40769	160.01	161.50	1.49	1.	213.	9.	40.	0.1	53.	20.	178.
40770	161.50	163.00	1.50	1.	1576.	2.	80.	1.7	71.	23.	137.
40771	163.00	164.50	1.50	1.	2132.	5.	131.	2.7	52.	17.	178.
40786	164.50	165.84	1.34	1.	1361.	2.	86.	0.7	15.	9.	209.
40772	165.84	167.00	1.16	1.	640.	4.	34.	0.5	82.	31.	120.
40773	167.00	168.50	1.50	1.	966.	10.	68.	1.0	55.	17.	220.
40774	168.50	170.00	1.50	1.	617.	2.	47.	0.6	70.	20.	175.
40775	170.00	171.50	1.50	1.	331.	3.	45.	0.2	53.	16.	190.
40776	171.50	173.00	1.50	1.	2417.	9.	96.	3.2	55.	21.	195.
40777	173.00	174.50	1.50	1.	1769.	10.	136.	2.6	106.	33.	194.

LATITUDE : 20000.000
DEPARTURE: 20500.000
ELEVATION: 735.100
DIP AT COLLAR: -45.00 DEG
AZIMUTH : 198.00 DEG
TOTAL DEPTH : 213.96

D I A M O N D D R I L L L O G
MUREX DRILL PROJECT

HOLE NO.: NMX88-17

DATE LOGGED: --/--/--
LOGGED BY :

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
0.00	213.96	0.00	4.57	CASING
		4.57	83.51	BASALT F.G. light green to dark green basalt, weakly magnetic. Porphyritic with phenocrysts of white feldsoar 1-2mm in size. Quite siliceous, and is mottled dark green light-green and white. 4.57-9.82m Jointing 35 & 75 deg aca. Sulf. f.f. 60 deg aca, & dissem in random fracts. 9.82-10.77m Quartz vein with minor sulf. orient 40 deg aca. 10.77-12.26m Fracts parallel to core axis. 15.68-16.43m Alteration siliceous zone, 3cm in width, 30 deg aca. 16.43-18.30m Sulf as f.f. & dissem in basalt. 10 & 75 deg aca. Alteration zones 18-30cm with quartz, sulf, & ep orient 45 deg aca. 18.30-19.59m Quartz string with minor Po, 3mm orient 60 deg aca. Struct 30 deg aca with min's which grow outward from a cent pt in a star shape, white in color, hardness 6 or 7 (Tremolite?) radial pattern. 19.59-20.87m Alteration zone, 5-30cm, siliceous with sulfides & ep & qtz

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
				35 deg aca. Joint/fract 50 & 65 deg aca. 23.72-25.00m Joints 60 & 80 deg aca. 25.00-25.89m Sil alteration zone, 26cm, parallel core axis, with sulf str @ 30 deg aca. 25.89-27.40m Alteration zone, siliceous with quartz, ep, & sulf, sulf f.f. str @32 deg aca, zone approx 70 deg aca. 27.40-28.80m Sulf f.f. 60 deg aca. 28.80-30.41m Sulf f.f. 40 & 50 deg aca. 30.41-32.02m Sulf. f.f. 70 deg aca. 32.02-33.45m Joint 30 & 70 deg aca. 33.45-35.78m Alteration zone. siliceous. quartz, sulf. & ep, 40 deg aca, 26cm 35.78-37.43m Quartz str 2mm, 60 deg aca 38.44-40.07m Alteration zone, siliceous with quartz, ep, & sulfides, 60 deg aca joint 55, 65 deg aca. 40.83-42.48m Alteration min, white in color, crystalline growth outward from cent to form star shape, hardness 5-6. Fills fract 25 deg aca. (Tremolite?) radial pattern. 48.40-49.63m Alteration zones, siliceous with qrtz, ep & sulfides, 4 & 5cm 51.13-52.71m Alteration zones, 16cm & 5cm, quartz, ep & sulfides, 50 deg aca. 54.43-56.24m Alteration zones, 5 & 3cm

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
				50 deg aca.
		83.51	84.45	QUARTZ VEIN Bull quartz with calcite & sulfide contacts ill defined but approx 40 deg.
		84.45	213.96	BASALT Upper margin shows signs of hydrothermal alteration. Partly kaolinized 84.45-85.36m Alteration zone, quartz, quartz crystals (euhedral), calcite, and mariposite. Upper contact 40 deg lower contact 60 deg aca. 93.82-95.45m Alteration zone, quartz, ep chl, sulfides & cc. Orient 50 deg aca. Width 7cm. 114.03-115.64m Quartz str, with sulfides width 2mm, orient 60 deg aca. 120.08-122.53m Quartz str with sulf, 70 & 80 deg aca. KARMUTSEN BASALT Fine grained, dark green in color, weakly magnetic, with sulfides as fracture filling, fracture surfaces are often chloritic, and usually contacts calcite 169.47-170.99m Alteration zone. Mod fract with sil healing. Products qtz & ep, bio, and sulfides. Also minor chl along fracts. Sulfides as f.f. 35 deg aca. 176.61-174.01m Minor fracturing with sulf. f.f. 25 and 40 deg aca. Quartz sulf stringer 35 deg aca. Sulfides

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
				Po, Cpy, mag.
				177.04-178.51m Sulf f.f. @ 177.60m Quartz crystals within a minor qtz & sulf stringer orientation 30 deg, Sulf str (f.f.) 30 & 45 deg aca.
				180.08-181.17m Mod to int fract., healed with silica, & sulfides: Alteration prods bio, chl & c.c. & quartz. At 180.50: 2cm wide str of massive Po, orient 25 deg aca.
				185.81-187.30m Alteration zone within the cent of this interval. Alteration prods incl. quartz, ep, chlorite & sulfides. Sulfides tr Cpy, & Po @ 45 deg aca.
				194.96-196.50m Core badly broken up. Fract. surfaces chlorite angles: 35 & 80 deg, & parallel to the core axis. Sulfides as fracture filling angle 15 deg aca. Broken core is sub-angular.
				196.96-197.21m Massive sulfide vein. Upper contact 30 deg. lower contact 35 deg aca.
				197.21-198.71m F.G. basalt, porphyritic, black in color with sulf fracture filling and quartz stringers. Sulf f.f. 62 deg & qtz str 20 deg aca.
				194.57-196.96m Fault-broken core, fract surf. chloritic 70 deg aca. and parallel to core axis. (Slip surface)

MAJOR		SUBUNIT		DESCRIPTION
From	To	From	To	
				203.33-204.83m Sulf. fracture filling. Cpy fract, 1mm, 42 deg and Cpy, Po fract 22 deg aca.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-17

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
40787	9.82	10.77	0.95	200.	0.1	2.
40788	10.77	12.26	1.49	248.	0.1	3.
40789	12.26	14.25	1.99	141.	0.1	2.
40790	14.25	15.68	1.43	104.	0.1	1.
40791	15.68	16.43	0.75	699.	0.4	7.
40792	16.43	18.30	1.87	684.	0.1	6.
40793	18.30	19.59	1.29	140.	0.1	7.
40794	19.59	20.87	1.28	817.	1.9	31.
40795	20.87	22.36	1.49	576.	0.1	10.
40796	22.36	23.72	1.36	179.	0.1	4.
40797	23.72	25.00	1.28	163.	0.1	7.
40798	25.00	25.89	0.89	405.	0.1	5.
40799	25.89	27.40	1.51	753.	0.1	3.
40800	27.40	28.80	1.40	132.	0.1	2.
40801	28.80	30.41	1.61	174.	0.1	1.
40802	30.41	32.02	1.61	105.	0.1	1.
40803	32.02	33.45	1.43	176.	0.1	2.
40804	33.45	34.44	0.99	405.	0.1	3.
40805	34.44	35.78	1.34	98.	0.1	1.
40806	35.78	37.43	1.65	160.	0.1	1.
40807	37.43	38.44	1.01	420.	0.3	3.
40808	38.44	40.07	1.63	591.	0.9	7.
40809	40.07	40.83	0.76	138.	0.3	1.
40810	40.83	42.28	1.45	145.	0.1	2.
40811	42.28	43.21	0.93	138.	0.1	1.
40812	43.21	44.23	1.02	118.	0.5	3.
40813	44.23	45.72	1.49	189.	0.1	3.
40814	45.72	46.87	1.15	64.	0.1	1.
40815	46.87	48.40	1.53	394.	0.1	6.
40816	48.40	49.63	1.23	167.	0.1	2.
40817	49.63	51.13	1.50	80.	0.1	1.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-17

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
40818	51.13	52.71	1.58	208.	0.1	3.
40819	52.71	54.43	1.72	168.	0.1	2.
40820	54.43	56.24	1.81	172.	1.3	4.
40821	56.24	57.76	1.52	117.	1.1	2.
40822	57.76	59.34	1.58	120.	0.1	1.
40823	59.34	60.99	1.65	48.	0.1	2.
40824	60.99	62.49	1.50	260.	0.5	3.
40825	62.49	64.04	1.55	85.	0.1	1.
40826	64.04	65.33	1.29	111.	1.1	5.
40827	65.33	67.00	1.67	112.	0.1	26.
40828	67.00	68.52	1.52	94.	0.3	10.
40829	68.52	70.17	1.65	160.	0.3	6.
40830	70.17	71.68	1.51	211.	0.1	3.
40831	71.68	73.22	1.54	228.	0.1	2.
40832	73.22	74.72	1.50	161.	0.5	2.
40833	74.72	76.19	1.47	160.	0.1	2.
40834	76.19	77.68	1.49	135.	0.1	1.
40835	77.68	79.11	1.43	441.	0.1	3.
40836	79.11	80.60	1.49	212.	0.2	1.
40837	80.60	81.46	0.86	792.	0.9	1.
40838	81.46	83.51	2.05	276.	0.1	1.
40839	83.51	84.45	0.94	4246.	4.2	46.
40840	84.45	85.36	0.91	654.	0.3	25.
40841	85.36	86.90	1.54	553.	0.1	5.
40842	86.90	88.31	1.41	198.	0.1	4.
40843	88.31	89.97	1.66	194.	1.1	2.
40844	89.97	91.49	1.52	44.	0.1	1.
40845	91.49	93.07	1.58	127.	1.0	1.
40846	93.07	93.82	0.75	135.	0.1	2.
40847	93.82	95.45	1.63	501.	0.1	7.
40848	95.45	97.00	1.55	96.	0.5	1.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-17

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
40849	97.00	98.51	1.51	253.	0.1	5.
40850	98.51	100.06	1.55	157.	0.2	2.
44776	100.06	101.69	1.63	178.	0.2	5.
44777	101.69	103.18	1.49	169.	0.3	5.
44778	103.18	104.71	1.53	148.	0.2	4.
44779	104.71	106.24	1.53	127.	0.2	7.
44780	106.24	107.78	1.54	173.	0.4	8.
44781	107.78	109.28	1.50	274.	0.5	4.
44782	109.28	112.48	3.20	134.	0.3	10.
44783	112.48	114.03	1.55	135.	0.3	7.
44784	114.03	115.64	1.61	85.	0.1	56.
44785	115.64	117.14	1.50	166.	0.1	1.
44786	117.14	118.64	1.50	105.	0.1	2.
44787	118.64	119.64	1.00	173.	0.1	1.
44788	119.64	120.80	1.16	112.	0.1	3.
44789	120.80	122.53	1.73	225.	0.1	1.
44790	122.53	124.06	1.53	423.	0.1	7.
44791	129.64	131.07	1.43	174.	0.1	3.
44792	134.93	135.93	1.00	207.	0.1	1.
44793	135.93	137.50	1.57	152.	0.1	1.
44794	145.12	146.65	1.53	948.	0.5	29.
44795	149.78	151.24	1.46	172.	0.1	6.
44796	151.24	152.70	1.46	114.	0.1	1.
44797	152.70	154.17	1.47	95.	0.1	1.
44798	154.17	155.69	1.52	376.	0.1	2.
44799	155.69	157.32	1.63	213.	0.1	4.
44800	157.32	158.81	1.49	150.	0.1	1.
44801	158.81	160.53	1.72	163.	0.1	1.
44802	160.03	161.69	1.66	95.	0.1	1.
44803	161.69	163.35	1.66	988.	0.9	11.
44804	163.35	164.89	1.54	143.	0.1	1.

DRILL HOLE NUMBER : NMX88-17

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
44805	164.89	166.40	1.51	106.	0.1	22.
44806	166.40	167.95	1.55	160.	0.1	5.
44807	167.95	169.47	1.52	134.	0.1	1.
44808	169.47	170.99	1.52	196.	0.1	8.
44809	170.99	172.61	1.62	167.	0.1	3.
44810	172.61	174.01	1.40	522.	0.2	4.
44811	174.01	175.55	1.54	270.	0.1	1.
44812	175.55	177.04	1.49	304.	0.1	2.
44813	177.04	178.51	1.47	210.	0.1	6.
44814	178.51	180.08	1.57	149.	0.1	4.
44815	180.08	181.17	1.09	515.	0.1	1.
44816	181.17	182.62	1.45	73.	0.1	1.
44817	182.62	184.24	1.62	182.	0.1	2.
44818	184.24	185.81	1.57	144.	0.1	1.
44819	185.81	187.30	1.49	124.	0.2	4.
44820	187.30	188.94	1.64	100.	0.1	1.
44821	188.94	190.45	1.51	49.	0.1	1.
44822	190.45	191.95	1.50	537.	0.4	10.
44823	191.95	193.50	1.55	407.	0.4	9.
44824	193.50	194.96	1.46	148.	0.2	1.
44825	194.96	196.50	1.54	385.	0.1	4.
44826	196.50	196.96	0.46	5083.	3.0	128.
44827	196.96	197.21	0.25	96926.	46.4	3670.
44828	197.21	198.71	1.50	1047.	0.5	23.
44829	198.71	200.21	1.50	524.	0.3	9.
44830	200.21	201.86	1.65	210.	0.2	1.
44831	201.86	203.33	1.47	62.	0.1	1.
44832	203.33	204.83	1.50	1180.	0.8	16.
40833	204.83	206.33	1.50	318.	0.2	8.
44834	206.33	207.83	1.50	59.	0.1	1.
44835	207.83	209.33	1.50	132.	0.1	3.

DRILL HOLE NUMBER : NMX88-17

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
40787	9.82	10.77	0.95	1.	200.	8.	33.	0.1	53.	18.	188.
40788	10.77	12.26	1.49	1.	248.	8.	27.	0.1	46.	14.	190.
40789	12.26	14.25	1.99	1.	141.	51.	34.	0.1	31.	8.	229.
40790	14.25	15.68	1.43	1.	104.	6.	25.	0.1	34.	8.	213.
40791	15.68	16.43	0.75	1.	699.	4.	39.	0.4	72.	35.	155.
40792	16.43	18.30	1.87	1.	684.	2.	36.	0.1	56.	38.	195.
40793	18.30	19.59	1.29	1.	140.	2.	22.	0.1	38.	8.	225.
40794	19.59	20.87	1.28	2.	817.	8.	52.	1.9	48.	29.	196.
40795	20.87	22.36	1.49	1.	576.	8.	33.	0.1	76.	35.	159.
40796	22.36	23.72	1.36	1.	179.	3.	20.	0.1	46.	11.	164.
40797	23.72	25.00	1.28	1.	163.	7.	21.	0.1	41.	12.	209.
40798	25.00	25.89	0.89	1.	405.	2.	33.	0.1	57.	21.	259.
40799	25.89	27.40	1.51	1.	753.	9.	36.	0.1	115.	52.	191.
40800	27.40	28.80	1.40	1.	132.	8.	21.	0.1	44.	11.	286.
40801	28.80	30.41	1.61	2.	174.	3.	28.	0.1	54.	14.	253.
40802	30.41	32.02	1.61	1.	105.	5.	21.	0.1	46.	12.	211.
40803	32.02	33.45	1.43	1.	176.	3.	37.	0.1	45.	13.	248.
40804	33.45	34.44	0.99	1.	405.	2.	30.	0.1	63.	28.	162.
40805	34.44	35.78	1.34	1.	98.	2.	19.	0.1	42.	8.	504.
40806	35.78	37.43	1.65	1.	160.	7.	23.	0.1	42.	12.	336.
40807	37.43	38.44	1.01	2.	420.	3.	26.	0.3	70.	29.	384.
40808	38.44	40.07	1.63	1.	591.	8.	47.	0.9	52.	22.	193.
40809	40.07	40.83	0.76	1.	138.	6.	18.	0.3	31.	12.	209.
40810	40.83	42.28	1.45	1.	145.	10.	19.	0.1	32.	7.	250.
40811	42.28	43.21	0.93	1.	138.	2.	20.	0.1	36.	11.	219.
40812	43.21	44.23	1.02	1.	118.	8.	23.	0.5	38.	11.	206.
40813	44.23	45.72	1.49	1.	189.	3.	22.	0.1	42.	13.	258.
40814	45.72	46.87	1.15	1.	64.	2.	17.	0.1	31.	7.	210.
40815	46.87	48.40	1.53	1.	394.	3.	33.	0.1	51.	10.	253.
40816	48.40	49.63	1.23	1.	167.	7.	23.	0.1	38.	13.	375.
40817	49.63	51.13	1.50	1.	80.	2.	22.	0.1	28.	6.	220.

DRILL HOLE NUMBER : NMX88-17

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
40818	51.13	52.71	1.58	1.	208.	4.	53.	0.1	41.	14.	244.
40819	52.71	54.43	1.72	1.	168.	4.	28.	0.1	43.	9.	252.
40820	54.43	56.24	1.81	1.	172.	10.	23.	1.3	42.	19.	270.
40821	56.24	57.76	1.52	1.	117.	8.	20.	1.1	35.	16.	266.
40822	57.76	59.34	1.58	1.	120.	2.	27.	0.1	43.	12.	239.
40823	59.34	60.99	1.65	1.	48.	2.	29.	0.1	41.	8.	255.
40824	60.99	62.49	1.50	1.	260.	7.	28.	0.5	41.	19.	280.
40825	62.49	64.04	1.55	1.	85.	2.	25.	0.1	39.	9.	230.
40826	64.04	65.33	1.29	1.	111.	8.	22.	1.1	34.	13.	235.
40827	65.33	67.00	1.67	1.	112.	2.	26.	0.1	41.	10.	219.
40828	67.00	68.52	1.52	1.	94.	2.	22.	0.3	32.	9.	210.
40829	68.52	70.17	1.65	1.	160.	4.	25.	0.3	33.	11.	298.
40830	70.17	71.68	1.51	1.	211.	2.	37.	0.1	38.	8.	255.
40831	71.68	73.22	1.54	1.	228.	3.	46.	0.1	47.	12.	398.
40832	73.22	74.72	1.50	1.	161.	9.	35.	0.5	46.	12.	191.
40833	74.72	76.19	1.47	1.	160.	4.	37.	0.1	37.	10.	247.
40834	76.19	77.68	1.49	1.	135.	9.	36.	0.1	58.	16.	288.
40835	77.68	79.11	1.43	1.	441.	4.	51.	0.1	92.	33.	225.
40836	79.11	80.60	1.49	1.	212.	8.	43.	0.2	73.	22.	233.
40837	80.60	81.46	0.86	1.	792.	10.	77.	0.9	111.	42.	306.
40838	81.46	83.51	2.05	1.	276.	3.	63.	0.1	65.	16.	314.
40839	83.51	84.45	0.94	3.	4246.	34.	232.	4.2	30.	17.	631.
40840	84.45	85.36	0.91	1.	654.	2.	92.	0.3	75.	23.	931.
40841	85.36	86.90	1.54	1.	553.	5.	46.	0.1	63.	16.	373.
40842	86.90	88.31	1.41	1.	198.	5.	32.	0.1	53.	14.	267.
40843	88.31	89.97	1.66	2.	194.	12.	32.	1.1	54.	21.	324.
40844	89.97	91.49	1.52	1.	44.	7.	34.	0.1	53.	12.	396.
40845	91.49	93.07	1.58	1.	127.	4.	27.	1.0	42.	15.	277.
40846	93.07	93.82	0.75	1.	135.	2.	26.	0.1	40.	8.	264.
40847	93.82	95.45	1.63	1.	501.	2.	43.	0.1	44.	11.	254.
40848	95.45	97.00	1.55	1.	96.	5.	30.	0.5	39.	13.	250.

DRILL HOLE NUMBER : NMX88-17

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
40849	97.00	98.51	1.51	1.	253.	11.	41.	0.1	50.	15.	268.
40850	98.51	100.06	1.55	1.	157.	14.	27.	0.2	30.	9.	246.
44776	100.06	101.69	1.63	1.	178.	6.	30.	0.2	29.	10.	239.
44777	101.69	103.18	1.49	1.	169.	5.	33.	0.3	37.	12.	282.
44778	103.18	104.71	1.53	1.	148.	7.	25.	0.2	35.	10.	221.
44779	104.71	106.24	1.53	1.	127.	6.	26.	0.2	28.	8.	307.
44780	106.24	107.78	1.54	1.	173.	13.	30.	0.4	33.	10.	213.
44781	107.78	109.28	1.50	1.	274.	2.	37.	0.5	38.	12.	221.
44782	109.28	112.48	3.20	1.	134.	5.	19.	0.3	24.	7.	179.
44783	112.48	114.03	1.55	1.	135.	8.	23.	0.3	28.	7.	146.
44784	114.03	115.64	1.61	1.	85.	6.	19.	0.1	28.	7.	130.
44785	115.64	117.14	1.50	1.	166.	5.	27.	0.1	30.	8.	152.
44786	117.14	118.64	1.50	1.	105.	8.	27.	0.1	37.	9.	159.
44787	118.64	119.64	1.00	1.	173.	5.	29.	0.1	36.	9.	287.
44788	119.64	120.80	1.16	1.	112.	6.	37.	0.1	44.	13.	194.
44789	120.80	122.53	1.73	1.	225.	8.	43.	0.1	54.	16.	236.
44790	122.53	124.06	1.53	1.	423.	5.	36.	0.1	45.	12.	148.
44791	129.64	131.07	1.43	1.	174.	7.	29.	0.1	34.	9.	176.
44792	134.93	135.93	1.00	1.	207.	9.	26.	0.1	40.	10.	172.
44793	135.93	137.50	1.57	1.	152.	6.	25.	0.1	30.	8.	160.
44794	145.12	146.65	1.53	1.	948.	6.	69.	0.5	48.	16.	217.
44795	149.78	151.24	1.46	1.	172.	5.	23.	0.1	28.	8.	169.
44796	151.24	152.70	1.46	1.	114.	4.	20.	0.1	27.	7.	173.
44797	152.70	154.17	1.47	1.	55.	4.	25.	0.1	39.	10.	184.
44798	154.17	155.69	1.52	1.	376.	5.	38.	0.1	42.	11.	181.
44799	155.69	157.32	1.63	1.	213.	6.	47.	0.1	42.	12.	208.
44800	157.32	158.81	1.49	1.	150.	7.	32.	0.1	54.	17.	215.
44801	158.81	160.53	1.72	1.	163.	7.	31.	0.1	39.	11.	206.
44802	160.03	161.69	1.66	1.	95.	7.	28.	0.1	42.	12.	221.
44803	161.69	163.35	1.66	2.	988.	5.	60.	0.9	45.	14.	186.
44804	163.35	164.89	1.54	1.	143.	7.	23.	0.1	33.	9.	186.

DRILL HOLE NUMBER : NMX88-17

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
44805	164.89	166.40	1.51	1.	106.	5.	30.	0.1	42.	12.	228.
44806	166.40	167.95	1.55	1.	160.	4.	33.	0.1	41.	12.	215.
44807	167.95	169.47	1.52	1.	134.	8.	29.	0.1	38.	11.	212.
44808	169.47	170.99	1.52	1.	196.	7.	40.	0.1	48.	13.	217.
44809	170.99	172.61	1.62	1.	167.	6.	38.	0.1	37.	10.	216.
44810	172.61	174.01	1.40	1.	522.	6.	41.	0.2	36.	16.	145.
44811	174.01	175.55	1.54	1.	270.	7.	28.	0.1	29.	9.	173.
44812	175.55	177.04	1.49	1.	304.	6.	32.	0.1	32.	12.	184.
44813	177.04	178.51	1.47	1.	210.	6.	23.	0.1	28.	8.	154.
44814	178.51	180.08	1.57	1.	149.	8.	32.	0.1	38.	11.	183.
44815	180.08	181.17	1.09	4.	515.	5.	41.	0.1	124.	41.	181.
44816	181.17	182.62	1.45	1.	73.	6.	30.	0.1	46.	11.	209.
44817	182.62	184.24	1.62	1.	182.	7.	27.	0.1	39.	11.	190.
44818	184.24	185.81	1.57	1.	144.	4.	17.	0.1	29.	8.	162.
44819	185.81	187.30	1.49	1.	124.	5.	21.	0.2	35.	10.	189.
44820	187.30	188.94	1.64	1.	100.	5.	24.	0.1	36.	9.	208.
44821	188.94	190.45	1.51	1.	49.	4.	21.	0.1	34.	8.	183.
44822	190.45	191.95	1.50	1.	537.	3.	35.	0.4	37.	10.	287.
44823	191.95	193.50	1.55	1.	407.	5.	49.	0.4	44.	12.	221.
44824	193.50	194.96	1.46	1.	148.	6.	27.	0.2	41.	9.	196.
44825	194.96	196.50	1.54	1.	385.	5.	41.	0.1	41.	12.	193.
44826	196.50	196.96	0.46	1.	5083.	8.	164.	3.0	50.	37.	186.
44827	196.96	197.21	0.25	10.	96926.	12.	1516.	46.4	147.	444.	81.
44828	197.21	198.71	1.50	1.	1047.	4.	54.	0.5	49.	20.	193.
44829	198.71	200.21	1.50	1.	524.	7.	62.	0.3	50.	15.	273.
44830	200.21	201.86	1.65	1.	210.	3.	42.	0.2	46.	13.	212.
44831	201.86	203.33	1.47	1.	62.	6.	34.	0.1	52.	14.	191.
44832	203.33	204.83	1.50	1.	1180.	9.	58.	0.8	64.	20.	221.
40833	204.83	206.33	1.50	1.	318.	7.	42.	0.2	55.	18.	219.
44834	206.33	207.83	1.50	1.	59.	7.	29.	0.1	44.	12.	190.
44835	207.83	209.33	1.50	1.	132.	8.	20.	0.1	33.	9.	165.

LATITUDE : 19950.000
DEPARTURE: 20700.000
ELEVATION: 712.300
DIP AT COLLAR: -45.00 DEG
AZIMUTH : 198.00 DEG
TOTAL DEPTH : 152.39

D I A M O N D D R I L L L O G
MUREX DRILL PROJECT

HOLE NO.: NMX88-18

DATE LOGGED: --/--/--
LOGGED BY :

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
0.00	152.39	0.00	0.61	CASING
		0.61	42.52	KARMUTSEN BASALT Fine grained, weakly magnetic basalt. Occasionally porphyritic with phenocrysts of white feldspar 1-2mm in size. Mottled dark-green, light green, black and white, 0.61-5.79m The basalt has been fractured and subsequently healed with silica, orient of 75 deg aca. Sulfides follow fractures & fill it.Sulf f.f. cut thru the siliceous alteration zone. Orient 25 deg aca. 7.29-8.97m Quartz vein with sulfides 50 deg aca Sulfides as f.f. 10.34-11.82m Fract zone subsequently healed with silica oriented 45 deg aca. Fractures are 22 and 45 deg aca 11.82-13.31m Sulf fract 30 deg aca 13.31-14.76m Qtz-sulf vein 45 deg aca Cpy, Po 19.34-20.80m Sulf f.f. 18 & 35 deg aca.
		42.52	42.67	QUARTZ VEIN Upper contact 35 degrees, lower contact 45 degrees aca, bull quartz, chloritic, at contact (upper).
		42.67	152.39	SILICIFIED KARMUTSEN BASALT 54.56-55.78m Fault. Fracture, surfaces are chloritic & show signs of

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
				slickensides. Angle 40 to 45 degrees aca. to 50 degrees aca. 77.72-78.82m Quartz vein 3-4cm wide. 30 degrees aca. Sulfides Po & Cpy. 92.60-94.48m Fault. Chlorite fract surfaces 35 degrees aca. SILICIFIED KARMUTSEN BASALT Intermittent alteration zones with quartz, ep, bio, act and sulfides. 143.86-144.42m Fault. Fract surfaces are chloritic orient of 25 & 35 deg aca Presence of slicks.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-18

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
8601	5.79	7.29	1.50	264.	0.1	1.
8602	7.29	8.97	1.68	308.	0.2	1.
8603	8.97	10.34	1.37	47.	0.1	1.
8604	10.34	11.82	1.48	846.	0.4	5.
8605	11.82	13.31	1.49	264.	0.1	1.
8606	13.31	14.76	1.45	792.	0.3	1.
8607	14.76	16.25	1.49	3723.	2.4	41.
8608	16.25	17.88	1.63	201.	0.1	1.
8609	17.88	19.34	1.46	251.	0.1	1.
8610	19.34	20.80	1.46	507.	0.2	1.
8611	20.80	22.44	1.64	270.	0.1	1.
8612	22.44	23.96	1.52	350.	0.1	2.
8613	23.96	25.48	1.52	170.	0.2	1.
8614	25.48	26.96	1.48	695.	0.4	2.
8615	26.96	28.42	1.46	238.	0.3	2.
8616	28.42	29.92	1.50	227.	0.2	2.
8617	29.92	31.45	1.53	659.	0.5	1.
8618	34.26	35.76	1.50	564.	0.2	1.
8619	35.76	37.10	1.34	142.	0.2	2.
8620	37.10	38.68	1.58	310.	0.3	1.
8621	41.68	42.52	0.84	157.	0.3	3.
8622	42.52	42.67	0.15	3232.	3.1	4.
8623	42.67	44.15	1.48	422.	0.4	7.
8624	44.15	45.77	1.62	264.	0.1	5.
8625	45.77	47.29	1.52	183.	0.4	3.
8626	47.29	49.02	1.73	137.	0.1	1.
8627	49.02	50.22	1.20	344.	0.3	11.
8628	50.22	51.52	1.30	334.	0.1	6.
8629	51.52	52.42	0.90	40.	0.1	1.
8630	52.42	53.58	1.16	127.	0.2	2.
8631	53.58	55.54	1.96	487.	0.6	3.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-18

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
8632	55.54	57.04	1.50	176.	0.1	2.
8633	57.04	58.65	1.61	166.	0.3	2.
8634	58.65	60.19	1.54	274.	0.3	1.
8635	60.19	61.70	1.51	154.	0.2	1.
8636	61.70	63.21	1.51	554.	0.4	3.
8637	63.21	64.76	1.55	98.	0.1	6.
8638	64.76	66.29	1.53	37.	0.2	1.
8639	66.29	67.55	1.26	286.	0.1	3.
8640	67.55	69.14	1.59	411.	0.5	2.
8641	69.14	70.90	1.76	637.	0.3	6.
8642	70.90	72.23	1.33	191.	0.1	1.
8643	72.23	73.75	1.52	260.	0.2	1.
8644	73.75	75.25	1.50	215.	0.1	4.
8645	75.25	76.55	1.30	171.	0.1	2.
8646	76.55	77.72	1.17	152.	0.1	1.
8647	77.72	78.82	1.10	1124.	0.8	3.
8648	78.82	80.29	1.47	171.	0.1	1.
8649	80.29	81.29	1.00	238.	0.1	2.
8650	81.29	82.25	0.96	187.	0.2	4.
8651	82.25	83.74	1.49	490.	1.0	15.
8652	83.74	85.29	1.55	312.	1.5	6.
8653	85.29	86.86	1.57	295.	0.1	1.
8654	86.86	88.33	1.47	298.	0.1	1.
8655	88.33	89.91	1.58	249.	0.4	5.
8656	89.91	91.43	1.52	976.	0.4	6.
8657	91.43	93.09	1.66	204.	0.1	1.
8658	93.09	94.48	1.39	91.	0.1	1.
8659	94.48	96.05	1.57	121.	0.1	3.
8660	96.05	97.55	1.50	360.	0.1	2.
8661	97.55	99.15	1.60	1471.	0.7	11.
8662	99.15	100.75	1.60	2233.	1.3	20.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-18

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
8663	100.75	102.08	1.33	390.	0.1	1.
8664	102.08	103.41	1.33	418.	0.2	2.
8665	103.41	104.93	1.52	268.	0.2	4.
8666	104.93	106.16	1.23	245.	0.1	1.
8667	106.16	108.02	1.86	383.	0.1	2.
8668	108.02	109.37	1.35	386.	0.1	3.
8669	109.37	110.87	1.50	186.	0.1	2.
8670	110.87	112.38	1.51	239.	0.1	1.
8671	112.38	113.76	1.38	227.	0.2	1.
8672	113.76	115.46	1.70	575.	0.3	4.
8673	115.46	117.01	1.55	233.	0.1	1.
8674	117.01	118.53	1.52	178.	0.2	2.
8675	118.53	120.06	1.53	122.	0.1	1.
8676	120.06	121.61	1.55	264.	0.1	1.
8677	121.61	122.94	1.33	150.	0.1	1.
8678	122.94	124.45	1.51	714.	0.5	6.
8679	127.57	129.09	1.52	766.	0.4	8.
8680	129.09	130.45	1.36	931.	0.5	10.
8681	133.36	133.96	0.60	369.	0.2	2.
8682	133.96	135.10	1.14	151.	0.2	4.
8683	136.31	137.12	0.81	531.	0.2	42.
8684	137.12	138.61	1.49	243.	0.1	1.
8685	138.61	139.48	0.87	747.	0.5	8.
8686	141.58	142.95	1.37	316.	0.1	2.
8687	145.53	147.06	1.53	482.	0.1	4.

DRILL HOLE NUMBER : NMX88-18

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
8601	5.79	7.29	1.50	1.	264.	5.	39.	0.1	51.	18.	429.
8602	7.29	8.97	1.68	1.	308.	5.	28.	0.2	40.	16.	192.
8603	8.97	10.34	1.37	1.	47.	6.	20.	0.1	29.	8.	168.
8604	10.34	11.82	1.48	1.	846.	70.	37.	0.4	55.	24.	283.
8605	11.82	13.31	1.49	1.	264.	7.	37.	0.1	46.	14.	228.
8606	13.31	14.76	1.45	1.	792.	8.	70.	0.3	72.	32.	330.
8607	14.76	16.25	1.49	1.	3723.	11.	201.	2.4	60.	28.	416.
8608	16.25	17.88	1.63	1.	201.	12.	37.	0.1	43.	14.	270.
8609	17.88	19.34	1.46	1.	251.	4.	35.	0.1	48.	16.	209.
8610	19.34	20.80	1.46	1.	507.	15.	51.	0.2	67.	27.	269.
8611	20.80	22.44	1.64	1.	270.	5.	22.	0.1	26.	10.	233.
8612	22.44	23.96	1.52	1.	350.	4.	48.	0.1	56.	21.	317.
8613	23.96	25.48	1.52	1.	170.	9.	34.	0.2	48.	15.	247.
8614	25.48	26.96	1.48	1.	695.	5.	40.	0.4	54.	25.	404.
8615	26.96	28.42	1.46	1.	238.	6.	26.	0.3	42.	17.	194.
8616	28.42	29.92	1.50	1.	227.	4.	25.	0.2	42.	18.	209.
8617	29.92	31.45	1.53	1.	659.	5.	53.	0.5	55.	28.	247.
8618	34.26	35.76	1.50	1.	564.	6.	31.	0.2	43.	15.	171.
8619	35.76	37.10	1.34	1.	142.	5.	29.	0.2	53.	15.	182.
8620	37.10	38.68	1.58	1.	310.	3.	28.	0.3	51.	19.	181.
8621	41.68	42.52	0.84	1.	157.	6.	55.	0.3	71.	13.	386.
8622	42.52	42.67	0.15	1.	3232.	6.	124.	3.1	78.	75.	388.
8623	42.67	44.15	1.48	1.	422.	7.	41.	0.4	52.	23.	251.
8624	44.15	45.77	1.62	1.	264.	7.	26.	0.1	53.	16.	230.
8625	45.77	47.29	1.52	1.	183.	5.	36.	0.4	54.	17.	216.
8626	47.29	49.02	1.73	1.	137.	6.	19.	0.1	30.	8.	205.
8627	49.02	50.22	1.20	1.	344.	5.	23.	0.3	43.	14.	264.
8628	50.22	51.52	1.30	1.	334.	4.	13.	0.1	22.	9.	140.
8629	51.52	52.42	0.90	1.	40.	4.	10.	0.1	17.	4.	147.
8630	52.42	53.58	1.16	1.	127.	8.	15.	0.2	27.	6.	135.
8631	53.58	55.54	1.96	1.	487.	8.	24.	0.6	30.	11.	138.

DRILL HOLE NUMBER : NMX88-18

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
8632	55.54	57.04	1.50	1.	176.	6.	10.	0.1	21.	7.	110.
8633	57.04	58.65	1.61	1.	166.	6.	25.	0.3	37.	10.	195.
8634	58.65	60.19	1.54	1.	274.	4.	26.	0.3	37.	13.	184.
8635	60.19	61.70	1.51	1.	154.	3.	27.	0.2	40.	11.	216.
8636	61.70	63.21	1.51	3.	554.	6.	38.	0.4	44.	17.	184.
8637	63.21	64.76	1.55	1.	98.	6.	32.	0.1	44.	11.	191.
8638	64.76	66.29	1.53	1.	37.	2.	28.	0.2	35.	9.	195.
8639	66.29	67.55	1.26	1.	286.	7.	26.	0.1	34.	10.	167.
8640	67.55	69.14	1.59	1.	411.	6.	37.	0.5	56.	22.	217.
8641	69.14	70.90	1.76	1.	637.	4.	47.	0.3	48.	15.	209.
8642	70.90	72.23	1.33	1.	191.	5.	29.	0.1	40.	11.	168.
8643	72.23	73.75	1.52	1.	260.	2.	35.	0.2	53.	17.	188.
8644	73.75	75.25	1.50	1.	215.	2.	29.	0.1	53.	14.	176.
8645	75.25	76.55	1.30	1.	171.	4.	26.	0.1	35.	10.	201.
8646	76.55	77.72	1.17	1.	152.	2.	24.	0.1	33.	9.	197.
8647	77.72	78.82	1.10	1.	1124.	4.	52.	0.8	41.	23.	291.
8648	78.82	80.29	1.47	1.	171.	5.	24.	0.1	32.	10.	232.
8649	80.29	81.29	1.00	1.	238.	7.	25.	0.1	35.	12.	201.
8650	81.29	82.25	0.96	1.	187.	3.	19.	0.2	31.	7.	146.
8651	82.25	83.74	1.49	2.	490.	12.	38.	1.0	43.	17.	213.
8652	83.74	85.29	1.55	2.	312.	35.	65.	1.5	36.	11.	192.
8653	85.29	86.86	1.57	1.	295.	6.	35.	0.1	42.	13.	215.
8654	86.86	88.33	1.47	1.	298.	4.	28.	0.1	39.	13.	176.
8655	88.33	89.91	1.58	1.	249.	6.	28.	0.4	35.	11.	166.
8656	89.91	91.43	1.52	1.	976.	9.	55.	0.4	69.	33.	293.
8657	91.43	93.09	1.66	1.	204.	5.	48.	0.1	45.	14.	257.
8658	93.09	94.48	1.39	1.	91.	4.	33.	0.1	42.	10.	176.
8659	94.48	96.05	1.57	1.	121.	8.	34.	0.1	50.	14.	189.
8660	96.05	97.55	1.50	1.	360.	14.	40.	0.1	61.	18.	247.
8661	97.55	99.15	1.60	1.	1471.	9.	77.	0.7	59.	20.	253.
8662	99.15	100.75	1.60	4.	2233.	8.	115.	1.3	47.	21.	293.

DRILL HOLE NUMBER : NMX88-18

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
8663	100.75	102.08	1.33	1.	390.	8.	57.	0.1	50.	15.	275.
8664	102.08	103.41	1.33	1.	418.	7.	43.	0.2	47.	17.	363.
8665	103.41	104.93	1.52	1.	268.	5.	47.	0.2	42.	14.	269.
8666	104.93	106.16	1.23	1.	245.	10.	44.	0.1	61.	18.	255.
8667	106.16	108.02	1.86	1.	383.	9.	46.	0.1	49.	15.	253.
8668	108.02	109.37	1.35	1.	386.	7.	48.	0.1	48.	17.	254.
8669	109.37	110.87	1.50	1.	186.	7.	37.	0.1	56.	14.	219.
8670	110.87	112.38	1.51	1.	239.	7.	32.	0.1	45.	12.	194.
8671	112.38	113.76	1.38	1.	227.	6.	32.	0.2	45.	13.	191.
8672	113.76	115.46	1.70	1.	575.	7.	29.	0.3	36.	12.	164.
8673	115.46	117.01	1.55	1.	233.	7.	22.	0.1	37.	14.	174.
8674	117.01	118.53	1.52	1.	178.	4.	17.	0.2	26.	9.	191.
8675	118.53	120.06	1.53	1.	122.	6.	20.	0.1	31.	9.	250.
8676	120.06	121.61	1.55	1.	264.	7.	21.	0.1	34.	12.	188.
8677	121.61	122.94	1.33	1.	150.	6.	19.	0.1	31.	10.	194.
8678	122.94	124.45	1.51	1.	714.	6.	35.	0.5	37.	13.	212.
8679	127.57	129.09	1.52	1.	766.	7.	36.	0.4	41.	14.	206.
8680	129.09	130.45	1.36	1.	931.	5.	39.	0.5	32.	9.	233.
8681	133.36	133.96	0.60	1.	369.	6.	21.	0.2	15.	6.	142.
8682	133.96	135.10	1.14	1.	151.	6.	22.	0.2	30.	9.	225.
8683	136.31	137.12	0.81	1.	531.	6.	32.	0.2	29.	9.	202.
8684	137.12	138.61	1.49	1.	243.	4.	22.	0.1	25.	8.	253.
8685	138.61	139.48	0.87	1.	747.	8.	37.	0.5	52.	14.	188.
8686	141.58	142.95	1.37	1.	318.	7.	25.	0.1	33.	13.	213.
8687	145.53	147.06	1.53	1.	482.	7.	33.	0.1	59.	19.	205.

LATITUDE : 19985.200
DEPARTURE: 29999.300
ELEVATION: 937.200
DIP AT COLLAR: -45.00 DEG
AZIMUTH : 332.00 DEG
TOTAL DEPTH : 41.15

D I A M O N D D R I L L L O G

HOLE NO.: NMX88-19

DATE LOGGED: --/--/--
LOGGED BY :

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
0.00	41.15	0.00	2.44	CASING
		2.44	9.50	BASALT Fine grained, FS medium grey to dark grey, silicified. Moderately blocky core, majority of fractures at 45-65 degrees to CA. 7.00: Quartz veinlet 2.0cm wide @25 degrees ACA, minor sulfides. 7.94: Quartz veinlet. 1.5cm wide @25 degrees ACA.
		9.50	10.06	BASALTIC BRECCIA Mostly pebble size. Subangular fragments of basalt, minor diorite in quartz-sulfide matrix. Frags 90%, matrix 10%. Increasing by 12.25m to frags 80% matrix 20%. Matrix is aporox 80%, sulfides 20% quartz toward bottom of section, increasing number of intrusive & sedimentary fragments.
		10.06	10.22	DIORITE DYKE Medium grained. Upper contact obscured by ground core. Lower contact at 20 degrees to CA
		10.22	23.40	MIXED LITHOLOGY BRECCIA Mostly medium to large pebble sized sub-angular fragments of basalt, intrusive, and sedimentary origin, in quartz-

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
				sulfide matrix. Frags) or = 85%, matrix (or = 15%, matrix is approx 80%, sulfides 20% quartz.
		23.40	25.56	DIORITE DYKE Medium to fine grained fresh surface light grey. Sulfides Po (Cpy) in fractures and disseminated. 25.15: Quartz vein with sulfides 1.5cm wide at approx 45 degrees to CA.
		25.56	25.93	MIXED LITHOLOGY BRECCIA Basalt sedimentary & intrusive frags in quartz-sulfide matrix. 90% frags. 10% matrix, matrix is 50% quartz, 50% sulfides. Upper contact gradational, lower contact approx 45 degrees to CA.
		25.93	27.35	DIORITE DYKE Medium grained, porphyritic wrt hornblende FS light grey with pale green tint. 26.60-27.30: very blocky and brown, rusty brown fracture fillings. Upper & lower cotacts partially gradational approx 45 degrees to CA.
		27.35	27.57	MIXED LITHOLOGY BRECCIA Small pebble sized subangular frags in quartz-sulfide matrix.) or = 90% frags, (or = 10% matrix. Tight matrix is 60% quartz, 40% sulfide.
		27.57	30.65	DIORITE DYKE

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
				Medium grained. Porphyritic wrt hornblende FS light grey with pale green tint. Upper contact approx 45 degrees to CA. Lower contact gradational approx 45 degrees to CA.
		30.65	31.80	MIXED LITHOLOGY BRECCIA Medium pebble to small cobble sized angular fragments of intrusive, basalt & sedimentary origin in quartz-sulfide matrix. 85% frags, 15% matrix, matrix is 40% quartz and 60% sulfides. Lower contact 15 degrees to CA.
		31.80	37.20	DIORITE DYKE As above. Lower contact obscured by ground core.
		32.70	38.40	BASALTIC BRECCIA Minor sedimentary frags. Tight (5% matrix, 50% quartz, 50% sulfides. Lower in section, basalt frags appear leached. Very broken and blocky. 37.90: Quartz vein approx 2cm wide sub parallel to CA. Lower contact 25 degrees to CA.
		38.40	40.75	DIORITE DYKE As above. But from 38.4-39.20 appears leached and very light grey collar, transition at 39.2 to greenish grey. Lower contact gradational.
		40.75	41.15	BASALTIC BRECCIA Very tight (5% matrix, Bottom of hole basalt.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-19

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
8801	4.73	5.73	1.00	153.	0.1	96.
8802	5.73	6.73	1.00	269.	0.2	34.
8803	6.73	7.73	1.00	468.	1.0	13.
8804	7.73	8.73	1.00	132.	0.1	6.
8785	8.73	9.73	1.00	110.	0.1	6.
8786	9.73	10.73	1.00	390.	0.1	10.
8787	10.73	11.73	1.00	234.	0.1	21.
8788	11.73	12.73	1.00	276.	0.1	320.
8789	12.73	13.73	1.00	327.	0.2	4310.
8790	13.73	14.73	1.00	832.	0.2	6770.
8791	14.73	15.73	1.00	687.	0.1	3210.
8792	15.73	16.73	1.00	724.	0.1	2180.
8793	16.73	17.73	1.00	374.	0.1	2010.
8794	17.73	18.73	1.00	638.	0.3	590.
8795	18.73	19.73	1.00	313.	0.1	152.
8796	19.73	20.73	1.00	606.	0.2	970.
8797	20.73	21.73	1.00	957.	1.1	12020.
8798	21.73	22.73	1.00	1997.	1.3	16880.
8799	22.73	23.73	1.00	3512.	1.8	6190.
8800	23.73	24.73	1.00	1529.	0.8	78.
8805	24.73	25.55	0.82	2368.	1.3	24.
8806	25.55	25.93	0.38	3214.	2.3	42.
8807	25.93	26.93	1.00	264.	0.4	23.
8808	26.93	27.35	0.42	153.	0.1	2.
8809	27.35	27.57	0.22	151.	0.1	6.
8810	27.57	28.57	1.00	156.	0.1	5.
8811	28.57	29.57	1.00	370.	0.2	2.
8812	29.57	30.65	1.08	207.	0.1	8.
8813	30.65	31.80	1.15	1293.	0.7	15.
8814	31.80	32.80	1.00	140.	0.1	6.
8815	32.80	33.80	1.00	294.	0.1	16.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-19

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
8816	33.80	34.80	1.00	117.	0.1	4.
8817	34.80	35.80	1.00	88.	0.1	13.
8818	35.80	36.80	1.00	90.	0.1	9.
8819	36.80	37.20	0.40	129.	0.1	3.
8820	37.20	38.40	1.20	419.	0.1	1.
8821	38.40	39.40	1.00	141.	0.1	1.
8822	39.40	40.75	1.35	137.	0.1	1.
8823	40.75	41.15	0.40	100.	0.1	1.

DRILL HOLE NUMBER : NMX88-19

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
8801	4.73	5.73	1.00	1.	153.	3.	118.	0.1	77.	27.	811.
8802	5.73	6.73	1.00	2.	269.	4.	135.	0.2	70.	26.	835.
8803	6.73	7.73	1.00	9.	468.	6.	230.	1.0	83.	27.	1319.
8804	7.73	8.73	1.00	8.	132.	8.	119.	0.1	68.	24.	1120.
8785	8.73	9.73	1.00	4.	110.	16.	102.	0.1	56.	18.	833.
8786	9.73	10.73	1.00	22.	390.	11.	120.	0.1	51.	20.	988.
8787	10.73	11.73	1.00	12.	234.	11.	136.	0.1	49.	23.	1135.
8788	11.73	12.73	1.00	26.	276.	10.	125.	0.1	50.	25.	1057.
8789	12.73	13.73	1.00	25.	327.	10.	136.	0.2	54.	31.	1154.
8790	13.73	14.73	1.00	12.	832.	18.	123.	0.2	57.	56.	915.
8791	14.73	15.73	1.00	23.	687.	8.	103.	0.1	48.	39.	818.
8792	15.73	16.73	1.00	16.	724.	12.	122.	0.1	48.	51.	969.
8793	16.73	17.73	1.00	14.	374.	7.	138.	0.1	49.	35.	1032.
8794	17.73	18.73	1.00	13.	638.	11.	132.	0.3	57.	45.	938.
8795	18.73	19.73	1.00	11.	313.	11.	143.	0.1	55.	24.	1129.
8796	19.73	20.73	1.00	16.	606.	11.	145.	0.2	52.	34.	1068.
8797	20.73	21.73	1.00	17.	957.	11.	160.	1.1	45.	50.	1160.
8798	21.73	22.73	1.00	42.	1997.	8.	150.	1.3	40.	38.	968.
8799	22.73	23.73	1.00	23.	3512.	9.	146.	1.8	40.	48.	574.
8800	23.73	24.73	1.00	11.	1529.	5.	82.	0.8	13.	10.	323.
8805	24.73	25.55	0.82	15.	2368.	2.	104.	1.3	25.	35.	363.
8806	25.55	25.93	0.38	38.	3214.	9.	186.	2.3	49.	33.	934.
8807	25.93	26.93	1.00	15.	264.	3.	39.	0.4	17.	13.	305.
8808	26.93	27.35	0.42	7.	153.	2.	37.	0.1	16.	11.	383.
8809	27.35	27.57	0.22	11.	151.	3.	75.	0.1	48.	22.	694.
8810	27.57	28.57	1.00	4.	156.	3.	35.	0.1	13.	11.	301.
8811	28.57	29.57	1.00	12.	370.	3.	43.	0.2	11.	11.	319.
8812	29.57	30.65	1.08	6.	207.	2.	36.	0.1	10.	11.	281.
8813	30.65	31.80	1.15	12.	1293.	8.	110.	0.7	45.	41.	751.
8814	31.80	32.80	1.00	5.	140.	3.	35.	0.1	14.	10.	291.
8815	32.80	33.80	1.00	6.	294.	4.	47.	0.1	28.	17.	392.

DRILL HOLE NUMBER : NMX88-19

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
8816	33.80	34.80	1.00	13.	117.	4.	38.	0.1	15.	10.	383.
8817	34.80	35.80	1.00	7.	88.	2.	36.	0.1	12.	8.	344.
8818	35.80	36.80	1.00	6.	90.	2.	40.	0.1	15.	11.	424.
8819	36.80	37.20	0.40	4.	129.	6.	49.	0.1	16.	13.	429.
8820	37.20	38.40	1.20	8.	419.	4.	94.	0.1	63.	31.	730.
8821	38.40	39.40	1.00	2.	141.	6.	35.	0.1	11.	11.	315.
8822	39.40	40.75	1.35	6.	137.	4.	38.	0.1	17.	9.	359.
8823	40.75	41.15	0.40	10.	100.	6.	56.	0.1	47.	18.	523.

LATITUDE : 19963.800
DEPARTURE: 30006.400
ELEVATION: 936.600
DIP AT COLLAR: -45.00 DEG
AZIMUTH : 16.00 DEG
TOTAL DEPTH : 65.37

D I A M O N D D R I L L L O G

HOLE NO.: NMX88-20

DATE LOGGED: --/--/--
LOGGED BY :

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
0.00	65.37	0.00	5.49	CASING
		5.49	5.70	DIORITE BOULDER
		5.70	5.90	SANDSTONE QUARTZO-FELDSPATHIC Medium grained, silicified, 10% diss Po Rusty fractures, may be a small boulder
		5.90	7.00	BASALT Fine grained silicified, chloritic, upper contact is a joint plane at 25 degrees to CA. Minor diss sulfides Py Po. Basalt is well fractured and rehealed with quartz. Moderately block core. Becoming more blocky down section
		7.00	8.99	BASALTIC BRECCIA: LARGE Pebble sized angular fragments of basalt Minor intrusive frag in quartz-sulfide tight matrix, 95% frags, 5% matrix, Matrix is 60% quartz, 40% sulfides Po (Cpy).
		8.99	9.75	LOST CORE (cave)
		9.75	17.70	MIXED LITHOLOGY BRECCIA Small to large pebble sized subangular frags of basalt. Intrusive & sedimentary origin. In tight to vuggy quartz-sulfide matrix. 95% frags, 5% matrix, matrix is 60% quartz and Fe oxides 40% sulfides Po Py (Cpy). Breccia has been re-fractured at variable angles to C.A. These fractures contain hematite

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
				pecthite probably from oxidizing sulfides. Core becoming very blocky. 12.40: Clay gouge zone. 6cm wide strong clay alteration, grey and yellow color. Fracture surface @65 degrees to CA. 15.50-17.70: Extremely blocky, broken & ground core. Lower contact obscured.
		17.70	25.90	MIXED LITHOLOGY BRECCIA Small to large pebble and occasional cobble sized subangular fragments of basalt, sandstone and intrusive lithologies in tight to vuggy quartz-sulfide matrix. 85% fragments, 15% matrix in some cases matrix is fine grained diorite? intrusive. Matrix mostly quartz 60%, sulfides 40% Po Py (Cpy). Secondary fracturing at 45-60 degrees to CA with Fe oxides & clays. Lower contact transitional to:
		25.90	33.50	MIXED LITHOLOGY BRECCIA Medium pebble to medium cobble sized, subangular to subrounded fragments of intrusive, basalt and sedimentary origin In some cases, matrix is fine grained diorite? intrusive, elsewhere matrix is quartz-sulfides, generally quite tight. Frags 80%, matrix 20%, diorite matrix contains only minor pyrrhotite. Quartz-

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
				sulfide matrix is 60% sulfide, 40% quartz. Core is only slightly blocky.
		33.50	34.31	DIORITE DYKE Fine grained, porphyritic wrt olage hornblende. Medium grey color. Upper contact 50 degrees CA. No visible mineralization.
		34.31	44.02	MIXED LITHOLOGY BRECCIA Small pebble to small cobble and a few large cobble angular to subangular fragments of intrusive, basalt & & sedimentary origin in some cases, matrix is fine grained diorite, but mostly quartz-sulfides, quartz 50%, sulfides 50% Po (Py, Cpy). Fragments 80%, matrix (or = 20%
		44.02	44.67	DIORITE DYKE Medium grained, minor disseminated Po Upper contact 7 degrees to CA, lower contact 50 degrees to CA.
		44.67	58.50	MIXED LITHOLOGY BRECCIA As above, but matrix is 60% quartz, 40% sulfide. Below approx 51m, sulfide content reducing, matrix (or = 20% mostly quartz. Except @ 53.03m: 2cm wide section of semi-massive sulfides, 10% quartz, 85% Po, 5% Cpy, and @53.7m 8cm massive sulfide, 2cm wide, 15% quartz, 80% Po, 5% Cpy. Gradational transition into underlying unit of fractured basalt occurs at

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
		58.50	65.37	approximately 58.5m. BASALT Some brecciated sections with minor quartz-sulfide infilling. Also some volcanic breccia, clots of epidote give a speckled appearance to the core.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-20

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
8824	5.90	7.00	1.10	355.	0.2	485.
8825	7.00	7.99	0.99	199.	0.2	39.
8826	7.99	8.99	1.00	336.	0.3	10.
8827	9.75	10.75	1.00	93.	0.1	12.
8828	10.75	11.75	1.00	296.	0.2	72.
8829	11.75	12.75	1.00	185.	0.1	132.
8830	12.75	13.75	1.00	636.	0.3	77.
8831	13.75	14.75	1.00	404.	0.2	67.
8832	14.75	15.75	1.00	89.	0.1	12.
8833	15.75	16.75	1.00	663.	0.7	35.
8834	16.75	17.70	0.95	595.	0.6	32.
8835	17.70	18.70	1.00	254.	0.2	24.
8836	18.70	19.70	1.00	328.	0.3	74.
8837	19.70	20.70	1.00	426.	0.3	415.
8838	20.70	21.70	1.00	253.	0.3	28.
8839	21.70	22.70	1.00	138.	0.3	3.
8840	22.70	23.70	1.00	239.	0.2	61.
8841	23.70	24.70	1.00	363.	0.1	49.
8842	24.70	25.90	1.20	312.	0.1	36.
8843	25.90	26.90	1.00	1482.	2.5	275.
8844	26.90	27.90	1.00	315.	0.1	12.
8845	27.90	28.90	1.00	145.	0.3	14.
8846	28.90	29.90	1.00	620.	0.1	1920.
8847	29.90	30.90	1.00	2842.	4.7	415.
8848	30.90	31.90	1.00	1990.	2.0	2840.
8849	31.90	32.90	1.00	1332.	2.5	3160.
8850	32.90	33.50	0.60	901.	0.4	750.
8851	33.50	34.31	0.81	3272.	3.5	795.
8852	34.31	35.31	1.00	456.	0.2	345.
8853	35.31	36.31	1.00	2572.	3.5	205.
8854	36.31	37.31	1.00	1494.	1.5	885.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-20

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
8855	37.31	38.31	1.00	1621.	2.1	285.
8856	38.31	39.31	1.00	1529.	2.0	1505.
8857	39.31	40.31	1.00	1161.	2.4	225.
8858	40.31	41.31	1.00	1291.	0.7	320.
8859	41.31	42.31	1.00	1104.	0.2	165.
8860	42.31	43.31	1.00	812.	0.4	83.
8861	43.31	44.02	0.71	440.	0.2	49.
8862	44.02	44.67	0.65	147.	0.1	22.
8863	44.67	45.67	1.00	720.	0.3	66.
8864	45.67	46.67	1.00	2198.	4.5	103.
8865	46.67	47.67	1.00	2695.	3.5	250.
8866	47.67	48.67	1.00	1913.	2.1	6190.
8867	48.67	49.67	1.00	2147.	2.6	550.
8868	49.67	50.67	1.00	3413.	3.8	1150.
8869	50.67	51.67	1.00	1891.	2.1	485.
8870	51.67	52.67	1.00	1045.	1.1	210.
8871	52.67	53.67	1.00	1497.	1.9	480.
8872	53.67	54.67	1.00	546.	1.0	440.
8873	54.67	55.67	1.00	328.	0.3	7.
8874	55.67	56.67	1.00	422.	0.3	6.
8875	56.67	57.67	1.00	202.	0.1	22.
8876	57.67	58.50	0.83	260.	0.1	1020.
8877	58.50	60.00	1.50	109.	0.1	1.
8878	60.00	61.50	1.50	162.	0.1	1.
8879	61.50	63.00	1.50	262.	0.1	2.
8880	63.00	64.50	1.50	199.	0.2	3.
8881	64.50	65.37	0.87	504.	0.4	3.

DRILL HOLE NUMBER : NMX88-20

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
8824	5.90	7.00	1.10	5.	355.	7.	97.	0.2	44.	56.	1020.
8825	7.00	7.99	0.99	13.	199.	13.	95.	0.2	43.	44.	988.
8826	7.99	8.99	1.00	19.	336.	2.	95.	0.3	50.	51.	917.
8827	9.75	10.75	1.00	5.	93.	7.	63.	0.1	18.	17.	649.
8828	10.75	11.75	1.00	10.	296.	11.	95.	0.2	33.	45.	1219.
8829	11.75	12.75	1.00	5.	185.	8.	90.	0.1	30.	35.	1018.
8830	12.75	13.75	1.00	9.	636.	13.	96.	0.3	41.	51.	1137.
8831	13.75	14.75	1.00	7.	404.	16.	99.	0.2	38.	52.	1087.
8832	14.75	15.75	1.00	11.	89.	9.	114.	0.1	38.	27.	1202.
8833	15.75	16.75	1.00	13.	663.	8.	124.	0.7	55.	36.	987.
8834	16.75	17.70	0.95	21.	595.	14.	99.	0.6	32.	42.	901.
8835	17.70	18.70	1.00	6.	254.	4.	107.	0.2	39.	39.	1018.
8836	18.70	19.70	1.00	1.	328.	2.	120.	0.3	51.	62.	1182.
8837	19.70	20.70	1.00	3.	426.	2.	114.	0.3	39.	56.	1135.
8838	20.70	21.70	1.00	5.	253.	2.	107.	0.3	36.	30.	1029.
8839	21.70	22.70	1.00	6.	138.	2.	88.	0.3	29.	21.	900.
8840	22.70	23.70	1.00	16.	239.	5.	101.	0.2	34.	29.	1002.
8841	23.70	24.70	1.00	12.	363.	6.	95.	0.1	36.	25.	1056.
8842	24.70	25.90	1.20	5.	312.	2.	79.	0.1	32.	25.	743.
8843	25.90	26.90	1.00	7.	1482.	3.	128.	2.5	30.	32.	972.
8844	26.90	27.90	1.00	18.	315.	2.	95.	0.1	23.	17.	943.
8845	27.90	28.90	1.00	11.	145.	3.	79.	0.3	18.	15.	804.
8846	28.90	29.90	1.00	44.	620.	9.	112.	0.1	37.	48.	982.
8847	29.90	30.90	1.00	98.	2842.	2.	147.	4.7	35.	47.	789.
8848	30.90	31.90	1.00	28.	1990.	2.	123.	2.0	35.	42.	828.
8849	31.90	32.90	1.00	32.	1332.	3.	118.	2.5	27.	32.	899.
8850	32.90	33.50	0.60	60.	901.	2.	76.	0.4	25.	24.	582.
8851	33.50	34.31	0.81	62.	3272.	3.	136.	3.5	31.	36.	799.
8852	34.31	35.31	1.00	7.	456.	2.	60.	0.2	9.	13.	507.
8853	35.31	36.31	1.00	20.	2572.	4.	150.	3.5	37.	48.	914.
8854	36.31	37.31	1.00	32.	1494.	7.	113.	1.5	29.	58.	904.

DRILL HOLE NUMBER : NMX88-20

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
8855	37.31	38.31	1.00	56.	1621.	2.	118.	2.1	29.	40.	834.
8856	38.31	39.31	1.00	39.	1529.	3.	100.	2.0	17.	21.	678.
8857	39.31	40.31	1.00	48.	1161.	2.	105.	2.4	25.	42.	741.
8858	40.31	41.31	1.00	8.	1291.	7.	100.	0.7	27.	40.	747.
8859	41.31	42.31	1.00	6.	1104.	7.	98.	0.2	26.	45.	818.
8860	42.31	43.31	1.00	7.	812.	2.	83.	0.4	26.	42.	715.
8861	43.31	44.02	0.71	6.	440.	2.	93.	0.2	28.	35.	852.
8862	44.02	44.67	0.65	4.	147.	2.	56.	0.1	16.	13.	577.
8863	44.67	45.67	1.00	15.	720.	6.	89.	0.3	27.	36.	761.
8864	45.67	46.67	1.00	13.	2198.	8.	99.	4.5	34.	47.	643.
8865	46.67	47.67	1.00	13.	2695.	2.	145.	2.5	37.	42.	927.
8866	47.67	48.67	1.00	24.	1913.	5.	107.	2.1	47.	53.	729.
8867	48.67	49.67	1.00	34.	2147.	4.	131.	2.6	33.	41.	937.
8868	49.67	50.67	1.00	30.	3413.	10.	152.	3.8	37.	45.	957.
8869	50.67	51.67	1.00	17.	1891.	10.	133.	2.1	38.	41.	976.
8870	51.67	52.67	1.00	11.	1045.	4.	113.	1.1	45.	50.	685.
8871	52.67	53.67	1.00	20.	1497.	2.	119.	1.9	52.	46.	854.
8872	53.67	54.67	1.00	4.	546.	7.	109.	1.0	56.	39.	931.
8873	54.67	55.67	1.00	3.	328.	6.	139.	0.3	68.	31.	1202.
8874	55.67	56.67	1.00	2.	422.	7.	115.	0.3	55.	30.	975.
8875	56.67	57.67	1.00	1.	202.	2.	101.	0.1	59.	29.	897.
8876	57.67	58.50	0.83	1.	260.	2.	122.	0.1	65.	41.	1090.
8877	58.50	60.00	1.50	1.	109.	4.	105.	0.1	55.	27.	990.
8878	60.00	61.50	1.50	3.	162.	3.	78.	0.1	64.	20.	633.
8879	61.50	63.00	1.50	1.	262.	6.	91.	0.1	56.	25.	785.
8880	63.00	64.50	1.50	1.	199.	5.	93.	0.2	63.	26.	757.
8881	64.50	65.37	0.87	1.	504.	2.	90.	0.4	55.	23.	625.

LATITUDE : 19973.600
DEPARTURE: 29953.500
ELEVATION: 974.400
DIP AT COLLAR: -45.00 DEG
AZIMUTH : 330.00 DEG
TOTAL DEPTH : 76.20

D I A M O N D D R I L L L O G

HOLE NO.: NMX88-21

DATE LOGGED: --/--/--
LOGGED BY :

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
0.00	76.20	0.00	3.50	CASING
		3.50	17.61	COMOX FORMATION HORNFELSED SANDSTONE Fine grained, dark grey to black. Sulfides occur as f.f. 45 degrees ACA. Weakly magnetic graphitic sandstone/silt -stone.
		17.61	21.90	DIORITE DYKE Upper contact 40 degrees and lower contact 50 degrees, finely crystalline, equigranular diorite.
		21.90	26.52	COMOX FORMATION HORNFELSED SANDSTONE Same as 3.50 to 17.61m. 26.02-26.14: Fault slicks with orientation of 55 degrees and 40 degrees ACA.
		26.52	52.94	DIORITE DYKE Finely crystalline, porphyritic, subhedral to anhedral, equigranular crystals. Epidotized. Upper contact 40 degrees & lower contact 50 degrees.
		52.94	60.63	KARMUTSEN BASALT Fine grained, weakly to non magnetic basalt. Light green to dark green in color. Occasionally contains phenocrysts of white feldspar 1-2 mm in size.
		60.63	62.48	DIORITE DYKE Same as 26.52 - 52.94m. Upper contact 50 degrees and lower contact 45 degrees.

MAJOR		SUBUNIT		DESCRIPTION
From	To	From	To	
		62.48	76.10	KARMUTSEN FORMATION BASALT See 52.94 - 60.63 m.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-21

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
42873	4.48	5.94	1.46	720.	0.1	6.
42874	5.94	7.49	1.55	330.	0.1	4.
42875	13.30	14.55	1.25	234.	0.1	1.
42290	14.55	16.06	1.51	1073.	0.2	28.
42291	16.06	17.61	1.55	232.	0.1	12.
42292	21.90	23.40	1.50	669.	0.1	18.
42293	23.40	24.90	1.50	825.	0.5	32.
42294	26.57	28.02	1.45	216.	0.1	5.
42295	43.28	44.78	1.50	132.	0.1	8.
42296	50.16	51.62	1.46	92.	0.1	3.
42297	51.62	52.94	1.32	96.	0.1	1.
42298	52.94	54.44	1.50	279.	0.1	3.
42299	56.22	57.72	1.50	150.	0.1	4.
42300	57.72	59.13	1.41	154.	0.1	1.
44020	59.13	60.63	1.50	99.	0.1	1.
44021	66.74	68.24	1.50	645.	0.6	21.
44022	68.24	69.79	1.55	858.	0.8	11.
44023	69.79	71.29	1.50	178.	0.1	3.
44024	71.29	72.79	1.50	183.	0.3	5.
44025	72.79	74.29	1.50	535.	0.3	152.
44098	74.29	75.79	1.50	224.	0.2	9.

DRILL HOLE NUMBER : NMX88-21

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
42873	4.48	5.94	1.46	1.	720.	16.	61.	0.1	95.	47.	341.
42874	5.94	7.49	1.55	1.	330.	11.	76.	0.1	99.	44.	439.
42875	13.30	14.55	1.25	1.	234.	12.	80.	0.1	109.	48.	553.
42290	14.55	16.06	1.51	1.	1073.	29.	81.	0.2	82.	49.	432.
42291	16.06	17.61	1.55	1.	232.	16.	85.	0.1	83.	25.	524.
42292	21.90	23.40	1.50	1.	669.	18.	81.	0.1	76.	38.	421.
42293	23.40	24.90	1.50	11.	825.	11.	105.	0.5	77.	33.	596.
42294	26.57	28.02	1.45	1.	216.	10.	39.	0.1	10.	9.	303.
42295	43.28	44.78	1.50	2.	132.	3.	35.	0.1	10.	10.	262.
42296	50.16	51.62	1.46	3.	92.	3.	33.	0.1	10.	6.	267.
42297	51.62	52.94	1.32	2.	96.	6.	35.	0.1	17.	6.	282.
42298	52.94	54.44	1.50	2.	279.	9.	44.	0.1	39.	13.	338.
42299	56.22	57.72	1.50	4.	150.	12.	29.	0.1	32.	10.	265.
42300	57.72	59.13	1.41	5.	154.	9.	39.	0.1	37.	10.	276.
44020	59.13	60.63	1.50	2.	99.	6.	26.	0.1	31.	8.	243.
44021	66.74	68.24	1.50	2.	645.	8.	40.	0.6	80.	21.	234.
44022	68.24	69.79	1.55	2.	858.	10.	67.	0.8	74.	29.	329.
44023	69.79	71.29	1.50	1.	178.	8.	53.	0.1	45.	12.	387.
44024	71.29	72.79	1.50	3.	183.	6.	31.	0.3	45.	9.	268.
44025	72.79	74.29	1.50	7.	535.	5.	70.	0.3	51.	16.	399.
44098	74.29	75.79	1.50	8.	224.	11.	50.	0.2	54.	12.	319.

LATITUDE : 9537.000
DEPARTURE: 51350.000
ELEVATION: 826.600
DIP AT COLLAR: -45.00 DEG
AZIMUTH : 150.00 DEG
TOTAL DEPTH : 138.37

D I A M O N D D R I L L L O G

HOLE NO.: NMX88-22

DATE LOGGED: --/--/--
LOGGED BY :

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
0.00	138.37	0.00	3.35	CASING
		3.35	33.65	KARMUTSEN BASALT Fine grained, very weakly to non - magnetic, dark green to light green, basalt occasionally porphyritic with phenocrysts, 1-2mm in size, of white feldspar
		33.65	34.17	QUARTZ VEIN Bull quartz. Upper contact 65 degrees & lower contact 40 degrees.
		34.17	43.26	KARMUTSEN BASALT Same as 3.35 to 33.65.
		43.26	43.75	QUARTZ VEIN Bull quartz & euhedral quartz crystals as infilling of vugs. Upper contact 30 degrees, lower contact 35 degrees ACA.
		43.75	67.52	KARMUTSEN BASALT Same as 3.35 to 33.65 m.
		67.52	68.27	FELDSPAR PORPHYRY DYKE Speckled with & purple with phenocrysts 1 to 3 mm in size of white feldspar. Upper contact 30 degrees and lower contact 45 degrees ACA. Contains sub rounded frags of basalt. Frags constitute 15% of dyke.
		68.27	138.37	KARMUSTEN BASALT

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-22

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
44099	14.43	15.93	1.50	1133.	0.6	27.
44100	15.93	17.52	1.59	250.	0.2	2.
44143	17.52	19.16	1.64	289.	0.1	1.
44144	19.16	20.35	1.19	186.	0.1	1.
44145	20.35	21.95	1.60	769.	0.3	1.
44146	21.95	23.34	1.39	149.	0.1	1.
44147	23.34	24.85	1.51	147.	0.1	3.
44148	30.31	32.13	1.82	114.	0.1	1.
44149	32.13	33.65	1.52	211.	0.1	1.
44150	33.65	34.17	0.52	476.	0.4	2.
28148	34.17	35.50	1.33	846.	0.5	1.
28149	35.50	36.99	1.49	787.	0.5	1.
28150	36.99	38.58	1.59	181.	0.1	2.
27693	38.58	40.14	1.56	324.	0.1	1.
27694	40.14	41.52	1.38	191.	0.1	3.
27695	41.52	43.16	1.64	410.	0.1	2.
27696	43.16	43.89	0.73	717.	0.2	2.
27697	43.89	45.53	1.64	215.	0.1	2.
27698	45.53	46.91	1.38	241.	0.1	3.
2251	52.32	53.83	1.51	382.	0.2	1.
2252	53.82	55.36	1.54	276.	0.2	1.
2253	55.36	56.95	1.59	297.	0.1	1.
2254	56.95	58.46	1.51	187.	0.2	1.
2255	58.46	59.93	1.47	240.	0.1	2.
2256	59.93	61.37	1.44	112.	0.1	1.
2257	61.37	62.85	1.48	148.	0.1	2.
2258	62.85	64.35	1.50	498.	0.2	2.
2259	64.35	66.06	1.71	480.	0.3	3.
2260	66.06	67.52	1.46	719.	0.5	5.
2261	67.52	68.27	0.75	173.	0.1	2.
2262	68.27	69.68	1.41	175.	0.1	1.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-22

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
2263	69.68	71.71	2.03	417.	0.1	2.
2264	71.71	73.70	0.99	497.	0.2	3.
2265	73.70	74.10	1.40	460.	0.2	1.
2266	74.10	75.50	1.40	319.	0.2	2.
2267	87.04	88.33	1.29	209.	0.1	1.
2268	88.33	89.78	1.45	338.	0.2	2.
2269	99.07	100.56	1.49	141.	0.1	1.
2270	100.56	102.01	1.45	260.	0.1	1.
2271	103.43	104.85	1.42	364.	0.2	10.
2272	104.85	106.39	1.54	347.	0.2	8.
2273	108.33	109.80	1.47	349.	0.1	2.
2274	109.80	111.34	1.54	297.	0.2	1.
2275	111.34	112.65	1.31	137.	0.1	1.
7426	112.65	114.43	1.78	253.	0.1	2.
7427	117.57	118.05	0.48	110.	0.1	3.
7428	118.05	119.86	1.81	175.	0.1	1.
7429	119.85	121.48	1.63	146.	0.1	1.
7430	126.41	128.01	1.60	699.	0.2	2.
7431	128.01	129.48	1.47	123.	0.1	4.

DRILL HOLE NUMBER : NMX88-22

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
44099	14.43	15.93	1.50	1.	1133.	2.	73.	0.6	86.	66.	351.
44100	15.93	17.52	1.59	1.	250.	6.	19.	0.2	48.	14.	165.
44143	17.52	19.16	1.64	1.	289.	2.	25.	0.1	60.	19.	171.
44144	19.16	20.35	1.19	1.	186.	3.	19.	0.1	48.	14.	133.
44145	20.35	21.95	1.60	1.	769.	2.	54.	0.3	86.	52.	305.
44146	21.95	23.34	1.39	1.	149.	3.	20.	0.1	29.	9.	177.
44147	23.34	24.85	1.51	1.	147.	2.	15.	0.1	21.	7.	129.
44148	30.31	32.13	1.82	1.	114.	10.	14.	0.1	17.	7.	125.
44149	32.13	33.65	1.52	1.	211.	2.	33.	0.1	21.	10.	207.
44150	33.65	34.17	0.52	1355.	476.	2.	22.	0.4	21.	9.	85.
28148	34.17	35.50	1.33	14.	846.	12.	70.	0.5	61.	28.	294.
28149	35.50	36.99	1.49	1.	787.	3.	46.	0.5	43.	15.	301.
28150	36.99	38.58	1.59	1.	181.	8.	21.	0.1	25.	11.	225.
27693	38.58	40.14	1.56	4.	324.	9.	36.	0.1	34.	12.	247.
27694	40.14	41.52	1.38	1.	191.	7.	17.	0.1	26.	8.	191.
27695	41.52	43.16	1.64	2.	410.	3.	35.	0.1	33.	15.	206.
27696	43.16	43.89	0.73	16.	717.	2.	76.	0.2	50.	22.	339.
27697	43.89	45.53	1.64	1.	215.	7.	29.	0.1	29.	10.	193.
27698	45.53	46.91	1.38	4.	241.	5.	25.	0.1	35.	11.	169.
2251	52.32	53.83	1.51	1.	382.	12.	28.	0.2	60.	27.	190.
2252	53.82	55.36	1.54	4.	276.	6.	38.	0.2	45.	12.	208.
2253	55.36	56.95	1.59	1.	297.	8.	32.	0.1	48.	16.	200.
2254	56.95	58.46	1.51	1.	127.	5.	21.	0.2	28.	9.	223.
2255	58.46	59.93	1.47	4.	240.	6.	23.	0.1	42.	14.	190.
2256	59.93	61.37	1.44	1.	112.	4.	20.	0.1	41.	11.	312.
2257	61.37	62.85	1.48	5.	148.	8.	20.	0.1	44.	13.	212.
2258	62.85	64.35	1.50	4.	492.	3.	27.	0.2	70.	23.	181.
2259	64.35	66.06	1.71	4.	480.	5.	41.	0.3	73.	21.	215.
2260	66.06	67.52	1.46	1.	719.	8.	35.	0.5	72.	27.	180.
2261	67.52	68.27	0.75	2.	173.	2.	39.	0.1	22.	13.	217.
2262	68.27	69.68	1.41	3.	175.	6.	31.	0.1	37.	9.	214.

DRILL HOLE NUMBER : NMX88-22

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
2263	69.68	71.71	2.03	11.	417.	2.	40.	0.1	72.	23.	228.
2264	71.71	72.70	0.99	2.	497.	2.	28.	0.2	52.	19.	190.
2265	72.70	74.10	1.40	11.	460.	3.	31.	0.2	47.	16.	188.
2266	74.10	75.50	1.40	3.	319.	2.	27.	0.2	41.	33.	155.
2267	87.04	88.33	1.29	22.	209.	6.	26.	0.1	46.	14.	248.
2268	88.33	89.78	1.45	3.	328.	2.	22.	0.2	43.	20.	206.
2269	99.07	100.56	1.49	1.	141.	3.	25.	0.1	24.	9.	238.
2270	100.56	102.01	1.45	2.	260.	2.	27.	0.1	28.	9.	203.
2271	103.43	104.85	1.42	4.	364.	4.	34.	0.2	30.	11.	271.
2272	104.85	106.39	1.54	3.	347.	2.	34.	0.2	29.	10.	281.
2273	108.33	109.80	1.47	2.	349.	7.	26.	0.1	30.	17.	167.
2274	109.80	111.34	1.54	2.	297.	2.	27.	0.2	29.	10.	217.
2275	111.34	112.65	1.31	2.	137.	3.	14.	0.1	19.	6.	157.
7426	112.65	114.43	1.78	4.	253.	6.	23.	0.1	27.	10.	205.
7427	117.57	118.05	0.48	1.	110.	5.	16.	0.1	20.	6.	184.
7428	118.05	119.86	1.81	2.	175.	2.	18.	0.1	22.	7.	153.
7429	119.85	121.48	1.63	1.	146.	4.	20.	0.1	21.	7.	258.
7430	126.41	128.01	1.60	4.	699.	7.	71.	0.2	69.	26.	355.
7431	128.01	129.48	1.47	1.	123.	2.	27.	0.1	26.	12.	254.

LATITUDE : 19968.900
DEPARTURE: 30004.400
ELEVATION: 937.200
DIP AT COLLAR: -45.00 DEG
AZIMUTH : 320.00 DEG
TOTAL DEPTH : 92.96

D I A M O N D D R I L L L O G

HOLE NO.: NMX88-23

DATE LOGGED: --/--/--
LOGGED BY :

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
0.00	92.96	0.00	12.19	CASING
		12.19	50.47	KARMUTSEN BASALT Fine grained, dark green, non-magnetic basalt. Occasionally porphyritic, it is moderately fractured, and altered. The alteration products in order of abundance are epidote, calcite, quartz & sulfides. 8.84-20.30 : Very badly broken core, the average size is approx. 2cm wide. Fault slicks 40 degrees ACA. 20.30-50.47: Fault, slicks @47 degrees ACA, & 35 degrees ACA. Broken core consisting of intervals of more competent core.
		50.47	55.26	DIORITE DYKE Moderately crystalline, anhedral to subhedral crystals. Moderately magnetic. Salt & pepper colored. Upper contact 75 degrees to 85 degrees. Lower contact 50 to 55 degrees ACA.
		55.26	79.75	MIXED LITHOLOGY BRECCIA Subrounded to sub angular frags of, in order of abundance, Karmutsen basalt, comox sediments, and intrusive fragments Matrix to frag ratio is 8 to 92. Overall

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
		79.75	98.96	the matrix comprises (/= 10%. KARMUTSEN BASALT Upper contact 55 degrees ACA. 79.75-82.80: Transitional change from breccia to fractured basalt. Basalt same as 12.19-50.47 m.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-23

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
7432	8.84	11.24	2.40	192.	0.3	23.
7433	13.70	15.54	1.84	599.	0.9	350.
7434	15.54	17.15	1.61	360.	0.7	21.
7435	17.15	18.90	1.75	230.	0.3	34.
7436	18.90	20.30	1.40	323.	0.3	8.
7437	20.30	21.71	1.41	85.	0.1	2.
7438	34.47	35.63	1.16	516.	0.3	8.
7439	35.63	37.61	1.98	301.	0.2	4.
7440	37.61	38.97	1.36	286.	0.4	4.
7441	38.97	40.36	1.39	283.	0.3	3.
7442	40.36	41.82	1.46	261.	0.1	3.
7443	41.82	43.04	1.22	314.	0.2	2.
7444	43.04	44.84	1.80	137.	0.1	1.
7445	44.84	46.36	1.52	219.	0.2	3.
7446	46.36	47.63	1.27	380.	0.2	5.
7447	47.63	49.20	1.57	276.	0.3	1.
7448	49.20	50.47	1.27	387.	0.3	6.
7449	52.24	53.68	1.44	249.	0.2	2.
7450	53.68	55.26	1.58	242.	0.2	2.
7451	55.26	56.75	1.49	1661.	2.4	420.
7452	56.75	58.18	1.43	353.	0.6	153.
7453	58.18	59.66	1.48	201.	0.2	26.
7454	59.66	61.13	1.47	208.	0.1	295.
7455	61.13	62.67	1.54	159.	0.2	37.
7456	62.67	64.05	1.38	145.	0.1	9.
7457	64.05	65.55	1.50	182.	0.3	5.
7458	65.55	66.96	1.41	137.	0.3	3.
7459	66.96	68.46	1.50	208.	0.2	1.
7460	68.46	69.96	1.50	403.	0.3	26.
7461	69.96	71.46	1.50	1187.	1.3	4.
7462	71.46	72.48	1.02	120.	0.3	7.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-23

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
7463	72.48	74.02	1.54	15711.	19.1	73.
7464	74.02	75.31	1.29	489.	0.8	7.
7465	75.31	76.79	1.48	673.	0.8	10.
7466	76.79	78.30	1.51	57.	0.2	3.
7467	78.30	79.75	1.45	296.	0.6	18.
7468	79.75	81.29	1.54	157.	0.4	462.
7469	81.29	82.80	1.51	241.	0.2	20.

DRILL HOLE NUMBER : NMX88-23

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
7432	8.84	11.24	2.40	9.	192.	9.	155.	0.3	83.	27.	982.
7433	13.70	15.54	1.84	4.	599.	12.	449.	0.9	68.	34.	1819.
7434	15.54	17.15	1.61	1.	360.	2.	248.	0.7	54.	21.	1134.
7435	17.15	18.90	1.75	1.	230.	11.	734.	0.3	85.	29.	1555.
7436	18.90	20.30	1.40	1.	323.	3.	200.	0.3	121.	35.	682.
7437	20.30	21.71	1.41	1.	85.	4.	82.	0.1	63.	20.	486.
7438	34.47	35.63	1.16	1.	516.	2.	41.	0.3	43.	15.	301.
7439	35.63	37.61	1.98	2.	301.	3.	40.	0.2	39.	14.	313.
7440	37.61	38.97	1.36	3.	286.	6.	61.	0.4	50.	17.	438.
7441	38.97	40.36	1.39	4.	283.	2.	61.	0.3	55.	20.	453.
7442	40.36	41.82	1.46	3.	261.	6.	45.	0.1	45.	15.	382.
7443	41.82	43.04	1.22	1.	214.	5.	41.	0.2	40.	21.	376.
7444	43.04	44.84	1.80	2.	137.	4.	31.	0.1	35.	13.	333.
7445	44.84	46.36	1.52	1.	219.	2.	31.	0.2	41.	13.	295.
7446	46.36	47.63	1.27	2.	380.	3.	38.	0.2	54.	16.	340.
7447	47.63	49.20	1.57	4.	276.	4.	47.	0.3	48.	16.	355.
7448	49.20	50.47	1.27	6.	387.	2.	80.	0.3	61.	25.	735.
7449	52.24	53.68	1.44	13.	249.	8.	40.	0.2	13.	16.	330.
7450	53.68	55.26	1.58	8.	242.	2.	38.	0.2	13.	12.	320.
7451	55.26	56.75	1.49	16.	1661.	10.	170.	2.4	55.	44.	1383.
7452	56.75	58.18	1.43	27.	353.	6.	126.	0.6	48.	24.	1046.
7453	58.18	59.66	1.48	20.	201.	6.	96.	0.2	54.	22.	878.
7454	59.66	61.13	1.47	24.	208.	5.	75.	0.1	50.	22.	727.
7455	61.13	62.67	1.54	15.	159.	6.	65.	0.2	38.	19.	653.
7456	62.67	64.05	1.38	12.	145.	6.	57.	0.1	29.	20.	684.
7457	64.05	65.55	1.50	10.	182.	2.	69.	0.3	35.	21.	738.
7458	65.55	66.96	1.41	10.	137.	6.	48.	0.3	33.	22.	674.
7459	66.96	68.46	1.50	20.	208.	3.	54.	0.2	33.	20.	630.
7460	68.46	69.96	1.50	23.	403.	6.	67.	0.3	44.	27.	657.
7461	69.96	71.46	1.50	15.	1187.	4.	79.	1.3	35.	22.	649.
7462	71.46	72.48	1.02	13.	120.	2.	68.	0.3	32.	20.	553.

DRILL HOLE NUMBER : NMX88-23

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
7463	72.48	74.02	1.54	13.	15711.	14.	271.	19.1	56.	53.	561.
7464	74.02	75.31	1.29	8.	489.	2.	75.	0.8	40.	23.	658.
7465	75.31	76.79	1.48	13.	673.	2.	69.	0.8	30.	22.	582.
7466	76.79	78.30	1.51	18.	57.	3.	74.	0.2	38.	25.	735.
7467	78.30	79.75	1.45	13.	296.	2.	70.	0.6	37.	21.	669.
7468	79.75	81.29	1.54	1.	157.	11.	27.	0.4	26.	8.	244.
7469	81.29	82.80	1.51	1.	241.	10.	26.	0.2	23.	9.	243.

LATITUDE : 19968.900
DEPARTURE: 30004.400
ELEVATION: 937.200
DIP AT COLLAR: -45.00 DEG
AZIMUTH : 355.00 DEG
TOTAL DEPTH : 111.86

D I A M O N D D R I L L L O G

HOLE NO.: NMX88-24

DATE LOGGED: --/--/--
LOGGED BY :

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
0.00	111.86	0.00	6.10	CASING
		6.10	34.59	MIXED LITHOLOGY BRECCIA Breccia composed of fragments of, in order of abundance, basalt, sediments, and diorite. Fragments of basalt and sediments are rounded to subrounded with the diorite frags subrounded. The matrix constitutes (/=15% and is composed of quartz, sulfides epidote & chlorite.
		34.59	35.42	DIORITE DYKE Upper contact 65 degrees and lower contact 40 degrees ACA. F.G. somewhat porphyritic in texture, contains frags of diorite, 1/2 to 2 cm in size; frags are subrounded
		35.42	68.51	MIXED LITHOLOGY BRECCIA Same as 6.10 - 34.59 m.
		68.51	69.03	DIORITE DYKE Upper contact 70 degrees and lower contact 65 degrees ACA. Subhedral to anhedral crystals, porphyritic and weakly magnetic.
		69.03	74.07	MIXED LITHOLOGY BRECCIA Same as 6.10 - 34.59 m.
		74.07	74.37	DIORITE DYKE Upper contact 25 degrees; lower contact 60 degrees ACA. Finely crystalline,

MAJOR From	MAJOR To	SUBUNIT From	SUBUNIT To	DESCRIPTION
				euhedral to subhedral crystalls. Magnetic
		74.37	111.86	MIXED LITHOLOGY BRECCIA Breccia composed of subangular to sub-rounded fragments of basalt & sediment, and diorite. The breccia is composed of in order of abundance: basalt, diorite, and sediments, hence BKID. Matrix is still 15% of total.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-24

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
7470	7.22	8.42	1.20	71.	0.1	2.
7471	8.42	10.17	1.75	52.	0.1	1.
7472	10.17	11.98	1.81	221.	0.1	27.
7473	11.98	13.60	1.62	382.	0.1	35.
7474	13.60	15.69	2.09	101.	0.1	45.
7475	15.69	17.14	1.45	60.	0.1	3.
7476	17.14	18.70	1.56	292.	0.2	25.
7477	18.70	20.19	1.49	1865.	2.3	33.
7478	20.19	21.69	1.50	544.	0.5	27.
7479	21.69	23.47	1.78	329.	0.3	13.
7480	23.47	24.98	1.51	357.	0.2	4.
7481	24.98	26.38	1.40	167.	0.1	1.
7482	26.38	27.93	1.55	367.	0.1	4.
7483	27.93	29.25	1.32	230.	0.1	2.
7484	29.25	30.75	1.50	249.	0.1	3.
7485	30.75	32.42	1.67	410.	0.1	37.
7486	32.42	33.94	1.52	87.	0.1	8.
7487	33.94	34.59	0.65	116.	0.1	13.
7488	34.59	35.42	0.83	53.	0.1	2.
7489	35.42	36.89	1.47	1082.	1.4	290.
7490	36.89	38.57	1.68	276.	0.3	81.
7491	38.57	40.10	1.53	583.	0.8	78.
7492	40.10	41.64	1.54	763.	0.9	168.
7493	41.64	43.13	1.49	538.	0.6	430.
7494	43.13	44.55	1.42	726.	0.9	86.
7495	44.55	46.27	1.72	566.	0.5	69.
7496	46.27	47.79	1.52	444.	0.4	58.
7497	47.79	49.20	1.41	872.	1.1	21.
7498	49.20	50.50	1.30	92.	0.2	8.
7499	50.50	52.21	1.71	485.	0.5	220.
7500	52.21	53.79	1.58	572.	0.4	457.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-24

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
7501	53.79	55.02	1.23	807.	1.4	220.
7502	55.02	56.53	1.51	968.	1.7	1510.
7503	56.53	58.04	1.51	879.	0.9	1070.
7504	58.04	59.56	1.52	1183.	1.2	138.
7505	59.56	61.04	1.48	934.	1.2	440.
7506	61.04	62.74	1.70	3218.	3.2	360.
7507	62.74	64.20	1.46	1145.	1.5	41.
7508	64.20	65.69	1.49	194.	0.3	7.
7509	65.69	67.18	1.49	132.	0.2	1.
7510	67.18	68.51	1.33	468.	0.1	520.
7511	68.51	69.03	0.52	26.	0.1	1.
7512	69.03	70.56	1.53	110.	0.2	13.
7513	70.56	72.20	1.64	93.	0.1	4.
7514	72.20	73.00	0.80	76.	0.1	48.
7515	73.00	74.07	1.07	47.	0.1	1.
7516	74.07	74.37	0.30	277.	0.2	250.
7517	74.37	76.04	1.67	67.	0.1	1.
7518	76.04	77.48	1.44	75.	0.1	1.
7519	77.48	78.98	1.50	173.	0.2	1.
7520	78.98	80.37	1.39	84.	0.2	2.
7521	80.37	82.12	1.75	89.	0.1	1.
7522	82.12	83.64	1.52	63.	0.1	1.
7523	83.64	85.13	1.49	92.	0.1	1.
7524	85.13	86.43	1.30	52.	0.1	1.
7525	86.43	88.07	1.64	81.	0.1	1.
7526	88.07	89.56	1.49	80.	0.1	1.
7527	89.56	91.07	1.51	85.	0.1	1.
7528	91.07	92.52	1.45	72.	0.1	1.
7529	92.52	94.05	1.53	128.	0.2	4.
7530	94.05	95.66	1.61	52.	0.1	1.
7531	95.66	97.19	1.53	68.	0.1	1.

ASSAY RECORD
MUREX DRILL PROJECT

DRILL HOLE NUMBER : NMX88-24

SAMPLE NO.	FROM	TO	WIDTH	CU PPM	AG PPM	AU PPB
7532	97.16	98.74	1.58	50.	0.1	1.
7533	98.74	100.19	1.45	62.	0.2	1.
7534	100.17	101.53	1.36	38.	0.2	1.
7535	101.53	103.36	1.83	106.	0.1	1.
7536	103.36	105.09	1.73	31.	0.1	1.
7537	105.09	106.43	1.34	84.	0.2	1.
7538	106.43	107.94	1.51	52.	0.1	1.
7539	107.94	109.21	1.27	58.	0.1	1.
7540	109.21	110.22	1.01	80.	0.1	1.
7541	110.22	111.86	1.64	95.	0.1	1.

DRILL HOLE NUMBER : NMX88-24

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
7470	7.22	8.42	1.20	6.	71.	2.	66.	0.1	41.	16.	860.
7471	8.42	10.17	1.75	3.	52.	2.	81.	0.1	32.	15.	953.
7472	10.17	11.98	1.81	10.	221.	2.	113.	0.1	39.	23.	1063.
7473	11.98	13.60	1.62	13.	382.	6.	88.	0.1	35.	26.	863.
7474	13.60	15.69	2.09	9.	101.	2.	78.	0.1	33.	21.	713.
7475	15.69	17.14	1.45	1.	60.	6.	62.	0.1	60.	25.	453.
7476	17.14	18.70	1.56	13.	292.	2.	108.	0.2	59.	35.	898.
7477	18.70	20.19	1.49	20.	1865.	2.	141.	2.3	32.	39.	1053.
7478	20.19	21.69	1.50	9.	544.	2.	81.	0.5	16.	19.	720.
7479	21.69	23.47	1.78	15.	329.	6.	110.	0.3	26.	17.	968.
7480	23.47	24.98	1.51	9.	357.	6.	128.	0.2	60.	26.	1175.
7481	24.98	26.38	1.40	4.	167.	5.	88.	0.1	60.	22.	982.
7482	26.38	27.93	1.55	3.	367.	3.	89.	0.1	64.	31.	810.
7483	27.93	29.25	1.32	4.	230.	7.	124.	0.1	65.	25.	1218.
7484	29.25	30.75	1.50	3.	249.	3.	125.	0.1	60.	22.	1048.
7485	30.75	32.42	1.67	3.	410.	20.	127.	0.1	50.	34.	1002.
7486	32.42	33.94	1.52	3.	87.	3.	159.	0.1	54.	23.	1313.
7487	33.94	34.59	0.65	2.	116.	8.	145.	0.1	56.	23.	1118.
7488	34.59	35.42	0.83	3.	53.	2.	48.	0.1	12.	15.	437.
7489	35.42	36.89	1.47	2.	1082.	2.	182.	1.4	39.	36.	1305.
7490	36.89	38.57	1.68	2.	276.	17.	153.	0.3	46.	27.	1295.
7491	38.57	40.10	1.53	2.	583.	2.	129.	0.8	57.	29.	1078.
7492	40.10	41.64	1.54	1.	763.	2.	138.	0.9	50.	30.	1092.
7493	41.64	43.13	1.49	1.	538.	9.	128.	0.6	29.	29.	1125.
7494	43.13	44.55	1.42	1.	726.	8.	141.	0.9	36.	30.	1128.
7495	44.55	46.27	1.72	1.	566.	12.	165.	0.5	49.	34.	1457.
7496	46.27	47.79	1.52	4.	444.	4.	144.	0.4	47.	26.	1161.
7497	47.79	49.20	1.41	5.	872.	2.	154.	1.1	36.	26.	1302.
7498	49.20	50.50	1.30	1.	92.	11.	97.	0.2	51.	19.	755.
7499	50.50	52.21	1.71	3.	485.	2.	116.	0.5	45.	32.	998.
7500	52.21	53.79	1.58	2.	572.	7.	100.	0.4	37.	29.	885.

DRILL HOLE NUMBER : NMX88-24

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
7501	53.79	55.02	1.23	1.	807.	3.	154.	1.4	46.	26.	1325.
7502	55.02	56.53	1.51	1.	968.	11.	137.	1.7	58.	34.	1204.
7503	56.53	58.04	1.51	5.	879.	5.	127.	0.9	52.	33.	1045.
7504	58.04	59.56	1.52	3.	1183.	2.	120.	1.2	43.	30.	1015.
7505	59.56	61.04	1.48	8.	934.	14.	147.	1.2	61.	31.	1069.
7506	61.04	62.74	1.70	1.	3218.	11.	168.	3.2	61.	39.	1235.
7507	62.74	64.20	1.46	2.	1145.	26.	148.	1.5	53.	28.	1201.
7508	64.20	65.69	1.49	9.	194.	8.	76.	0.3	53.	22.	748.
7509	65.69	67.18	1.49	5.	132.	7.	82.	0.2	48.	19.	800.
7510	67.18	68.51	1.33	1.	468.	20.	139.	0.1	66.	41.	1300.
7511	68.51	69.03	0.52	1.	26.	7.	49.	0.1	11.	7.	471.
7512	69.03	70.56	1.53	1.	110.	10.	99.	0.2	41.	19.	875.
7513	70.56	72.20	1.64	1.	93.	18.	86.	0.1	34.	16.	882.
7514	72.20	73.00	0.80	1.	76.	9.	79.	0.1	23.	14.	824.
7515	73.00	74.07	1.07	1.	47.	3.	46.	0.1	19.	12.	438.
7516	74.07	74.37	0.30	1.	277.	18.	118.	0.2	49.	40.	1010.
7517	74.37	76.04	1.67	1.	67.	10.	72.	0.1	45.	20.	663.
7518	76.04	77.48	1.44	1.	75.	2.	56.	0.1	38.	17.	523.
7519	77.48	78.98	1.50	1.	173.	15.	62.	0.2	53.	24.	584.
7520	78.98	80.37	1.39	1.	84.	10.	69.	0.2	45.	16.	534.
7521	80.37	82.12	1.75	1.	89.	16.	68.	0.1	39.	15.	522.
7522	82.12	83.64	1.52	1.	63.	7.	65.	0.1	45.	15.	537.
7523	83.64	85.13	1.49	1.	92.	13.	66.	0.1	45.	17.	523.
7524	85.13	86.43	1.30	1.	52.	13.	57.	0.1	47.	15.	562.
7525	86.43	88.07	1.64	1.	81.	6.	72.	0.1	40.	15.	550.
7526	88.07	89.56	1.49	1.	80.	10.	101.	0.1	41.	18.	644.
7527	89.56	91.07	1.51	1.	85.	8.	107.	0.1	41.	17.	666.
7528	91.07	92.52	1.45	1.	72.	9.	213.	0.1	36.	13.	624.
7529	92.52	94.05	1.53	1.	128.	10.	133.	0.2	36.	15.	502.
7530	94.05	95.66	1.61	1.	52.	4.	65.	0.1	42.	11.	448.
7531	95.66	97.19	1.53	1.	68.	6.	54.	0.1	39.	11.	387.

DRILL HOLE NUMBER : NMX88-24

SAMPLE NO.	FROM	TO	WIDTH	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM
7532	97.16	98.74	1.58	1.	50.	8.	105.	0.1	39.	12.	539.
7533	98.74	100.19	1.45	1.	62.	2.	132.	0.2	28.	10.	356.
7534	100.17	101.53	1.36	1.	38.	8.	45.	0.2	32.	10.	339.
7535	101.53	103.36	1.83	1.	106.	7.	37.	0.1	28.	9.	313.
7536	103.36	105.09	1.73	1.	31.	2.	51.	0.1	15.	7.	323.
7537	105.09	106.43	1.34	1.	84.	8.	28.	0.2	30.	12.	274.
7538	106.43	107.94	1.51	1.	52.	5.	36.	0.1	30.	13.	316.
7539	107.94	109.21	1.27	1.	58.	11.	35.	0.1	37.	14.	353.
7540	109.21	110.22	1.01	1.	80.	7.	37.	0.1	35.	14.	302.
7541	110.22	111.86	1.64	1.	95.	2.	31.	0.1	31.	12.	252.

APPENDIX III

DRILL CORE SAMPLE ANALYSES

Murray NMX 88-16 8809.034

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: SEP 9 1988 DATE REPORT MAILED: Sept 12/88 ASSAYER: D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8809-034 177 File # 88-4354

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
R 40727	1	79	4	26	.2	39	11	393	2.65	15	5	ND	3	95	1	2	2	56	1.82	.029	2	64	1.11	69	.17	2	3.52	.26	.61	3	1
R 40728	1	170	3	36	.2	29	10	171	2.06	6	5	ND	2	68	1	2	2	38	1.82	.032	2	34	.62	19	.15	2	2.43	.22	.17	1	1
R 40729	1	501	5	54	.4	37	13	211	2.50	8	5	ND	3	61	1	2	2	52	2.12	.033	2	61	.88	30	.18	2	2.82	.25	.27	5	2
R 40730	1	93	4	47	.1	31	8	267	2.15	8	5	ND	2	60	1	2	2	46	1.64	.027	2	53	.50	47	.16	2	2.63	.23	.42	1	1
R 40731	1	312	3	34	.4	50	27	215	4.09	5	5	ND	3	52	1	2	2	47	2.17	.025	2	43	.61	14	.16	3	2.55	.22	.12	2	1
R 40732	1	648	4	53	.5	199	60	168	5.92	6	5	ND	3	44	1	2	2	37	1.35	.026	2	37	.61	24	.14	2	1.93	.17	.23	2	2
R 40733	1	173	4	35	.1	24	9	214	1.88	8	5	ND	2	90	1	2	2	51	2.52	.031	2	32	.67	24	.16	2	3.39	.31	.15	3	1
R 40734	1	120	4	26	.2	24	9	219	1.96	5	5	ND	3	95	1	2	2	45	2.49	.030	2	27	.61	19	.15	2	3.27	.30	.14	1	2
R 40735	1	109	6	20	.2	27	8	178	1.82	7	5	ND	3	81	1	2	2	44	2.13	.028	2	36	.75	34	.15	4	3.04	.28	.29	2	1
R 40736	1	81	2	22	.1	31	13	174	2.10	7	5	ND	3	52	1	2	2	47	1.40	.024	2	62	.95	50	.16	3	2.58	.20	.48	2	1
R 40737	6	11505	12	309	6.1	59	46	213	5.83	57	5	ND	3	62	3	3	2	104	1.79	.029	2	107	1.33	67	.23	2	3.66	.25	.69	5	156
R 40738	1	179	5	23	.1	31	10	215	2.08	11	5	ND	3	64	1	2	2	45	1.80	.027	2	46	.78	38	.16	2	2.57	.25	.31	1	1
R 40739	1	227	4	23	.1	28	10	169	2.01	4	5	ND	2	59	1	2	2	46	1.78	.029	2	43	.71	32	.16	2	2.45	.22	.27	1	1
R 40740	1	487	2	30	.5	26	22	153	3.00	68	5	ND	2	49	1	2	2	47	1.71	.055	2	48	.50	15	.30	2	1.97	.16	.13	1	5
R 40741	1	1023	5	111	2.1	41	20	275	4.09	33	5	ND	3	66	1	2	2	86	1.69	.033	2	80	1.44	24	.17	2	3.45	.23	.27	2	1
R 40742	1	258	4	27	.2	26	13	199	1.99	6	5	ND	3	90	1	2	2	46	2.34	.036	2	28	.65	23	.14	2	3.29	.31	.20	1	2
R 40743	1	493	5	59	.6	43	17	221	3.09	8	5	ND	3	68	1	2	2	65	1.75	.036	2	62	1.02	29	.17	2	2.94	.24	.31	2	1
R 40744	1	118	5	22	.2	40	11	173	2.03	4	5	ND	3	64	1	2	2	43	1.70	.027	2	39	.73	31	.16	2	2.53	.24	.28	1	1
R 40745	1	217	5	19	.6	44	21	141	2.34	5	5	ND	3	41	1	2	2	35	1.52	.029	2	33	.48	12	.14	2	1.86	.18	.23	3	4
R 40746	1	569	6	37	.5	7	28	133	3.41	9	5	ND	2	73	1	2	2	32	.89	.052	2	9	.87	35	.12	2	2.22	.19	.51	3	6
STD C AU-R	18	59	43	132	6.7	65	32	1021	4.17	40	19	8	38	48	19	16	22	59	.49	.095	39	57	.93	179	.07	32	1.99	.06	.13	11	515

8809-034

Mineral Hill - MMX 88-16 8809-041

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: SEP 12 1988 DATE REPORT MAILED: Sept 15/88 ASSAYER: C. Leong ...D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8809-041 177 File # 88-4413

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
40747	1	758	19	86	.7	6	16	281	3.59	11	5	ND	1	65	1	2	32	32	.69	.051	2	6	1.01	69	.10	2	2.24	.16	.55	1	13
40748	1	469	7	73	.5	46	17	212	3.03	9	5	ND	1	57	1	2	3	58	2.30	.035	2	55	.87	51	.16	2	4.29	.34	.57	1	9
40749	2	3362	2	221	4.8	49	22	284	5.09	2	5	ND	1	52	1	2	2	97	1.61	.042	2	98	1.52	63	.20	2	3.68	.21	.55	1	29
40750	1	2245	3	124	2.3	43	19	246	3.60	8	5	ND	1	80	1	4	2	76	1.98	.046	2	75	1.20	52	.18	3	3.56	.27	.82	3	26
40751	1	566	8	35	.5	31	12	164	1.77	2	5	ND	1	78	1	2	2	41	2.51	.030	2	35	.59	21	.13	2	3.64	.29	.23	1	4
40752	1	355	7	30	.5	19	6	144	1.62	4	5	ND	1	76	1	2	2	43	2.66	.034	2	24	.49	36	.12	2	3.65	.26	.16	2	8
40753	1	170	6	19	.1	28	8	135	3.65	2	5	ND	1	72	1	2	3	40	2.35	.031	2	26	.59	18	.13	2	3.46	.23	.24	1	3
40754	1	326	6	28	.4	47	18	136	2.22	3	5	ND	1	50	1	2	2	49	2.85	.038	2	26	.49	16	.14	2	4.10	.31	.18	3	2
40755	1	398	4	22	.4	53	20	87	2.01	2	5	ND	1	86	1	2	2	28	3.05	.036	2	19	.32	12	.12	3	4.47	.30	.33	1	1
40756	1	238	6	27	.1	46	16	172	2.56	6	5	ND	1	77	1	2	2	55	2.34	.034	2	47	.95	29	.16	3	3.82	.28	.41	2	1
40757	1	3203	2	165	3.8	59	27	232	4.94	9	5	ND	1	65	1	2	2	94	1.85	.038	2	80	1.46	46	.18	2	3.68	.23	.65	1	39
40758	1	1681	4	75	1.5	42	19	157	2.91	11	5	ND	1	55	1	2	2	54	1.76	.039	2	44	.78	30	.14	2	2.54	.25	.08	1	27
40759	2	1065	6	55	.7	46	16	272	4.48	17	5	ND	1	62	1	4	2	108	2.99	.037	2	109	1.66	32	.20	2	3.28	.19	.54	1	31
40760	6	3835	6	116	3.7	59	18	564	6.90	136	5	ND	2	52	1	35	2	143	5.34	.027	4	134	1.79	26	.08	5	3.53	.12	.36	1	14
40761	1	3172	5	215	6.2	55	24	289	6.26	55	5	ND	1	40	1	4	2	84	2.45	.031	2	83	1.25	27	.14	2	3.12	.16	.30	3	31
40762	1	835	3	61	1.8	48	17	242	3.34	19	5	ND	1	51	1	2	2	62	1.76	.030	2	73	1.16	22	.14	2	3.66	.19	.26	1	6
40763	2	2735	2	165	4.8	53	30	195	3.61	5	5	ND	1	45	1	2	2	68	1.65	.026	2	50	.74	15	.15	3	2.58	.19	.15	1	27
40764	1	531	3	53	.6	52	17	225	2.60	6	5	ND	1	40	1	2	2	51	1.49	.028	2	57	.67	17	.17	2	2.22	.18	.21	2	2
40765	4	364	2	36	.4	55	15	226	2.77	9	5	ND	1	56	1	2	2	61	2.26	.031	2	57	.95	14	.20	4	2.96	.21	.17	2	4
40766	1	169	2	19	.1	27	10	167	1.65	2	5	ND	1	61	1	2	2	42	1.85	.026	2	41	.64	15	.15	2	2.47	.21	.13	1	6
40767	1	275	9	27	.1	57	18	162	2.67	2	5	ND	1	56	1	2	2	67	1.79	.033	2	50	.76	29	.18	4	2.76	.26	.32	2	1
40768	1	1625	4	92	1.8	51	51	141	5.30	2	5	ND	1	78	1	2	2	39	2.29	.036	2	53	.63	11	.15	4	3.15	.31	.07	1	29
40769	1	213	9	45	.1	53	20	178	3.77	2	5	ND	1	84	1	2	2	78	2.20	.038	2	76	1.58	55	.17	2	4.62	.32	1.02	1	1
40770	1	1576	2	62	1.2	71	22	137	2.89	3	5	ND	1	65	1	2	2	46	1.75	.039	2	37	.68	22	.14	4	2.88	.25	.36	1	12
40771	1	2130	5	131	2.7	51	17	156	3.01	8	5	ND	1	79	1	2	2	59	2.06	.038	2	46	.95	28	.16	2	3.38	.28	.43	1	31
40772	1	640	4	34	.5	62	31	120	3.32	3	5	ND	1	74	1	2	2	44	1.53	.027	1	39	.62	23	.15	4	3.06	.26	.33	2	5
40773	3	966	10	68	1.0	55	17	225	3.23	2	5	ND	1	65	1	2	2	73	1.96	.060	2	66	1.09	26	.26	2	3.27	.22	.46	1	12
40774	1	617	3	47	.6	70	20	175	3.01	2	5	ND	1	78	1	2	3	60	1.95	.035	2	46	.92	32	.19	4	3.25	.27	.46	1	32
40775	1	331	3	45	.2	53	16	193	2.64	2	5	ND	1	91	1	2	2	55	2.15	.038	2	47	.88	31	.17	4	3.41	.27	.48	1	194
40776	1	2417	9	96	3.2	53	22	195	3.30	2	5	ND	1	76	1	2	2	64	1.82	.038	2	56	.56	29	.20	3	3.05	.24	.48	1	59
40777	1	1069	12	136	2.6	196	33	194	4.03	2	5	ND	1	66	1	2	2	56	2.53	.031	2	49	.86	22	.18	2	3.44	.24	.33	1	34
STD C/AU-R	19	61	43	132	7.0	68	30	1023	4.25	41	17	8	39	69	18	18	24	60	.48	.092	39	55	.94	183	.07	32	1.95	.06	.14	12	510

8809-041

Minnex 8809 - NMX - 88-17

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: SEP 15 1988 DATE REPORT MAILED: Sept 21/88 ASSAYER. C. Leong ..D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8809-051 177 File # 88-4511 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
42778	2	697	2	41	.2	7	17	135	3.45	2	5	ND	1	85	1	2	2	35	.74	.046	2	12	.90	48	.15	2	2.20	.10	1.22	1	18
42779	1	888	2	44	1.0	6	15	135	3.32	4	5	ND	2	76	4	2	2	34	.34	.044	2	13	.80	31	.12	6	1.99	.17	.66	2	32
42780	1	259	6	28	.2	7	16	158	3.55	2	5	ND	1	62	1	2	2	37	.82	.043	2	16	.88	40	.14	2	2.23	.21	1.11	1	6
42781	2	612	6	69	1.3	10	22	217	3.97	8	5	ND	3	93	3	3	2	40	1.11	.049	2	22	.98	32	.12	10	2.30	.20	.95	3	9
42782	1	372	2	42	.2	7	13	113	2.79	6	5	ND	2	74	2	2	2	35	.88	.046	2	19	.84	33	.11	5	1.84	.16	.92	1	3
42783	3	460	4	47	.2	7	12	132	2.73	22	5	ND	2	74	2	2	2	34	.80	.048	2	14	.81	35	.11	7	1.91	.17	.99	1	12
42784	1	373	2	35	.2	7	9	132	2.90	2	5	ND	1	74	1	2	2	34	.76	.050	2	13	.88	43	.13	10	2.06	.18	1.04	1	14
42785	2	944	2	39	.1	18	23	102	3.21	7	5	ND	2	86	1	2	3	29	.65	.048	2	10	.67	36	.10	3	2.03	.22	.83	1	11
42786	1	1161	2	66	.2	15	9	209	3.02	3	5	ND	1	125	1	2	2	33	1.22	.041	2	19	.84	60	.12	2	2.94	.26	1.15	1	39
42787	1	222	8	33	.1	53	18	198	2.39	5	5	ND	1	65	1	2	2	56	1.77	.033	2	63	.89	36	.20	4	3.20	.32	.65	3	2
42788	1	245	3	27	.1	46	14	150	1.64	4	5	ND	1	81	1	2	2	43	1.71	.027	2	48	.52	19	.16	2	2.56	.28	.23	1	3
42789	1	281	51	34	.1	31	8	229	1.84	5	5	ND	1	86	1	2	2	41	1.72	.029	2	56	.61	28	.15	2	2.92	.28	.24	1	2
42790	1	104	5	25	.2	34	8	213	2.62	2	5	ND	1	106	1	2	2	47	2.06	.031	2	55	.69	24	.18	9	3.15	.32	.38	1	1
42791	1	699	4	35	.4	72	35	155	2.29	8	5	ND	1	67	1	2	2	38	2.17	.026	2	48	.46	18	.16	4	3.20	.29	.24	1	7
42792	1	584	2	36	.1	56	19	165	3.07	2	5	ND	1	60	1	2	2	39	2.03	.029	2	38	.34	9	.18	2	2.69	.24	.13	1	6
42793	1	140	2	22	.1	38	8	225	1.80	2	5	ND	1	75	1	2	2	47	1.83	.027	2	57	.74	26	.16	3	2.91	.30	.41	1	7
42794	2	817	8	52	1.9	46	29	196	2.82	15	5	ND	9	81	8	5	4	49	2.21	.031	2	41	.62	13	.17	23	3.15	.29	.19	13	31
42795	1	526	6	33	.2	35	25	159	3.27	2	5	ND	1	97	1	2	2	42	1.93	.028	2	56	.62	18	.15	2	3.06	.27	.29	1	10
42796	1	279	3	20	.2	49	11	154	1.92	2	5	ND	1	95	1	2	2	46	2.32	.029	2	50	.68	24	.14	2	3.39	.33	.30	1	4
42797	1	262	3	21	.1	44	11	209	1.86	3	5	ND	1	65	1	3	2	43	1.84	.028	2	61	.69	18	.12	2	2.92	.30	.22	1	7
42798	2	405	2	33	.1	57	21	259	2.98	2	5	ND	1	62	1	2	2	52	1.35	.029	2	66	.82	31	.17	2	2.21	.20	.79	1	5
42799	1	253	9	36	.1	115	52	891	4.52	2	5	ND	1	59	1	2	2	42	2.04	.025	2	51	.56	19	.12	4	3.07	.26	.33	1	3
42800	1	132	8	21	.1	44	11	286	2.21	2	5	ND	1	77	1	2	2	48	1.82	.029	2	65	.72	23	.13	2	2.86	.29	.32	1	2
42801	1	174	3	29	.1	54	21	253	2.41	2	5	ND	1	59	1	2	2	50	1.72	.032	2	52	.70	23	.13	2	2.75	.26	.39	1	1
42802	1	105	5	22	.1	46	12	201	2.19	4	5	ND	2	91	1	2	2	53	2.16	.032	2	64	.73	31	.18	5	3.45	.32	.82	3	1
42803	1	178	3	32	.1	45	13	248	2.43	2	5	ND	1	71	1	2	2	51	1.68	.026	2	66	.91	34	.14	3	2.93	.26	.79	1	2
42804	1	405	2	33	.1	63	28	162	3.06	7	5	ND	1	54	1	2	2	45	1.92	.027	2	47	.50	17	.15	2	2.90	.25	.25	1	2
42805	2	98	2	19	.2	42	9	504	2.18	2	5	ND	1	100	1	2	2	47	2.15	.030	2	51	.72	28	.16	2	3.07	.34	.34	1	1
42806	1	160	7	23	.1	42	12	339	1.76	2	5	ND	1	109	1	2	2	43	2.03	.031	2	46	.56	20	.15	7	2.84	.30	.17	1	1
42807	2	422	3	26	.3	70	26	384	2.91	13	5	ND	1	86	2	2	4	40	1.94	.028	2	50	.57	18	.13	8	2.85	.30	.24	1	5
42808	1	591	8	47	.9	52	22	193	1.25	14	5	ND	3	83	2	2	2	37	1.83	.027	2	46	.50	18	.13	5	2.72	.26	.22	3	7
42809	1	139	6	18	.3	31	12	208	1.74	7	5	ND	3	68	2	2	2	41	1.79	.029	2	45	.55	16	.15	4	2.53	.26	.23	1	1
42810	1	145	12	19	.1	32	7	259	1.77	2	5	ND	1	75	1	2	2	43	1.96	.027	2	53	.69	25	.16	2	3.02	.28	.32	1	2
42811	1	128	7	23	.1	36	11	239	1.77	6	5	ND	1	77	1	2	2	46	1.95	.029	2	52	.71	24	.14	6	2.97	.29	.33	1	1
42812	2	119	8	23	.5	28	11	205	1.95	5	5	ND	1	68	2	2	2	46	1.43	.027	2	70	.81	31	.14	7	2.47	.24	.32	2	2
42813	1	185	3	33	.1	42	13	258	1.90	3	5	ND	1	77	1	2	2	42	2.12	.031	2	41	.43	9	.19	2	3.57	.26	.10	1	3
STD C/AU-S	18	59	41	132	7.1	67	28	1018	3.96	42	21	6	36	67	16	18	17	59	.46	.094	38	53	.84	177	.07	38	1.87	.06	.16	17	470

8809-051

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPB	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
42814	1	54	2	17	.1	31	7	210	1.43	2	5	ND	1	52	1	2	2	38	2.20	.025	2	66	.54	14	.16	2	2.91	.24	.13	1	1
42815	1	194	3	53	.3	59	10	252	1.69	2	5	ND	1	93	1	2	2	47	2.88	.032	2	42	.58	15	.20	2	3.30	.32	.13	1	5
42816	1	167	2	83	.1	35	13	279	1.96	7	5	ND	1	83	1	2	2	47	2.17	.029	2	69	.75	28	.19	2	3.09	.29	.25	5	2
42817	1	85	1	32	.1	28	6	220	1.74	2	5	ND	1	75	1	2	2	47	1.99	.025	2	51	.76	36	.20	2	2.97	.29	.33	1	1
42818	1	208	4	53	.2	47	14	241	2.17	2	5	ND	1	72	1	2	2	45	2.19	.025	2	51	.68	21	.17	2	2.99	.26	.21	1	3
42819	1	266	6	36	.2	43	9	252	2.09	3	5	ND	1	90	1	2	2	54	2.16	.028	2	55	.70	34	.18	2	3.39	.32	.31	1	2
42820	1	572	10	82	1.0	42	19	270	2.47	12	26	ND	7	57	7	7	4	59	2.20	.031	3	59	.73	19	.17	15	3.03	.29	.22	16	4
42821	1	137	6	30	1.1	35	26	266	2.76	8	29	ND	8	35	9	5	2	64	2.06	.033	3	65	.87	22	.20	14	2.83	.22	.10	15	2
42822	1	122	2	23	.1	43	12	259	3.22	2	5	ND	1	42	1	2	2	63	1.55	.020	2	70	1.37	42	.19	2	2.55	.24	.79	1	1
42823	1	48	2	39	.1	41	8	255	2.37	2	5	ND	1	67	1	2	2	70	1.87	.033	2	87	1.37	43	.23	2	3.25	.32	.86	1	2
42824	1	260	7	28	.5	41	16	286	2.45	6	5	ND	3	83	3	2	2	56	2.25	.021	2	59	.89	28	.19	5	3.28	.22	.23	9	3
42825	1	85	2	25	.1	39	9	230	2.40	2	5	ND	1	58	1	2	2	61	1.89	.030	2	76	1.06	33	.23	2	2.83	.25	.56	1	1
42826	1	131	4	32	1.1	36	13	235	2.16	8	8	ND	7	52	7	2	4	55	1.84	.030	3	72	.94	31	.22	16	2.56	.26	.41	14	3
42827	1	122	2	26	.1	41	10	219	2.62	2	5	ND	1	76	1	2	2	62	2.13	.030	2	71	1.14	54	.25	2	3.52	.31	.93	1	26
42828	1	84	2	22	.1	32	9	220	2.04	5	5	ND	1	59	1	2	2	56	1.81	.027	2	67	.94	32	.24	2	2.63	.23	.59	2	10
42829	1	150	4	25	.3	33	11	298	2.06	6	5	ND	1	101	3	2	2	57	2.01	.034	2	61	.79	22	.23	2	3.03	.35	.23	5	6
42830	1	211	2	27	.1	38	8	255	2.01	2	5	ND	1	90	1	2	2	54	2.53	.037	2	62	.79	26	.21	2	3.61	.33	.29	1	3
42831	1	228	3	46	.2	47	12	298	3.09	4	5	ND	1	102	1	2	2	67	2.61	.038	2	50	.98	26	.25	2	3.79	.35	.34	1	2
42832	1	162	9	35	.5	45	12	191	1.76	10	5	ND	2	117	3	15	2	47	3.45	.035	2	43	.66	16	.21	4	4.92	.41	.18	10	2
42833	1	162	4	37	.1	37	10	249	2.10	4	5	ND	1	121	1	4	2	55	3.57	.038	2	43	.62	20	.26	2	4.50	.45	.15	1	2
42834	1	155	9	35	.1	58	15	286	2.59	2	5	ND	1	99	1	2	2	56	2.20	.037	2	51	.88	27	.20	2	3.47	.28	.24	3	1
42835	1	447	4	51	.1	92	33	225	3.34	4	5	ND	1	96	1	2	2	58	2.03	.036	2	65	.85	32	.20	2	3.35	.31	.45	4	3
42836	1	212	5	43	.2	73	22	233	3.01	10	5	ND	1	122	2	3	2	66	2.78	.035	2	61	1.07	21	.24	2	4.28	.38	.27	5	1
42837	1	190	10	72	.9	111	42	326	3.88	14	5	ND	1	104	3	2	2	79	2.73	.038	2	74	1.30	20	.27	2	3.88	.33	.26	8	1
42838	1	276	3	63	.1	65	16	324	4.00	52	5	ND	1	79	1	22	2	96	2.39	.036	2	94	1.65	60	.25	2	3.67	.35	.87	1	1
42839	3	4045	34	232	4.2	35	17	631	3.89	1423	5	ND	1	19	1	655	47	15	5.17	.007	3	19	.28	2	.01	6	.25	.01	.12	1	46
42840	1	954	2	92	.3	25	23	931	7.78	6704	5	ND	1	20	1	223	2	58	1.97	.028	2	45	.97	4	.01	2	.58	.01	.22	1	25
42841	1	553	5	46	.1	63	19	323	3.74	57	5	ND	1	101	1	4	2	75	3.76	.033	2	81	1.45	29	.20	2	3.87	.33	.76	1	5
42842	1	198	5	33	.1	53	16	267	2.93	4	5	ND	1	72	1	2	2	75	2.74	.038	2	80	1.35	25	.29	2	3.58	.29	.38	1	4
42843	2	134	12	32	1.1	50	21	326	2.94	14	29	ND	7	97	7	15	5	73	2.98	.037	3	79	1.11	25	.27	11	4.31	.36	.42	25	2
42844	1	64	7	34	.2	53	22	356	2.85	84	5	ND	1	60	1	4	2	76	2.08	.034	2	101	1.16	38	.21	2	3.50	.28	.95	1	1
42845	1	127	4	27	1.0	42	15	272	2.28	10	7	ND	7	57	7	5	2	62	1.99	.034	1	77	1.22	25	.20	13	2.89	.25	.32	15	1
42846	1	135	2	26	.2	40	9	264	2.23	2	5	ND	1	85	1	2	2	63	2.32	.033	2	59	1.14	29	.22	2	3.39	.34	.25	1	2
42847	1	551	2	43	.1	44	12	254	2.32	2	5	ND	1	70	1	2	2	61	1.99	.030	2	68	1.26	30	.21	2	3.32	.28	.38	1	7
42848	1	96	5	30	.5	39	13	250	2.28	9	5	ND	2	75	4	2	2	56	2.04	.031	2	66	1.33	43	.21	5	3.45	.27	.60	11	1
42849	1	253	11	41	.1	55	15	266	2.84	10	5	ND	1	86	1	2	2	63	1.93	.032	2	78	1.33	49	.23	2	3.57	.28	.83	12	5
STD C/AU-S	19	59	37	132	6.9	68	25	1018	4.09	37	18	7	35	69	16	15	18	60	.49	.087	38	54	.93	183	.08	38	2.03	.06	.13	11	485

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
[illegible]	1	197	14	27	.2	30	9	246	1.73	23	5	ND	1	113	1	2	2	50	2.72	.033	2	39	.68	17	.18	2	3.63	.33	.10	1	2
[illegible]	1	178	6	32	.2	25	10	238	1.32	21	5	ND	1	97	1	2	2	47	2.94	.034	2	41	.67	11	.19	4	3.87	.32	.04	1	5
[illegible]	1	169	5	33	.3	37	12	282	2.04	6	5	ND	1	93	1	2	2	57	2.76	.035	2	67	.91	13	.18	5	3.59	.21	.13	1	5
[illegible]	1	246	7	25	.2	35	19	221	1.64	7	5	ND	1	104	1	2	2	68	2.51	.033	2	43	.65	10	.17	2	3.22	.19	.06	1	4
[illegible]	1	137	6	26	.2	28	8	307	1.57	6	5	ND	1	89	1	2	2	60	2.70	.031	2	61	.69	13	.16	2	3.87	.21	.12	1	7
[illegible]	1	172	13	30	.4	33	10	213	1.74	10	5	ND	1	95	1	2	2	62	3.01	.035	2	37	.65	17	.15	2	4.25	.31	.19	1	6
[illegible]	1	224	2	37	.5	38	12	221	2.21	5	5	ND	1	86	1	2	2	55	2.57	.033	2	55	.84	20	.23	2	3.63	.28	.30	12	4
[illegible]	1	134	5	19	.3	24	7	179	1.30	7	5	ND	1	86	1	2	2	36	2.84	.032	2	33	.52	14	.24	3	3.99	.20	.14	1	13
STD C/AU-S	18	56	42	132	7.2	66	22	1042	3.80	41	19	7	36	48	20	17	17	55	.45	.088	36	57	.83	174	.06	33	1.80	.05	.14	11	510

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

Murex AMX 88-17 (TMc)

GEOCHEMICAL ANALYSIS CERTIFICATE

8809-071

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: SEP 22 1988 DATE REPORT MAILED: Sept 28/88 ASSAYER: C. Leong ..D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

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SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
R 44783	1	135	6	23	.3	29	7	146	1.57	2	5	ND	1	96	1	2	2	44	2.77	.032	2	39	.63	20	.16	2	4.50	.33	.25	1	7
R 44784	1	85	6	19	.2	28	7	130	1.56	2	5	ND	1	83	1	2	2	41	2.35	.031	2	40	.58	20	.17	2	3.31	.27	.27	1	56
R 44785	1	138	5	27	.2	30	8	152	1.73	4	5	ND	1	75	1	2	2	46	1.98	.034	2	44	.75	22	.18	2	5.23	.35	.32	1	1
R 44786	1	105	8	27	.4	33	9	155	1.87	4	5	ND	1	94	1	2	2	52	2.32	.035	2	55	.83	28	.18	2	3.94	.31	.45	1	3
R 44787	1	122	5	35	.2	36	9	287	2.01	2	5	ND	1	91	1	2	2	50	2.27	.033	2	50	.77	28	.18	2	3.87	.35	.44	1	1
R 44788	1	222	8	37	.1	44	13	154	2.87	3	5	ND	1	87	1	2	2	64	1.83	.039	2	66	1.10	41	.18	2	3.84	.35	.75	1	2
R 44789	1	225	8	43	.1	54	16	236	3.34	12	5	ND	2	82	1	2	2	75	1.93	.039	2	97	1.22	56	.19	2	4.69	.31	.92	1	1
R 44790	1	423	5	36	.2	45	12	348	2.56	3	5	ND	1	80	1	2	2	47	2.36	.033	2	48	.62	26	.18	2	3.80	.21	.36	1	7
R 44791	1	174	7	29	.2	36	9	176	1.92	3	5	ND	1	160	1	2	2	49	2.51	.024	2	38	.88	22	.15	2	4.24	.22	.36	1	3
R 44792	1	237	8	26	.1	40	10	172	1.78	3	5	ND	1	125	1	2	2	51	3.30	.035	2	43	.61	35	.19	2	4.58	.36	.24	1	1
R 44793	1	152	6	26	.1	30	8	160	1.66	2	5	ND	1	113	1	2	2	46	2.47	.034	2	38	.65	14	.19	2	3.86	.35	.24	1	1
R 44794	1	948	6	69	.5	48	36	227	2.89	13	5	ND	1	95	1	2	2	67	2.16	.036	2	70	.97	43	.23	2	3.92	.31	.54	1	29
R 44795	1	172	5	23	.2	28	8	169	1.54	2	5	ND	1	87	1	2	2	45	2.63	.030	2	43	.66	18	.15	2	4.01	.30	.20	1	6
R 44796	1	124	4	20	.1	27	7	193	1.57	3	5	ND	2	117	1	2	2	45	2.87	.029	2	45	.66	22	.14	2	4.50	.25	.23	1	1
R 44797	1	55	4	25	.1	25	10	184	2.24	3	5	ND	1	58	1	3	2	52	1.64	.030	2	81	1.09	47	.21	2	3.09	.22	.73	1	1
R 44798	1	376	5	38	.1	42	11	261	2.55	8	5	ND	1	65	1	2	2	55	1.93	.029	2	70	.93	26	.20	2	3.25	.33	.45	1	2
R 44799	1	272	5	47	.1	42	12	226	2.82	10	5	ND	1	65	1	2	2	65	1.46	.032	2	96	1.20	47	.23	2	3.83	.28	.75	1	9
R 44800	1	156	7	33	.1	54	17	215	3.22	9	5	ND	1	46	1	2	2	58	1.41	.032	2	87	1.23	52	.22	2	3.65	.19	.51	1	1
R 44801	1	183	7	31	.1	35	11	206	2.34	2	5	ND	1	78	1	3	2	53	2.25	.032	2	69	1.03	40	.22	2	4.11	.28	.31	1	1
R 44802	1	99	7	28	.1	42	15	221	2.58	4	5	ND	1	64	1	2	2	52	1.77	.029	2	93	1.18	56	.24	6	3.05	.23	.34	1	1
R 44803	1	369	5	49	.6	43	14	186	2.54	6	5	ND	1	65	1	2	2	52	2.52	.033	2	51	.80	26	.23	2	3.42	.25	.34	1	11
R 44804	1	143	7	23	.1	33	9	185	2.06	4	5	ND	1	81	1	2	2	53	2.87	.033	2	56	.87	34	.20	2	4.82	.22	.53	1	1
R 44805	1	126	5	35	.2	42	12	228	2.55	3	5	ND	1	53	1	2	2	54	1.56	.029	2	88	1.16	44	.21	2	3.16	.20	.87	1	22
R 44806	1	162	4	33	.1	41	12	215	2.55	5	5	ND	1	57	1	3	2	59	1.68	.030	2	85	1.18	47	.22	2	3.32	.21	.84	1	5
R 44807	1	134	6	29	.2	36	13	212	2.30	4	5	ND	1	88	1	3	2	59	2.00	.030	2	67	1.06	40	.22	3	3.67	.29	.74	1	1
R 44808	1	166	7	42	.1	49	15	217	2.75	2	5	ND	1	59	1	2	3	64	1.73	.031	2	84	1.15	52	.22	2	3.42	.22	.94	1	1
R 44809	1	267	6	38	.1	37	10	216	2.40	10	5	ND	1	69	1	2	2	53	1.86	.030	2	66	.92	33	.20	2	3.29	.23	.53	1	2
R 44810	1	522	8	41	.2	26	16	145	2.78	8	5	ND	1	62	1	3	2	45	2.47	.035	2	48	.62	17	.16	5	4.02	.25	.24	2	4
R 44811	1	179	7	28	.1	29	9	172	1.97	6	5	ND	1	72	1	3	2	46	2.63	.032	2	54	.69	23	.16	2	4.58	.26	.36	1	1
R 44812	1	304	5	32	.1	32	12	184	2.38	5	5	ND	1	69	1	3	2	50	2.82	.033	2	52	.77	19	.17	3	4.56	.26	.29	1	1
R 44813	1	227	6	23	.1	26	8	158	1.86	5	5	ND	1	68	1	2	2	45	2.82	.033	2	45	.66	20	.18	2	4.52	.27	.31	25	8
R 44814	1	149	6	32	.1	36	11	183	2.24	6	5	ND	1	73	1	2	2	50	2.78	.032	2	54	.80	32	.21	2	4.61	.28	.46	1	4
R 44815	4	512	7	42	.2	124	41	181	6.38	34	5	ND	1	55	1	2	2	69	1.64	.031	2	88	1.13	57	.22	2	3.30	.24	.96	1	1
R 44816	1	79	5	30	.1	46	11	209	2.96	5	5	ND	1	56	1	2	2	69	1.81	.033	2	94	1.26	66	.28	2	3.52	.22	.52	1	1
R 44817	1	182	7	33	.2	39	11	190	2.55	2	5	ND	1	61	1	3	3	60	2.30	.034	2	89	1.10	52	.25	2	5.83	.25	.77	1	1
R 44818	1	144	4	17	.1	29	8	152	1.66	3	5	ND	1	65	1	2	3	36	2.10	.029	2	54	.73	27	.15	2	3.42	.24	.39	1	1
STD C/AU-S	19	57	43	133	6.7	67	29	1036	4.15	39	18	7	38	47	17	16	20	58	.49	.093	36	56	.90	175	.08	33	2.03	.09	.14	22	485

8809-071

SAMPLE	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPB	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
P 64819	1	124	5	21	2	35	10	169	2.36	2	5	ND	1	62	1	2	2	46	1.65	.030	2	68	.87	39	.18	1	2.01	.12	.66	1	4
P 64820	1	100	5	26	.1	36	9	206	2.21	2	5	ND	1	52	1	2	2	48	1.52	.028	2	69	1.02	46	.16	2	2.88	.22	.71	1	1
P 64821	1	69	4	22	.1	34	8	183	2.59	2	5	ND	1	53	1	2	2	49	1.61	.021	2	65	.86	36	.20	2	2.07	.21	.56	1	1
P 64822	1	237	5	35	.4	32	10	287	2.33	2	5	ND	1	53	1	2	2	46	1.62	.031	2	64	.66	27	.17	5	2.15	.12	.41	1	10
P 64823	1	407	5	49	.4	44	12	321	2.57	2	5	ND	1	41	1	2	2	69	1.46	.022	2	81	1.21	69	.24	3	3.23	.13	1.01	1	5
P 64824	1	148	6	27	.2	42	9	186	2.65	2	5	ND	1	51	1	2	2	68	1.58	.024	2	72	1.13	61	.24	5	3.12	.22	.87	1	1
P 64825	1	385	5	41	.1	42	11	283	2.61	2	5	ND	1	48	1	2	2	56	1.86	.035	2	82	.85	35	.20	2	3.05	.21	.47	1	4
P 64826	1	5283	8	164	2.9	50	37	386	4.87	20	5	ND	1	45	1	2	2	74	1.32	.032	2	109	1.27	81	.22	4	3.53	.13	1.27	1	328
P 64827	11	66926 ✓	12	1516	45.4 ✓	147	444	83	20.28	126	5	8	1	3	12	11	25	16	.33	.076	2	6	.29	6	.02	6	.43	.02	.14	3	3573
P 64828	1	1047	4	54	.5	45	20	283	3.17	5	5	ND	1	70	1	2	2	65	1.66	.034	2	87	1.07	64	.17	2	2.47	.24	.89	1	23
P 64829	1	524	7	52	.5	56	15	273	3.61	10	5	ND	1	79	1	2	2	81	1.61	.037	2	83	1.32	53	.20	2	3.77	.24	1.15	1	9
P 64830	1	510	5	43	.2	46	13	212	3.46	6	5	ND	1	64	1	2	2	73	1.31	.034	2	105	1.45	92	.19	2	3.07	.26	1.17	1	1
P 64831	1	62	6	34	.1	32	14	391	3.57	7	5	ND	1	52	2	2	2	87	2.21	.034	2	123	1.64	145	.24	2	2.67	.21	1.69	1	1
P 64832	1	1180	9	58	.6	64	20	221	4.34	5	5	ND	2	44	2	3	2	84	1.14	.033	2	115	1.55	162	.24	2	3.53	.17	1.59	1	26
P 64833	1	318	7	42	.2	55	16	218	3.72	6	5	ND	2	53	1	2	2	79	1.50	.033	2	103	1.32	126	.24	2	3.57	.20	1.26	2	8
P 64834	1	59	7	29	.1	44	12	150	2.83	2	5	ND	1	74	1	2	2	67	1.50	.033	2	86	1.31	107	.22	3	3.45	.23	1.20	2	1
P 64835	1	132	6	20	.1	33	9	155	3.01	3	5	ND	1	70	1	2	2	43	1.79	.033	2	58	.89	32	.19	2	2.24	.26	.67	1	2
P 6831	1	294	5	39	.1	51	18	425	3.28	3	5	ND	1	55	1	2	2	67	1.18	.030	2	81	1.64	19	.14	4	3.10	.17	.23	1	1
P 6832	1	308	5	28	.2	40	16	162	2.80	28	5	ND	1	65	1	2	2	59	1.39	.030	2	69	3.05	14	.14	7	2.89	.19	.15	2	1
P 6833	1	47	5	20	.1	29	6	166	1.80	2	5	ND	1	73	1	2	2	54	1.76	.030	2	62	.79	22	.15	3	2.13	.23	.27	1	1
P 6834	1	846	70	35	.6	85	24	285	2.92	47	5	ND	1	72	1	23	2	48	2.45	.033	2	62	.59	17	.13	2	4.30	.32	.26	1	5
P 6835	1	264	7	27	.1	48	14	238	3.15	5	5	ND	1	51	1	2	2	80	1.42	.034	2	95	1.44	13	.11	2	2.51	.23	.20	1	3
P 6836	1	152	8	32	.5	72	31	230	5.97	65	5	ND	1	56	1	2	2	100	1.16	.031	2	106	2.04	23	.12	2	4.01	.21	.44	2	1
P 6837	1	3733	11	322	2.4	59	28	436	6.15	21	5	ND	1	60	1	2	3	101	1.20	.032	2	117	2.13	9	.12	5	4.39	.20	.66	1	43
P 6838	1	322	12	37	.1	43	14	270	3.32	7	5	ND	1	52	1	2	2	70	1.42	.032	2	85	1.45	4	.14	2	3.27	.21	.03	1	1
P 6839	1	351	4	35	.1	48	16	225	3.03	35	5	ND	1	68	1	2	2	63	1.83	.033	2	69	1.33	16	.14	2	3.26	.20	.28	1	3
P 6840	1	307	15	51	.2	67	27	269	4.63	9	5	ND	2	69	1	1	2	59	1.19	.021	2	104	1.85	30	.13	2	3.83	.23	.39	1	1
P 6841	1	179	5	22	.1	26	10	222	2.01	9	5	ND	1	65	1	2	2	43	1.25	.023	2	68	.71	6	.12	2	2.15	.22	.23	1	1
P 6842	1	350	4	48	.1	58	22	327	4.25	6	5	ND	1	62	1	2	2	78	1.12	.022	2	99	1.81	9	.14	5	3.24	.25	.39	1	2
P 6843	1	172	9	38	.2	46	25	267	2.68	2	5	ND	1	56	1	2	2	63	1.42	.031	2	78	1.62	29	.22	3	3.05	.23	.37	1	1
P 6844	1	693	5	49	.4	54	25	424	4.49	6	5	ND	1	69	1	2	2	85	1.53	.031	2	68	1.33	26	.15	2	3.23	.21	.35	2	1
STD C/AU-S	39	57	42	132	6.9	68	29	1015	4.11	41	17	8	39	43	17	20	20	59	.49	.052	39	57	.91	178	.07	23	2.06	.06	.14	22	495

✓ ASSAY REQUIRED FOR CORRECT RESULT

RR NMx 88-17 (DB) 8809-071

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

DATE RECEIVED: OCT 3 1988
DATE REPORT MAILED: Oct. 11/88.

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp AU** BY FIRE ASSAY FROM 1/2 A.T.

ASSAYER: C. Leong. D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT-8809-071 177 FILE # 88-4706R

SAMPLE#	Cu %	Ag OZ/T	Au** OZ/T
R 4826	.51	.11	.002
R 4827	9.75	1.59	.110
R 4828	.11	.04	.001

Mwrex AMX 88-18 (TMc)

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

GEOCHEMICAL ANALYSIS CERTIFICATE

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

DATE RECEIVED: SEP 26 1988 DATE REPORT MAILED: Sept 30/88 ASSAYER. C. Leong .D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8809-082 177 File # 88-4791 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
8815 DR	1	226	6	26	.2	42	17	194	2.74	2	5	ND	1	56	1	2	2	50	2.06	.029	2	54	.79	15	.17	2	2.16	.22	.26	1	2
8816 DR	1	227	4	25	.2	42	12	209	2.76	2	5	ND	1	60	1	2	2	59	1.87	.032	2	64	.96	9	.18	3	2.56	.24	.13	1	1
8817 DR	1	496	5	52	.5	55	28	247	3.99	2	5	ND	1	58	1	2	2	73	1.19	.034	2	79	1.41	8	.17	2	2.65	.17	.10	1	1
8818 DR	1	554	6	31	.2	43	15	191	2.25	5	5	ND	1	69	1	2	3	54	1.63	.038	2	73	.99	11	.13	2	3.01	.22	.12	1	1
8819 DR	1	142	5	28	.2	53	15	182	2.66	2	5	ND	1	46	1	2	2	68	1.20	.034	2	98	1.82	38	.16	2	3.12	.19	.63	1	2
8820 DR	1	210	3	28	.3	51	19	161	2.79	2	5	ND	1	46	1	2	2	72	1.41	.031	2	98	1.49	32	.14	4	3.15	.20	.48	1	1
8821 DR	1	159	6	33	.3	71	13	386	3.76	25	5	ND	1	136	1	2	2	70	1.68	.052	3	184	2.38	6	.08	2	4.15	.23	.02	1	5
8822 DR	1	3232	9	124	3.1	76	25	388	>1.66	224	23	ND	1	42	1	3	2	45	1.21	.016	2	103	1.30	2	.03	2	2.25	.07	.03	1	4
8823 DR	1	422	7	41	.4	52	23	251	3.97	33	5	ND	1	82	1	2	2	66	2.94	.034	2	84	1.20	33	.16	2	5.08	.25	.66	1	7
8824 DR	1	264	4	26	.2	52	19	230	2.54	20	5	ND	1	48	1	2	2	52	2.59	.031	2	63	.84	17	.14	2	4.21	.20	.22	1	5
8825 DR	1	183	5	35	.4	54	17	216	3.23	5	5	ND	1	23	1	2	2	100	.78	.030	2	105	2.14	33	.15	2	2.95	.12	.03	1	5
8826 DR	1	137	6	25	.2	30	8	205	1.64	2	5	ND	1	43	1	2	2	58	3.35	.031	2	67	.81	9	.17	3	4.87	.21	.12	1	1
8827 DR	1	344	5	23	.3	43	18	264	3.29	2	5	ND	1	37	1	2	2	57	3.71	.030	2	61	.72	9	.15	5	5.69	.14	.13	1	11
8828 DR	1	334	4	19	.1	22	9	140	1.07	6	5	ND	1	63	1	2	2	20	2.96	.028	2	24	.12	3	.15	2	3.83	.24	.01	1	6
8829 DR	1	42	4	12	.1	17	4	169	.94	2	6	ND	1	53	1	2	2	35	3.03	.033	2	28	.25	7	.22	3	4.05	.31	.28	1	1
8830 DR	1	127	4	19	.2	27	6	135	1.99	5	5	ND	1	56	1	2	2	37	2.67	.038	2	41	.32	15	.20	3	5.21	.24	.15	1	2
8831 DR	1	697	5	74	.6	35	11	136	2.41	14	5	ND	1	69	1	4	4	28	3.55	.042	2	28	.23	7	.14	3	4.29	.16	.04	4	3
8832 DR	1	178	6	13	.1	21	7	110	1.23	5	5	ND	1	71	1	2	2	25	3.51	.037	2	22	.18	7	.14	2	4.50	.20	.05	1	2
8833 DR	1	166	6	25	.3	37	10	195	2.24	2	5	ND	1	101	1	2	2	63	2.20	.023	2	46	.88	28	.17	2	3.61	.31	.63	2	2
8834 DR	1	274	4	28	.3	31	13	184	2.32	4	5	ND	1	92	1	2	2	52	2.28	.034	2	35	.70	9	.14	2	3.33	.15	.14	1	1
8835 DR	1	154	3	27	.2	42	11	218	2.40	2	5	ND	1	67	1	2	2	61	1.96	.024	2	38	.98	14	.13	2	3.21	.27	.26	1	1
8836 DR	3	558	6	38	.4	44	17	184	3.33	2	5	ND	1	67	1	2	2	62	1.76	.034	2	34	1.01	23	.13	2	3.23	.27	.16	1	3
8837 DR	1	56	8	22	.1	44	11	191	2.66	4	5	ND	1	78	1	2	2	59	1.84	.023	2	56	1.18	59	.15	2	3.49	.29	.76	1	6
8838 DR	1	57	2	18	.1	25	9	165	2.29	2	5	ND	1	56	1	2	2	54	1.59	.033	2	48	.88	37	.19	2	3.12	.30	.62	1	1
8839 DR	1	286	7	26	.1	34	10	167	2.33	6	5	ND	1	86	1	3	2	47	2.91	.031	2	35	.51	12	.15	2	4.42	.33	.21	1	3
8840 DR	1	411	6	37	.5	55	22	217	5.22	2	5	ND	1	44	1	2	2	59	1.81	.031	2	53	.90	6	.15	2	3.07	.23	.12	4	2
8841 DR	1	637	4	47	.3	48	15	228	2.67	7	5	ND	1	78	1	2	3	56	1.60	.035	2	40	1.11	15	.17	2	3.09	.23	.26	1	5
8842 DR	1	191	5	29	.1	40	11	166	2.33	6	5	ND	1	70	1	2	2	63	1.92	.036	2	34	.67	28	.14	2	3.16	.26	.56	3	1
8843 DR	1	205	1	35	.2	53	17	189	3.62	5	5	ND	1	76	1	2	2	77	1.81	.037	2	48	1.24	62	.16	2	3.46	.27	.81	1	1
8844 DR	1	225	2	29	.1	53	14	175	2.29	2	5	ND	1	91	1	2	2	62	1.89	.035	2	30	1.02	32	.13	2	3.14	.27	.57	1	4
8845 DR	1	171	4	25	.1	35	10	232	2.14	7	5	ND	1	95	1	2	2	55	2.22	.035	2	28	.80	19	.15	2	3.25	.32	.26	1	2
8846 DR	1	351	2	24	.1	33	9	197	1.78	5	5	ND	1	84	1	2	2	52	1.91	.039	2	22	.82	14	.13	3	2.59	.27	.13	1	1
8847 DR	1	1124	6	52	.6	41	22	291	5.00	3	6	ND	1	78	1	2	3	95	1.63	.037	2	63	1.53	4	.13	2	3.48	.26	.07	1	3
8848 DR	1	171	5	24	.1	32	10	232	2.08	5	5	ND	1	73	1	2	3	53	1.86	.039	2	26	.79	5	.13	2	2.85	.25	.04	1	1
8849 DR	1	239	7	35	.1	35	11	201	2.36	6	5	ND	1	70	1	2	2	54	2.07	.036	2	39	.74	7	.14	2	2.97	.27	.07	2	2
8850 DR	1	187	3	19	.2	31	7	146	1.64	5	5	ND	1	74	1	2	2	40	2.42	.038	2	27	.49	8	.13	2	3.46	.27	.12	1	4
STD C/AU-R	18	59	40	132	6.8	68	30	1029	4.26	42	18	7	38	50	16	16	23	81	.50	.095	41	55	.88	179	.07	32	1.96	.06	.13	11	490

88-9-082

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPB	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
8651 CR	2	491	12	98	1.0	42	17	213	3.39	11	5	ND	1	97	1	2	3	61	2.14	.034	2	59	.96	17	.14	2	3.03	.18	.22	1	15
8652 CR	2	212	25	65	1.5	36	11	192	2.72	14	5	ND	1	64	1	16	2	57	1.57	.033	2	58	1.12	14	.14	2	2.85	.23	.30	1	6
8653 CR	1	295	6	35	.1	42	12	215	3.11	8	5	ND	1	69	1	2	3	58	1.58	.030	2	65	1.10	17	.17	9	2.82	.22	.32	1	3
8654 CR	1	298	4	28	.1	39	13	176	2.23	9	5	ND	1	48	1	2	2	44	1.50	.025	2	60	.89	23	.13	2	2.37	.21	.42	1	1
8655 CR	1	249	6	29	.4	35	11	166	2.17	5	5	ND	1	38	1	2	2	45	1.79	.029	2	48	.66	14	.15	2	2.43	.22	.29	1	5
8656 CR	1	535	9	55	.4	69	33	293	6.06	33	5	ND	1	57	1	2	3	91	1.87	.031	2	92	1.67	32	.19	2	3.46	.21	.62	3	5
8657 CR	1	224	5	48	.1	45	14	257	3.62	9	5	ND	1	52	1	2	2	86	1.36	.032	2	193	1.62	61	.21	2	3.13	.22	1.36	1	1
8658 CR	1	91	4	33	.1	42	10	176	2.48	4	5	ND	1	54	1	2	2	68	1.45	.030	2	70	1.36	43	.17	2	3.01	.24	1.01	1	1
8659 CR	1	121	6	34	.1	50	14	185	2.96	12	5	ND	1	50	1	3	2	78	1.39	.031	2	92	1.70	54	.15	2	3.16	.21	1.65	4	3
8660 CR	1	350	14	43	.1	61	19	247	3.87	6	5	ND	1	57	1	2	3	61	3.41	.036	2	72	1.34	44	.20	2	5.73	.19	1.00	3	2
8661 CR	1	1451	9	77	.7	55	20	253	4.36	6	5	ND	1	45	1	2	2	82	2.16	.035	2	74	1.24	40	.22	2	3.57	.21	.93	2	11
8662 CR	4	3233	8	115	1.3	47	21	293	5.03	7	5	ND	1	35	1	2	2	108	1.40	.032	2	86	1.90	65	.22	2	2.62	.16	1.65	2	10
8663 CR	1	350	8	57	.1	50	15	275	4.25	3	5	ND	1	53	1	2	2	97	1.51	.035	2	65	1.59	67	.28	2	3.47	.23	1.85	1	1
8664 CR	1	416	7	43	.2	47	17	363	4.20	7	5	ND	1	68	1	2	3	70	2.41	.034	2	60	1.04	23	.15	2	3.96	.21	.43	1	2
8665 CR	1	258	5	47	.2	42	14	269	3.86	3	5	ND	1	53	1	2	2	80	1.79	.031	2	72	1.42	36	.22	2	3.42	.25	.65	1	4
8666 CR	1	245	22	44	.1	61	18	255	4.34	7	5	ND	1	26	1	2	4	93	1.17	.031	2	109	1.85	60	.30	2	3.23	.17	1.14	3	1
8667 CR	1	382	9	46	.1	49	15	253	4.01	4	5	ND	1	68	1	2	2	89	1.74	.034	2	95	1.74	37	.22	2	3.95	.23	1.03	1	3
8668 CR	1	386	7	48	.1	48	17	258	4.10	16	5	ND	1	74	1	2	34	94	1.61	.033	5	96	1.78	48	.23	2	3.28	.21	1.03	1	3
8669 CR	1	266	7	37	.1	56	14	219	3.53	6	5	ND	2	66	1	3	3	92	1.60	.038	2	75	1.58	43	.26	2	3.22	.23	1.52	2	2
8670 CR	1	239	7	32	.1	45	12	194	2.97	5	5	ND	1	58	1	2	4	72	1.73	.033	2	52	1.07	28	.20	2	3.14	.26	.86	1	1
8671 CR	1	227	6	32	.2	45	13	191	3.18	8	5	ND	1	63	1	2	2	72	1.90	.033	2	74	1.31	43	.20	2	3.44	.24	1.14	1	1
8672 CR	1	535	7	29	.3	36	12	164	2.43	5	5	ND	1	66	1	3	2	47	2.54	.032	2	32	.76	22	.13	2	3.73	.32	.35	2	4
8673 CR	1	239	7	32	.1	37	14	174	2.51	2	5	ND	1	66	1	2	2	46	2.06	.029	2	45	.95	35	.13	2	3.45	.32	.52	1	1
8674 CR	1	178	4	17	.2	25	9	141	1.73	2	5	ND	1	72	1	2	2	39	1.83	.029	2	44	.66	22	.14	2	2.68	.26	.22	1	2
8675 CR	1	102	6	22	.1	31	9	250	1.96	3	5	ND	1	76	1	2	2	45	1.37	.029	2	55	.87	27	.13	2	2.74	.25	.33	1	1
8676 CR	1	266	7	21	.1	34	13	186	2.22	5	5	ND	1	74	1	2	2	44	2.48	.030	2	42	.73	17	.16	2	3.56	.26	.16	1	1
8677 CR	1	150	6	15	.1	31	10	164	1.92	7	5	ND	1	70	1	2	2	45	2.08	.028	2	53	.76	15	.14	2	3.01	.25	.25	1	1
8678 CR	1	714	6	35	.5	37	13	215	2.48	3	5	ND	1	70	1	2	2	48	2.22	.028	2	50	.85	22	.12	2	3.19	.28	.55	1	1
8679 CR	1	364	7	36	.4	41	14	206	2.76	2	5	ND	1	57	1	2	2	46	1.80	.025	2	53	.85	29	.14	4	2.91	.23	.49	3	8
8680 CR	2	331	5	39	.5	32	9	233	1.79	5	5	ND	1	53	1	2	2	42	2.50	.030	2	35	.60	15	.13	2	3.23	.23	.18	2	10
8681 CR	1	269	6	21	.2	15	6	142	1.23	3	5	ND	1	54	1	2	2	29	2.24	.026	2	24	.22	6	.13	3	1.67	.27	.02	1	2
8682 CR	1	151	6	20	.2	30	9	225	1.93	5	5	ND	1	105	1	3	3	49	2.53	.024	2	27	.84	14	.12	2	3.73	.34	.44	1	4
8683 CR	1	531	6	32	.2	28	9	202	1.77	6	5	ND	1	54	1	2	3	37	2.00	.028	2	41	.56	13	.14	2	3.71	.24	.21	1	42
8684 CR	1	243	4	22	.1	25	8	252	1.55	5	5	ND	1	58	1	2	2	37	1.97	.030	2	36	.51	15	.15	2	2.53	.24	.17	1	1
8685 CR	1	347	6	37	.5	52	14	198	1.98	4	5	ND	1	96	1	2	2	45	2.50	.029	2	48	.75	26	.13	3	3.74	.27	.25	2	6
8686 CR	1	516	7	25	.1	33	13	213	3.03	10	5	ND	1	75	1	2	2	48	2.63	.027	2	38	.79	13	.15	2	3.58	.31	.16	5	2
8687 CR	1	482	7	33	.1	59	15	265	3.51	12	5	ND	1	78	1	2	2	65	2.83	.030	2	69	1.11	43	.17	2	3.57	.30	.28	4	4
STD DAV-8	13	56	42	132	6.9	67	29	1025	2.99	44	19	6	36	45	18	17	22	60	.49	.092	40	53	.94	179	.07	33	2.02	.05	.15	12	495

RR Minex MMX 88-19 (DS) 8810-060

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

DATE RECEIVED: NOV 3 1988
DATE REPORT MAILED: Nov. 15/88

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp AU** BY FIRE ASSAY FROM 1/2 A.T.

SIGNED BY. C. Leong . D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT-8810-060 177 FILE # 88-5420R

SAMPLE#	AU** oz/t
R 8785	.001
R 8786	.001
R 8787	.001
R 8788	.013
R 8789	.092
R 8790	.201
R 8791	.082
R 8792	.059
R 8793	.054
R 8794	.017
R 8795	.007
R 8796	.021
R 8797	.334
R 8798	.261 ✓
R 8799	.193 ✓
R 8800	.004

✓ - Not reproducible

Munex NMx 88-19 (DB)

8810-060

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 2ML 3-1-3 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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: OCT 25 1988 DATE REPORT MAILED: Oct 27/88 SIGNED BY. C. Leong ..D.TOYE, C.LECKIE, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8810-060 177 File # 88-5420

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
P 8735	4	102	.6	102	.1	56	18	833	7.87	2	5	ND	1	23	1	2	2	194	.78	.040	2	100	2.17	31	.11	2	3.89	.11	.41	1	6
R 8736	21	252	11	222	.1	51	23	903	10.48	2	5	ND	1	31	1	2	2	152	.41	.029	2	124	2.56	25	.08	2	4.35	.04	.15	1	11
P 8737	12	224	11	136	.1	49	23	1035	11.84	2	5	ND	1	15	1	2	2	151	.35	.037	2	135	2.60	19	.07	2	4.89	.04	.15	1	21
R 8738	14	174	13	120	.1	30	25	1287	12.97	3	5	ND	1	8	2	2	2	138	.28	.033	2	124	2.36	17	.06	2	4.65	.02	.13	1	222
R 8739	28	227	12	126	.2	54	31	1154	14.73	2	5	3	2	12	1	2	2	151	.36	.038	2	142	2.52	24	.05	2	5.60	.03	.14	3	6322
P 8740	11	331	13	122	.2	57	36	915	15.19	2	5	ND	2	8	1	2	2	111	.25	.030	2	101	2.95	15	.03	2	4.39	.02	.12	1	5771
R 8741	23	697	8	130	.3	46	29	818	13.59	2	5	3	1	8	1	2	2	117	.22	.036	2	107	3.23	27	.06	2	4.46	.02	.16	1	2221
R 8742	18	714	12	122	.3	48	31	965	15.48	2	5	ND	2	9	1	2	2	114	.23	.033	2	150	3.20	15	.04	2	4.69	.02	.16	1	2282
R 8743	14	174	7	138	.1	49	35	1032	15.64	2	5	ND	2	11	1	2	2	149	.27	.039	2	149	2.72	28	.06	2	5.47	.04	.15	1	2011
P 8744	17	833	11	132	.3	57	45	939	14.13	7	5	ND	2	13	1	3	3	142	.38	.035	2	122	2.51	26	.06	2	5.14	.04	.17	1	551
R 8745	11	310	11	148	.1	55	24	1229	12.56	2	5	ND	2	6	1	2	2	147	.24	.029	2	118	2.92	16	.06	2	5.49	.01	.13	3	151
R 8746	18	616	11	145	.2	62	34	1068	14.42	3	5	ND	2	6	1	2	3	131	.24	.036	2	130	2.68	22	.04	2	5.51	.02	.13	1	872
P 8747	17	897	11	162	.1	65	50	1151	17.72	2	5	11	3	5	1	2	5	123	.21	.046	2	164	2.48	24	.04	2	5.35	.01	.16	1	22222
R 8748	42	1191	8	192	.1	42	38	968	12.70	3	5	ND	1	6	1	2	2	91	.19	.032	2	92	2.39	31	.05	2	4.41	.01	.16	2	15981
P 8749	13	1512	8	148	.1	42	46	974	11.83	5	5	ND	1	7	1	2	4	84	.26	.047	2	76	1.72	31	.06	2	3.48	.02	.21	2	5192
R 8750	11	1555	8	82	.4	23	20	333	4.73	15	5	ND	1	15	1	2	2	39	.43	.044	2	19	1.02	11	.03	3	2.13	.04	.06	1	79
STD C/AU*	18	57	41	132	7.1	67	39	1033	4.15	40	18	7	39	47	17	16	20	57	.51	.091	38	55	.94	172	.06	37	2.01	.06	.10	21	505

8810-060

Murex RR 88-20 (NB) 8810-065

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

DATE RECEIVED: NOV 3 1988
DATE REPORT MAILED: Nov. 25/88.

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp AU** BY FIRE ASSAY FROM 1/2 A.T.

SIGNED BY. C. Leong D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION LTD. PROJECT-8810-065 177 FILE # 88-5491R

SAMPLE#	AU** oz/t
R 8843	.009
R 8844	.001
R 8845	.001
R 8846	.048
R 8847	.023
R 8848	.078
R 8849	.103
R 8850	.031
R 8851	.029
R 8852	.010
R 8853	.006
R 8854	.028
R 8855	.010
R 8856	.017
R 8857	.008
R 8858	.011
R 8859	.005
R 8860	.010
R 8861	.002
R 8862	.001
R 8863	.003
R 8864	.002
R 8865	.010
R 8866	.072
R 8867	.019
R 8868	.036
R 8869	.031

Mmrx NMX 88-20 (JB) 8810-065

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: OCT 27 1988 DATE REPORT MAILED: Oct 31/88 SIGNED BY C. Leong ,D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8810-065 177 File # 88-5491 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
R 8801	1	153	2	128	.1	37	27	811	5.89	11	5	ND	1	35	1	2	2	230	.81	.034	2	128	1.91	57	.14	3	3.76	.15	.55	1	95
R 8802	2	265	4	135	.1	75	26	835	7.96	17	5	ND	1	42	1	2	1	230	1.18	.050	2	105	2.38	46	.13	2	4.10	.10	.56	1	14
R 8803	5	468	6	230	1.0	93	37	1319	10.20	11	5	ND	1	25	1	2	3	287	.69	.042	2	130	2.79	29	.12	4	4.61	.11	.48	1	13
R 8804	4	131	3	119	.1	68	24	1120	9.55	9	5	ND	1	22	1	2	2	265	.56	.037	2	126	2.61	30	.12	5	4.18	.09	.36	1	6
R 8805	15	2356	2	104	1.3	25	35	383	7.65	10	5	ND	1	19	1	2	2	47	.35	.026	2	26	1.32	16	.03	7	2.27	.05	.09	5	24
R 8806	38	3216	9	196	2.3	45	32	934	15.42	2	5	ND	1	4	2	2	2	150	.13	.033	2	130	2.76	71	.10	6	5.42	.01	.77	1	42
R 8807	15	264	5	35	.4	17	13	305	4.27	32	5	ND	1	26	1	2	2	30	.63	.041	5	16	.81	11	.01	5	1.56	.04	.10	1	23
R 8808	2	153	2	57	.1	16	11	383	4.01	30	5	ND	1	25	1	2	2	37	1.01	.045	7	22	1.06	11	.01	7	1.80	.04	.11	1	2
R 8809	11	151	3	75	.1	48	22	694	5.53	26	5	ND	1	12	1	2	2	129	.45	.035	2	126	2.36	62	.09	18	4.02	.05	.48	1	6
R 8810	4	156	3	55	.1	19	11	301	4.04	11	5	ND	1	18	1	2	2	39	.70	.043	2	15	1.19	11	.02	3	1.83	.05	.06	1	5
R 8811	12	870	2	43	.2	11	11	339	4.59	2	5	ND	1	19	1	2	2	41	.55	.045	4	21	1.18	7	.02	7	2.03	.05	.06	3	2
R 8812	6	207	2	56	.2	10	11	281	4.07	2	5	ND	1	26	1	2	2	37	.85	.045	4	14	1.08	10	.03	4	1.52	.06	.05	1	9
R 8813	12	1293	8	110	.7	45	41	751	15.15	2	5	ND	1	5	1	2	3	155	.21	.038	2	123	2.73	47	.10	2	4.60	.02	.44	1	15
R 8814	5	143	3	95	.1	14	10	291	4.08	2	5	ND	1	28	1	2	2	38	.80	.045	2	17	1.10	20	.02	5	1.86	.05	.05	1	6
R 8815	5	194	4	47	.1	26	17	352	5.78	2	5	ND	1	11	1	2	2	71	.62	.034	2	57	1.71	9	.05	6	2.37	.04	.06	3	15
R 8816	13	117	4	28	.1	15	10	253	4.73	2	5	ND	1	26	1	2	3	44	.55	.041	2	20	1.23	13	.04	4	2.22	.06	.33	1	6
R 8817	7	88	2	36	.1	12	8	244	3.95	4	5	ND	1	38	1	2	2	38	.68	.044	2	16	1.15	7	.04	6	2.10	.05	.03	1	13
R 8818	6	92	2	40	.1	15	11	424	4.29	11	5	ND	1	33	1	2	3	38	.60	.042	2	15	1.14	9	.04	2	2.19	.05	.01	1	9
R 8819	4	125	5	69	.2	26	13	523	5.00	6	5	ND	1	25	1	2	2	38	.62	.040	2	15	1.15	9	.03	3	2.36	.06	.03	2	3
R 8820	8	415	4	94	.2	63	31	730	11.17	44	5	ND	1	22	1	2	2	146	2.76	.032	3	179	2.86	35	.08	2	4.03	.04	.54	1	1
R 8821	2	141	5	35	.1	11	11	315	3.83	35	5	ND	1	48	1	2	2	23	1.92	.032	3	14	1.04	7	.01	6	.62	.02	.10	1	6
R 8822	6	137	4	36	.1	17	9	359	4.59	3	5	ND	1	12	1	2	4	40	1.04	.034	2	23	1.33	7	.04	3	1.91	.03	.09	1	1
R 8823	12	100	6	56	.1	47	18	523	6.35	3	5	ND	1	21	1	2	2	81	.62	.042	2	78	2.12	36	.13	6	3.13	.07	.47	1	1
R 8824	6	335	7	87	.2	44	56	1020	14.93	5	5	ND	2	5	1	2	3	99	.13	.034	2	87	1.75	33	.05	5	4.27	.01	.22	1	455
R 8825	13	199	12	95	.2	43	44	988	14.24	21	5	ND	1	5	1	2	2	125	.16	.036	2	106	1.94	33	.06	8	4.47	.02	.15	2	39
R 8826	19	336	2	95	.3	53	51	917	15.33	33	5	ND	1	8	1	2	3	148	.23	.031	2	100	1.83	40	.09	2	4.32	.02	.22	2	13
R 8827	5	93	7	63	.1	19	27	649	8.25	35	5	ND	1	13	1	2	2	47	.15	.045	2	29	1.17	49	.05	4	3.02	.02	.23	1	12
R 8828	22	295	11	95	.2	33	45	1219	14.67	54	5	ND	1	10	1	3	3	98	.25	.035	2	74	1.61	19	.04	4	4.13	.01	.10	2	72
R 8829	5	185	9	80	.1	30	55	1018	12.41	18	5	ND	1	6	1	2	2	92	.11	.031	2	71	1.62	42	.05	7	4.18	.01	.23	2	132
R 8830	5	536	13	86	.3	41	51	1837	15.61	25	5	ND	2	10	1	2	2	106	.16	.032	2	80	1.72	29	.04	5	4.40	.01	.19	1	77
R 8831	7	424	16	99	.2	38	52	1087	16.15	21	5	ND	2	17	1	2	2	127	.15	.032	2	66	1.87	27	.05	12	4.72	.01	.13	2	67
R 8832	21	59	9	116	.1	38	27	1292	12.16	12	5	ND	1	8	1	3	3	121	.19	.038	2	77	1.99	36	.06	11	4.52	.02	.21	1	12
R 8833	13	563	6	124	.7	55	36	987	11.22	83	5	ND	1	11	1	2	2	103	.25	.029	3	79	1.85	69	.08	5	4.28	.03	.49	1	55
R 8834	21	595	14	95	.6	32	42	901	12.40	141	5	ND	2	15	1	4	3	89	.26	.047	5	59	1.60	32	.04	7	4.30	.02	.17	1	32
R 8835	5	254	4	107	.2	39	39	1015	14.35	75	5	ND	1	19	2	2	2	140	.42	.041	3	109	2.80	67	.09	7	4.99	.04	.63	1	24
R 8836	1	129	2	120	3	51	62	1192	17.40	182	5	ND	2	4	1	2	2	126	.11	.031	7	107	1.91	34	.05	2	4.80	.01	.29	1	74
STD C/AU-R	19	58	40	131	6.8	69	31	1059	4.21	38	20	7	37	67	18	20	23	56	.48	.092	39	56	.91	173	.06	38	1.94	.06	.13	11	515

8810-065

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPB	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
R 8837	3	226	2	114	.3	39	56	1135	17.65	54	5	ND	3	2	1	2	2	125	.09	.030	4	97	1.95	13	.03	2	5.05	.01	.21	1	415
R 8838	5	153	2	127	.3	36	30	1029	14.69	2	5	ND	3	2	1	2	2	138	.10	.034	3	81	2.01	21	.05	2	5.14	.01	.25	1	23
R 8839	5	139	2	88	.3	29	21	930	11.55	2	5	ND	2	4	1	2	2	111	.17	.038	3	52	1.68	28	.05	2	4.35	.01	.21	1	3
R 8840	16	239	5	101	.3	34	29	1002	12.78	16	5	ND	2	6	1	4	3	101	.12	.034	2	68	1.73	31	.05	3	4.58	.01	.32	5	61
R 8841	12	363	6	95	.1	36	25	1256	10.85	36	5	ND	2	9	1	2	2	105	.24	.038	3	53	1.64	39	.05	3	4.11	.02	.37	3	49
R 8842	5	112	2	79	.1	32	25	783	9.54	42	5	ND	2	13	1	2	2	91	.34	.037	2	66	1.53	39	.06	2	3.60	.05	.31	1	36
R 8843	7	1482	3	129	2.6	33	32	972	13.23	8	5	ND	2	4	1	2	2	74	.12	.035	2	36	1.78	12	.03	2	4.35	.01	.15	6	175
R 8844	18	335	2	95	.3	23	17	943	10.86	2	6	ND	3	6	1	2	2	89	.14	.032	2	50	1.69	11	.04	2	4.12	.01	.20	1	12
R 8845	11	145	3	79	.3	18	15	634	9.24	8	5	ND	2	6	1	2	2	72	.16	.036	2	39	1.50	10	.04	2	3.67	.02	.19	1	16
R 8846	44	620	9	112	.1	37	48	962	15.46	11	5	ND	2	5	1	2	2	105	.17	.044	2	56	1.87	17	.04	2	4.83	.01	.19	6	1920
R 8847	98	2342	2	147	4.7	35	47	789	14.12	2	5	ND	3	9	1	2	2	85	.24	.030	2	50	1.70	16	.04	2	4.19	.03	.26	1	415
R 8848	28	1990	2	123	3.3	35	42	828	14.63	2	5	ND	3	9	1	2	2	99	.21	.029	2	83	1.88	23	.04	2	4.64	.01	.29	1	2640
R 8849	32	1322	3	118	2.5	27	32	699	14.23	19	5	3	2	3	1	2	2	91	.11	.026	2	63	1.75	19	.04	2	4.65	.01	.26	25	3192
R 8850	60	301	2	76	.4	25	24	562	11.40	5	5	ND	3	3	1	2	2	87	.11	.031	2	58	1.67	60	.08	2	3.98	.01	.54	1	350
R 8851	62	2072	3	135	3.9	31	36	799	15.12	8	5	ND	2	2	1	2	4	92	.11	.033	2	79	1.88	33	.06	2	4.75	.01	.42	9	795
R 8852	7	459	2	60	.2	9	13	567	7.51	2	5	ND	3	6	1	2	2	29	.13	.036	2	13	.92	111	.04	2	3.06	.04	.28	4	345
R 8853	20	2572	6	150	3.5	37	48	914	16.42	28	5	ND	2	3	2	7	2	93	.13	.034	2	74	1.84	20	.04	2	4.77	.01	.29	29	205
R 8854	32	1494	7	133	1.5	29	59	904	17.35	13	5	ND	2	2	1	3	2	78	.09	.031	2	72	1.74	14	.03	2	4.54	.01	.15	6	865
R 8855	55	1621	2	118	2.1	29	60	838	14.74	5	5	ND	3	2	1	2	2	88	.10	.030	2	56	1.79	20	.04	2	4.54	.01	.24	1	265
R 8856	35	1529	2	100	2.0	17	21	678	10.30	7	5	ND	2	4	1	2	2	52	.13	.041	2	33	1.47	38	.04	2	3.85	.01	.31	1	1595
R 8857	48	1611	2	105	2.4	25	42	741	14.88	2	5	ND	4	2	1	2	10	79	.09	.031	2	47	1.75	16	.03	2	4.33	.01	.19	1	225
R 8858	8	1291	7	109	.7	27	40	747	14.97	15	5	ND	1	2	1	4	2	82	.09	.030	2	49	1.64	22	.04	4	4.22	.01	.19	5	320
R 8859	5	1104	7	98	.2	26	45	858	15.05	11	5	ND	2	2	1	2	2	75	.09	.031	2	61	1.77	13	.03	2	4.61	.01	.13	3	165
R 8860	7	812	2	82	.4	26	42	715	14.16	7	5	ND	3	2	1	2	2	69	.09	.031	2	48	1.62	19	.03	2	4.16	.01	.17	1	82
R 8861	6	440	2	93	.2	28	35	852	15.30	2	5	ND	3	2	1	2	2	96	.09	.028	2	83	1.99	13	.03	2	4.89	.01	.17	2	49
R 8862	4	147	2	56	.1	15	13	577	7.82	10	5	ND	2	5	1	2	2	52	.28	.037	2	39	1.33	13	.04	3	3.15	.02	.13	1	22
R 8863	25	722	5	89	.3	27	36	751	13.55	16	5	ND	2	2	2	6	2	82	.11	.035	2	47	1.71	19	.04	3	4.36	.01	.16	7	66
R 8864	13	2168	8	99	4.5	24	47	643	14.60	35	5	ND	2	2	2	5	2	81	.09	.029	2	59	1.58	18	.03	2	3.87	.01	.14	10	105
R 8865	13	2595	2	145	2.5	37	42	927	17.70	3	5	ND	2	1	2	2	2	109	.07	.028	2	82	2.09	9	.03	2	5.24	.01	.12	4	250
R 8866	24	1323	5	107	2.1	47	53	729	16.00	2	5	ND	3	2	1	2	2	75	.08	.030	2	51	1.56	22	.03	2	4.11	.01	.19	21	5190
R 8867	34	2247	4	131	2.6	33	41	937	16.21	9	5	ND	2	1	1	2	2	105	.10	.035	2	116	1.93	9	.03	2	5.06	.01	.15	17	550
R 8868	30	1415	17	152	2.3	37	45	957	18.25	24	5	ND	2	1	2	2	2	124	.09	.035	2	89	2.06	11	.04	2	5.43	.02	.12	16	1150
R 8869	17	1991	22	122	2.2	38	41	976	17.88	17	5	ND	1	1	2	5	2	121	.08	.032	2	90	2.10	11	.04	2	5.52	.01	.09	13	485
STD C/AU-S	38	57	39	132	7.0	66	26	958	3.95	37	17	7	36	45	17	19	18	55	.49	.069	36	55	.90	173	.06	36	1.94	.06	.14	11	520

Muscle NMIX 88-20 (DA) 8811-002

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: OCT 31 1988 DATE REPORT MAILED: Nov 3/88 SIGNED BY. C. Leong ,D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 177/8811-002 File # 88-5567

SAMPLE	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
R 8870	11	1045	4	113	1.1	45	50	585	13.55	8	5	ND	3	2	1	2	4	63	.10	.026	2	41	1.44	37	.03	2	5.75	.01	.13	4	215
R 8871	23	1457	2	119	1.5	52	46	854	15.73	6	5	ND	3	2	1	2	2	98	.11	.028	2	77	1.87	56	.05	2	4.56	.01	.21	37	450
R 8872	4	545	7	109	1.0	56	35	621	15.30	2	5	ND	2	6	1	2	2	139	.20	.032	2	97	2.21	24	.05	2	5.25	.02	.12	13	440
R 8873	3	328	6	139	.3	68	31	1202	16.83	6	5	ND	2	6	1	2	4	186	.28	.029	2	150	3.11	17	.05	2	6.61	.02	.06	1	7
R 8874	2	422	7	113	.3	55	30	975	12.42	7	5	ND	2	15	1	2	2	149	.45	.033	2	109	2.74	24	.07	2	5.24	.05	.15	3	6
R 8875	1	202	2	102	.2	59	29	857	15.53	2	6	ND	2	16	1	2	2	128	.48	.033	2	99	2.66	21	.10	2	4.60	.05	.15	1	22
P 8876	1	260	3	122	.3	65	41	1090	14.45	7	5	ND	1	10	1	2	4	156	.37	.031	2	114	3.08	16	.08	2	5.44	.04	.08	1	1020
R 8877	1	109	4	105	.3	55	27	950	10.62	6	5	ND	1	10	1	2	2	132	.35	.031	2	93	2.90	15	.05	2	4.63	.03	.15	1	1
P 8878	3	262	3	78	.1	64	20	623	7.39	9	5	ND	1	35	1	2	2	125	.95	.033	2	124	2.67	21	.11	2	4.54	.10	.24	1	1
P 8879	1	252	6	91	.2	56	25	785	9.66	8	5	ND	1	23	1	2	2	131	.67	.030	2	119	2.58	19	.12	2	4.56	.08	.24	1	2
R 8880	1	259	5	93	.2	60	26	757	9.63	7	5	ND	1	19	1	2	2	143	.54	.032	2	155	3.06	27	.16	2	4.73	.06	.20	1	3
P 8881	1	504	3	98	.4	59	33	625	9.09	6	5	ND	1	15	1	2	2	137	.67	.029	2	141	2.80	26	.14	2	4.27	.06	.26	1	3
STD C/AU-R	19	57	39	132	7.1	68	38	1063	4.21	37	23	7	36	47	16	17	18	55	.46	.083	37	55	.90	175	.06	34	1.95	.06	.14	11	520

8811 - 002

Murex (TMC) NMX-88-21 8811-025

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: NOV 15 1988 DATE REPORT MAILED: Nov 23/88 SIGNED BY. C. Leong

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

NORANDA EXPLORATION PROJECT 8811-025 177 File # 88-5851

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
R 88252	1	1075	39	81	.2	82	49	422	10.11	24	5	ND	1	81	1	2	3	238	2.23	.028	2	114	1.44	57	.12	2	5.23	.03	.59	1	26
R 88253	1	222	15	55	.1	45	25	524	7.59	21	5	ND	1	115	1	2	2	232	2.31	.029	2	152	1.93	58	.10	2	5.62	.02	.66	1	12
R 88254	1	869	28	81	.2	75	35	421	9.21	5	5	ND	1	124	1	2	2	156	2.29	.031	2	166	2.25	52	.05	2	6.02	.01	1.20	1	15
R 88255	11	325	11	105	.5	72	33	596	9.21	19	5	ND	1	97	1	2	15	169	1.78	.024	2	166	2.75	60	.10	2	5.57	.04	1.36	1	65
R 88256	1	316	12	39	.1	12	9	303	3.26	2	5	ND	1	62	1	2	2	36	1.46	.031	2	28	1.09	9	.05	2	2.09	.01	.07	1	5
R 88257	2	132	3	35	.1	10	45	262	2.73	17	5	ND	1	74	1	2	2	35	1.23	.032	2	21	.99	7	.05	2	1.97	.01	.25	1	3
R 88258	3	92	3	33	.1	10	6	267	2.69	9	5	ND	1	73	1	2	2	32	1.65	.031	3	25	.97	7	.04	2	1.99	.01	.24	1	3
R 88259	2	96	5	35	.1	17	6	282	3.17	17	5	ND	1	48	1	2	2	35	1.67	.032	2	20	1.02	5	.03	2	1.81	.01	.05	1	1
R 88260	3	275	9	44	.1	29	13	338	5.11	9	5	ND	1	72	1	2	1	98	2.34	.026	2	82	1.56	15	.16	2	3.71	.02	.23	1	3
R 88261	4	193	12	29	.1	22	11	265	3.31	15	5	ND	1	67	1	2	2	65	2.61	.035	2	58	1.10	12	.17	2	3.75	.09	.19	1	4
R 88262	5	134	9	39	.1	17	10	206	3.69	9	5	ND	1	63	1	2	2	61	1.77	.023	2	78	1.43	30	.17	4	3.25	.20	.57	1	1
R 88263	1	723	15	61	.1	35	47	341	10.07	15	5	ND	1	37	1	2	3	330	1.02	.025	2	127	1.39	50	.18	2	3.69	.17	.97	2	6
R 88264	1	332	11	75	.1	55	44	439	9.23	6	5	ND	2	30	1	2	3	317	.66	.033	2	122	.99	62	.16	2	3.91	.10	1.40	1	4
R 88265	1	224	12	49	.1	139	48	553	11.45	11	5	ND	2	55	1	2	2	265	.28	.028	5	136	1.24	45	.13	2	6.01	.01	.44	2	1
R 88266	1	99	6	26	.1	31	5	243	2.89	19	5	ND	1	129	1	3	2	55	3.62	.027	2	50	.80	21	.14	2	4.48	.34	.26	1	1
R 88267	2	645	9	47	.6	80	21	284	3.87	3	5	ND	1	74	1	2	2	56	2.26	.023	2	53	.83	35	.16	2	2.72	.03	.39	1	21
R 88268	2	659	15	67	.3	74	28	329	5.58	9	5	ND	2	64	1	3	2	77	1.42	.022	2	77	1.44	46	.18	7	3.75	.13	.32	1	11
R 88269	1	178	3	33	.1	45	12	287	5.05	11	5	ND	1	53	1	2	2	93	1.76	.025	2	91	1.68	65	.23	2	3.20	.16	1.52	1	3
R 88270	3	153	6	31	.3	45	6	263	2.84	9	5	ND	1	105	1	2	2	55	2.67	.024	2	55	.87	34	.14	7	3.56	.28	.44	1	5
R 88271	7	333	9	72	.3	51	15	399	6.84	411	5	ND	2	55	1	2	2	106	2.28	.025	2	110	1.72	97	.19	2	3.61	.19	2.19	1	152
R 88272	8	124	11	60	.1	56	12	315	5.54	17	5	ND	1	76	1	2	2	80	1.36	.025	2	80	1.52	57	.25	2	3.52	.21	1.55	1	8
STD C/AU-R	18	59	42	132	7.1	68	29	1074	3.89	38	38	7	37	47	17	17	19	56	.46	.087	37	53	.94	174	.09	36	1.84	.09	.15	12	520

88-11-025

Number NMX 88.22 (JMc) 8811-032

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: NOV 16 1988 DATE REPORT MAILED: Nov 21/88 SIGNED BY. C. Leong, D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8811-032 177 File # 88-5876 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
2251	1	382	11	39	.2	60	17	191	3.68	23	5	ND	1	114	1	2	2	50	2.66	.030	2	56	.56	15	.05	2	4.29	.06	.22	3	1
2252	4	275	6	38	.2	49	12	228	2.61	14	5	ND	1	97	1	2	2	53	2.54	.031	2	50	.75	11	.12	4	4.15	.05	.28	2	2
2253	1	287	8	32	.1	48	15	205	2.89	12	5	ND	1	117	1	2	2	48	2.53	.030	2	41	.68	11	.13	2	3.66	.05	.11	1	1
2254	1	227	9	21	.2	28	9	122	1.75	9	5	ND	1	105	1	2	2	43	2.59	.026	2	34	.57	12	.12	5	3.64	.04	.15	1	2
2255	4	240	6	22	.1	42	16	190	2.26	19	5	ND	1	103	1	2	2	47	2.62	.029	2	39	.54	11	.12	4	3.52	.05	.08	1	2
2256	1	231	9	29	.2	42	11	312	1.92	12	5	ND	1	108	1	2	2	46	2.60	.030	2	44	.66	16	.15	4	3.55	.07	.17	3	1
2257	5	245	8	29	.1	44	13	212	2.61	13	5	ND	1	106	1	2	2	50	2.33	.031	2	50	.70	17	.12	2	3.29	.07	.22	3	2
2258	4	192	9	27	.2	33	23	181	3.18	11	5	ND	1	91	1	2	2	47	2.55	.029	2	35	.55	12	.10	2	3.61	.06	.15	1	2
2259	4	482	5	41	.3	72	21	215	4.53	24	5	ND	1	52	1	2	2	83	2.07	.027	2	79	1.22	50	.17	4	3.54	.21	1.35	1	3
2260	1	216	5	35	.5	72	27	182	3.32	14	5	ND	1	74	1	2	2	52	3.32	.026	2	54	.84	27	.12	5	4.75	.23	.45	1	5
2261	2	173	2	29	.1	22	10	217	3.67	17	5	ND	1	35	1	2	2	68	1.06	.031	2	68	1.28	33	.12	6	1.76	.09	1.06	1	2
2262	3	175	6	31	.1	37	9	214	2.41	15	5	ND	1	67	1	2	2	64	1.73	.030	2	61	1.09	30	.17	2	2.64	.26	.55	1	1
2263	11	427	2	40	.1	72	23	226	4.59	29	5	ND	1	52	1	2	2	73	2.43	.027	2	71	1.22	19	.18	2	2.32	.16	.28	1	3
2264	2	497	4	28	.2	52	19	890	2.94	7	5	ND	1	75	1	2	2	47	2.26	.024	2	43	.64	19	.15	2	2.88	.28	.33	1	3
2265	11	480	5	31	.2	47	16	186	3.05	12	5	ND	1	76	1	2	2	64	2.16	.030	2	68	.86	16	.20	6	2.84	.23	.25	1	1
2266	3	319	2	27	.2	41	33	155	5.32	23	5	ND	1	95	1	2	2	47	2.20	.029	2	47	.74	20	.13	5	3.15	.23	.28	1	2
2267	22	229	6	26	.1	46	14	248	2.47	10	5	ND	1	75	1	2	2	55	2.30	.030	2	55	.82	24	.15	2	2.86	.26	.31	1	1
2268	3	226	2	22	.2	45	27	206	2.65	15	5	ND	1	74	1	2	2	43	2.21	.028	2	41	.53	9	.12	3	2.35	.27	.10	1	2
2269	1	181	3	25	.1	24	9	231	1.99	12	5	ND	1	64	1	2	2	53	2.73	.030	2	43	.64	12	.17	3	3.00	.26	.10	1	1
2270	2	260	3	27	.2	29	9	203	1.69	5	5	ND	1	54	1	2	2	43	1.70	.025	2	43	.76	31	.13	2	2.20	.22	.29	1	1
2271	4	354	4	34	.2	52	11	321	2.49	13	5	ND	1	60	1	2	2	56	2.79	.029	2	47	.74	11	.17	2	2.54	.22	.16	2	10
2272	3	247	2	34	.2	29	13	291	2.23	13	5	ND	1	74	1	2	2	47	2.38	.024	2	40	.83	29	.11	3	3.04	.26	.25	2	8
2273	2	249	7	26	.1	30	17	167	2.34	11	5	ND	1	81	1	2	2	49	2.48	.028	2	46	.53	14	.15	3	3.09	.29	.17	1	2
2274	1	197	2	27	.2	29	10	217	1.93	11	5	ND	1	113	1	2	2	45	2.62	.023	2	33	.67	16	.12	2	3.53	.33	.18	1	1
2275	2	157	2	24	.1	19	6	157	1.35	11	5	ND	1	97	1	2	2	33	2.00	.026	2	30	.45	13	.10	2	3.73	.32	.12	1	1
2276	4	253	6	33	.1	37	13	226	2.87	12	5	ND	1	118	1	2	2	60	2.99	.029	2	28	.50	16	.12	3	3.86	.34	.14	1	2
2277	1	230	5	16	.1	20	6	164	1.65	12	5	ND	1	92	1	2	3	44	2.46	.025	2	30	.42	12	.16	4	2.93	.25	.10	1	2
2278	2	175	4	28	.2	21	7	153	2.09	12	5	ND	1	95	1	2	2	37	2.63	.025	2	29	.41	12	.15	3	3.25	.31	.07	1	1
2279	1	149	4	23	.1	21	7	258	1.59	10	5	ND	1	108	1	2	2	38	3.26	.026	2	28	.58	23	.13	2	4.35	.37	.21	1	1
2280	4	899	7	72	.2	69	26	355	4.26	491	5	ND	1	115	1	7	13	93	2.55	.026	2	100	1.69	78	.11	6	3.83	.15	1.26	1	2
2281	1	123	2	27	.1	25	12	254	2.55	28	5	ND	1	125	1	2	2	61	2.21	.030	2	55	.81	31	.16	3	2.75	.24	.24	1	4
22582	4	224	3	35	.1	24	12	247	3.24	12	5	ND	1	82	1	2	2	70	3.16	.029	2	52	1.07	12	.19	2	4.22	.28	.16	1	1
22584	1	132	7	13	.1	25	8	191	1.71	6	5	ND	1	95	1	2	2	39	3.39	.026	2	25	.47	12	.14	2	4.60	.36	.11	1	3
22585	1	422	1	55	.1	33	15	208	3.53	16	5	ND	1	82	1	2	2	66	3.13	.028	2	50	.97	18	.16	2	4.51	.32	.35	35	2
22586	14	747	2	96	.2	50	22	339	7.28	49	5	ND	1	26	1	7	2	130	1.67	.022	2	123	2.25	69	.18	2	2.96	.69	1.88	551	2
22587	1	215	3	29	.1	28	13	153	2.73	16	5	ND	1	89	1	2	2	56	2.21	.025	2	64	.81	23	.14	2	4.67	.32	.53	11	2
STD C/AU-R	18	59	37	132	7.1	67	32	1031	3.74	41	19	6	37	44	17	18	18	56	.48	.038	36	55	.83	174	.08	34	1.79	.06	.15	12	490

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPB	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
37698	1	241	3	25	.2	35	11	169	2.25	2	5	ND	1	138	1	2	2	42	3.37	.030	2	37	.61	16	.13	2	5.08	.35	.17	1	3
37699	14	846	13	72	.5	61	28	284	5.44	17	5	ND	1	64	1	2	2	113	2.93	.031	2	108	1.84	13	.17	2	4.61	.26	.36	2	1
37700	1	747	3	46	.5	43	15	201	3.19	5	5	ND	1	83	1	2	2	65	3.45	.035	2	51	1.02	10	.17	3	5.04	.24	.19	2	1
37701	1	261	3	22	.1	25	11	225	2.15	52	5	ND	1	101	1	2	2	44	5.34	.031	2	37	.65	15	.13	2	5.04	.36	.12	1	2
44299	1	1135	2	73	.8	85	56	351	10.35	11	5	ND	1	41	1	2	5	130	1.26	.028	2	127	1.64	37	.11	2	3.99	.17	.42	1	17
44300	1	150	5	15	.2	48	24	165	2.12	2	5	ND	1	66	1	2	2	38	2.32	.035	2	28	.66	16	.09	2	3.57	.11	.19	1	2
44342	1	139	2	25	.1	63	13	171	3.26	4	5	ND	1	65	1	2	2	57	1.99	.041	2	57	.91	18	.10	2	3.08	.25	.23	1	1
44344	1	136	3	19	.1	46	14	133	2.74	2	5	ND	1	108	1	2	2	52	2.15	.035	2	38	.71	17	.09	2	3.70	.24	.23	2	3
44345	1	559	3	54	.3	86	52	305	9.45	9	5	ND	1	64	2	2	2	151	.72	.027	2	163	2.33	57	.14	2	4.04	.14	1.58	1	1
44346	1	249	3	32	.1	39	6	123	3.93	6	5	ND	1	107	1	2	2	46	2.51	.031	2	40	.69	12	.14	2	3.82	.24	.13	1	1
44347	1	147	2	23	.2	31	7	129	1.47	6	5	ND	1	97	1	2	2	34	3.23	.031	2	24	.45	7	.13	3	4.59	.35	.09	1	5
44348	1	218	12	14	.1	17	7	125	1.41	2	5	ND	1	91	1	2	2	36	3.67	.031	2	31	.50	11	.14	4	4.96	.36	.15	1	1
44349	1	311	2	33	.1	21	10	207	2.86	7	5	ND	1	73	1	2	2	69	2.66	.028	2	67	1.13	30	.15	2	4.17	.28	.51	1	1
44350	1359	475	2	22	.4	22	5	65	1.81	40	5	ND	1	7	1	2	2	15	.49	.008	2	61	.22	4	.03	2	.61	.02	.05	1	2
STD C/AU-S	38	59	44	133	6.9	68	32	1032	4.22	42	22	7	38	47	19	19	21	59	.49	.087	39	54	.93	172	.06	35	2.07	.06	.13	12	479

Minerex MMI 88-23 (TM-)

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: NOV 15 1988 DATE REPORT MAILED: Nov 22/88 SIGNED BY. C. Leong ..D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 811-035 177 File # 88-5901 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
P 7432	3	192	9	253	.8	92	27	881	3.01	42	5	ND	1	97	1	2	2	198	1.24	.036	2	194	2.22	81	.12	2	5.12	.24	.87	1	13
P 7433	4	599	12	469	.6	56	24	1819	10.99	120	5	ND	1	27	2	2	2	159	.58	.042	2	193	5.34	18	.06	4	4.05	.05	.19	1	350
P 7434	3	381	2	248	.7	56	21	2134	5.01	45	5	ND	1	46	3	2	2	125	.97	.055	2	128	2.29	28	.11	2	3.89	.12	.24	1	11
P 7435	1	222	11	734	.2	66	19	1933	9.13	86	5	ND	1	60	4	2	2	198	1.11	.040	3	222	2.99	21	.08	3	4.64	.06	.19	1	24
P 7436	1	223	3	202	.3	122	35	682	7.61	157	5	ND	1	52	2	2	2	190	1.64	.035	3	225	2.20	60	.11	8	4.22	.09	.38	1	8
P 7437	1	68	4	92	.1	62	20	486	4.09	117	5	ND	1	67	1	5	2	109	2.47	.029	2	117	3.06	60	.12	9	3.28	.18	.91	1	8
P 7438	1	335	3	63	.3	43	15	320	3.02	8	5	ND	1	59	1	2	2	91	2.35	.032	2	98	1.11	20	.21	4	3.37	.25	.18	2	8
P 7439	2	121	3	42	.2	25	14	313	3.60	6	5	ND	1	59	1	2	2	66	1.26	.025	5	63	1.20	27	.19	3	2.50	.25	.32	1	4
P 7440	2	235	5	92	.4	55	17	408	4.15	18	5	ND	1	93	1	2	2	77	2.13	.026	2	87	1.45	35	.16	3	3.03	.22	.48	1	4
P 7441	4	233	3	81	.5	59	20	483	4.84	32	5	ND	1	58	1	2	2	91	1.65	.031	2	89	1.83	31	.19	7	2.44	.22	.45	1	2
P 7442	3	281	6	68	.3	45	13	382	4.51	9	5	ND	1	51	1	2	2	88	2.16	.030	2	85	1.62	28	.23	4	3.52	.22	.42	3	1
P 7443	1	324	5	42	1	40	21	575	4.46	15	5	ND	1	55	1	2	2	78	2.19	.027	2	73	2.49	25	.21	12	3.38	.21	.27	2	2
P 7444	2	127	4	58	.1	35	13	283	3.24	2	5	ND	1	47	1	2	2	69	2.74	.030	2	66	1.25	22	.19	6	2.50	.25	.23	3	1
P 7445	1	229	3	32	1	61	13	295	3.09	6	5	ND	1	74	1	2	2	63	2.10	.039	2	64	1.11	24	.15	3	3.08	.25	.32	1	1
P 7446	1	283	3	33	.2	54	16	340	4.17	11	5	ND	1	78	1	2	1	80	2.60	.034	2	76	1.34	19	.21	6	4.16	.25	.29	2	3
P 7447	4	226	4	47	.2	42	15	355	4.89	7	5	ND	1	61	2	2	1	106	2.99	.039	2	102	1.89	53	.22	2	3.76	.24	.91	4	1
P 7448	3	287	6	83	2	61	28	735	8.81	12	5	ND	1	51	1	2	2	249	1.72	.052	2	128	2.75	44	.18	2	6.97	.19	.61	4	3
P 7449	.3	149	3	42	.2	28	15	320	5.45	18	5	ND	1	50	1	2	3	42	.85	.049	2	14	2.29	11	.05	2	2.12	.02	.05	1	2
P 7450	3	242	2	33	.2	13	12	322	4.63	13	5	ND	1	28	2	2	2	41	.46	.045	2	15	1.15	7	.05	3	1.64	.06	.03	3	2
P 7451	16	1882	18	112	2.4	55	44	1382	12.48	8	5	ND	2	6	3	2	2	161	.16	.029	2	249	3.19	13	.05	3	5.83	.01	.09	4	422
P 7452	27	355	5	126	.6	48	24	1966	11.09	15	5	ND	1	8	1	2	3	133	.50	.037	2	106	2.53	25	.06	2	4.49	.03	.22	1	155
P 7453	23	221	5	96	.2	54	32	979	9.33	32	5	ND	1	22	2	2	3	218	.23	.026	2	142	2.29	45	.09	6	4.34	.04	.26	1	26
P 7454	24	236	3	79	.1	50	23	727	6.35	11	5	ND	3	7	4	2	1	101	.39	.029	2	96	3.04	42	.07	4	3.05	.02	.18	1	235
P 7455	15	159	6	65	.2	35	19	653	7.87	5	5	ND	1	12	1	2	2	77	.05	.007	3	72	1.74	58	.06	3	3.27	.04	.22	2	27
P 7456	12	149	4	57	.1	29	29	634	7.26	13	5	ND	1	17	1	2	3	62	.59	.042	5	52	3.45	68	.03	2	2.96	.02	.20	1	9
P 7457	12	132	3	69	.3	35	23	732	8.18	34	5	ND	1	22	1	2	2	91	.45	.027	4	73	1.65	47	.04	5	3.27	.02	.28	1	5
P 7458	15	127	6	49	.3	33	28	674	8.00	51	5	ND	1	19	1	2	2	62	2.06	.032	4	33	1.33	23	.01	4	2.32	.01	.16	1	3
P 7459	23	123	3	58	.2	33	29	620	9.59	57	5	NC	1	7	1	2	2	53	.83	.038	6	48	1.91	36	.02	2	3.27	.01	.26	1	1
P 7460	23	402	5	63	.3	44	27	557	10.61	29	5	ND	2	6	1	2	2	65	.26	.039	3	54	1.60	32	.04	6	3.72	.01	.33	1	13
P 7461	15	1187	4	79	1.0	29	22	649	9.62	29	5	NC	2	7	1	2	2	49	.24	.031	3	46	1.47	24	.02	3	3.42	.02	.24	3	4
P 7462	13	122	2	66	.3	35	25	653	9.35	37	5	NC	1	9	1	2	2	51	.29	.032	3	47	1.45	33	.02	6	3.49	.03	.22	1	7
P 7463	13	10711	14	172	19.2	36	53	561	11.83	79	5	NC	1	5	2	2	2	49	.53	.032	2	42	1.27	29	.02	2	3.07	.01	.19	8	72
P 7464	1	889	2	75	.8	42	32	559	10.15	14	5	NC	2	5	1	2	2	65	.20	.026	2	61	1.52	38	.05	2	3.72	.01	.28	1	7
P 7465	13	473	2	66	.8	28	22	582	9.42	19	5	ND	2	5	1	2	2	42	.16	.039	2	30	1.01	43	.04	4	3.16	.01	.14	1	12
P 7466	28	17	2	74	2	38	25	725	10.19	27	3	ND	2	4	3	3	2	55	.19	.026	2	62	1.61	36	.05	2	3.82	.01	.25	1	3
P 7467	13	236	2	72	6	33	21	669	9.18	23	5	ND	3	5	1	3	1	65	.23	.032	2	54	1.52	43	.08	3	2.84	.01	.23	2	19
STD C/AU-R	19	62	42	132	7.0	72	31	1039	4.27	44	20	8	39	52	20	38	23	81	.59	.086	42	55	.59	180	.07	38	1.90	.08	.12	12	510

88-5901-11-35

ELEMENT	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	PPB	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
P 7+00S	1	157	11	87	6	36	9	248	3.28	9	5	ND	1	82	1	6	3	46	3.03	.022	2	84	.78	32	.16	7	2.53	.16	.26	1	685
P 7+50S	1	241	12	25	1	13	9	243	1.53	11	5	ND	1	95	1	1	1	58	3.15	.023	2	41	.70	19	.15	5	4.29	.20	.15	1	20

MUREX (TMC) NMX-88-24

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: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: NOV 18 1988 DATE REPORT MAILED: Nov 23/88 SIGNED BY C. Leong ..D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8811-036 177 File # 88-5925 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
R 7470	5	71	2	56	.3	42	19	850	4.28	7	5	ND	1	42	1	2	2	91	2.22	.042	2	87	1.93	21	.15	2	3.26	.12	.15	1	2
R 7471	2	55	2	81	.1	32	15	953	5.31	11	5	ND	1	43	1	2	2	54	1.22	.039	2	67	1.73	32	.12	2	3.59	.12	.29	1	1
R 7472	10	107	2	119	.1	35	20	1042	9.75	16	5	ND	1	21	1	2	2	121	.81	.031	3	78	2.15	49	.06	3	5.28	.11	.48	1	27
R 7473	13	382	6	61	.1	35	26	863	10.76	67	5	ND	2	7	1	2	2	101	.17	.031	5	63	1.66	23	.04	2	4.32	.01	.11	1	35
R 7474	9	131	2	76	.1	33	21	713	7.87	59	5	ND	1	24	1	2	2	99	.60	.049	2	66	1.35	21	.05	2	3.84	.07	.13	1	45
R 7475	1	60	6	62	.1	50	25	453	5.65	30	5	ND	1	66	1	2	2	187	1.27	.050	2	93	1.61	56	.13	5	3.96	.19	.55	1	3
R 7476	13	292	2	108	.2	59	35	892	11.88	52	5	ND	1	16	1	2	2	198	.31	.026	4	96	2.12	63	.09	5	5.60	.06	.53	1	25
R 7477	27	1165	2	141	2.2	32	39	1053	14.22	14	5	ND	2	5	1	2	2	198	.12	.029	3	66	1.83	25	.05	4	4.31	.03	.11	2	33
R 7478	9	564	2	81	.5	16	19	720	8.41	6	5	ND	1	12	1	2	2	72	.20	.035	2	38	1.23	22	.05	2	3.28	.03	.11	1	27
R 7479	15	328	6	110	.3	25	17	962	6.45	8	5	ND	1	19	1	2	2	92	.45	.036	2	66	1.74	39	.09	2	3.85	.05	.21	1	13
R 7480	9	357	6	128	.2	60	26	1135	9.30	9	5	ND	1	22	1	2	2	151	.82	.054	2	115	2.82	44	.16	2	4.76	.07	.55	1	6
R 7481	4	167	5	85	.1	60	22	982	5.80	5	5	ND	1	46	1	2	2	117	1.75	.041	2	88	2.16	24	.18	3	4.31	.17	.29	2	1
R 7482	3	167	3	69	.1	64	31	819	8.24	28	5	ND	1	22	1	2	2	158	.93	.035	2	110	2.53	72	.20	2	4.12	.10	.75	1	4
R 7483	4	230	7	124	.1	66	25	1219	8.58	14	5	ND	1	26	1	2	2	157	1.17	.034	2	153	3.20	38	.23	2	4.77	.07	.65	1	2
R 7484	3	249	3	109	.1	60	22	1048	7.40	5	5	ND	1	36	1	2	2	150	1.24	.041	2	145	3.06	41	.22	2	4.87	.12	.62	1	3
R 7485	5	413	20	127	.1	53	24	1002	12.06	22	5	ND	1	18	1	2	2	102	.59	.041	2	97	3.05	18	.14	2	5.27	.07	.22	1	37
R 7486	3	97	3	159	.1	54	23	1310	13.73	14	5	ND	2	7	1	2	2	186	.28	.037	2	151	3.08	21	.08	4	5.46	.03	.10	1	8
R 7487	2	116	8	145	.1	56	23	1118	12.67	9	5	ND	2	10	1	2	2	174	.32	.034	2	139	3.90	70	.10	2	6.32	.04	.35	6	12
R 7488	3	53	2	46	.1	12	15	437	5.25	7	5	ND	1	8	1	4	2	26	.27	.042	2	17	.97	30	.02	2	2.31	.03	.08	2	1
R 7489	2	1382	2	162	1.4	39	36	1335	18.49	3	5	ND	2	2	1	2	2	137	.13	.041	2	131	2.89	7	.05	2	7.13	.01	.03	1	250
R 7490	2	276	17	153	.3	46	27	1295	17.78	9	5	ND	2	2	2	2	2	199	.12	.028	2	148	3.36	29	.06	2	7.53	.07	.15	1	81
R 7491	2	563	2	129	.8	57	29	1078	15.17	13	5	ND	2	4	1	2	2	134	.16	.029	2	109	2.64	47	.09	4	6.31	.01	.35	6	78
R 7492	1	763	2	138	.9	50	33	1391	15.66	4	5	ND	2	3	1	2	2	153	.12	.035	2	100	2.50	19	.06	7	6.36	.01	.11	1	156
R 7493	1	538	9	122	.6	29	29	1125	14.32	15	5	ND	2	3	1	3	2	134	.13	.038	2	116	2.32	18	.05	2	5.92	.01	.11	2	430
R 7494	1	725	8	141	.9	36	30	1128	15.50	8	5	ND	2	3	1	2	2	152	.13	.035	2	96	2.48	15	.06	2	6.15	.01	.10	3	86
R 7495	1	956	12	165	.5	49	34	1457	18.41	8	5	ND	2	5	1	2	2	191	.11	.038	10	133	2.89	10	.02	2	7.27	.01	.05	1	65
R 7496	4	869	6	144	.6	47	26	1161	15.42	13	5	ND	2	3	1	2	2	158	.16	.036	2	123	2.67	34	.07	2	6.59	.01	.27	2	56
R 7497	5	872	2	154	1.1	56	26	1302	15.84	13	5	ND	2	1	1	2	2	174	.11	.035	2	120	2.68	19	.06	4	6.64	.01	.10	5	21
R 7498	1	62	11	97	.2	51	19	755	9.25	7	5	ND	1	37	1	2	2	137	1.23	.045	2	112	2.21	105	.16	2	5.92	.15	.95	1	8
R 7499	3	495	1	116	.5	45	32	998	15.16	8	5	ND	2	4	1	2	2	126	.14	.029	2	90	2.21	16	.05	2	5.68	.01	.09	4	220
R 7500	3	971	7	103	.4	37	29	895	12.50	12	5	ND	1	8	2	2	2	101	.18	.042	3	63	1.87	13	.05	2	4.90	.02	.08	3	457
R 7501	2	807	3	154	1.4	46	26	1325	19.24	5	5	ND	3	2	2	2	2	188	.11	.033	2	162	2.84	12	.06	2	7.63	.01	.09	1	220
R 7502	1	963	11	137	1.7	58	34	1204	19.31	13	5	4	2	1	3	2	2	182	.11	.032	2	140	2.67	12	.03	4	7.06	.01	.10	210	1515
R 7503	5	879	5	127	.9	52	23	1045	17.29	5	5	4	3	1	2	2	2	171	.10	.035	2	116	2.49	43	.08	2	6.37	.01	.42	58	1070
R 7504	3	1183	3	120	1.3	43	30	1015	15.53	16	5	ND	2	2	1	2	3	143	.12	.033	2	99	2.30	20	.05	2	5.80	.01	.14	22	138
R 7505	6	924	14	147	1.2	61	31	1059	16.95	9	5	ND	2	5	1	2	2	169	.20	.024	2	133	2.38	40	.05	2	6.44	.02	.26	132	445
STD C AU-R	19	61	43	135	6.8	68	31	1033	4.26	42	18	8	39	49	19	18	23	61	.50	.087	40	55	.84	177	.07	34	1.96	.06	.13	12	510

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
R 7505	1	1219	11	155	3.0	61	39	1235	18.19	5	5	ND	2	3	1	2	3	173	.14	.039	2	129	2.48	18	.05	7	6.45	.01	.09	22	350
R 7507	1	1185	16	148	1.5	53	29	1201	13.86	9	5	ND	1	5	1	2	2	156	.22	.040	2	97	2.65	18	.06	2	5.63	.03	.12	7	41
R 7508	9	194	8	76	.3	53	22	748	5.59	2	5	ND	1	22	1	2	2	96	.84	.045	2	116	2.46	35	.17	2	3.26	.05	.45	1	7
R 7509	5	122	7	82	.2	48	19	809	5.95	18	5	ND	1	34	2	2	3	96	1.19	.041	2	92	2.24	49	.12	3	2.25	.09	.50	3	1
R 7510	1	463	20	139	.3	66	41	1300	13.62	10	5	ND	1	18	1	2	2	164	.61	.038	2	119	2.30	20	.06	3	5.20	.06	.09	1	520
R 7511	1	26	7	49	.1	11	7	471	3.18	7	5	ND	1	18	1	2	2	26	.49	.046	2	10	.95	8	.03	2	1.96	.06	.04	2	1
R 7512	1	111	10	99	.2	41	19	675	8.02	6	5	ND	1	25	1	2	2	131	.49	.047	2	66	2.24	69	.11	2	3.88	.07	.34	2	13
R 7513	2	93	13	86	.1	34	16	882	7.37	9	5	ND	1	22	1	2	2	93	.53	.040	2	69	1.98	44	.08	3	3.87	.08	.20	4	4
R 7514	1	79	9	79	.1	23	14	824	7.08	4	5	ND	1	17	1	2	3	77	.44	.051	2	38	1.75	49	.06	2	3.59	.07	.14	1	48
R 7515	1	47	3	46	.1	19	12	438	4.27	2	5	ND	1	22	1	2	2	44	.47	.041	2	26	1.18	52	.09	2	1.95	.06	.32	1	1
R 7516	1	372	18	116	.2	49	40	1010	11.77	7	5	ND	1	20	1	2	2	122	.38	.049	2	79	2.25	67	.10	3	4.53	.08	.53	4	250
R 7517	1	67	10	72	.1	45	20	663	5.85	5	5	ND	1	33	1	2	2	100	.81	.044	2	60	2.29	48	.15	2	3.62	.09	.71	2	1
R 7518	1	75	2	55	.1	38	17	523	4.65	5	5	ND	1	39	1	2	3	92	.90	.046	2	70	1.86	76	.16	3	3.16	.11	.77	2	1
R 7519	1	178	15	62	.1	53	24	584	5.56	8	5	ND	1	60	1	2	3	102	1.71	.046	2	102	1.99	61	.16	5	4.18	.13	.68	2	1
R 7520	1	84	10	69	.2	45	16	504	5.45	7	5	ND	1	43	1	2	2	106	1.03	.046	2	78	2.01	63	.16	2	3.47	.10	.77	1	2
R 7521	1	89	16	89	.1	39	15	522	4.38	5	5	ND	1	56	1	2	2	88	1.45	.041	2	61	1.60	64	.15	6	3.43	.12	.53	2	1
R 7522	1	83	7	61	.2	45	15	537	4.68	2	5	ND	1	64	1	2	3	91	1.41	.038	2	70	1.70	80	.15	2	3.69	.13	.55	2	1
R 7523	1	92	13	66	.1	45	17	523	4.38	6	5	ND	1	80	1	2	2	88	1.68	.042	2	74	1.65	72	.16	4	3.41	.12	.55	3	1
R 7524	1	52	10	57	.1	47	15	562	4.62	2	5	ND	1	92	1	2	2	90	1.63	.042	2	87	1.67	55	.17	2	3.41	.14	.51	2	1
R 7525	1	81	6	72	.1	49	15	556	3.86	3	5	ND	1	63	1	2	1	85	1.57	.044	2	77	1.55	55	.15	4	3.46	.16	.53	1	1
R 7526	1	86	12	101	.1	42	18	644	4.19	3	5	ND	1	55	1	2	2	78	1.25	.043	2	73	1.61	74	.14	2	3.03	.11	.49	2	1
R 7527	1	95	6	207	.1	61	27	666	3.90	2	5	ND	1	54	1	2	2	72	1.18	.040	2	70	1.52	86	.14	3	3.09	.13	.39	2	1
R 7528	1	72	9	213	.2	35	13	524	3.65	2	5	ND	1	47	1	2	2	80	1.36	.045	2	71	1.57	48	.15	5	3.01	.14	.37	1	1
R 7529	1	129	15	133	.2	36	15	502	3.56	22	5	ND	1	92	1	2	4	75	2.43	.040	2	51	1.19	54	.13	2	2.96	.14	.37	1	4
R 7530	1	91	4	65	.1	42	11	448	3.07	4	5	ND	1	67	1	2	2	71	1.49	.042	2	74	1.44	54	.15	4	3.03	.17	.52	7	1
R 7531	1	56	6	54	.2	26	12	387	2.69	7	5	ND	1	70	1	2	4	57	2.00	.040	2	59	1.06	26	.14	2	3.19	.19	.16	2	1
R 7532	1	53	6	105	.1	39	12	539	3.26	6	5	ND	1	56	1	2	2	74	1.62	.038	2	67	1.28	39	.14	2	3.18	.18	.33	1	1
R 7533	1	62	3	131	.2	28	10	356	2.48	2	5	ND	1	46	1	2	2	54	1.28	.048	2	45	.98	38	.13	2	2.17	.14	.33	1	1
R 7534	1	39	6	45	.2	32	16	339	2.49	2	5	ND	1	57	1	2	2	58	1.39	.037	2	46	1.00	34	.14	2	2.47	.17	.31	2	1
R 7535	1	106	7	37	.1	15	9	312	2.67	2	5	ND	1	62	1	2	2	63	1.85	.043	2	51	.88	18	.17	2	2.83	.19	.17	1	1
R 7536	1	31	2	51	.1	15	7	322	2.29	5	5	ND	1	63	1	2	3	41	.87	.045	2	27	.76	40	.10	2	1.54	.10	.27	1	1
R 7537	1	84	6	38	.2	20	12	274	2.50	3	5	ND	1	52	1	2	2	56	1.62	.044	2	45	.89	24	.16	2	2.48	.16	.22	2	1
R 7538	1	52	5	35	.1	30	13	329	2.89	6	5	ND	1	48	1	2	2	61	1.29	.046	2	49	1.06	33	.14	2	2.37	.15	.31	2	1
R 7539	1	59	11	35	.1	37	14	353	1.97	2	5	ND	1	48	1	2	2	66	1.49	.042	2	61	1.25	26	.17	2	2.52	.16	.34	1	1
R 7540	1	89	7	37	.1	35	14	302	2.95	2	5	ND	1	46	1	2	2	63	1.29	.038	2	49	1.26	34	.17	3	2.63	.15	.64	2	1
R 7541	1	65	2	31	.1	31	12	252	2.31	2	5	ND	1	47	1	2	2	57	1.97	.045	2	46	1.06	29	.15	3	3.40	.17	.55	1	1
STD C/AU-R	19	62	44	132	6.8	69	31	1036	4.20	42	18	8	38	46	19	18	19	60	.49	.098	40	55	.94	176	.07	34	1.95	.06	.13	12	510

MUREX (TM) NMX-88-24 88//-036

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

DATE RECEIVED: NOV 25 1988
DATE REPORT MAILED: Nov. 30/88

ASSAY CERTIFICATE

- SAMPLE TYPE: Pulp AU** BY FIRE ASSAY FROM 1/2 A.T.

SIGNED BY. C. Leong D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8811-036 177 FILE # 88-5925R

SAMPLE#	AU** oz/t
R 7502	.044
R 7503	.027

APPENDIX IV

SOIL GEOCHEMISTRY ANALYSES

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716 DATE RECEIVED: MAR 17 1988
DATE REPORT MAILED: Mar 22/88

GEOCHEMICAL ANALYSIS CERTIFICATE

- SAMPLE TYPE: SOIL PULP
AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: C. Leong. D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT-8803-031 177 File # 88-0791 Page 1

SAMPLE#	Submitted Sample Wt (g)	AU* ppb	87-5774 Au	8711 - 22
506E 9075N		7	9	
506E 9050N		27	635	
506E 9025N		37	15	
506E 8725N		25	96	
506E 8700N	9.5	4	12	
506E 8450N	4.2	1	11	
506E 8400N	3.1	1	14	
510E 9450N		2	3	
510E 9425N		25	42	
510E 9400N		11	2	
510E 8925N		12	1	
510E 8900N	8.7	2	41	
510E 8875N		1	74	
510E 8825N	6.5	1	1	
511E 9575N	5.4	93	860	
511E 9550N	4.6	4	17	
511E 9525N	4.4	6	190	
511E 9100N		11	3	
511E 9075N		3	130	
511E 9050N	6.6	92	12	
513E 9525N		7	16	
513E 9500N		13	71	
513E 9475N		109	13	
514E 9700N		34	6	
514E 9675N		47	76	
514E 9650N	8.1	672	174	
514E 9625N		20	53	
514E 9600N		2	1	
514E 9525N		4	4	
514E 9500N		37	47	
514E 9475N		6	76	
514E 9450N		6	12	
514E 9425N		13	2	
514E 9400N		11	6	
50900E 10050N		6	31	8711-24
50900E 10025N		25	17	

SAMPLE#	AU* ppb	
50900E 10000N	505	[illegible]
50900E 9975N	9	[illegible]
51100E 10050N	16	[illegible]
51100E 10025N	41	[illegible]
51100E 10000N	13	[illegible]
51300E 11100N	35	[illegible]
51300E 11075N	102	[illegible]
51300E 11050N	71	[illegible]
51300E 11025N	86	[illegible]
51300E 11000N	44	[illegible]
51300E 10975N	118	[illegible]
51300E 10925N	65	[illegible]
51400E 11000N	71	[illegible]
51400E 10975N	56	[illegible]
51400E 10950N	48	[illegible]
51400E 10925N	28	[illegible]
51400E 10900N	41	[illegible]
51400E 10875N	8	[illegible]
51400E 10850N	44	[illegible]
51400E 10825N	61	[illegible]
51400E 10800N	89	[illegible]
51400E 10775N	51	[illegible]
51400E 10750N	38	[illegible]
51400E 10725N	67	[illegible]
51400E 10700N	72	[illegible]
51400E 10675N	28	[illegible]
51400E 10650N	45	[illegible]
51400E 10625N	64	[illegible]
51400E 10600N	26	[illegible]
51400E 10575N	31	[illegible]
51400E 10550N	26	[illegible]
51400E 10525N	14	[illegible]
51400E 10500N	19	[illegible]
51400E 10475N	12	[illegible]
51500E 10925N	316	[illegible]
51500E 10875N	39	[illegible]

SAMPLE#		AU# ppb	
51500E	10850N	57	65
51500E	10825N	43	112
51500E	10800N	118	109
51500E	10750N	45	77
51500E	10700N	12	135
51500E	10675N	42	69
51500E	10650N	113	110
51500E	10600N	92	82
51500E	10575N	46	56
51500E	10250N	22	132
51500E	10000N	9	870
51600E	10800N	117	52
51600E	10775N	63	162
51600E	10750N	145	73
51600E	10700N	82	109
51600E	10675N	68	230
51600E	10650N	112	156
51600E	10600N	83	98
51600E	10575N	75	57
51600E	10550N	39	54
51700E	11350N	23	110
51700E	11325N	62	52

NORANDA VANCOUVER LABORATORY

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PROPERTY/LOCATION: MUREX CODE :8805-035

Project No. : 177 Sheet:1 of 3 Date rec'd:MAY13
Material :25S SOILS Geol.:D.B. Date compl:MAY26
Remarks :Au - unroasted

Values in PPM, except where noted.

T. No.	SAMPLE No.	Cu	Ag	As	PPB Au
2	525E - 10725N	150	0.4	70	20
3	10750	160	0.4	80	10
4	10775	120	0.6	64	20
5	10800	60	0.2	34	10
6	10825	110	0.2	58	20
7	10875	120	0.2	22	10
8	10900	100	0.4	34	10
9	10925	110	0.2	86	10
10	10950	100	0.2	64	10
11	10975	100	0.2	84	10
12	11000	120	0.4	54	10
13	11025	120	0.2	28	10
14	11050	170	0.8	74	10
15	11075	110	0.2	26	10
16	11100	70	0.4	52	10
17	11125	74	0.2	74	10
18	11150	120	0.2	76	20
19	11175	100	0.2	240	10
20	11225	120	0.2	100	30
21	11250	130	0.4	76	20
22	525E - 11300N	88	0.2	86	10
23	527E - 8800N	36	0.2	28	10
24	8825	76	0.4	14	10
25	8850	70	0.4	6	10
26	8875	30	0.2	1	10
27	8900	100	0.4	16	20
28	8925	40	0.6	1	10
29	8950	180	11.0	4000	290
30	8975	120	3.6	650	130
31	9000	120	0.4	160	10
32	9075	100	0.2	160	10
33	9100	82	0.2	150	10
34	9150	190	0.4	180	10
35	9175	180	0.2	140	10
36	9200	120	0.8	86	10
37	9225	240	1.6	150	10
38	9300	170	0.6	80	10
39	9325	120	1.0	92	20
40	9350	100	1.2	100	20
41	9375	240	1.4	120	10
42	9400	180	1.2	130	10
43	9425	150	0.4	80	10
44	9475	140	0.6	100	10
45	9500	220	0.6	86	100
46	9525	210	0.4	80	10
47	9550	190	0.4	56	20
48	9575	150	0.6	80	20
49	527E - 9600N	250	0.4	90	10

May 31/88 [illegible]

T.T. No.	SAMPLE No.	Cu	Ag	As	PPB Au
50	527E - 9625N	170	1.2	94	10
51	9650	1500	2.6	510	50
52	9675	290	0.8	110	20
53	9700	160	1.0	100	20
54	9725	120	1.0	90	10
55	9750	310	0.8	110	80
56	9775	110	0.6	80	10
57	9800	130	0.6	88	30
58	9825	270	0.8	160	10
59	9875	190	0.4	120	10
60	9925	160	0.4	90	10
61	9950	240	0.4	130	10
62	9975	66	0.4	110	20
63	10050	150	0.4	120	10
64	10075	130	0.4	90	10
65	10100	210	0.2	150	10
66	10125	110	0.4	70	10
67	10150	150	0.2	90	10
68	10175	110	0.4	82	10
69	10200	200	0.4	80	10
70	10225	220	0.4	120	10
71	10250	390	0.4	170	30
72	10275	490	1.2	180	10
73	10300	120	0.2	74	10
74	10325	150	0.4	98	10
75	10350	100	0.4	80	10
76	10375	190	0.6	96	10
77	10400	190	0.4	90	10
78	10425	96	0.4	60	300
79	10450	140	0.4	74	10
80	10475	74	0.4	62	10
81	10500	96	0.4	66	10
82	10525	120	0.6	64	10
83	10550	170	1.0	98	10
84	10575	130	0.4	88	10
85	10600	120	0.6	68	10
86	10625	28	0.2	10	10
87	10675	60	0.4	96	10
88	10700	110	0.2	70	10
89	10725	210	0.2	100	10
90	10750	180	0.2	98	10
91	10775	150	0.4	66	10
92	10800	120	0.2	62	10
93	10825	170	0.4	96	10
94	10850	180	0.4	90	10
95	10875	110	0.4	56	10
96	10900	200	0.2	88	10
97	10925	130	0.6	84	10
98	10950	120	0.6	120	10
99	527E - 10975N	46	0.4	78	10
100	CHECK NL-5	26	1.4	56	--
101	527E - 11000N	140	0.8	120	580
102	529E - 9000N	190	0.6	120	10
103	9075	110	1.0	90	20
104	9100	300	0.4	130	40
105	9125	88	0.4	64	10
106	529E - 9150N	280	0.4	110	10

T.T. No.	SAMPLE No.	Cu	Ag	As	PPB Au
					8805-035 Pg. 3 of 5
107	529E - 9175N	200	0.6	120	10
108	9200	110	0.4	110	10
109	9225	80	0.4	100	10
110	9250	240	1.6	110	20
111	9350	130	1.2	84	10
112	9375	130	0.6	96	10
113	9400	82	0.6	86	10
114	9425	130	0.4	74	20
115	9450	100	0.6	62	10
116	9475	110	1.0	100	40
117	9500	160	1.0	150	20
118	9525	160	0.6	160	10
119	9550	190	0.2	76	10
120	9575	140	1.2	150	10
121	9650	150	0.6	110	50
122	9675	100	0.8	100	10
123	9700	260	0.6	100	10
124	9750	220	0.4	120	10
125	9775	34	0.4	14	90
126	9800	140	0.8	88	30
127	9825	200	0.8	14	20
128	9850	130	0.8	120	10
129	9875	140	0.2	100	10
130	9900	34	0.2	86	10
131	9925	150	0.8	92	140
132	9950	160	0.6	120	10
133	529E - 9975N	120	0.6	150	10
134	531E - 9100N	100	0.4	22	10
135	9125	140	0.4	32	10
136	9200	190	1.0	98	10
137	9225	180	1.6	54	10
138	9250	200	0.6	68	10
139	9275	100	0.4	160	10
140	9300	160	0.2	86	10
141	9325	72	1.0	130	30
142	9350	140	0.4	120	10
143	9375	190	0.4	110	10
144	9400	150	0.6	140	20
145	9425	300	0.6	350	40
146	9450	130	0.8	48	20
147	9475	160	1.6	88	10
148	9500	110	0.8	36	50
149	9550	84	0.4	40	10
2	9575	74	0.4	20	30
3	9600	170	0.4	70	20
4	9625	210	0.6	120	40
5	9650	240	0.6	110	20
6	9675	84	0.2	66	20
7	9700	190	0.4	190	30
8	9725	210	0.4	110	20
9	9750	140	0.2	68	30
10	9775	130	0.2	70	10
11	9800	170	0.4	70	40
12	9850	140	0.4	150	20
13	9875	120	0.4	40	20
14	9900	180	0.4	46	10
15	531E - 9925N	60	0.2	42	10

T.T. No.	SAMPLE No.	Cu	Ag	As	PPB Au
					8805-035 Pg. 4 of 5
16	531E - 9950N	170	0.6	88	20
17	9975	190	0.6	140	20
18	10025	130	1.6	110	20
19	10075	240	0.6	190	40
20	10100	88	0.4	120	10
21	10125	90	0.4	96	30
22	10150	130	0.4	84	20
23	10175	140	0.6	76	10
24	10200	130	0.4	72	70
25	10225	100	0.2	76	20
26	10250	220	0.4	100	20
27	531E - 10300N	140	0.2	120	30
28	533E - 9200N	28	0.2	1	10
29	9225	68	0.4	36	10
30	9300	120	0.2	58	40
31	9325	40	0.4	56	20
32	9350	40	0.2	54	20
33	9375	220	0.6	100	40
34	9400	180	0.2	74	30
35	9425	120	0.2	100	20
36	9450	200	0.6	94	30
37	9475	180	0.6	130	20
38	9500	82	0.2	66	20
39	9525	60	0.4	64	10
40	9575	74	0.2	56	30
41	9600	88	0.2	58	10
42	9625	220	0.2	100	20
43	9650	140	0.2	100	30
44	9675	110	0.2	84	20
45	9750	150	0.6	52	20
46	9775	170	0.4	76	20
47	9800	88	0.4	64	10
48	9825	120	0.4	110	20
49	9850	110	0.2	78	10
50	9875	90	0.6	66	20
51	9900	120	0.4	82	10
52	9925	74	0.2	50	10
53	9950	220	0.2	100	10
54	533E - 9975N	110	0.2	20	10
55	535E - 9300N	110	0.2	58	10
56	9325	140	0.2	130	20
57	9350	86	0.2	140	10
58	9375	120	0.2	120	40
59	9400	170	0.2	64	20
60	9425	92	0.4	12	10
61	9475	150	0.2	42	10
62	9500	150	0.2	62	20
63	9525	24	0.2	8	10
64	9550	140	0.2	70	10
65	9575	140	0.2	44	10
66	9600	120	0.4	30	20
67	9625	120	0.4	44	10
68	9650	130	0.2	26	10
69	9700	130	0.2	54	10
70	9725	100	0.2	28	20
71	9750	82	0.2	40	10
72	535E - 9775N	120	0.2	100	10

T.T. No.	SAMPLE No.	Cu	Ag	As	PPB Au
					8805-035 Pg. 5 of 5
73	535E - 9800N	94	0.2	92	10
74	9825	130	0.2	56	70
75	9850	130	0.2	90	20
76	9875	160	0.2	92	140
77	9900	130	0.2	16	10
78	9925	140	0.2	32	20
79	535E - 9950N	90	0.4	36	10
80	100N - 526E	270	0.6	130	40
81	52625	220	0.8	120	20
82	52650	150	0.6	120	10
83	52700	140	0.4	110	30
84	52725	210	0.4	180	20
85	52750	200	0.4	160	30
86	52775	160	0.4	120	20
87	52800	130	1.6	440	20
88	52825	110	0.2	180	50
89	52850	96	0.4	150	10
90	52875	190	0.4	220	50
91	52900	150	0.2	80	390
92	52925	100	0.2	52	10
93	52950	120	0.4	56	20
94	52975	96	0.4	98	10
95	53000	120	0.6	92	10
96	53025	180	0.8	110	20
97	53050	240	1.0	140	20
98	53100	160	0.4	98	10
99	100N - 531506	110	0.2	80	20
100	CHECK NL-5	28	1.4	52	-
101	100N - 53175E	150	0.4	74	10
102	53225	130	0.2	36	10
103	53250	80	0.4	30	10
104	53275	62	0.4	32	10
105	53300	140	0.2	60	10
106	53325	84	0.2	26	10
107	53350	80	0.4	44	10
108	53375	78	0.2	44	10
109	53425	90	0.2	58	50
110	100N - 53475E	90	0.2	36	10

Murex (DB) 8807-047

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

DATE RECEIVED: JULY 11 1988
DATE REPORT MAILED: July 15/88.

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-P4 SOIL P5 SOIL/SILT P6 ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

ASSAYER: C. Leong D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8807-047 177 File # 88-2590 Page 1

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
L514E 89+00N	47	.1	58	94
L514E 88+50N	383	.2	50	17
L514E 88+00N	85	.1	59	21
L514E 87+50N	39	.1	49	8
L514E 87+00N	55	.3	250	2
L514E 86+50N	24	.1	579	1
L514E 86+00N	49	.1	55	10
L514E 85+50N	152	.1	94	30
L514E 85+00N	77	.1	64	2
L514E 84+00N	21	.1	22	7
L514E 83+00N	166	.1	29	10
L514E 82+50N	74	.1	22	11
L514E 82+00N	83	.4	37	4
L514E 81+50N	126	.1	52	16
L515E 99+50N	247	.1	152	8
L515E 99+00N	252	.5	146	71
L515E 98+00N	267	.4	143	12
L515E 95+00N	56	.1	49	45
L515E 94+50N	229	.2	91	13
L515E 94+00N	239	.2	96	19
L515E 93+00N	492	.2	3920	13
L515E 92+50N	194	.5	79	1
L515E 92+00N	144	.1	31	1
L515E 91+50N	122	.1	73	87
L515E 91+00N	111	.1	44	6
L515E 90+50N	60	.1	35	4
L515E 90+00N	117	.2	60	23
L515E 89+50N	71	.1	44	13
L515E 89+00N	48	.1	37	65
L515E 88+50N	36	.1	43	19
L515E 88+00N	147	.2	77	14
L515E 87+50N	232	.1	125	13
L515E 87+00N	62	.3	692	7
L515E 86+50N	29	.1	134	2
L515E 86+00N	32	.1	157	4
L515E 85+50N	57	.1	95	4
STD C/AU-S	58	7.2	43	52

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
L515E 85+00N	68	.1	27	1
L515E 84+50N	123	.2	56	1
L515E 84+00N	68	.1	58	15
L515E 83+00N	18	.1	15	1
L515E 82+50N	94	.2	17	73
L515E 82+00N	62	.1	12	5
L515E 81+50N	53	.1	21	1
L515E 81+00N	66	.1	412	1
L517E 99+50N	219	.3	129	21
L517E 99+00N	164	.2	117	17
L517E 98+50N	164	.3	111	82
L517E 97+50N	120	.2	90	4
L517E 95+50N	245	.2	157	9
L517E 95+00N	232	.6	120	3
L517E 94+50N	417	.5	700	1
L517E 94+00N	676	.5	870	4
L517E 93+50N	245	.5	138	11
L517E 93+00N	189	.1	95	9
L517E 92+50N	249	.2	85	1
L517E 92+00N	462	.5	330	15
L517E 91+50N	262	.3	63	9
L517E 90+00N	94	.4	52	4
L517E 89+50N	67	.2	60	1
L517E 89+00N	111	.1	158	52
L517E 88+50N	47	.1	102	7
L517E 88+00N	86	.1	40	3
L517E 87+50N	52	.3	52	4
L517E 87+00N	70	.3	49	3
L517E 86+50N	34	.3	29	5
L517E 86+00N	54	.1	23	1
L517E 85+50N	52	.1	25	1
L517E 85+00N	71	.3	16	1
L517E 84+50N	145	.2	31	1
L517E 83+50N	119	.2	84	57
L517E 83+00N	34	.1	25	8
L519E 99+50N	100	.4	144	30
STD C/AU-S	58	7.1	39	52

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
L519E 99+00N	176	.5	134	50
L519E 98+50N	259	.5	121	47
L519E 98+00N	163	.3	106	21
L519E 97+50N	163	.8	74	102
L519E 97+00N	170	.4	86	14
L519E 96+50N	164	.2	95	9
L519E 96+00N	331	.4	122	16
L519E 95+50N	2004	5.7	482	135
L519E 95+00N	1222	4.5	535	149
L519E 94+50N	376	.8	123	18
L519E 94+00N	428	1.0	167	13
L519E 93+50N	134	.1	143	13
L519E 93+00N	135	.1	128	55
L519E 92+50N	250	.4	165	12
L519E 92+00N	57	.3	354	3
L519E 91+50N	197	.3	185	14
L519E 91+00N	276	.5	68	7
L519E 90+50N	120	.4	70	12
L519E 90+00N	56	.2	165	2
L519E 89+00N	69	.2	54	20
L519E 88+50N	51	.2	87	8
L519E 88+00N	112	.1	108	10
L519E 87+50N	40	.1	41	28
L519E 87+00N	90	.3	40	3
L519E 86+50N	169	.2	149	7
L519E 86+00N	51	.1	35	1
L519E 85+50N	118	.2	51	19
L519E 85+00N	77	.2	33	18
L519E 84+00N	95	.1	33	4
L519E 83+50N	78	.3	22	1
L519E 81+50N	24	.1	17	1
L519E 81+00N	91	.2	22	4
L521E 99+50N	312	.6	255	88
L521E 98+50N	173	.3	143	26
L521E 97+50N	84	.2	68	126
L521E 97+00N	1555	9.2	880	82
STD C/AU-S	58	6.7	39	52

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
L521E 96+50N	72	.4	80	17
L521E 96+00N	126	.3	112	15
L521E 95+50N	111	.1	108	10
L521E 95+00N	1017	3.0	403	78
L521E 94+50N	69	.3	70	10
L521E 94+00N	256	.2	123	24
L521E 93+00N	222	.5	142	6
L521E 92+50N	177	.4	184	5
L521E 92+00N	166	.4	161	13
L521E 91+50N	155	.2	240	64
L521E 91+00N	202	.7	170	2
L521E 90+50N	307	.5	439	3
L521E 90+00N	277	.3	161	9
L521E 89+50N	71	.1	76	13
L521E 89+00N	141	.2	64	20
L521E 88+50N	39	.1	43	5
L521E 88+00N	113	.3	49	1
L521E 87+50N	37	.1	30	5
L521E 87+00N	111	.1	311	6
L521E 86+50N	83	.2	191	3
L521E 86+00N	33	.2	36	1
L521E 85+50N	35	.1	39	2
L521E 85+00N	88	.2	40	6
L521E 84+00N	62	.1	36	4
L521E 83+50N	68	.1	38	7
L523E 99+50N	205	.3	231	24
L523E 99+00N	256	.3	191	21
L523E 98+50N	342	.8	249	34
L523E 98+00N	189	.5	104	19
L523E 97+50N	254	.5	176	28
L523E 97+00N	235	.4	146	23
L523E 96+50N	102	.2	111	16
L523E 96+00N	101	.1	113	31
L523E 95+50N	198	.4	107	19
L523E 95+00N	173	.8	168	5
L523E 94+50N	287	.4	118	65
STD C/AU-S	57	6.6	40	53

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
L523E 94+00N	178	.7	117	23
L523E 93+50N	255	.3	164	29
L523E 93+00N	110	.2	93	11
L523E 92+50N	242	.6	115	15
L523E 92+00N	248	.3	167	8
L523E 91+50N	76	.3	101	5
L523E 91+00N	116	.6	87	11
L523E 90+00N	110	.4	118	5
L523E 89+50N	103	.2	176	13
L523E 89+00N	63	.2	81	11
L523E 88+50N	79	.4	62	5
L523E 88+00N	42	.2	36	7
L523E 87+50N	59	.1	66	275
L523E 87+00N	82	.1	31	66
L532E 99+50N	115	.2	64	15
L532E 99+00N	92	.4	50	9
L532E 98+50N	159	.3	163	22
L532E 98+00N	91	.4	97	16
L532E 97+00N	176	.6	165	72
L532E 96+50N	161	.3	87	16
L532E 96+00N	106	.2	86	9
L532E 95+50N	188	.5	131	13
L532E 95+00N	149	.1	115	21
L532E 94+50N	11	.6	6	8
43876 SILT	1380	2.9	444	114
43877 SILT	1079	3.0	381	136
43878 SILT	812	1.3	190	33
STD C/AU-S	57	6.6	41	52

NORANDA VANCOUVER LABORATORY

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PROPERTY/LOCATION: MUREX CODE :8807-074

Project No. : 177 Sheet:1 of 4 Date rec'd:JUL19

Material :170 SOILS Geol.:D.B./R.W. Date compl:AUG11

Remarks :

Values in PPM, except where noted.

T.T. No.	SAMPLE No.	Cu	Ag	As	PPB Au
2	51400E-8125N	96	0.2	20	10
3	8175	98	0.2	30	10
4	8225	34	0.2	10	10
5	8275	66	0.2	24	30
6	8325	90	0.2	38	10
7	8350	56	0.2	26	10
8	8375	12	0.2	12	10
9	8425	50	0.2	24	10
10	8475	78	0.2	54	10
11	8525	34	0.2	16	10
12	8625	34	0.2	120	10
13	8675	64	0.2	320	10
14	8725	42	0.2	410	10
15	8775	190	0.2	64	10
16	8825	280	0.2	100	10
17	51400E-8875N	48	0.2	28	10
18	51500E-8125N	130	0.2	40	10
19	8175	18	0.2	8	10
20	8225	72	0.2	26	10
21	8275	110	0.2	40	10
22	8325	18	0.2	16	10
23	8375	54	0.2	30	10
24	8575	40	0.2	54	10
25	8625	26	0.2	22	10
26	8675	28	0.2	44	10
27	8725	30	0.2	150	10
28	8775	72	0.2	50	10
29	8825	70	0.2	38	10
30	8875	120	0.2	46	10
31	8975	18	0.2	12	10
32	9025	86	0.2	66	20
33	9075	44	0.2	60	10
34	9125	86	0.2	64	10
35	9275	350	0.2	550	10
36	9325	420	0.2	1300	60
37	9425	210	0.2	92	10
38	9475	140	0.4	80	10
39	9525	260	0.4	200	10
40	9725	150	0.2	110	40
41	9825	220	1.0	140	30
42	9875	120	0.2	140	10
43	51500E-9925N	150	0.2	120	10
44	51700E-8275N	110	0.2	24	10
45	8325	32	0.2	16	10
46	8375	130	0.2	26	10
47	8425	98	0.2	22	10
48	8475	92	0.2	34	10
49	51700E-8525N	100	0.2	22	10

17/08 R.K. (D.B.) /...../12

T.T. No.	SAMPLE No.	Cu	Ag	As	PPB Au
					8807-074 Pg. 2 of 4
50	51700E-8575N	38	0.2	10	20
51	8625	74	0.2	66	40
52	8675	14	0.2	8	10
53	8725	54	0.2	48	10
54	8775	48	0.2	28	10
55	8825	14	0.2	1	10
56	8875	86	0.2	140	10
57	8925	60	0.2	42	20
58	8975	62	0.2	28	30
59	9225	230	0.2	260	40
60	9275	230	0.2	80	20
61	9325	220	0.2	400	10
62	9375	250	0.4	92	10
63	9425	170	0.2	94	10
64	9475	180	0.2	120	10
65	9525	210	0.2	180	10
66	9725	130	0.2	120	10
67	9775	340	0.2	100	10
68	9825	250	0.2	120	20
69	9875	88	0.2	92	10
70	9925	130	0.2	120	50
71	51700E-9975N	160	0.2	160	50
72	51900E-8125N	52	0.2	62	10
73	8225	64	0.2	12	10
74	8275	60	0.2	28	10
75	8375	82	0.2	36	10
76	8425	50	0.2	36	10
77	8475	62	0.2	46	10
78	8525	90	0.2	68	60
79	8575	82	0.2	72	10
80	8625	38	0.2	36	10
81	8675	76	0.2	68	10
82	8725	98	0.2	60	30
83	8775	44	0.2	48	20
84	8825	50	0.2	150	10
85	8875	160	0.2	120	10
86	8925	88	0.2	86	20
87	8975	94	0.2	94	40
88	9025	56	0.2	130	30
89	9075	240	0.2	86	20
90	9125	250	0.2	72	20
91	9175	190	0.2	470	40
92	9225	190	0.4	100	20
93	9275	92	0.2	100	10
94	9325	160	0.2	190	20
95	9375	400	0.2	180	20
96	9425	330	0.2	150	30
97	9475	290	0.2	150	10
98	9525	2000	4.4	540	870
99	51900E-9575N	160	0.2	94	40
100	CHECK NL-6	48	1.0	92	-
101	51900E-9625N	200	0.2	130	30
102	9675	240	0.2	120	10
103	9725	54	0.2	70	30
104	9775	120	0.2	100	10
105	9825	130	0.4	68	30
106	51900E-9875N	210	0.8	170	30

T. T. No.	SAMPLE No.	Cu	Ag	As	PPB Au
					8807-074 Pg. 3 of 4
107	51900E-9925N	270	1.0	80	40
108	51900E-9975N	180	0.2	150	20
109	52100E-8375N	50	0.2	40	10
110	8475	46	0.2	1400	10
111	8525	54	0.2	48	10
112	8575	24	0.2	10	10
113	8625	12	0.2	12	10
114	8725	60	0.2	72	10
115	8775	32	0.2	20	10
116	8825	100	0.2	34	10
117	8875	76	0.2	32	10
118	8925	120	1.6	700	60
119	8975	430	0.4	280	80
120	9025	140	0.2	140	10
121	9075	300	0.2	180	10
122	9125	170	0.2	110	10
123	9175	130	0.2	240	50
124	9225	170	0.2	110	50
125	9275	170	0.2	140	10
126	9325	470	0.2	220	140
127	9375	170	0.6	120	10
128	9425	190	0.2	120	10
129	9475	150	0.2	98	10
130	9525	1000	7.0	700	80
131	9575	240	0.2	170	20
132	9625	230	0.2	160	40
133	9675	130	0.2	120	10
134	9725	3200	6.8	900	910
135	9775	82	0.2	110	60
136	9825	380	0.2	210	20
137	9925	330	0.2	310	40
138	52100E-9975N	160	0.2	250	170
139	52300E-8325N	96	0.2	34	10
140	8775	34	0.2	50	10
141	8825	22	0.2	30	10
142	8875	62	0.2	62	10
143	8925	74	0.2	130	10
144	8975	90	0.2	78	10
145	9025	84	0.2	120	10
146	9075	250	0.6	250	10
147	9125	300	11.2	2900	340
148	9175	62	0.2	170	10
149	52300E-9275N	96	0.2	110	30
150	CHECK NL-6	48	0.8	82	-
151	52300E-9325N	120	0.2	82	20
152	9375	190	0.4	110	20
153	9425	250	0.2	110	20
154	9475	250	0.2	110	20
155	9525	160	0.2	140	20
156	9575	120	0.4	120	20
157	9675	360	0.2	210	110
158	9725	150	0.2	110	40
159	9775	1100	2.8	360	50
160	9875	350	0.2	170	30
161	9925	150	0.2	200	70
162	9975	190	0.2	380	240
163	52300E-9425N	72	0.4	82	50

T.T. No.	SAMPLE No.	Cu	Ag	As	PPB Au	8807-074 Pg. 4 of 4
164	52300E-9575N	82	0.2	88	20	
165	9625	150	0.2	140	10	
166	9675	80	0.2	96	20	
167	9725	82	0.2	120	10	
168	9775	110	0.2	96	30	
169	9825	110	0.2	100	10	
170	9875	140	0.2	130	10	
171	9925	84	0.2	72	10	
172	52300E-9975N	100	0.2	80	10	

NORANDA VANCOUVER LABORATORY

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PROPERTY/LOCATION: MOREX CODE :8808-070

Project No. : 177 Sheet:1 of 1 Date rec'd:AUG15
Material :28 SOILS Geol.:D.B. Date compl:SEPT02
Remarks :

Values in PPM, except where noted.

T.T. No.	SAMPLE No.	Cu	Ag	As	PPB Au
2	52800E-9575N	210	0.6	98	10
3	9600	200	0.6	140	50
4	9625	74	0.4	120	30
5	9650	120	0.4	130	20
6	9675	150	0.4	190	20
7	9725	210	0.8	140	10
8	9750	260	0.8	160	30
9	9775	160	0.6	110	10
10	9800	160	0.6	100	20
11	9825	200	0.6	130	10
12	9850	200	0.6	150	40
13	9875	160	0.6	170	20
14	9925	88	0.4	90	460
15	9950	240	1.0	160	30
16	52800E-9975N	170	0.6	170	10
17	53000E-9650N	160	0.4	84	290
18	9675	100	0.4	88	30
19	9700	120	0.6	110	10
20	9725	140	0.4	98	20
21	9750	130	0.4	96	20
22	9775	78	0.8	64	10
23	9800	150	0.4	76	20
24	9850	80	0.6	96	50
25	9875	260	1.0	150	30
26	9900	170	0.8	150	20
27	9925	130	0.8	140	40
28	9950	180	1.0	120	10
29	53000E-9975N	130	0.6	120	10

Sept BP RW Rk JP

NORANDA VANCOUVER LABORATORY

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PROPERTY/LOCATION:MUREX CODE :8811-018

Project No. :177 Sheet:1 of 1 Date rec'd:NOV.14
Material :42 SOILS Geol.:T.Mc. Date compl:NOV.21
Remarks :

Values in PPM, except where noted.

T.T. No.	SAMPLE No.	Cu	Ag	PPB Au
12	30075E-19860N	80	0.2	20
13	19870	70	0.2	10
14	19880	98	0.6	10
15	19890	140	0.4	10
16	19900	170	0.8	110
17	19920	910	3.8	800
18	19950	350	0.4	10
19	19960	180	0.2	10
20	19970	210	0.4	10
21	19990	68	0.4	10
22	20000	90	0.4	30
23	20010	120	0.4	20
24	20020	200	0.2	20
25	20040	82	0.2	10
26	20050	120	0.6	10
27	20060	170	0.4	10
28	20070	78	0.4	10
29	20080	130	0.4	10
30	20090	48	0.2	10
31	20100	170	0.4	10
32	20110	110	0.2	10
33	20130	120	0.6	10
34	20140	120	0.6	20
35	20150	140	0.2	170
36	20160	130	0.4	10
37	20170	180	0.6	10
38	20180	180	0.6	10
39	20190	110	1.4	10
40	20200	72	0.4	10
41	20210	170	1.0	10
42	20220	100	0.8	10
43	20230	60	0.4	10
44	20240	120	0.4	20
45	20250	490	0.6	10
46	20260	130	0.8	10
47	20270	270	0.4	10
48	20280	320	0.4	10
49	20300	160	0.6	10
50	20310	160	0.8	20
51	20320	330	0.6	10
52	20330	160	1.0	10
53	20340	170	0.6	10
54	30075E-20350N	160	0.4	10

NORANDA VANCOUVER LABORATORY

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PROPERTY/LOCATION:MUREX (D-ZONE) CODE : 8811-025

Project No. :177 Sheet:1 of 3 Date rec'd:NOV 14
Material :36 SOILS Geol.:T.Mc. Date compl:NOV.28
Remarks :* size fractions +40/-10, +80/-40 pulverized.
Values in PPM, except where noted.

T.T. No.		SAMPLE No.	Cu	*Cu	Ag	*Ag	% *Fe	PPB Au	PPB *Au	KK Au NL Geo. Partv.
43	57876	+40/-10	200	190	0.6	0.6	6.3	500	335	
44		+80/-40	210	220	1.0	0.6	6.6	800	2300	1500
45		-80	240	240	0.6	0.6	7.2	250	950	
46	57877	+40/-10	160	200	0.6	0.6	6.5	80	110	
47		+80/-40	210	220	0.8	0.6	6.5	500	150	
48		-80	230	260	0.6	0.6	7.5	300	325	
49	57878	+40/-10	170	200	0.6	0.6	6.3	250	600	
50		+80/-40	200	220	0.8	0.6	6.7	125	625	
51		-80	140	250	0.6	0.6	7.3	525	175	
52	57879	+40/-10	230	250	0.4	0.4	5.6	300	6750	
53		+80/-40	260	250	0.4	0.4	5.5	350	215	
54		-80	300	310	0.4	0.4	6.7	250	375	
55	57880	+40/-10	250	250	0.4	0.4	5.7	200	500	5400
56		+80/-40	280	260	0.6	0.4	5.7	150	210	
57		-80	290	280	0.4	0.4	5.8	230	1300	
58	57881	+40/-10	240	270	0.4	0.4	5.7	140	3900	
59		+80/-40	270	270	0.4	0.4	5.6	440	375	
60		-80	310	310	0.4	0.4	6.3	375	450	
61	57882	+40/-10	220	230	0.6	0.6	5.4	550	5400	5700
62		+80/-40	220	240	0.6	0.6	5.2	125	185	
63		-80	230	260	0.6	0.6	5.8	300	400	
64	57883	+40/-10	220	250	1.0	0.6	5.5	50	60	
65		+80/-40	250	250	0.8	0.6	5.4	60	150	
66		-80	250	260	0.8	0.6	5.8	250	65	
67	57884	+40/-10	270	280	0.6	0.6	5.5	100	170	
68		+80/-40	270	290	0.6	0.6	5.5	50	70	
69		-80	270	280	0.6	0.6	5.6	1100	90	250
70	57885	+40/-10	22	38	0.6	0.6	1.5	55	70	
71		+80/-40	30	30	0.6	0.6	1.2	50	5	
72		-80	24	20	0.4	0.4	0.9	10	10	
73	57886	+40/-10	98	120	0.8	0.6	3.0	30	15	
74		+80/-40	110	120	0.8	0.6	3.2	5	5	
75		-80	100	I.S.	0.6	I.S.	I.S.	5	5	
76	57887	+40/-10	180	180	0.6	0.4	4.8	40	20	
77		+80/-40	160	180	0.6	0.4	4.8	5	25	
78		-80	160	I.S.	0.4	I.S.	I.S.	20	25	
79	57888	+40/-10	290	290	0.8	0.2	7.7	20	10	
80		+80/-40	310	310	0.6	0.4	8.2	10	10	
81		-80	320	330	0.6	0.4	8.8	20	15	
82	57889	+40/-10	350	340	0.4	0.4	8.1	5	5	
83		+80/-40	350	360	0.8	0.4	8.7	30	5	
84		-80	360	390	0.6	0.4	9.5	20	5	
85	57890	+40/-10	370	400	0.6	0.4	9.8	5	5	
86		+80/-40	420	430	1.0	0.4	10.4	5	5	
87		-80	440	I.S.	0.6	I.S.	I.S.	20	5	
88	57891	+40/-10	500	490	0.8	0.4	10.2	10	5	
89		+80/-40	470	510	1.0	0.4	10.4	20	10	
90	57892	-80	480	520	0.6	0.4	10.8	20	5	

T.T. No.	SAMPLE No.		Cu	*Cu	Ag	*Ag	% *Fe	PPB Au	PPB *Au	8811-025 Pg. 2 of 3
91	57892	+40/-10	440	490	0.6	0.4	9.5	20	5	
92		+80/-40	520	510	0.8	0.4	10.3	5	100	
93		-80	530	560	0.6	0.6	10.5	10	10	
94	57893	+40/-10	420	500	0.6	0.4	10.3	20	5	
95		+80/-40	510	540	0.6	0.6	11.1	20	5	
96		-80	490	I.S.	0.6	I.S.	I.S.	20	5	
97	57894	+40/-10	64	92	0.8	0.8	8.3	880	825	
98		+80/-40	72	82	1.0	1.0	7.8	70	300	
99		-80	62	78	0.8	0.8	8.0	400	580	
100	CHECK NL-6		48	52	1.0	1.0	2.4	--	-	
101	57895	+40/-10	88	76	1.0	1.0	10.4	110	110	
102		+80/-40	100	110	1.0	1.0	10.6	250	150	
103		-80	100	120	1.0	1.2	11.6	450	175	
104	57896	+40/-10	66	86	1.0	0.8	9.2	175	2250	200
105		+80/-40	82	84	1.0	1.0	9.4	200	150	
106		-80	80	84	1.0	1.0	9.8	650	250	
107	57897	+40/-10	250	250	1.0	0.8	7.2	110	150	
108		+80/-40	250	250	1.2	1.0	6.8	75	180	
109		-80	250	260	1.0	1.0	6.8	100	45	
110	57898	+40/-10	220	240	0.8	0.8	7.0	70	70	
111		+80/-40	260	250	1.2	1.0	6.8	110	60	
112		-80	260	250	1.2	1.0	6.6	100	45	
113	57899	+40/-10	240	240	1.2	1.0	6.9	475	275	15
114		+80/-40	250	240	1.6	1.6	7.0	225	90	
115		-80	250	I.S.	1.6	I.S.	I.S.	250	5	
116	57900	+40/-10	230	230	1.0	1.0	6.2	40	280	
117		+80/-40	240	240	1.4	1.2	6.0	150	80	
118		-80	240	240	1.2	1.0	5.6	425	15	
119	57901	+40/-10	260	230	1.2	1.0	5.8	40	70	
120		+80/-40	250	240	1.0	1.0	5.5	150	90	
121		-80	240	250	1.0	1.0	5.3	75	140	
122	57902	+40/-10	240	230	0.8	0.8	5.6	70	75	
123		+80/-40	250	230	1.2	1.0	5.0	65	60	
124		-80	260	I.S.	1.2	I.S.	I.S.	100	10	
125	57903	+40/-10	140	150	0.6	0.6	4.4	10	15	
126		+80/-40	160	160	1.0	0.6	4.1	10	35	
127		-80	170	180	0.8	0.8	4.6	10	15	
128	57904	+40/-10	150	160	1.0	0.4	4.3	10	20	
129		+80/-40	160	160	0.6	0.4	3.9	15	30	
130		-80	190	180	0.8	0.6	4.2	15	25	
131	57905	+40/-10	120	120	0.6	0.6	4.0	60	85	20
132		+80/-40	120	120	1.0	0.6	3.8	5	10	
133		-80	140	130	1.0	0.8	3.5	10	30	
134	57906	+40/-10	160	170	0.6	0.6	3.9	35	25	
135		+80/-40	160	160	1.0	0.6	3.8	25	15	
136		-80	160	170	0.8	0.8	4.0	10	10	
137	57907	+40/-10	140	170	0.6	0.6	3.9	25	20	
138		+80/-40	150	160	0.8	0.6	3.5	10	40	
139		-80	150	170	0.8	0.6	3.8	10	30	
140	57908	+40/-10	140	160	0.8	0.6	3.5	10	30	
141		+80/-40	140	170	0.8	0.8	3.7	5	10	
142		-80	160	150	0.8	0.6	3.4	5	5	
143	57909	+40/-10	180	150	0.6	0.6	3.9	20	30	20
144		+80/-40	180	180	0.8	1.0	3.7	10	10	
145		-80	180	190	0.8	0.8	3.8	15	20	
146	57910	+40/-10	190	200	0.4	0.6	4.1	20	5	
147	57910	+80/-40	180	180	1.2	0.6	3.6	70	10	

T.T. No.	SAMPLE No.		Cu	*Cu	Ag	*Ag	% *Fe	PPB Au	PPB *Au	8811-025 Pg. 3 of 3
148	57910	-80	180	190	1.0	0.6	3.8	15	5	
149	57911	+40/-10	170	190	0.6	0.4	4.1	15	90	3o
150		+80/-40	170	190	0.8	0.8	3.7	15	10	
151	57911	-80	190	180	1.0	0.8	3.6	10	10	

Au (PPB)	non-pulv'd	avg	pulverized	avg
Tot. sum of +40/-10=	4550	126	22370	621
Tot. sum of +80/-40=	4210	117	5780	161
	1st	avg	2nd-analysis	avg
Tot. sum of -80 =	6375	177	5630	156

MESH SIZE
10 mesh = 2.0 mm
40 mesh = 0.5 mm
80 mesh = 0.18 mm

APPENDIX V

ROCK SAMPLE GEOCHEMISTRY RESULTS

Minex (DB)

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

DATE RECEIVED: AUG 15 1988

DATE REPORT MAILED: Aug. 21/88.

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.

ASSAYER: D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8808-073 177 FILE # 88-3640

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
28142	2861	2.3	2	83
28143	321	.1	2	1
28144	904	.2	10	9
28145	689	.1	9	2
28146	1013	.2	14	14
28147	787	.2	27	3
44208	3132	3.7	2	60
44209	2894	2.8	2	155
44210	381	.3	2	20
44211	1342	1.3	2	16
44212	3688	3.4	3	144
44213	2174	2.3	2	41
44214	941	1.0	2	9
44215	1575	2.1	2	77
44216	149	.1	2	1
44217	2085	1.9	5	59
44218	1089	1.2	3	27
44219	444	.4	4	7
44220	1063	.7	20	19
44221	5897	5.1	6	79
44222	930	.6	7	1
44223	84	.1	4	1
44224	2340	2.0	64	55
44225	2279	1.9	8	76
STD C/AU-R	59	6.7	42	470

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: RE-RUN 88AUG054 — CODE: 8808-0548

Project No. : 177 — Sheet: 1 of 1 — Date rec'd: AUG24
Material : RE-RUN 20 — Geol.: D.B. — Date compl: SEPT01
Remarks : PULPS IN DUPLICATE 2 x 10.0 g
Values in PPM, except where noted.

T.T. No.	SAMPLE No.	PPB Au
R -	28109	40
	28110	10
	28111	60
	28112	10
	28113	10
	28114	30
	28115	20
	28116	10
	28117	10
	28118	350
	28119	40
R -	28120	5500
R -	79788	10
	79789	40
	79790	10
	79791	20
	79792	20
	79793	40
	79794	30
R -	79795	560

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB	
R 28124	58776✓	105.6✓	10	4430	
R 28125	3022	5.2	2	199	
R 28140	1179	2.2	15	1030	
R 28141	422	1.2	5	510	
R 44201	3721	4.7	5	87	
R 44202	2204	2.7	6	64	
R 44203	898	.9	10	7	
R 44204	148	.3	26	2	
R 44205	1641	2.1	5	44	
R 44206	3402	3.5	12	270	
R 44207	3035	4.0	7	67	
R 79776	92	.1	4	13	
R 79777	224	.2	2	185	
R 79778	669	1.7	5	2380	
R 79779	404	.7	6	1850	
R 79780	420	.8	8	228	
R 79781	721	2.1	2	370	
R 79782	715	1.8	4	1620	
R 79783	476	1.3	3	880	
R 79784	1208	4.3	4	8520	
R 79785	295	.2	2	174	
R 79786	372	.5	8	230	
R 79787	192	.2	21	8	NL 31/8 1x10 g
R 79788	570	.5	17	13	[illegible]
R 79789	1543	1.6	40	69	40
R 79790	1048	.8	22	16	10
R 79791	917	.7	14	18	20
R 79792	1196	.9	41	11	15
R 79793	404	.3	71	211	[illegible]
R 79794	1784	1.4	94	23	20
R 79795	494	1.4	25	470	450
R 79796	899	.7	11	22	
R 79797	28422	27.7	44	1090	
R 79798	1516	1.2	7	58	
R 79799	10687	10.8	27	420	
R 79800	433	.3	2	7	
STD C/AU-R	57	7.1	41	505	

✓ - ASSAY REQUIRED FOR CORRECT RESULT -

Murex (BB) 8808-054

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

DATE RECEIVED: AUG 11 1988
DATE REPORT MAILED: Aug. 15/88.

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.

ASSAYER: C. Leong. D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8808-054 177 FILE # 88-3487 Page 1

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
R 27648	1068	.7	3	77
R 28089	2650	4.9	2	8960
R 28090	5083	25.2	2	690
R 28091	2055	3.4	7	80
R 28092	9838	31.5	52	3960
R 28093	2476	3.2	12	120
R 28094	1094	.7	7	26
R 28095	1495	3.1	8	290
R 28096	5548	10.6	16	1990
R 28097	4861	4.2	15	227
R 28098	10017	16.5	42	3995
R 28099	2272	1.6	10	145
R 28100	2750	5.0	50	230
R 28101	7610	18.1	55	510
R 28102	4066	2.8	14	138
R 28103	1453	1.2	9	21
R 28104	27886	22.3	29	2255
R 28105	1628	.7	7	180
R 28106	5555	2.8	15	65
R 28107	7478	10.3	34	650
R 28108	3133	2.4	4	155
R 28109	1742	1.6	10	39
R 28110	2109	1.5	36	18
R 28111	727	.6	61	33
R 28112	490	.3	20	25
R 28113	315	.1	22	4
R 28114	315	.7	8	22
R 28115	477	.5	37	8
R 28116	368	.3	53	5
R 28117	617	.5	7	5
R 28118	1216	.6	20	310
R 28119	638	.5	11	22
R 28120	1277	2.1	33	4995
R 28121	4761	5.4	16	2240
R 28122	1314	1.5	3	10360
R 28123	13840	28.3	2	4325
STD C/AU-R	57	7.1	38	525

Murex (DB) 8808-006

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

DATE RECEIVED: AUG 2 1988
DATE REPORT MAILED: Aug. 8/88

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.

ASSAYER: C. Leong. D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT 8808-006-177 FILE # 88-3172

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
R 28048	1050	.5	6	13
R 28049	995	.4	53	15
R 28050	707	.1	10	1
R 28051	7238	8.2	9	64
R 28052	24735	17.3	2	122
R 43905	1173	.8	5	41
R 43906	1966	1.3	7	98
R 43932	1911	1.6	2	18
R 44001	355	.1	10	5
R 44002	179	.2	2	4
R 44003	765	.6	10	4
R 44004	21872	26.8	9	240
R 44005	39816	33.5	147	114
R 44006	1538	1.3	7	7
R 44007	674	.6	2	5
R 44008	21964	13.5	61	75
R 44009	1394	1.2	3	7
R 44010	1066	1.7	2	10
R 44011	1140	.8	52	2
R 44012	901	.6	12	1
R 44013	335	.1	8	3
R 44014	3878	3.4	22	47
R 44015	851	.5	4	16
R 44016	3306	2.8	7	34
R 44017	18674	17.0	4	1420
R 44018	2683	2.6	3	41
R 44019	13253	10.4	5	205
R 44025	1028	.9	3	13
R 44027	6193	6.2	4	63
R 44028	37610	31.5	8	740
R 44029	5479	4.9	5	38
R 44030	20125	16.5	9	330
R 44248	1699	1.9	3	11
R 44249	25566	20.7	12	560
R 44250	4714	4.5	2	48
STD C/AU-R	58	7.1	38	490

SAMPLE#	Cu PPM	Ag PPM	As PPM	Au* PPB
R-27629	307	.4	41	1
R-27630	185	.2	2	1
R-27631	454	.2	2	6
R-27632	2735	1.9	10	125
R-27633	638	.5	40	3
R-27634	1257	1.0	15	9
R-27635	1190	.9	2	24
R-27636	2735	1.9	2	38
R-27637	2574	1.1	74	32
R-27638	881	.5	2	11
R-27639	69	.1	17	2
R-27640	538	.3	2	4
R-27651	1268	1.2	4	9
R-27652	882	.7	2	24
R-28028	2787	2.5	2	106
R-28029	417	.2	4	6
R-28030	12929	11.4	49	95
R-28031	3443	9.6	6369	950
R-28032	498	.4	11	3
R-28033	2038	1.5	86	15
R-28034	9994	6.8	57	64
R-28035	233	.1	14	3
R-28036	121	.3	2	2
R-28037	470	.3	24	5
R-28038	94	.2	2	1
R-28039	2014	.7	2	10
R-28040	447	.1	2	4
R-28042	3587	27.8	>9999	12430
R-28043	4375	3.5	130	106
R-28044	3966	3.7	972	137
R-28045	177	.3	6	11
R-28046	540	.1	193	52
R-28047	16	.1	12	2
R-43901	169	.2	2	3
R-43904	207	.2	62	9
STD C/AU-R	58	6.7	38	510

V - Saturated

Murex

88-06-056

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 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: JUNE 22 1988 DATE REPORT MAILED: July 4/88 ASSAYER: C. Leong ..D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

NORANDA EXPLORATION PROJECT-88-06-056-177 File # 88-2152

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
R 27603	6	2986	2	54	1.5	30	38	209	9.47	2	5	ND	2	2	1	2	9	38	.08	.032	2	34	1.14	47	.07	2	2.83	.01	.61	49	7
R 27604	4	843	3	28	.5	18	24	245	8.35	7	5	ND	3	1	1	2	2	34	.09	.033	2	28	1.22	38	.05	3	3.01	.01	.87	1	11
R 27605	2	69953 ✓	52	552	124.3 ✓	20	22	169	41.08	21	5	ND	6	2	7	2	329	38	.02	.001	2	34	.23	5	.01	2	.97	.01	.03	140	9330
R 27606	10	2288	3	117	2.1	11	31	830	13.22	2	5	ND	3	1	1	2	2	69	.06	.026	2	44	1.63	18	.03	2	4.00	.01	.13	7	6905
R 27607	1	1668	8	202	3.0	74	48	440	11.45	2	5	ND	1	34	1	2	2	227	.89	.050	2	122	2.27	30	.08	2	4.39	.16	.30	1	28
R 27608	57	2507	4	141	4.2	18	11	901	11.56	4	5	ND	2	3	1	2	6	89	.10	.032	2	83	2.03	28	.04	2	4.20	.01	.13	2	56
R 27609	14	2109	9	91	3.8	20	15	393	15.26	53	5	ND	4	5	1	2	129	153	.04	.032	4	135	2.05	13	.02	2	2.84	.01	.07	1	2035
R 27610	210	136	6	53	.1	34	17	290	6.64	2	5	ND	1	20	1	2	2	91	.71	.018	2	69	1.44	20	.09	2	2.92	.09	.25	6	2
R 27611	16	417	2	94	.3	40	26	473	14.73	10	5	ND	2	8	1	2	2	198	.23	.033	2	200	3.05	76	.25	3	4.37	.03	1.54	16	6
R 27612	8	132	8	79	.1	25	18	625	14.23	7	5	ND	2	2	1	2	53	152	.02	.031	2	166	2.47	20	.05	2	4.53	.01	.15	1	1
R 27613	1	185	12	101	.1	68	30	596	16.48	8	5	ND	2	5	1	2	2	224	.19	.032	2	207	3.07	82	.27	2	5.52	.02	2.93	1	2
R 27614	2	320	12	114	.1	94	45	704	15.82	294	5	ND	3	7	1	2	2	187	.03	.042	10	54	.39	28	.01	8	5.14	.01	.08	1	5
R 27615	2	207	2	28	.1	43	11	155	6.17	9	5	ND	1	11	1	2	2	48	.03	.004	2	76	.60	48	.03	2	1.78	.02	.25	1	4
R 27616	1	2703	7	49	1.0	23	28	131	6.16	16	5	ND	2	2	1	2	6	55	.04	.012	2	32	.68	6	.03	6	1.63	.02	.04	1	105
R 27617	1	16796	15	868	19.3	25	42	1757	20.82	7	5	ND	4	7	3	2	53	133	.13	.026	2	157	2.23	16	.05	2	3.72	.03	.07	1	985
R 27618	2	123	2	43	.1	22	8	219	4.26	2	5	ND	2	2	1	2	2	77	.16	.034	2	45	1.30	53	.16	2	2.02	.02	1.22	27	7
R 27619	7	1101	5	47	1.9	16	17	311	10.40	2	5	ND	3	2	1	2	5	50	.04	.033	3	62	1.34	62	.10	6	3.49	.01	1.26	2	15
R 27620	2	383	32	96	.2	61	23	532	10.68	11	5	ND	2	14	1	6	2	239	.33	.036	2	241	3.25	57	.26	9	4.26	.05	1.35	1	6
R 27621	1	386	3	78	.1	46	19	384	9.11	6	5	ND	2	9	1	2	3	147	.30	.034	2	134	2.50	9	.12	5	3.17	.02	.12	1	4
R 27622	1	271	6	25	.1	8	11	327	3.57	74	5	ND	1	4	1	2	4	42	.02	.022	3	28	.78	8	.01	6	1.17	.02	.07	1	6
R 27623	2	263	8	72	.1	58	19	602	10.74	3	5	ND	2	8	1	2	2	157	.24	.031	2	147	2.64	41	.14	3	3.77	.03	.66	1	7
R 27624	17	140	14	134	.1	25	17	1419	20.32	3	5	ND	3	2	1	5	2	174	.07	.032	2	159	2.48	10	.05	2	5.85	.01	.06	6	260
R 27625	2	44856 ✓	7	865	82.9 ✓	24	83	351	9.04	430	5	ND	3	1	8	6	181	5	.13	.007	2	10	.16	19	.01	3	.35	.01	.17	1	68
STD C/AU-R	18	56	36	132	7.0	67	28	1075	3.92	39	17	7	36	48	17	16	18	55	.46	.083	37	53	.89	174	.06	38	1.82	.06	.13	12	500

✓ ASSAY REQUIRED FOR CORRECT RESULT -

APPENDIX VI

ANALYTICAL METHODS

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 Mixing & pulverizing composite.	.50 1.50
HM	Heavy mineral separation - S.G.2.96 + wash -20 mesh	12.00
V1	Drying vegetation and pulverizing 50 gms to -80 mesh	3.00
V2	Ashing up to 1 lb wet vegetation at 475 deg.C	2.00
H1	Special Handling	17.00/hr

Sample Storage

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

Pulps are retained for one year and discarded unless claimed.

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

Supplies

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

Conversion Factors

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

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

GEOCHEMICAL ANALYSES - Rocks and Soils

Group 1 Digestion

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

Group 1A - Analysis by Atomic Absorption.

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

First Element $2.25 Subsequent Element $1.00

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

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

First Element $4.75 All Elements $5.50

Group 1C - Hg Detection limit - 5 ppb Price $2.50

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

Group 1D - ICP Analysis

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

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

Group 1E - Analysis by ICP/MS

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

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

Hydro Geochemical Analysis

Natural water for mineral exploration

26 element ICP - Mo,Cu,Pb,Zn,Ag,Co,Ni,Mn,Fe,As,Sr,Cd,V,Ca,P, Li,Cr,Mg,Ti,B,Al,Na,K,Ce,Be,Si			$8.00
F by Specific Ion Electrode	- detection	20 ppb	$3.75
U by UA3	- detection	.01 ppb	5.00
pH		.1 pH	1.50
Au	- detection	.001 ppb	4.00

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

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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 fustion - 50ml in 20% HCl	2 ppm	4.00
Carbon	LECO (total as C or CO2)	.01 %	5.75
Carbon+Sulfur	Both by LECO	.01 %	6.50
Carbon (Graphite)	HCl leach before LECO	.01 %	8.00
Chromium	0.50 gram samples are fused with 1 gm 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

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Regular Assay

Aluminum	(Al)	$ 7.00	Moisture	(H2O)	$ 5.00
Antimony	(Sb)	7.00	Molybdenum	(Mo)	7.00
Arsenic	(As)	7.00	Molybdenum Sulfide	(MoS2)	9.00
Barium	(Ba)	7.00	Niobium	(Nb)	10.00
Bismuth	(Bi)	7.00	Nickel	(Ni)	7.00
Boron	(B)	7.00	Nickel (Non-sulfide)		9.00
Cadmium	(Cd)	7.00	Palladium	(Pd)	10.00
Calcium	(Ca)	7.00	Phosphorus	(P)	7.00
Carbon (Total)	(C)	9.00	Platinum	(Pt)	10.00
Carbon (Graphitic)*		10.00	Potassium	(K)	7.00
Carbon plus Sulfur	(Total)*	11.00	Rhodium	(Rh)	10.00
Cerium	(Ce)	10.00	Rubidium	(Rb)	7.00
Chromium	(Cr)	7.00	Selenium	(Se)	10.00
Cesium	(Cs)	10.00	Silica	(SiO2)	7.00
Cobalt	(Co)	7.00	Silver	(Ag)	7.00
Copper	(Cu)	7.00	Silver (Fire Assay)		8.50
Copper (non-sulfide)*		8.00	Sodium	(Na)	7.00
Europium	(Eu)	20.00	Specific Gravity*	(SG)	7.00
Fluorine	(F)	7.00	Strontium	(Sr)	7.00
Gallium	(Ga)	7.00	Sulfur (Total)*	(S)	9.00
Germanium	(Ge)	7.00	Sulfur (Sulfate)	(S)	10.00
Gold	(Au)	7.00	Tantalum	(Ta)	7.00
Gold (Fire Assay)		8.50	Tellurium	(Te)	10.00
Gold plus Silver (Fire Assay)		12.00	Thallium	(Tl)	10.00
Indium	(In)	7.00	Thorium*	(Th)	7.00
Iron (Total)	(Fe)	7.00	Tin	(Sn)	7.00
Iron (Ferrous)*		10.00	Titanium	(Ti)	7.00
Lanthanum	(La)	7.00	Tungsten	(W)	7.00
Lithium	(Li)	7.00	Uranium	(U)	7.00
Lead	(Pb)	7.00	Vanadium	(V)	7.00
Loss on Ignition	(LOI)	2.00	Yttrium	(Y)	7.00
Magnesium	(Mg)	7.00	Zinc	(Zn)	7.00
Manganese	(Mn)	7.00	Zirconium*	(Zr)	7.00
Mercury*	(Hg)	7.00			

• Minimum 5 samples per batch

Other elements by Mass Spec. on request.

Multi-Element Assay Price

Arsenic, Antimony, Bismuth, Cadmium, Cobalt, Copper, Gold, Iron, Lead, Manganese, Molybdenum, Nickel, Silver, Thorium, Uranium, Zinc.

Price : First element $7.00 Each Additional $3.00 All 16 elements $22.00

Whole Rock Assay Prices

SiO2, Al2O3, Fe2O3, CaO, MgO, Na2O, K2O, MnO, TiO2, P2O5, Cr2O3, LOI.

Price : First oxide $7.00 Each Additional $3.50 All 12 $9.00

Volume Discounts Available.

Special Fire Assay Prices

Gold (1/2 A/T)	$ 8.50
Gold + Silver (1/2 A/T)	$12.00
Gold (1 A/T)	$10.00
Gold - native + 100 mesh	$ 6.00
Gold, Silver, Platinum, Palladium, Rhodium (1/2 A/T)	$22.00
Placer conc. for total precious metal or Gold + return of bead	$15.00

APPENDIX VII

STATEMENT OF COSTS

1) Line Grid Establishment 14.5 km.

1a) Wages

No. of Mandays	21	
Rate per day	$150.00	
Total Wages.....		$ 3,150.00

1b) Food & Accomodation

No. of Mandays	21	
Rate per day	$ 23.50	
Total Lodging.....		$ 493.50

1c) Transportation

No. of Days	7	
Rate per day	$62.50	
Ferries	$51.00	
Air Transporation	$148.00	
Total Transportation.....		$ 636.50

1d) Misc. Field Supplies..... $ 271.12

Total for grid establishment $ 4,551.12

2) Geophysical Surveys

Mag	1.75 km.
EM	0.75 km.
IP	2.78 km.

2a) Wages

No. of Mandays	20
Rate per day	$175.00

Total Wages.....$ 3,500.00

2b) Food & Accomodation

No. of Mandays	20
Rate per day	$23.50

Total Lodging.....$ 470.00

2c) Transportation

No. of Days	7
Rate per day	$62.50
Ferries	$69.00

Total Transportation.....$ 506.50

2d) Instrument Rental (IP)

No. of Days	6
Rate per day	$395.00

Total Instrument Rental.....$ 2,370.00

Total for Geophysics $ 6,846.50

3) Geological Mapping, Trenching and Rock Sampling.

3a) Wages

Geologist: No. of Mandays	63	
Rate per day	$200.00	
Samplers: No. of Mandays	41	
Rate per day	$130.00	
Total Wages		$ 17,930.00

3b) Food & Accomodation

No. of Mandays	104	
Rate per day	$ 19.75	
Total Lodging		$ 2,054.00

3c) Transportation

No. of Days	32	
Rate per day	$ 62.50	
Ferries	$ 69.00	
Total Transportation		$ 2,069.00

3d) Miscellaneous Field Supplies		$ 21.10
Equipment Rental (Rock saw, pump)		$ 405.00
Sample shipments		$ 98.75
3e) Sample prep, analysis, data entry		
211 samples @ $11.50/sample		$ 2,426.50
Total for Geology & Rock Sampling		$ 25,004.35

4) Soil Geochemistry

4a) Wages

No. of Mandays	12	
Rate per day	$130.00	
Total Wages		$ 1,560.00

4b) Food & Accomodation

No. of Mandays	12	
Rate per day	$ 19.75	
Total Lodging		$ 237.00

4c) Transportation

No. of Days	6	
Rate per day	$ 62.50	
Total Transportation		$ 375.00

4d) Miscellaneous Field Supplies (Bags etc.)	$ 137.50
Sample Shipments	$ 186.75

4e) Sample Analysis

376 Samples @ $11.55/sample	$ 4,341.00

Total for Soil Geochemistry $ 6,837.25

5) Diamond Drilling

5a) Contracts

Drilling Total 1066.9m @ $92.23 / meter; $98,405.29

Services (Road & Pad Building, Reclamation); $5,701.50

Total Contracts.....$104,106.79

5b) Core Handling & Splitting

Wages:

No. of Mandays 17

Rate per day $150.00

Total Wages.....$ 2,550.00

5c) Core Analysis

I.C.P. & Au 575 samples @ $14.70/sample

Assay 48 samples @ $ 8.50/sample

Sample shipments $862.50

Total for Core Analysis.....$ 9,723.00

5d) Engineering, Core Logging, Supervision

No. of Mandays 72

Rate per day $200.00

Total for Engineering.....$ 14,400.00

5e) Transportation

No. of Days 46

Rate per day $ 62.50

Total Transportation.....$ 2,875.00

5f) Food & Accomodation

No. of Mandays 89

Rate per day $ 21.50

Total Lodging.....$ 1,913.50

Total for Drilling.....$135,568.29

TOTALS

1)	Linecutting	$ 4,551.12
2)	Geophysics	$ 6,846.50
3)	Geology & Rock Sampling	$ 25,004.35
4)	Soil Geochemistry	$ 6,837.25
5)	Diamond Drilling	$ 135,568.29
	Total Expenditures	$ 178,807.51

APPENDIX VIII

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

****

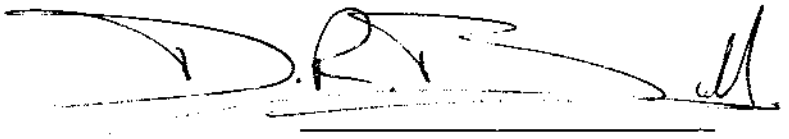
I, Dennis R. Bull of the Municipality of Richmond, Province of British Columbia, do hereby certify that:

- I am a Geologist residing at 161, 10991 Mortfield Road, Richmond, B.C.

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

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

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



Dennis R. Bull

STATEMENT OF QUALIFICATIONS

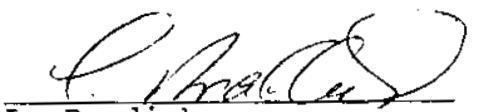
I, Lyndon Bradish of Vancouver, Province of British Columbia, do hereby certify that:

1. I am a Geophysicist residing at 1826 Trutch Street, Vancouver, B.C.

2. I am a graduate of the University of British Columbia with a B.Sc. (geophysics).

3. I am a member in good standing in the Society of Exploration Geophysicists, European Association of Exploration Geophysicists and the Prospector's and Developer's Association.

4. I presently hold the position of Regional Geophysicist with Noranda Exploration Company, Limited and have been in their employ since 1973.



L. Bradish.