GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,763

Part 1 of 2

REPORT OF WORK

ON THE

TAS PROJECT

N.T.S. 93 K/16

OMINECA MINING DIVISION
BRITISH COLUMBIA

Situated at Coordinates: 55° 52' N
124° 16' W

NORANDA EXPLORATION COMPANY, LIMITED
(NO PERSONAL LIABILITY)

BY: GORDON MAXWELL
LYNDON BRADISH

FEBRUARY, 1988

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SUMMARY:

The TAS project is located approximately 50 km north of Fort St. James and 150 km northwest of Prince George. The area is underlain by Upper Triassic to Lower Jurassic Takla Group volcanics and sediments intruded by a series of Upper Triassic to Lower Cretaceous stocks and batholiths.

The focus of present exploration is on a package of strongly hornfelsed siltstone/tuff, andesite and hornblende augite porphyry units which host elevated gold mineralization in shear and fracture zones. To date, three zones have been outlined by cat trenching: the east zone, the mid zone and the west pit zone. A total of 1188 meters of diamond drilling have also been completed.

Further recommended work includes a gradient array I.P. survey, further dipole-dipole I.P. survey, mise a la masse survey, trenching and 3,000 meters of diamond drilling.

INTRODUCTION:

The purpose of the TAS project was to evaluate a large (1.5km x 0.25km) gold geochem anomaly. In doing so, several new gold showings were discovered by both diamond drilling and cat trenching.

A further 4253 B-horizon soil samples were collected on four separate grids, the 10,000 recon grid, the 50,000 detail grid, the Zana and the HA 1 grids. In addition, 44 km of VLF, 28 km of I.P. and 124 km of magnetometer survey were conducted in an attempt to outline further mineralized trends.

Approximately 6,000 square meters of cat trenching was completed over areas of strongest gold geochem using a TD-8 cat and washing with a wajax fire pump. A small diamond drill program totaling 1,188 meters in 17 holes was completed between June and August of 1987. In addition, eleven percussion drillholes totaling 390 meters was also completed.

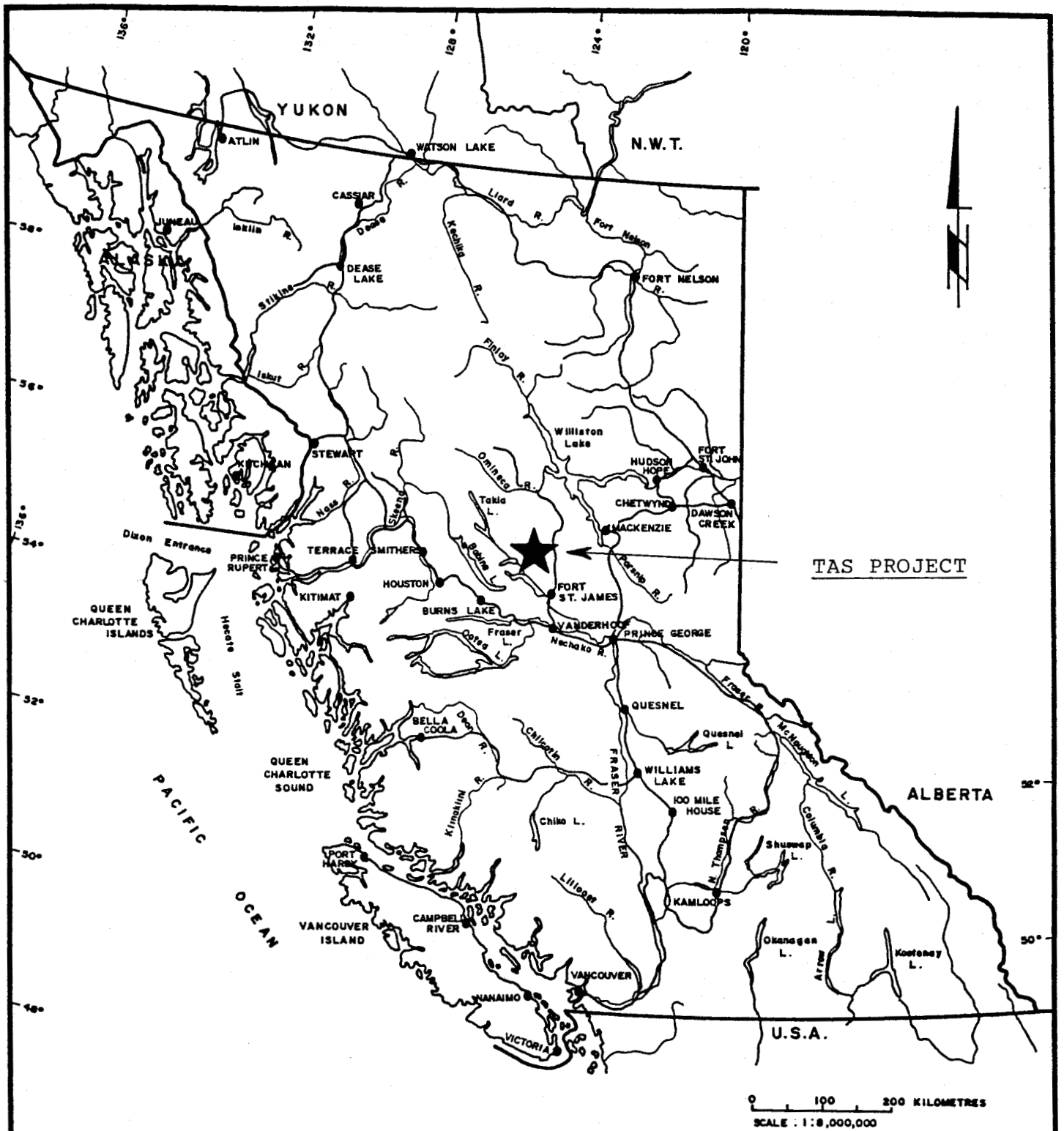
LOCATION & ACCESS:

The TAS property is situated approximately 50 km north of the town of Fort St. James and 150 km northwest of Prince George. The property can be directly accessed by two wheel drive vehicle on the all-weather Inzana Lake logging road from Fort St. James. Access to various parts of the property are via rough logging roads and clear cuts. Presently, several logging contractors are active in the area.

TAS PROJECT CLAIMS:

NAME	UNITS	RECORD #	RECORD DATE	DUE	AREA (Ha.)
Ha 1	18	7705	June 30	1989	450
Tas 1	9	8142	January 27	1991*	225
Tas 2	12	7448	December 30	1990*	300
Tas 3	9	7449	December 30	1990*	225
Tas 4	12	7450	December 30	1990*	300
Tas 5	8	7451	December 30	1990*	200
Tas 6	15	7700	June 24	1991*	375
Tas 7	20	7701	June 24	1991*	500
Tas 8	20	7702	June 24	1991*	500
Tas 9	20	7703	June 24	1991*	500
Tas 10	15	7704	June 24	1991*	375
Tas 11	20	7959	September 17	1990*	500
Zana 2	20	8099	December 4	1989*	500
Zana 3	20	8100	December 4	1989*	500
Zana 4	15	8101	December 4	1989*	375
Zana 5	20	8247	March 24	1990*	500

* Subject to confirmation from Gold Commissioner.



REVISED	TAS PROJECT
	LOCATION MAP
PROJ.No. 271	SURVEY BY: GM DATE: Feb/88
N.T.S. 93K16	DRAWN BY: S.K.B. SCALE: 1:8,000,000
DWG. No. 1	NORANDA EXPLORATION
	OFFICE: PRINCE GEORGE, B.C.

VANCAL 11927

TOPOGRAPHY & VEGETATION:

The area is characterized by pine flats, swampy areas and gently rolling hills. The flat areas include layered glacial debris, sandy plains and small eskers. Swampy areas are generally found around Hatdudatehl and Taslincheko Creeks. The gently rolling hills consist mainly of resistant rock outcrop area.

Vegetation consists of mature stands of spruce pine and balsam, which is presently being logged off in some areas. Undergrowth is mainly alder with some devil's club.

REGIONAL GEOLOGY:

The area has most recently been described by J.E. Armstrong in G.S.C. Memoir 252, Fort St. James Map-Area in 1949. The area has also been covered on G.S.C. Map 971A by H.M.A. Rice in 1949 (Geology of Smithers-Fort St. James Area).

The TAS project lies in a broad northwest trending package of rocks known as the Quesnel Trough. These include Upper Triassic to Lower Jurassic Takla Group volcanics and sediments which have been intruded by a series of felsic to ultramafic stocks and batholiths, ranging in age from Upper Triassic to Lower Cretaceous.

The Takla group volcanics and sediments include andesitic to basaltic flows, tuffs, tuff breccia and agglomerates interbedded with conglomerates, greywacke, shales and limestones. The intrusive rocks include the Hogem batholith and several other Omineca intrusions consisting of granite, syenite, granodiorite, quartz diorite, diorite, gabbro and pyroxenite.

The area is cut by numerous fault structures usually trending northwest, parallel to the Pinchi Fault. These may be subparallel splay faults with tensional or transverse structures trending east-west.

PROPERTY HISTORY:

The area has received very little exploration attention in the past, except for the early days of the porphyry copper rage. In 1969, the N.B.C. syndicate acquired the HAT claims to cover the copper occurrence on the HA 1 claim and followed up with VHEM, Mag and detail geology surveys. The area was covered by an airborne EM and Mag survey flown by Questor in 1981, contracted by Selco Exploration. The Sask claims, immediately north of the HA 1 were subsequently staked and followed up by ground HLEM and Mag surveys. Two diamond drill holes were drilled in 1982 to the HLEM conductors.

In 1982, the Inzana Lake forest access road was constructed through the area and during construction, a cat opened up disseminated copper mineralization near the Freegold Zone.

This area was staked by Alex Leggate and later allowed to lapse. The claims were then re-staked by A. Halleran of Fort St. James after receiving geochemically anomalous gold values in rock samples from the Freegold area. Visible gold was discovered in quartz/carbonate veins, not far from the original copper discovery, by Noranda personnel on a routine property examination.

The property was optioned in 1985 and a small follow up program was initiated, including soil sampling, detail magnetometer survey, I.P. and recon geologic mapping. The I.P. lines were extended to cover part of the Ridge area, where a strong chargeability signature was encountered. In the spring of 1986, soil sampling over the Ridge area outlined strong gold geochem over a 1.5 km strike length. Subsequent hand trenching and cat stripping discovered numerous sulphide zones containing strong gold mineralization.

AGREEMENTS:

Noranda Exploration can earn 100% interest in the TAS property, subject to a 2% N.S.R. (A. Halleran), by maintaining the property in good standing and by making the following option payments:

$ 5,000 on signing	July 18, 1985
$ 3,000	September 30, 1985
$ 10,000	September 30, 1986
$ 30,000	September 30, 1987
$ 60,000	September 30, 1988
$ 90,000	September 30, 1989
$140,000	September 30, 1990
$330,000	September 30, 1991

GRIDS:

The old 10,000 grid was extended to the north, west and east to accommodate further recon soil sampling and magnetic surveys. A total of 87.5 km of line was established at line spacing of either 100 or 200 meters with stations marked at every 25 meters. The lines are flagged and run north-south controlled by crudely cut tie lines every 1000 meters.

A new detail 50,000 grid was established over the previous grid to accommodate further close spaced soil sampling, I.P. surveys, magnetic surveys and to add better control for trenching and diamond drilling. Lines on the new grid run both north-south and east-west forming a square grid pattern every 50 meters with stations marked every 25 meters. All baselines, tie lines and some lines are cut and picketed. A total of 60.75 km of line has been established on the 50,000 grid.

The Zana grid consists of 24 km of flagged line, controlled by 2.4 km of cut baseline, running at an azimuth of 360 degrees. The wing lines run 90 degrees to the baseline with

stations marked every 25 meters. A flagged tie line connects all the lines at 41000E.

The HA 1 grid has 12.25 km of flagged line, controlled by 1.2 km of cut baseline, running at an azimuth of 090 degrees.

LOCAL GEOLOGY:

The 1987 field mapping program was carried out by Rob Baerg and Gordon Maxwell. The mapping was done at two scales, 1:1000 for the overall picture of the Ridge area and 1:200 for detail sampling and mapping in trenches.

The most frequently encountered unit on the property is a hornfelsed siltstone or fine ash tuff, which has been cut by a weakly porphyritic diorite and a hornblende-augite porphyry. These intrusive units occur usually as large to small stocks or dykes. All units in the Ridge area have been moderately to intensely fractured. The units described below and on the geology maps are not listed according to age or any particular order.

UNIT 1: A hornfelsed siltstone or fine ash tuff and minor andesite, containing variable amounts of chlorite, epidote, silica, biotite and quartz/carbonate alteration. These rocks are moderately to intensely fractured and brecciated, containing a trace to 10% pyrite, pyrrhotite and chalcopyrite. This unit is generally green-grey in color to a mottled pale green, grey-green, dark green to a bleached tan or buff color in areas of intense alteration.

UNIT 2: Unit 2 is composed of a dark grey to black siltstone/shale which has been locally hornfelsed. This unit is not very prominent on the property, but occurs locally, interbedded with Unit 1. The siltstone/shale horizon is fairly massive to weakly laminated with a weak pervasive carbonate alteration and numerous calcite veins and veinlets.

UNIT 3: This unit is termed hornblende-augite porphyry and occurs as small stocks and dykes cutting Unit 1 at various orientations, with widths varying from 10 cm to 30 meters. The porphyry contains 1-30% 1-10mm euhedral to anhedral hornblende and augite phenocrysts with local 1-10% 1-5mm anhedral feldspar phenocrysts. The matrix is grey-green to dark green, variably hornfelsed and locally quartz, chlorite altered. The unit is weakly to moderately fractured with 1-5% disseminated pyrite, pyrrhotite and chalcopyrite.

UNIT 4: Unit 4 is a light to dark grey hornblende porphyry which occurs in narrow dykes cutting all units except Unit 5. The porphyry consists of 2-25% 1-2mm hornblende phenocrysts in a fine grained grey-green matrix with weak chlorite-epidote alteration. The hornblende phenocrysts

are aligned parallel to the dyke contacts. This porphyry unit is quite rare on the property, usually occurring only on the western end of the ridge.

UNIT 5: A weakly porphyritic quartz diorite to diorite, which makes up the most prominent intrusive on the property. The diorite is light to medium grey, equigranular to weakly porphyritic, containing 5-10% hornblende, 90-95% feldspar and hornblende grains. This unit appears to be weakly to moderately allitized and saussuritized. The unit is commonly silicified with minor chlorite and sericite alteration, containing trace to 2% pyrite and trace to 5% pyrrhotite. On the Ridge area, this unit occurs as small stocks and dykes cross cutting all units and may be closely related to the large epidotized diorite stock which covers most of the Freegold area of the grid. The diorite in the Freegold area is characterized by a very strong high magnetic signature, possibly due to the pyrrhotite and trace amounts of magnetite.

UNIT 6: Unit 6 is a fine grained, dark green to green-grey feldspar porphyry with 2-3mm anhedral feldspar phenocrysts. The matrix is usually moderately to strongly chlorite altered, sometime weakly schistose in areas of shearing.

UNIT 7: An intensely altered fault zone, located in diamond drill holes 271-87 1 & 2. These are usually strongly schistose, with intense chlorite/clay alteration, typically containing 2-3% disseminated pyrite. This unit is sometimes surrounded by an highly brecciated zone on both the footwall and hanging wall.

UNIT 8: A brown to grey quartz/carbonate altered zone usually highly weathered, containing 1-2% disseminated pyrite and 1-25% quartz and calcite veins and veinlets. Found usually in the area of the Freegold trench, where the odd speck of visible gold has been encountered.

UNIT 9: The main host of gold mineralization in the Ridge area, consists of stringer to massive sulphides, usually hosted in shears or heavily fractured siltstone/tuff or hornblende-augite porphyry. This unit typically contains 5-80% pyrite, pyrrhotite and chalcopyrite in stringers and semi-massive to massive sulphide bands, ranging from 1 cm to 300 cm in thickness. Stringers are found in moderately to strongly brecciated and fractured areas immediately adjacent major shears contain thin, massive to semi-massive sulphide bands.

SOIL GEOCHEMISTRY:

A total of 4253 B-horizon soil samples were collected in 1987 on four separate grids. The largest is the 10,000 recon grid on the TAS property, over which 2435 samples were collected. Detailed sampling over the Ridge area was initiated on a new 50,000 grid and a total of 898 samples taken. In addition, 630 samples and 290 samples were obtained from the Zana and HA 1 grids respectively. The samples from the recon 10,000 grid were collected during winter months using long soil augers to obtain samples under two meters of snow. Samples from the 50,000 Zana and Ha 1 grids were obtained, using grub hoes, from holes ranging from 15 to 35 cm in depth during summer months. The samples were placed in Kraft wet-strength paper bags, dried, then shipped to Noranda Labs in Vancouver, B.C., for analysis. Samples from the recon 10,000 and the 50,000 grids were analyzed for copper and gold only; samples from the Zana grid were analyzed for copper, zinc, lead, silver and gold and the HA 1 grid were analyzed for copper, zinc, lead, silver, gold and arsenic. Results are plotted on 1:1000, 1:2500, and 1:5000 scale maps in rear pockets.

10,000 Recon Grid:

Gold Geochem - Gold values in areas other than the Ridge zones range from 5 to 590 ppb with most in the range of 5 to 10 ppb, very low values were considered anomalous. The anomalous values appear to be highly scattered and isolated.

Copper Geochem - Copper values range from 2 to 1040 ppm, with background around 2 to 25 ppm. Anomalous values appear to be scattered and isolated and no new areas of high copper geochem were outlined.

50,000 Grid:

Gold Geochem - The area of strongest and most consistent gold geochem is on the Ridge area where values range from 10 to 50,000 ppb. The 50 ppb contour indicates large wide-spread areas of elevated gold geochem. This contour shows some strong trends of which the most obvious is a 600 meter long anomalous trend at 055 degrees extending from the west pit zone to 49600E/50300N. The same trend appears to be intersected by three cross structures which trend 140 degrees and cut the main trend at the west pit zone, 49400E/50150N and 49550E/50200N. These anomalous gold trends may be indicating major structural trends which host strong gold mineralization.

The 50 ppb contour also shows a short (300 meter), 50 meter wide zone trending 030 degrees across the mid zone, which appear to follow the major structures found in the trenches.

There appears to be a strong discontinuous trend running north-south along L50000E over the east zone. Other large anomalies also occur: 1) between 49250E and 49500E from 49700N

to 49900N which appears to trend 010 degrees, 2) a blob type anomaly located between 50100E and 50400E from 49750N to 49950N, 3) between 48950E and 49150E from 50100N to 50200N trending 055 degrees, and, 4) an east-west trending anomaly between 49450E and 49600E at 49350N.

Some more isolated anomalies are listed below:

48850E/50100N	49900E/49850N
49250E/49800N	50150E/50025N
49600E/50025N	50375E/50000N
49600E/49875N	50400E/50175N
49700E/49700N	

Copper Geochem - Copper values on the Ridge area range from 6 to 3300 ppm, where background is around 20-50 ppm. The largest anomalous copper geochem covers a large area immediately south and including the east zone. The main trend of the anomaly appears to be about 060 degrees and appears to be intersected by a north-south trend anomaly which covers the east zone.

Another obvious anomaly occurs over the west pit zone trending 350 degrees, discontinuously from 49700N to 50150N along line 49050E. Other major anomalies occur: 1) between 48750E and 48900E at 50225N trending 060 degrees, 2) at the north edge of the soil coverage between 48950E and 49300E at 50300N trending east-west, 3) a north-south trend between 50100N and 50250N at 49250E, 4) surrounding the mid zone between 49700E and 49800N from 49950E to 50100E, and 5) a large blob type anomaly between 50200E and 50300E from 49950N to 50100N.

The small isolated anomalies are listed below:

50400E/50025N	49300E/50250N
49675E/49825N	49200E/49800N
50100E/49700N	49150E/50125N
49500E/49800N	48800E/49775N

<u>Zana Grid:</u>

Gold - Gold values on the grid range from 10 to 150 ppb, but only two values are considered anomalous. The two anomalous values are centered around L38400N/40450E.

Copper - Copper values range from 8 to 1600 ppm, with background levels considered to range from 8 to 40 ppm, anomalous values are >100 ppm.

The largest and strongest anomalous area occurs at 40900E to 41100E between lines 39000N and 39400N. Other anomalous areas occur at 40250E to 40450E between lines 39700N and 39800N, 40600E to 40800E between lines 39000N and 39500N and centered around L39600N/40250E.

Single sample anomalies are as listed:

L38200N/40475E
L38200N/40600E
L38400N/40050E
L38400N/40100E
L38700N/40750E
L39000N/40725E
L39600N/40825E
L39500N/40625E
L39800N/40925E

Silver - Silver values range from the detection limit of 0.2 to 5.6 ppm, background levels are 0.2-0.6 ppm and anomalous values are considered to be >1ppm.

The largest and strongest silver anomaly coincides with the best copper anomaly at 40800E to 41200E, between line 39000N and 39500N. Other anomalous areas occur at 40000E to 40050E between lines 39200N and 39600N, centered around L39200N at 40700E and 40650E between lines 39500N to 39700N.

Single station anomalies occur at:

L38800N/40350E
L38800N/40425E
L39000N/40725E
L39100N/40625E
L39600N/40825E
L39600N/40225E
L39700E/39550N
L39700E/39625N
L39700E/39700N
L39700E/39975N
L39900E/40125N
L39900E/40375N
L40000E/39675N
L40000E/39850N
L40000E/40200N

Lead - Lead values range from 1 to 80 ppm, with background around 1 to 5 ppm and anomalies considered >20 ppm. Lead geochem has outlined three anomalous areas: 1) 40800E to 41000E between lines 39000N and 39700N, 2) 41050E to 41150E between lines 39200N and 39500N, and, 3) 40700E between 39100N and 39300N. Several other single station anomalies occur at:

L39000N/40725E
L39100N/40600E
L39400N/40500E
L39900E/40375N
L40000E/39675N
L40000E/39850N
L40000E/40100N
L40000E/40200N

Zinc - Zinc values range from 56 to 600 ppm with background levels around 56 to 200 ppm and anomalous values considered >500 ppm. Only three single station anomalies are outlined.

L39100N/40825E
L39900E/40475N
L40000E/39825N

<u>HA-1 Grid:</u>

Copper - Copper values range from 12 ppm to 450 ppm in scattered, isolated, single station anomalies throughout the grid. A group of anomalous copper values ranging from 200 ppm to 450 ppm occur on Line 10,200E, centered approximately at 9500N.

Gold - Gold values were all very low with a maximum value of 80 ppb. A group of three consecutive 80 ppb gold values occur at the north end of Line 9400E.

Lead - The maximum lead value is 4 ppm, therefore, no areas are considered anomalous.

Zinc - Zinc values range from 54 ppm to 350 ppm in scattered, isolated, single station anomalies throughout the grid. A group of weakly anomalous zinc geochem is clustered around Lines 9900E and 10,000E between 9300N and 9550N.

Arsenic - Arsenic values range from 1 to 28 ppm, none are considered anomalous.

Silver - Silver values range from 0.2 to 1.4 ppm, no anomalous areas on the grid are apparent.

GEOPHYSICS:

INSTRUMENTATION:

VLF-EM SURVEY INSTRUMENTATION

The EM-16 VLF-EM receiver is manufactured and serviced by GEONICS of Mississauga, Ontario. This instrument measures the dip of the null angle and phase of the electromagnetic field generated by very low frequency transmitters maintained by military forces around the world for communications purposes. The frequency range is between 15 and 30 KHz. with power outputs in the range of 50 kilowatts to 1 megawatt.

The operation of the EM-16 instrument is well documented in the manuals and other literature. Basically the system is physically oriented along the lines of the electromagnetic field and this angle of the null field is recorded as units of percent slope. Additionally the phase angle is also measured and recorded. This type of passive EM system suffers considerable influence from the local topography and as a high system frequency is employed, subtle variations in the underlying resistivity produce large variations in the recorded profiled data thus caution must be exercised in the interpretation of the data.

This EM survey employed the transmitter station located at Seattle, Wash. (NLK). Both VLF-EM parameters discussed above were recorded at 25 meter intervals.

MAGNETOMETER SURVEY INSTRUMENTATION

The magnetometer surveyed employed a field and base station package also manufactured by Scintrex of Concord, Ontario. The MP-3 system records the Total Magnetic Field with a field accuracy of 1 to 2 nano Teslas with all applicable corrections having been applied to the data. Readings were recorded at 12.5 meter intervals.

Some of the early work also employed a Geometrics 'unimag' (G.836). This data however was also corrected, leveled and merged with all of the recorded data. The accuracy of this data is of the order of +/- 10 nano Teslas.

I.P. SURVEY INSTRUMENTATION

The I.P. survey employed a Frequency Domain system manufactured by Phoenix Geophysics of Toronto, Ontario. The transmitter and generator have a capacity of producing 1.2 Kilowatts of electrical power although this amount of power is rarely used.

I.P. surveys that were carried out during the early part of 1986 utilized the same transmitter but in the Time Domain mode along with a Huntec Mark IV receiver. A two second cycle time was used throughout the survey.

The survey parameters employed for these surveys were as follows:

Dipole array	: Dipole-Dipole
Dipole length	: 25 meter detail
	: 50 meter 'recon'
Separations	: n=4 on detail
	: n=3 on recon
Frequencies	: 0.25 and 4.0 Hertz
Parameters recorded	: Percent Frequency Effect (PFE) & Resistivity (ohm-meters)
I.P. transmitter	: Phoenix IPT-1 & MG-1
I.P. receiver	: Phoenix IPV-1

A fixed transmitter setup using up to four Tx dipoles on either side of the transmitter was the most frequently, however some of the work completed by P. Walcott (contractor) employed a moving setup method. The recorded resistivities indicate that EM coupling was negligible.

DISCUSSION OF RESULTS

GENERAL

Surveys completed on the TAS project area between 1986 and 1987 consisted of VLF-EM, Magnetometer and Induced Polarization methods. Grid lines extend in both North-south and East West directions with most of the early survey coverage completed on the North - South grid lines.

VLF - EM SURVEY

During July 1987 a VLF-EM survey was completed on the RIDGE GRID with readings recorded at 25 meter intervals. The Seattle, Wash. VLF-EM transmitter was employed for the source signal.

The VLF-EM coverage was restricted to 11 east west lines. The survey has recorded numerous 'crossovers' however for the most part these are of long wavelength (> 100 meters) and thus are most likely caused by smooth continuous variations in the overburden resistivity or by topographic changes. There are a few sharper features which are noted on the profile map as 'conductor axes' but these are for the most part lacking in good quadrature response. These sharper features are considered areas of interest. One locality with significant VLF (and magnetic) activity is centered approximately at L.49850N/49600E.

When this data is compared with the filtered resistivity data there is good correlation with the subtle EM responses however there is a low confidence level with the VLF-EM data by itself. The quality of the I.P. data supersedes the quality of the VLF-EM which, considering the quantity of I.P. data available, puts the VLF-EM data as a supportive method at best.

MAGNETOMETER SURVEY

Magnetometer surveys were run during several programs spanning 1985, 1986 and 1987. This large coverage was completed on the North-South lines while a smaller magnetic survey was completed on the RIDGE GRID which is constructed of East-West lines. (There has been no attempt to merge the East-west line data with the North-South line data). All of the North-South line data has been leveled, corrected and merged into a single data set. Difficulties were encountered in attempting to merge the numerous data sets collected by a number of individuals. Most of the level differences have been corrected to within approximately 10 nano Teslas however discrepancies still exist particularly on the north ends of lines 9400E and 9600E.

The large data set (N-S lines) has identified four specific types of magnetic responses reflecting changes in the magnetic susceptibility of the underlying geology. They are as follows:

UNIT 1:

This response is typical of an intrusive body and is mapped over the south central portion of the grid between Lines 9800E and 12300E and approximately south of station 10300N. This response indicates a high magnetic susceptibility whose boundaries are well defined. Possible dike structures are evident emanating from the North West corner of the intrusive in a 065 and 315 azimuthal direction. Note that peripheral of the northern contact there is an extensive magnetic low which is a reflection of the dipolar nature of the Total Field. This low should not be construed as an anomalous area of magnetic mineral depletion.

UNIT 2:

This area is located west of the intrusive and south of the 1250 nT contour (on the filtered map) between approximately L.7600E/11300N to L.9400E/10000N. This area is underlain by a moderate but uniform magnetic susceptibility unit.

UNIT 3:

The remainder of the gridded area is underlain by a low magnetic susceptibility unit that has a geological noise level of approximately 50 to 75 nT. This 'noise' is generally of a low frequency except in an area bounded between Lines 9800E - 11000E and stations 11100N to 11500N where the characteristics of the geological 'noise' is considerably sharper and higher in amplitude. This would indicate discrete, small near surface sources of high susceptibility. These sane sources may also be responsible for the overall pattern of the magnetics for this unit 3 but beyond the above mentioned area may be at a somewhat deeper depth of burial.

RIDGE GRID

A smaller scaled magnetometer survey was completed during 1987 on the RIDGE GRID which consisted of a number of East-West lines controlled by the 50000E baseline. Note that this area was also surveyed with some detail on a North-South line direction. The information from either of these data sets indicates that the area is underlain by a magnetically uniform package punctuated by small isolated zones of high magnetic susceptibility.

Some indication of magnetic 'strike' direction can be inferred from the data however the numerous isolated anomalies tend to add some confusion to the picture. Both data sets indicate a preferential 140-160 direction as well as a subsidiary 090 direction. A third direction of interest is a magnetic contact feature which extends in a definite 045 degree direction. This direction is most evident on the old data set collected on the North-South lines. Specifically a package of active magnetics is mapped between L.49300E/49800N - L.49900E/50300N and L.49750E/49700N - 50350E/50300N. West of this unit there is a similar package defined northwest of a contact between L.49000E/49750N - L.49500E/50300N. These are very subtle features and can only be poorly defined at best due to the line directions of the two Ridge grids.

Other structural features are evident from the magnetic data and are as presented on the Ridge grid compilation/Mag map.

INDUCED POLARIZATION SURVEYS

Numerous I.P. surveys have been completed in the TAS project area. The majority of the work has centered on the Ridge grid (on both of the two overlapping grids). The work can be split into two portions - i.e. the North-South grid and the East-West Ridge grid. Determining line to line correlation with the I.P. data has been at best a difficult task and this is probably the result of the small PFE sources involved and the unknown direction of these sources. A case can be made for a multiplicity of strike directions however directions as defined by the magnetometer surveys are seen. This is particularly true of 140 - 160 degrees.

NORTH - SOUTH GRID

The IP data indicates this large area to be underlain by a high IP effect response typically in the range 4 to 9 Percent FE. Within this high background several "anomalous" PFE and resistivity responses stand out thus defining a number of potential targets. The work completed during 1986 consisted of 'recon' lines numbered less than 20000E. Time Domain equipment employing 25 meter dipoles was used on lines 10000E to 10800E. For Lines 8800E and 11100E to 12900E a wide 50 meter dipole length was employed. Specific descriptions of the recorded data on the North-South grid (Lines 8800E - 12900E and Lines 49000E - 50400E) are as follows:

LINE 8800E

This recon line was surveyed with 50 meter dipoles and three weak zones of PFE were recorded in a fairly homogeneous resistivity package. The most significant PFE anomaly is defined between 11500N and 11650N.

LINE 10000E

A high chargeability background is mapped north of station 10300N with few other distinctive features noted.

LINE 10100E

A high chargeability background is noted north of station 10387N with a local IP anomaly defined at 10425N-10500N. To the south of this package the area is broken by three weal IP zones as illustrated on the pseudo-section. The two small responses at 10150N and 10200N have no identifiable resistivity signatures other than that they lie within a high resistivity zone.

LINE 10200E

A distinctive high chargeability package is defined north of station 10400N. To the south of this unit there are no responses of immediate interest save for a number of small weak response at 9825N - 9925N/n=4.

LINE 10400E

A similar signature as above carries to this line. The high IP background is evident north of 10525N and within this unit the resistivities are quite variable. Within this unit a weak IP is defined at 10650N. At the south contact (10525N) there is a noticeable increase in the resistivity. South of 10300N the IP background increases with a local IP enhancement noted at this contact.

LINE 10600E

Two IP backgrounds are noted on this section and whose boundary or transition occurs between 10662.5N and 10725N. This is also reflected in the resistivity data but is not as prominent as with the IP data. Within the area of the high IP there are two zones of above (local) background and are centered at 10825N/n=4 and a less distinct zone at approximately 11200N. Associated with this latter response is a low resistivity zone which is assumed to be the east extension of the low resistivity zone defined at L.10800E/11312.5N as mentioned below.

South of the high IP background the resistivities drop north of 10450N. Within this 200 ohm-meter material a broad IP anomaly is recorded centered at 10362.5N/n=3. There is no distinct resistivity signature associated with this zone.

LINE 10800N

A high IP background is recorded on this line of data. Within this package some localized zones are noted particularly those centered at 10875N/n=3,4 and 11337.5N/n=4. These two responses reflect subtle changes in the rock composition rather than discrete zones. There is no recorded resistivity signatures associated with these IP responses. One resistivity feature that is initially mapped on Line 10600E is identified at 11312.5N which appears to be sourced by a narrow, steeply dipping zone of low resistivity.

LINE 11100E

The IP survey on this line employed a 50 meter dipole length and has defined a high IP background between 10350N and 10900N(?) within which some minor increases in the Frequency Effect can be discerned. The resistivities are uniform throughout the section.

LINE 11500E

No discrete PFE targets were identified on this section of data. Two areas of above background are mapped south of 9800N and at 10350N - 10850N. The resistivity shows no outstanding features save for a resistivity high centered at 10050N/n=3.

LINE 11900E

This Line of data has defined an area of above background PFE north of station 11350N. The PFE values at depth (n=3) are quite high and indicate a wide target. The resistivity is low within this high PFE zone.

LINE 12400E

Two zones of high PFE are defined on this line however it is strongly suspected that they are the same zone which extends across the full length of the surveyed line. A low resistivity area between 10850N and 11100N appears to be suppressing the depth of detection which in turn causes an artificial low in the PFE values. Local high PFE anomalies are seen in the data and are as illustrated on the section.

LINE 12900E

Three zones of anomalous PFE readings were recorded on this line and are as illustrated on the IP section. Due to the wide dipole spacing of 50 meters definition of these sources is poor.

The following IP Lines were surveyed with a dipole length of 25 meters.

LINE 49000E

A broad PFE target with PFEs in excess of 10% is located at 49800N-50025N however the resistivity does not show any clear pattern. Indeed it appears that there may have been a problem with the Tx electrodes (ice?) that has suppressed the PFE response and disrupted the resistivity pattern.

At stations 50175N-50212N there is a substantial PFE anomaly that clearly stands out above the high background. This target lies on the south flank but not in a uniform zone of low resistivity. This low resistivity unit is a pronounced change in signature thus probably is reflecting a gross change in the geology.

LINE 49200E

Located at 49687N-49712N there is a moderate response that may actually be closely associated with the response discussed below. The south edge of this anomaly has a sharp cutoff which is in itself an anomaly. There is no resistivity signature of interest.

As discussed above this zone at 49812N-49837N may be associated with the response to the south but otherwise represents a narrow source at depth.

A narrow and poorly defined anomaly at 50000N-50025N lacks a balanced anomaly shape. It is approximately twice background and may be due to an electrode problem.

This anomaly at 50087N-50112N has a well developed PFE pattern indicating a source that extends to depth with a width of approximately 25 meters. There is no obvious resistivity pattern associated with this target however the PFE response should stand on its own.

LINE 49400E

A broad PFE response is located at 49962N-50112N that is well above background and has a high resistivity 'core'. This zone may extend some 100 meters to the south but the signature indicates this section of the source to be buried.

LINE 49600E

This narrow zone at 49800N-49850N is poorly defined and is at best only inferred as a surficial response within a low resistivity zone.

Much of this PFE response at 49937N-49975N was not recorded as it occurs within and on the north side of a very low resistivity anomaly that has values down to 8 ohm-meters. This resistivity response is highly anomalous and in fact may be a composite response of two low resistivity sources. A high resistivity zone lies on the north flank of the PFE/RES anomaly.

A very broad zone is defined north of 50125N that extends beyond the end of the line. Within this anomaly variations of the PFE can be discerned however with a background of 12%-15% it is difficult to identify specific features. A significant low resistivity zone is recorded at the north end of the line and is only partially defined.

LINE 49800E

The wide PFE zone at 50087N - ? is the extension of the zone discussed above for Line 49600E and is assumed to be the same source.

A poorly defined PFE anomaly is mapped at 49700N-49725N however it appears to occur at a resistivity contact.

At 49812N-49850N there is a small response of two times the background PFE. The shape of this anomaly hints that the edge or the end of the source is being defined with the bulk of the source located off line.

A definite surficial source is located at 49925E-49950E and is of limited depth extent as indicated by the PFE signature. The resistivity response is interesting in that the anomaly is associated with a low resistivity sandwiched by thin high resistivity sources.

LINE 50000E

A very poorly defined near surface PFE response is recorded at 49975N-50000N on the south flank of a resistivity contact.

A zone of limited depth extent is mapped at 50150N-50187N and is associated with a high resistivity response. This PFE response is approximately twice background and generally poorly defined.

LINE 50200E

The high PFE zone defined at 49887N-49962N occurs within a high background and is thus poorly defined although what is attractive

is the narrow and coincident resistivity low that is associated with this target.

A high PFE zone (2 times background located at 50112N-50162N) appears to be of limited depth extent. A significant low resistivity anomaly is mapped coincident with the south contact of the PFE anomaly. This resistivity low is flanked or sandwiched with a veneer of high resistivity.

LINE 50400E

A 50 meter wide zone at the extreme North end of the line has clear and distinct boundaries along with a well defined resistivity signature of 400 to 500 ohm-m. This line has an overall low PFE background.

The remaining lines discussed below are located on the East-West grid lines and are concentrated in the vicinity of the 'RIDGE GRID'. Frequency Domain equipment employing a 25 meter dipole-dipole array was used exclusively in this area.

LINE 49200N

Two zones of anomalous PFE were partially defined on this line of data. At the west end of the line a build-up in the PFE values is recorded west of station 49050E. This source appears to occur within a high resistivity environment however it is only partially defined. East of 49800E there is a significant increase in the PFE and what is noticeable about this package is the uniformity of the PFE and resistivity values leading to the conclusion that this unit is quite homogeneous. The east contact is located at station 50025E.

LINE 49400N

The PFE values are somewhat elevated on this Line defining a background of about 5% to 6%. Within this package there are two narrow zones centered at 49612.5E and at 49750E. Neither of these sources has any outstanding resistivity signature.

LINE 49900N

This line of data has a complex picture both in the resistivity and PFE parameters thus making anomaly identification difficult. Five anomalous PFE zones are tentatively indicated on the section. Narrow (<50m) responses that do stand out are centered at stations 49100E and at 49737.5E with the latter being the most interesting due to its association with a localized resistivity.

LINE 49950N

As for the line to the south there is an elevated PFE background with a few 'anomalous' responses that are as noted on the pseudo-section. None of these have well defined shapes and

probably reflect changes in the sulphide content of the underlying geology. One feature of interest is the zone of high resistivity centered at 49950E and a poorly defined zone at 50037.5E. There is no unique PFE response mapped with these resistivity anomalies. Additional second grade high resistivity zones are mapped at approximately 48900E, 49362.5E and 50212.5E.

LINE 50000N

This line of IP data has mapped a number of PFE anomalies however the pervasive high background provides difficulties in anomaly definition. Those zones that standout are as indicated on the pseudo-section and are centered at 49037.5E, 49500E and 51025E. There are several narrow high resistivity sources mapped on this line and are located at 48850E, 49375E, 49825E, 49950E and 50162.5E. These resistivity highs may represent dikes and/or discrete zones of silicification.

LINE 50050N

As for the previous lines there is a high PFE background recorded over most of this line however a contact is defined at 50225E where the PFE drops significantly east of this point. Note that there is an increase in the PFE at this contact. Well defined PFE sources are difficult to locate within this high PFE environment however an attempt has been made to indicate these areas on the pseudo-section. Narrow resistivity highs are mapped at 49125E, 49512.5E - 49612.4E (?), and at 49925E. None of these resistivity targets have an associated and discrete PFE response.

All of the resistivity and PFE data in the vicinity of the RIDGE grid, which includes the data from the North-South and East-West grid lines, has been filtered (according to D. C. Fraser of DIGHEM, Ontario) and plotted at 1:2500 in contoured plan form. This presentation allows an overview of the IP survey to be seen however actual anomaly location and definition should be determined from the pseudo-sections only. Both the PFE and resistivity data sets show a weak trend direction of 140 - 160 degrees which is supported somewhat by the magnetic survey. The resistivity data shows a number of high resistivity units in particular the major package which runs in an East-West direction and enclosed by the 500 ohm-meter contour. Peripheral to the bulk of this package centered at 50050N/49500E there is a PFE high which with some imagination encircles the local resistivity high. Other areas have a coincident resistivity and PFE high and appear to be of small dimension. Such sources are located at approximately 49950N/50200E, 50175N/50200E and 50450N/49800E.

DRILLING:

In May of 1987 a 5000 foot drill contract was let to Phil's Diamond Drilling of 100 Mile House, B.C. Drilling was done using a skid mounted Longyear 38, tow around by an International TD-8 bulldozer. Drilling encountered difficulties with equipment, personnel and the extra-ordinarily hard and brecciated rock on the property.

HOLE NO: 271-87-1

Location: 48708N/48950E
Azimuth: 330 degrees
Dip: -45 degrees

LOG: (meters)	Description
0 - 6.1	Casing
6.1 - 12.2	Diorite
12.2 - 16.5	Altered tuff/siltstone - 2-3% py
16.5 - 22.3	Fault Zone
22.3 - 40.2	Diorite
40.2 - 50.6	Silicified siltstone
50.6 - 59.1	Diorte
59.1 - 60.4	Hornfelsed andesite
60.4 - 70.4	Diorite
70.4 - 72.5	Siltstone
72.5	END OF HOLE

Drillhole 1 was proposed to test the down dip extent of the Freegold Zone, but encountered very poor ground conditions, recovering only about 20% of the core. A large fault zone was intersected, but no quartz/carbonate zone was cut. No significant assays were reported.

HOLE NO: 271-87-2

Location: 48714N/48983E
Azimuth: 330 degrees
Dip: -45 degrees

LOG: (meters)	Description
0 - 4.6	Casing
4.6 - 10.1	Diorite
10.1 - 19.2	Siltstone/tuff
19.2 - 26.5	Fault Zone
26.5 - 39.0	Andesite tuff
39.0 - 43.6	Diorite
43.6 - 44.8	Andesite
44.8 - 46.9	Silicified siltstone - 2-5% py
46.9 - 48.2	Andesite
48.2 - 71.9	Diorite
71.9	END OF HOLE

The second hole was another attempt to test the Freegold Zone, but 50 meters to the east along strike. The hole again failed to intersect a quartz/carbonate zone. No significant assays to report.

HOLE NO: 271-87-3

Location: 49976N/49976E
Azimuth: 100 degrees
Dip: -55 degrees

LOG: (meters)	Description
0 - 2.1	Casing
2.1 - 8.8	Hornblende-augite Diorite
8.8 - 13.4	Hornblende-Augite Porphyry - 5% py
13.4 - 16.5	Siltstone
16.5 - 19.5	Brecciated siltstone
19.5 - 21.0	Sulphide Zone - 10-20% py, 2% po, tr. cpy
21.0 - 28.0	Brecciated siltstone - 1-2% py
28.0 - 41.1	Andesite - 1% py
41.1 - 46.3	Brecciated siltstone - 1-2% py
46.3 - 48.5	Siltstone - 1% py
48.5	END OF HOLE

Drillholes 271-87-3, 4, 5, 6, and 11 are located along the East Zone trend of mineralization which was trenched and chip sampled in Trench 1. Assays from chip sampling up dip from hole 2 gave 24.7 gmt Au over 2.0 meters. The drillhole intersected a sulphide zone at 19.5 m to 21.0 m, but no significant assays were returned.

HOLE NO: 271-87-4

Location: 50006N/49978E
Azimuth: 100 degrees
Dip: -45 degrees

LOG: (meters)	Description
0 - 2.7	Casing
2.7 - 4.9	Hornblende-augite porphyry
4.9 - 7.9	Siltstone
7.9 - 8.8	Hornblende-augite porphyry - 2-5% py
8.8 - 13.7	Siltstone
13.7 - 14.6	Andesite - 2-5% py
14.6 - 14.9	Brecciated siltstone - 1-2% py
14.9 - 15.2	Massive sulphide - 30% po, 50% py, 1% mag
15.2 - 17.1	Andesite - 2-5% py
17.1 - 18.6	Siltstone - 5% py
18.6 - 21.0	Sulphide zone - 25% po, 10% py, 1% cpy
21.0 - 24.4	Siltstone
24.4	END OF HOLE

HOLE NO: 271-87-5

Location: 50006N/49978E
Azimuth: 100 degrees
Dip: -65 degrees

LOG: (meters)	Description
0 - 6.1	Casing
6.1 - 17.1	Siltstone
17.1 - 18.3	Andesite
18.3 - 21.3	Siltstone
21.3 - 22.6	Brecciated siltstone with 10-15% Py, tr. Cpy
22.6 - 24.4	Siltstone
24.4 - 25.9	Brecciated siltstone with 10-15% Po, 1% Py, 15cm massive Po, trace Cpy
25.9 - 26.8	Magnetite and Sulphides with 60% Magnetite, 20% Po, 20% Carbonate
26.8 - 32.0	Siltstone
32.0 - 33.2	Andesite
33.2 - 37.2	Siltstone
37.2 - 37.6	Silicified siltstone, bands of massive Pyrite and Pyrrhotite - 10-15% Py, 10-15% Po
37.6 - 44.8	Brecciated siltstone, 2-3% sulphides
44.8 - 49.1	Siltstone
49.1	END OF HOLE

Drillholes 4 and 5 were completed from the same set up along the same section to test a sulphide zone in Trench 1, which gave a chip sample of 4.5 gmt over 2.3 meters. Hole 4 intersected two mineralized zones; the upper assayed 2.0 gmt/6.1 meters and the lower zone ran 8.81 gmt/0.9 meters. Hole 5 also intersected the two same zones; 3.8 gmt/5.5 meters and 7.7 gmt/0.4 meters.

HOLE NO: 271-87-6

Location: 50040N/49968E
Azimuth: 095 degrees
Dip: -45 degrees

LOG: (meters)	Description
0 - 4.6	Casing
4.6 - 13.1	Diorite
13.1 - 14.6	Siltstone
14.6 - 18.3	Diorite, minor siltstone
18.3 - 28.7	Hornfelsed black shale
28.7 - 31.1	Siltstone
31.1 - 31.5	Massive sulphides - 60% Po, 15% Py, 5% Cpy
31.5 - 35.4	Siltstone - 2-5% Po, 2% Py, 1% Cpy 2-15cm bands of massive sulphides
35.4 - 36.9	Siltstone
36.9 - 38.1	Hornblende-augite porphyry
38.1 - 43.0	Siltstone
43.0 - 44.2	Hornblende-augite porphyry

44.2 - 54.3	Siltstone
54.3 - 55.8	Diorite
55.8 - 56.4	Mineralized zone - 10% Py, 10% Po, 1% Cpy Carbonate vein
56.4 - 57.0	Hornblende-augite porphyry
57.0 - 57.9	Brecciated Siltstone
57.9 - 58.5	Diorite
58.5 - 66.8	Siltstone
66.8	END OF HOLE

Drillhole 271-87-6 was a 25 meter set out along strike to the north from holes 4 and 5. The hole intersected 8.9 gmt/5.3 meters from 30.1m to 35.4m and 15.53 gmt/0.6 meters from 55.8m to 56.4m.

HOLE NO: 271-87-7

Location: 49989N/49716E
Azimuth: 120 degrees
Dip: -45 degrees

LOG: (meters)	Description
0 - 5.2	Casing
5.2 - 10.1	Andesite
10.1 - 13.7	Brecciated siltstone - 2-5% py in fractures and stringers
13.7 - 17.7	Diorite - 2-5% py
17.7 - 17.8	Massive pyrite-pyrrhotite
17.8 - 30.5	Siltstone - 2-3% py
30.5 - 32.6	Altered siltstone - 2-5% py
32.6 - 35.7	Mineralized siltstone - 10% py stringers, 5% po
35.7 - 36.9	Hornblende-augite porphyry - 3-5% py
36.9 - 40.2	Siltstone - 1-2% py
40.2 - 43.3	Hornblende-augite porphyry
43.3 - 43.6	Siltstone - 2-3% py
43.6 - 44.5	Hornblende-augite porphyry
44.5 - 46.0	Mineralized siltstone - 2-5% py, 5% po
46.0 - 49.4	Hornblende-augite porphyry - 2-3% py
49.4 - 61.6	Siltstone - <1% py
61.6 - 64.3	Mineralized siltstone - 2-3% py, 1-2% po
64.3 - 69.2	Hornblende-augite porphyry - 1% py
69.2 - 73.5	Siltstone - 1-2 py
73.5 - 74.1	Hornblende-augite porphyry
74.1 - 75.3	Siltstone
75.3	END OF HOLE

HOLE NO: 271-87-8

Location: 49968N/49700E
Azimuth: 120 degrees
Dip: -45 degrees

LOG: (meters)	Description
0 - 3.7	Casing
3.7 - 19.2	Siltstone - 2% py
19.2 - 15.9	Hornblende-augite porphyry
25.9 - 28.0	Andesite
28.0 - 29.6	Diorite
29.6 - 36.0	Siltstone - 1-2% py, 1% po
36.9 - 40.5	Diorite
40.5 - 54.3	Siltstone - 1% py, 1% po
54.3 - 57.0	Mineralized siltstone - 2-3% po, <1% py
57.0 - 57.6	Hornblende-augite porphyry - 1% po
57.6 - 64.6	Altered siltstone - 2-3% py (60.0-61.0m - 20% po, 10% py in stringers)
64.6 - 67.4	Siltstone
67.4 - 68.9	Breccia
68.9 - 71.3	Mineralized siltstone - 10% py in stringers, 10% po, 1% cpy
71.3 - 73.8	Hornblende-augite porphyry
73.8 - 86.0	Mineralized siltstone - 2-5% py, 5-10% po - in stringers
86.0 - 93.6	Hornblende-augite porphyry
93.6	END OF HOLE

HOLE NO: 271-87-9

Location: 50021N/49725E
Azimuth: 020 degrees
Dip: -45 degrees

LOG: (meters)	Description
0 - 6.1	Casing
6.1 - 23.5	Hornblende-augite porphyry
23.5 - 30.2	Siltstone - 1-2% py
30.2 - 37.2	Hornblende-augite porphyry
37.2 - 40.2	Siltstone
40.2 - 51.8	Diorite
51.8 - 57.6	Hornblende-augite porphyry
57.6 - 58.5	Siltstone
58.5	END OF HOLE

HOLE NO: 271-87-10

Location: 50021N/49725E
Azimuth: 120
Dip: -45
Depth: 76.8 m (252 feet)

LOG: (meters)	Description
0 - 9.1	Casing
9.1 - 25.3	Siltstone - 1-2% py
25.3 - 26.5	Andesite
26.5 - 27.1	Mineralized andesite - 20% po, 10% py
27.1 - 34.7	Siltstone
34.7 - 36.3	Mineralized siltstone - 5-10% po, 5-10% py
36.3 - 37.2	Siltstone - 1-2% py
37.2 - 38.1	Mineralized siltstone - 20% po, 15% py, 1% cpy
38.1 - 46.6	Siltstone - 1% py
46.6 - 47.9	Mineralized siltstone - 30% po, 20% py
47.9 - 57.3	Siltstone - 1-2% py, 1% po.
57.3 - 58.8	Carbonate altered siltstone - 2-5% py
58.8 - 63.1	Mineralized siltstone - 2-5% py
63.1 - 67.4	Siltstone
67.4 - 68.6	Hornblende-augite porphyry
68.6 - 70.1	Siltstone
70.1 - 71.6	Hornblende-augite porphyry
71.6 - 74.1	Siltstone
74.1 - 76.8	Diorite

HOLE NO: 271-87-11

Location: 50060N/49942E
Azimuth: 090 degrees
Dip: -45 degrees

LOG: (meters)	Description
0 - 1.5	Casing
1.5 - 10.1	Diorite
10.1 - 12.2	Hornblende augite porphyry
12.2 - 15.8	Siltstone
15.8 - 16.8	Brecciated siltstone
16.8 - 20.7	Andesite
20.7 - 25.0	Siltstone
25.0 - 26.8	Hornblende augite porphyry
26.8 - 29.2	Carbonate altered siltstone
29.2 - 29.6	Stringer pyrite pyrrhotite - 20% po, 10% py, trace cpy
29.6 - 31.1	Carbonate altered siltstone
31.1 - 54.8	Siltstone
54.8 - 57.0	Diorite
57.0 - 60.0	Siltstone
60.0 - 60.7	Brecciated siltstone
60.7 - 62.8	Siltstone
62.8 - 64.3	Hornblende augite porphyry

64.3	- 73.8	Siltstone
73.8	- 75.3	Hornblende augite porphyry
75.3	- 88.1	Siltstone
88.1	- 92.0	Brecciated siltstone
92.0		END OF HOLE

HOLE NO: 271-87-12

Location: 49984N/49905E
Azimuth: 110 degrees
Dip: -45 degrees

LOG: (meters)		Description
0	- 4.6	Casing
4.6	- 16.3	Hornblende Augite Porphyry - 1-2% py, 1% po
16.3	- 19.2	Siltstone
19.2	- 19.8	Brecciated siltstone, 2-5% py
19.8	- 20.4	Hornblende augite porphyry
20.4	- 26.5	Siltstone, 1% py
26.5	- 28.3	Andesite
28.3	- 39.6	Siltstone
39.6	- 40.9	Hornblende augite porphyry
40.9	- 51.0	Siltstone, 2-5% py
51.0	- 52.8	Hornblende augite porphyry - 2-5% py
52.8	- 61.0	Siltstone, 2-5% py
61.0	- 68.0	Hornblende augite porphyry 5-10% py, 2-5% po, trace cpy
68.0	- 72.7	Siltstone, 2-5% py
72.7	- 82.9	Hornblende augite porphyry - 1-2% py, 1% po
82.9		END OF HOLE

HOLE NO: 271-87-13

Location: 49973N/49748E
Azimuth: 120 degrees
Dip: -45 degrees

LOG: (meters)		Description
0	- 7.0	Casing
7.0	- 25.2	Siltstone - 1% py, <1% po
25.2	- 34.3	Andesite - 1-2% po, 1% py
34.3	- 38.8	Mineralized siltstone - 10-15 po, 5-10 py, tr cpy
38.8	- 41.8	Diorite - 1-2 py, 1 po
41.8	- 45.4	Siltstone - 1 py, po
45.4	- 47.6	Hornblende Augite Porphyry - 2-5 py, 1 po
47.6	- 56.1	Siltstone - 2-5 py
56.1	- 63.4	Hornblende Augite Porphyry - <1 py
63.4	- 72.5	Siltstone - 1-2 py, <1 po
72.5	- 73.8	Hornblende Augite Porphyry - 10-15 po, 1-2 py <1 cpy
73.8	- 78.5	Siltstone - 2-3 py, <1 po
78.5	- 81.6	Andesite - 2-5 py

81.6 - 83.5	Siltstone - 2-3 py
83.5 - 85.6	Mineralized siltstone - 10-20 po, 2-5 py, <1 cpy
85.6 - 86.7	Breccia - 2-5 po, 2-3 py, tr cpy
86.7 - 89.3	Siltstone - 2-3 py, 1-2 po
89.3 - 91.6	Breccia - 2-3 py
91.6 - 101.5	Siltstone - 1-2 py
101.5	END OF HOLE

HOLE NO: 271-87-14

Location: 49894N/49058E
Azimuth: 270 degrees
Dip: -45 degrees

LOG: (meters)	Description
0 - 2.7	Casing
2.7 - 6.3	Siltstone - 1-2 py
6.3 - 7.4	Hornblende Augite Porphyry
7.4 - 21.4	Diorite
21.4 - 25.3	Andesite - 2-5 py
25.3 - 32.7	Siltstone - 1-2 py
32.7 - 34.0	Hornblende Augite Porphyry
34.0 - 34.8	Diorite
34.8 - 43.9	Siltstone - 2-5 py, tr cpy
43.9 - 46.3	Mineralized Hornblende Augite Porphyry 5-10 po, 5 py, <1 cpy
46.3 - 51.2	Siltstone - 2-3 py
51.2 - 56.9	Hornblende Augite Porphyry - <1 py
56.9 - 61.0	Siltstone
61.0	End of Hole

HOLE NO: 271-87-15

Location: 49920N/49953E
Azimuth: 280 degrees
Dip: -45 degrees

LOG: (meters)	Description
0 - 4.6	Casing
4.6 - 16.6	Andesite Tuff
16.6 - 21.4	Diorite
21.4 - 24.2	Siltstone - 1% py
24.2 - 25.2	Mineralized Siltstone - 20-25% py, trace cpy
25.2 - 29.4	Siltstone
29.4 - 36.7	Andesite Tuff - 2-3% py
36.7 - 39.9	Hornblende-augite porphyry
39.9 - 41.6	Andesite
41.6 - 42.8	Hornblende-augite porphyry
42.8 - 43.1	Mineralized siltstone - 10-25% py, trace cpy
43.1 - 46.1	Siltstone
46.1 - 46.6	Andesite Tuff
46.6 - 48.3	Siltstone - 2-3% py

48.3 - 49.5	Hornblende-augite porphyry - 2-5% py
49.5 - 55.1	Siltstone
55.1 - 57.2	Brecciated Andesite
57.2 - 58.0	Hornblende-augite porphyry
58.0 - 58.1	Siltstone - 2-5% py
68.1 - 69.2	Hornblende-augite porphyry
69.2 - 71.0	Andesite
71.0 - 73.2	Siltstone - 2-3% py
73.2	END OF HOLE

HOLE NO: 271-87-16

Location: 49972N/49018E
Azimuth: 260 degrees
Dip: -45 degrees

LOG: (meters)	Description
0 - 1.8	Casing
1.8 - 7.8	Diorite
7.8 - 31.1	Siltstone and Andesite - 1-3% py, po
31.1 - 34.8	Diorite - 2-5% py
34.8 - 43.9	Siltstone - 2-5% py, 1-2% po, tr. cpy
43.9 - 44.9	Mineralized siltstone - 20% py, 10% po, 1% cpy
44.9 - 49.7	Siltstone
49.7 - 50.3	Diorite
50.3	END OF HOLE

HOLE NO: 271-87-17

Location: 49955N/49059E
Azimuth: 070 degrees
Dip: -45 degrees

LOG: (meters)	Description
0 - 6.4	Casing
6.4 - 6.7	Hornblende-augite porphyry
6.7 - 12.0	Siltstone - 2-3% py, 1% po, trace cpy
12.0 - 14.8	Diorite
14.8 - 18.5	Siltstone - 2-3% py, trace cpy
18.5 - 19.2	Mineralized siltstone - 20-25% py, 5% po, <1% cpy
19.2 - 22.6	Siltstone
22.6 - 28.6	Hornblende-augite porphyry - 2-5% py, 2-5% po, trace cpy
28.6 - 34.6	Siltstone - 2-5% py, 1-2% po, trace cpy
34.6 - 37.5	Diorite
37.5 - 41.4	Siltstone
41.4 - 42.8	Hornblende-augite porphyry
42.8 - 50.3	Siltstone - 2-3% py
50.3 - 55.7	Hornblende-augite porphyry - 2-3% py, 1% po
55.7 - 74.1	Siltstone - 2-5% py, 1-2% po, trace cpy
74.1 - 89.3	Hornblende-augite porphyry
89.3	END OF HOLE

13.7 - 16.8	Diorite
16.8 - 18.3	Diorite, Quartz carbonate - 1% py
18.3 - 24.4	Diorite
24.4 - 25.9	Quartz carbonate
25.9 - 30.5	Diorite
30.5 - 54.9	Siltstone, diorite - <1% py
54.9	End of Hole

This hole was a 25 meter step out to the east, but encountered very little quartz carbonate.

HOLE NO: 271-87-P4

Location: 49244N/49910E
Azimuth: 250 degrees
Dip: -55 degrees

LOG: (meters)	Description
0 - 6.1	Overburden
6.1 - 9.1	Siltstone - 2-5% py
9.1 - 12.2	No recovery
12.2	Abandoned Hole

HOLE NO: 271-87-P5

Location: 49240N/49910E
Azimuth: 250 degrees
Dip: -55 degrees

LOG: (meters)	Description
0 - 4.6	Overburden
4.6 - 7.6	Hornblende Augite Porphyry - 1-2% py
7.6 - 88.4	Siltstone - 2-5% py, tr. cpy
88.4	End of Hole

Drillhole P4 and P5 were designed to test a strong I.P. anomaly directly in front of the Noranda camp site. P4 failed to give recovery after 9.1 meters. P5 was successful, but gave no significant assays.

HOLE NO: 271-87-P6

Location: 48713N/48900E
Azimuth: 355 degrees
Dip: -45 degrees

LOG: (meters)	Description
0 - 7.6	overburden
7.6 - 61.0	Diorite - 1% py, tr. cpy
61.0	End of Hole

This drillhole was a 25 meter step out to the west on the Freegold zone, but failed to intersect a quartz-carbonate horizon.

HOLE NO: 271-87-P7

Location: 48978N/49486E
Azimuth: 355 degrees
Dip: -55 degrees

LOG: (meters)	Description
0 - 27.4	Overburden Hole Abandoned

P7 was an attempt to test another I.P. target, but the hole was lost in overburden.

HOLE NO: 271-87-P8

Location: 49195N/49914E
Azimuth: 270 degrees
Dip: -55 degrees

LOG: (meters)	Description
0 - 7.6	Overburden
7.6 - 36.6	Hornblende Augite Porphyry, siltstone 2-10% py, tr. cpy
36.6	End of Hole

Drillhole P8 tested another strong I.P. target in the camp vicinity, but gave no significant gold assays.

HOLE NO: 271-87-P9

Location: 49525N/49787E
Azimuth: 260 degrees
Dip: -50 degrees

LOG: (meters)	Description
0 - 3.0	overburden
3.0 - 13.7	Diorite - 1% py
13.7	End of Hole Hole Abandoned

HOLE NO: 271-87-P10

Location: 49710N/49785E
Azimuth: 080 degrees
Dip: -55 degrees

LOG: (meters)	Description
0 - 6.1	overburden
6.1 - 13.7	Hornblende Augite Porphyry
13.7 - 18.3	Siltstone - 2-3% py
18.3	End of Hole
	Hole Abandoned

Both drillholes P9 and P10 failed to test the projected targets because of bad ground conditions.

HOLE NO: 271-87-P11

Location: 49968N/49746E
Azimuth: 300 degrees
Dip: -55 degrees

LOG: (meters)	Description
0 - 21.3	Siltstone - 2-10% py
21.3	End of Hole

P11 was drilled across known mineralized zones on the Mid zone, but assays failed to reproduce chip and grab samples results.

CONCLUSIONS:

Tas Property

The TAS property appears to be underlain by a strongly hornfelsed series of siltstone/tuff, andesite and hornblende-augite porphyry. This hornfelsing is believed to be a result of emplacement of the diorite stock in the area of the Freegold Zone. Gold mineralization appears to have been driven off from either the diorite or another source, through a complex shear and fracture system in the siltstone/tuff unit.

Trenching outlined three main trends of gold mineralization: the east zone, the mid zone and the west pit zone. Gold mineralization in the east zone occurs as massive to stringer pyrite, pyrrhotite, chalcopyrite and magnetite in what appears to be a prominent shear trending 350 degrees. Assays as high as 24.7 gmt over 2.0 meters in chip sampling and 8.9 gmt over 5.3 meters in diamond drilling have been encountered.

A total of five diamond drillholes have been completed on the Mid zone, which lies 250 meters west of the East zone. This zone consists of a series of narrow sulphide filled shears, generally trending 030 degrees. The best assays include 24.4 gmt over 1.0 meters, 24.7 gmt over 0.9 meters and 20,200 gmt over 1.0 meters from chip sampling and 11.69 gmt over 0.7 meters.

The West Pit zone is a strong shear zone which can be traced for almost 100 meters, trending 350 degrees. Gold mineralization occurs in bands of massive to stringer pyrite, pyrrhotite and chalcopyrite in widths up to 2.0 meters. The highest assays from this zone include 37.8 gmt over 1.5 meters, 10.2 gmt over 1.5 meters and 11.4 gmt over 1.8 meters in chip sampling and 17.01 gmt over 1.3 meters in diamond drilling.

Soil geochemistry and geophysics outlined numerous targets which warrant further follow up using trenching and diamond drilling. The percussion drilling program was somewhat of a bust, because of very poor recovery after about 20 meters depth, as a result of the highly fractured nature of the host rocks.

Zana Grid

Only one weak gold anomaly was outlined on the entire grid, but requires further fill-in sampling. The most interesting anomaly is the coincident copper, lead and silver geochem around 40900E to 41100E between lines 39000N and 39600N. Further sampling is required in this area; this should be followed up by prospecting and cat trenching to determine the source.

HA 1 Grid

Although the property has received only a limited exploration, it appears that the gold-copper potential is somewhat reduced from initial expectations. The area of most interest appears to be mainly the silicified zones and quartz-carbonate

alteration which contains 2-5% pyrite in quartz stringers. These zones have returned only low gold values to date.

RECOMMENDATIONS:

1. A large gradient array I.P. survey should be conducted in order to determine the extent of the mineralization on the Ridge area.

2. Further dipole-dipole array I.P. is necessary in areas of strong P.F.E. and chargeability anomalies in order to determine their extent.

3. Small mise a la masse survey should be conducted over the east zone and the west pit zone in order to determine the extent of such mineralization.

4. Further detail soil sampling is required to the north and south of the east-west soil coverage to date on the Ridge

5. Approximately 5,000 square meters of cat trenching is required to test geochem anomalies in areas of shallow overburden.

6. A diamond drill program consisting of 3,000 meters of drilling is required to test previously outlined gold mineralization and new geochem and geophysical targets.

APPENDIX I

STATEMENT OF COSTS

TAS PROPERTY

1.	Geophysics:	
	Magnetometer Survey	$ 8,211.00
	VLF-EM Survey	$ 1,389.00
	I.P. Survey	$ 33,857.00
2.	Geochemistry:	
	Soil	$ 58,527.00
	Rock	$ 1,872.00
	Other	$ 107.00
3.	Sampling/Assaying:	$ 12,462.00
4.	Diamond Drilling:	$144,502.00
5.	Linecutting:	$ 8,154.00
6.	Trenching:	$ 5,369.00
7.	Geology:	$ 45,660.00
	TOTAL COST	$320,110.00

APPENDIX II

STATEMENT OF QUALIFICATIONS

I, Gordon Maxwell of Prince George, Province of British Columbia, do hereby certify that:

1. I am a Geologist residing at 5905 Rideau Street, Prince George, British Columbia.

2. I am a graduate of the University of Manitoba with an Hons. B. Sc. (geology).

3. I am a member in good standing of the Canadian Institute of Mining and the Prospector's and Developer's Association.

4. I presently hold the position of Project Geologist with Noranda Exploration Company, Limited and have been in their employ since 1980.

G. Maxwell

APPENDIX II

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 British Columbia.

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

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

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

L. Bradish.

APPENDIX III

ANALYTICAL PROCEDURES

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver. (March, 1984).

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 analysis.

Rock specimens are pulverized to -120 mesh (0.13 mm). Heavy mineral fractions (panned samples) 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 weighted out at 0.2 g or less depending on the matrix of the rock, and twice as much acid is used for decomposition that that is used for silt or soil.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn (all the group A elements of the fee schedule) can be determined directly from the digest (dissolution) with an atomic absorption spectrometer (AA). 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 attached with 3.3 ml of 6% tartaric aid, 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 acid solution with an AA-475, equipped with electrodeless discharge lamp (EDL).

Arsenic - As: 0.2 - 0.4 g sample is digested with 1.5 ml of 70% perchloric acid and 0.5 ml of conc. nitric acid. A Varian AA-475 equipped with an As-EDL measures the arsenic concentration of the digest.

Barium - Ba: 0.1 g sample is decomposed with conc. perchloric, nitric and hydrofluoric acid. Atomic absorption using a nitrous oxide-acetylene flame determines Ba from the aqueous solution.

Bismuth - Bi: 0.2 g - 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 into the flame of the AA instrument c/w EDL.

Gold - Au: 10.0 g sample sample (Pan-concentrates see below) is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with Methyl iso-Butyl ketone (MIBK) from tje aqueous solution. Gold is determined from the MIBK solution with flame AA.

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 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, taken from a perchloric-nitric (3:1) decomposition, usually from the multi-element digestion, is diluted with water and a phosphate buffer. This solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

LOWEST VALUES REPORTED IN PPM

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

APPENDIX IV

DIAMOND DRILL LOGS

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: June 6, 1987
DATE COMPLETED: June 7, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 48708N
DEP: 48950E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 2

DIP: -45 deg
BEARING: 330 deg

DIP TESTS:
DEPTH: 72.5 m.
ANGLE: -43 deg.

HOLE NO: 271-87-1

ELEV: 950 m
LENGTH 72.5 m

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	6.1	0	CASING															
6.1	12.2	20	EPIDOTIZED GRANODIORITE Mottled, dark grey and pale green, medium grained with 1mm size veinlets of calcite and epidote. Very badly broken core. (1% pyrite, hematite staining on fractures.	Fractures @ 10 and 80 deg to CA	(1	90501	12.2-13.1	0.9		10		0.1		450		44		6
12.2	16.5	30	ALTERED SILTSTONE/TUFF Dark grey to green, fine grained, highly fractured. Very irregular quartz and carbonate alteration in clots and veinlets (1-2mm), pervasive chlorite and epidote alteration with 2-3% pyrite.	Fractures sets @ 40 and 60 deg to CA	2-3 py 1-2 py	90502 90503	13.1-14.6 14.6-16.5	1.5 1.9		<5 <5		0.1 0.1		186 108		32 34		6 <2
16.5	22.3	35	FAULT ZONE Highly shear rock with intense chlorite and clay alteration, highly epidotized, hematite staining on fracture plane with 1-2% disseminated pyrite.	Slickensides @ 25 deg to CA	1-2 py 2-3 py (1 py 1 py 1-2 py	90504 90505 90506 90515	16.5-17.7 17.7-19.2 19.2-20.7 20.7-22.2	1.2 1.5 1.5 1.5		55 60 10 5		0.1 0.4 0.2 0.1		610 2000 340 77		30 34 40 48		3 4 2 4
22.3	40.2	30	EPIDOTIZED GRANODIORITE Dark green, medium grained, very badly broken core. Some purplish/pink colored dykes. 34.1m-34.4m purplish-pink coarse grained dyke.															
40.2	50.6	43	SILICIFIED SILTSTONE Buff to cream, mottled siltstone with narrow, irregular vein and veinlets of quartz, weakly silicified with 2-5% disseminated pyrite in some sections. Core very badly broken.	Quartz vein @ 20 deg to CA Fractures @ 20 deg to CA	1-2 py 1 py 1 py (1 py 2 py 2 py 2-5 py	90507 90508 90509 90510 90511 90512 90513	40.2-42.1 42.1-43.6 43.6-45.1 45.1-46.6 46.6-48.2 48.2-49.7 49.7-50.6	1.9 1.5 1.5 1.5 1.6 1.5 0.9		1 6 7 6 4 3 6		0.1 0.2 0.1 0.1 0.1 0.1 0.1		154 363 228 281 332 264 380		34 38 39 38 49 40 45		9 8 12 6 8 3 6

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-1

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
50.6	59.1	70	EPIDOTIZED GRANODIORITE Darker grey in color, less epidote alteration, 2-3 pyrite throughout. 52.4m-53.0m fine grained, green-grey siltstone with 2-5% pyrite	Fracture sets at 10 and 45 deg to CA														
59.1	60.4	43	HORNFELSED ANDESITE Dark grey to green mottled andesite with patches of granodiorite and epidote alteration. 2-5% disseminated pyrite.	Fractures @ 10 deg to CA	2-5 py	90514	59.1-60.1	1.3		5		0.1		360		34		3
60.4	70.4	56	EPIDOTIZED GRANODIORITE As above with very badly broken core and thin bands of buff to white colored siltstone. 63.7m-64.0m siltstone, 2-3% pyrite 68.3m-68.6m silicified siltstone with 1-2% pyrite.	Fracture sets at 80, 45 and 20 deg to CA														
70.4	72.5	48	ALTERED SILTSTONE Medium to dark green, weakly epidotized siltstone with fine veinlets of calcite and epidote, 1-2% pyrite. 70.4m highly fractured and sheared, intense chloritic altertion, 5% pyrite. 71.0m 2cm quartz vein with flakes of pyrite on fractures. END OF HOLE	Fractures at 45 and 80 deg to CA Vein at 40 deg to CA														

NORANDA EXPLORATION COMPANY LIMITED)
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D.D.H. #

DATE COLLARED: June 8, 1987 | DATE COMPLETED: June 9, 1987 | CORE SIZE: NQ | PROPERTY: TAS OPTION | N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 48714
DEP: 48983

SURVEYED CO-ORDINATES:

PROJECT: 271 | PAGE 1 OF 3

DIP: -45 deg
BEARING: 330 deg

DIP TESTS:
DEPTH: 71.9 m.
ANGLE: -42 deg.

HOLE NO: 271-87-2

ELEV: 950 m.
LENGTH 71.9 m.

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	4.6		CASING															
4.6	10.1	53	DIORITE (EPIDOTIZED) Light to medium grey with 30% 1-2mm anhedral feldspar phenocrysts, weak epidote alteration, highly fractured, some xenoliths of hornfelsed siltstone and andesite.	Fractures at 31, 45 and 80 deg to CA														
			7.6-8.8m: Silicified zone (mylonite?) mottled green and white with 20% quartz and calcite veinlets containing 2-5% pyrite and traces of chalcopyrite, grey to black graphite/chlorite along fractures and in quartz rich zones.	Veinlets at 16 deg to CA	2-5 py trace cp	90516	7.6-8.8	1.2		<5		0.2		49		34		3
			8.8-10.1m: Weakly mineralized diorite with slight epidote alteration, highly fractured, 10% quartz and carbonate veinlets with 1-2% disseminated pyrite.		1-2 py	90517	8.8-10.1	1.3		<5		0.1		200		48		4
10.1	19.2	52	ANDESITE TUFF Weakly hornfelsed, dark grey to green, fairly massive tuff with 1-2mm size fragments, weakly epidotized with narrow dykes of epidotized diorite, 2-3% narrow quartz and calcite veinlets with <1% disseminated pyrite.	Fractures at 47 deg to CA														
			10.1m: 2cm quartz vein	Vein at 20 deg to CA														
			13.1-13.4m: unaltered diorite															
			15.2-16.2m: intense epidote alteration															
			15.5-15.8m: diorite (epidotized)															
			18.3m: 5cm quartz/calcite vein															
			18.6-19.2m: heavily fractured and silicified zone with 5% dissem pyrite, 5% quartz and calcite veinlets	Veinlets at 33 deg to CA	5 py	90518	18.6-19.2	0.6		30		0.1		330		27		7

NORANDA EXPLORATION COMPANY LIMITED) D.D.H. #
(NO PERSONAL LIABILITY)

PROPERTY: TAS OPTION HOLE NO : 271-87-2 PAGE 2

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
19.2	26.5	75	FAULT ZONE/BRECCIA Light to pale green breccia with intense chlorite and clay alteration, brecciated fragments of hornfelsed siltstone, diorite and andesite section highly epidotized, 10-15% quartz/carbonate veinlets with hematite staining along fractures, badly broken core, poor recovery.													
26.5	39.0	91	ANDESITE TUFF Weakly hornfelsed, pale to dark green, fairly massive, weakly epidotized with very fine, <1mm size fragments. 5% quartz/carbonate and epidote veinlets, some silicified sections, 2-5% dissem pyrite throughout.	Veining at 05 and 47 deg to CA												
			32.3-32.6m: Weakly mineralized tuff with 5% quartz/carbonate veinlets and 2-3% pyrite in silicified zone.		2-5 py	90521	32.3-32.6	0.3		40		0.1		58		30		3
39.0	43.6	100	DIORITE (EPIDOTIZED) Medium grained, pale to light green, mottled epidote alteration, 2-3% quqrtz/carbonate and epidote veinlets (1-2mm).													
43.6	44.8	100	ANDESITE TUFF Weakly hornfelsed, mildly altered, dark green tuff with fine siltstone bands. 2-5mm, weak hematite staining on fractures, spotty epidote alteration.													
44.8	46.9	100	SILTSTONE (SILICIFIED) Light grey to buff siliceous zone with 2-5% dissem. pyrite and <1% chalco-pyrite, weak, pervasive carbonate alteration, vuggy calcite and pyrite.	Slickensides at 20-35 deg to CA												
			44.8-46.0m: 5-10% pyrite, <1% chalco-pyrite with 2-3 cm quartz/carbonate veinlets.	Veining at 23 deg to CA	trace cp 5-10 py	90519	44.8-46.0	1.2		22		0.1		245		35		6
			46.0-46.9m: Silicified siltstone, 2-5% pyrite, narrow quartz/carbonate veinlets, highly fractured.		2-5 py	90520	46.0-46.9	0.9		49		0.1		358		21		9
46.9	48.2	100	ANDESITE Dark green, highly fractured hornfelsed andesite with 5% quartz veinlets, dark siliceous siltstone bands, 2-5 cm.	Veining at 21, 45 and 82 deg to CA												

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-2

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
48.2	71.9	95	DIORITE (EPIDOTIZED)															
			As above, 39.0-43.6m.															
			51.2-51.8m: massive epidote with 1-2mm quartz/carbonate veinlets.	Veining at 33 deg to CA														
			53.6m: 2cm quartz vein															
			54.9-55.5m: massive epidote.															
			64.9m: 5cm quartz/carbonate vein															
			66.4m: clay and chlorite altered fracture zone.															
71.9			END OF HOLE															

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: June 11, 1987
DATE COMPLETED: June 11, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 49976N
DEP: 49976E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 3

DIP: -55 deg
BEARING: 100 deg

DIP TESTS:
DEPTH: 48.5 m
ANGLE: -45 deg.

HOLE NO: 271-87-3

ELEV: 1050 m.
LENGTH 48.5 m.

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	2.1		CASING - BOULDERS															
2.7	8.8	90	HORNBLENDE-AUGITE DIORITE Dark grey-green with 40% 2-20mm hornblende, augite and feldspar phenocrysts 1% biotite, badly fractured with hematite staining, 1% dissem. pyrite throughout.															
			7.3-10.3m: 1-2% dissem. pyrite		1-2 py	90522	7.3-10.3	3.0		(5		0.2		300		33		4
8.8	13.4	92	HORNBLENDE-AUGITE PROPHYRY Weakly hornfelsed, dark grey to green with 10% 2-20mm hornblende and augite phenocrysts, 1% biotite, 5% pyrite, mainly in fractures and thin seams, (1-2mm).															
			10.3-11.3m: 5% pyrite in fractures and seams		5 py	90523	10.3-11.3	1.0		(5		0.1		220		37		7
			11.3-12.8m: as above with 2% pyrite		2 py	90524	11.3-12.8	1.5		5		0.1		265		30		5
			12.8-13.4m: as above with 5% pyrite		5 py	90525	12.8-13.4	0.6		30		0.1		94		30		2
13.4	16.5	80	SILTSTONE/TUFF Hornfelsed, light grey to pale green, badly fractured with 1-2% dissem pyrite and traces of pyrrhotite in blebs and fractures, some weakly silicified sections with 1-2mm quartz veinlets.															
			13.4-14.9m: 1-2% pyrite, trace po		1-2 py	90526	13.4-14.9	1.5		85		(0.1		28		16		6
			14.9-16.5m: 1-2% pyrite, trace po		trace po	90527	14.9-16.5	1.6		110		(0.1		42		18		2
16.5	19.5	90	BRECCIA Mottled, medium grey and pale green, brecciated siltstone with 2-5% pyrite in blebs and fractures, weak chlorite alteration.															
			17.6m: 2cm quartz/carbonate vein															
			16.5-18.0m: 2-5% pyrite in blebs and fractures, 2% quartz/carbonate veinlets		2-5 py	90528	16.5-18.0	1.5		70		(0.1		56		24		6
			18.0-19.5m: as above with 5% pyrite		5 py	90529	18.0-19.5	1.5		190		0.1		48		25		6

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION HOLE NO : 271-87-3 PAGE 2

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
19.5	21.0	90	MINERALIZED SILTSTONE															
			Highly fractured pale green to medium grey with irregular quartz/carbonate veins containing 10-20% stringers of pyrite, 1-2% pyrrhotite and traces of chalcopyrite, calcite in vugs and fractures; manganese staining on fractures.	Slickensides at 50 deg to CA Veining at 50-65 deg to CA														
			19.5-21.0m:		10-20 py 1-2 po trace cp	90530	19.5-21.0	1.5		220		0.3		760		30		2
21.0	28.0	90	BRECCIA															
			Hornfelsed, pale grey matrix with coarse (up to 5cm), very angular fragments.	Fractures at 47 and 25 deg to CA														
			25.3m: 10cm mineralized zone, 10% stringer pyrrhotite, 5% pyrite, 5% quartz/carbonate veinlets.															
			21.0-22.6m: highly fractured, 5% quartz/carbonate veinlets, 1-2% pyrite		1-2 py	90531	21.0-22.6	1.5		170		0.1		128		16		<2
			22.6-24.1m: as above		1-2 py	90532	22.6-24.1	1.5		40		(0.1		41		16		<2
			24.1-25.6m: as above with 10 cm band of 10% po and 5% py		10 po, 5 py	90533	24.1-25.6	1.5		30		0.1		102		19		<2
			25.6-27.1m: as above		1-2 py	90534	25.6-27.1	1.5		150		0.1		80		16		<2
			27.1-28.0m: as above		1-2 py	90535	27.1-28.0	0.9		15		(0.1		69		19		3
28.0	41.1	87	ANDESITE (SILTSTONE)															
			Medium to fine grained, dark grey to dark green, fairly massive andesite with some silicified sections and breccia zones (2cm to 40cm)	Fractures at 42, 31 and 83 deg to CA														
			32.0-32.3m: breccia with silicification.															
			37.2-37.8m: breccia															
			28.0-29.6m: weakly silicified andesite with 1% pyrite		1 py	90536	28.0-29.6	1.6		15		0.3		445		24		<2
			29.6-31.1m: as above		1 py	90537	29.6-31.1	1.5		10		0.1		240		26		2
			31.1-32.6m: as above with some sections of breccia and 1-2% pyrite in fractures, weakly silicified.		1-2 py	90538	31.1-32.6	1.5		10		0.1		49		18		<2
41.1	46.3	81	BRECCIA															
			As above, 21.0-28.0m															
			41.1-43.6m: rounded, altered, siltstone fragments in clay and chlorite matrix, weakly silicified, 1% pyrite.															

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-3

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
41.1	46.3	81	Continued from previous page. 43.6-44.5m: crumbly breccia with intense clay and chlorite alteration 44.5-44.8m: as above - 41.1-43.6m 44.8-46.3m: as above - 43.6-44.5m															
46.3	48.5	100	SILTSTONE/TUFF Dark grey, weakly fractured with 1% pyrite in fractures.		1 py													
48.5			END OF HOLE															

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: June 12, 1987
DATE COMPLETED: June 12, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 50006N
DEP: 49978E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 3

DIP: -45 deg
BEARING: 100 deg

DIP TESTS:
DEPTH: 24.4 m
ANGLE: -45 deg.

HOLE NO: 271-87-4

ELEV: 1045 m.
LENGTH 24.4 m.

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	2.7		CASING															
2.7	4.9	45	HORNBLENDE-AUGITE PORPHYRY Brown to dark grey/green heavily weathered with (1% pyrite. 1-2% quartz veins and veinlets. 4.9m: 5cm intensely oxidized, weathered zone.															
4.9	7.9	80	SILTSTONE/TUFF Hornfelsed, grey/brown (weathering) near top, to medium grey/green. 10% narrow quartz/carbonate veinlets with 1% pyrite.	Veining at 52 deg to CA Fractures at 68, 47 and 21 deg to CA	1 py 1 py	90539 90540	4.9-6.4 6.4-7.9	1.5 1.3		(5 35		(0.1 0.1		75 54		30 20		(2 6
7.9	8.8	80	HORNBLENDE-AUGITE PROPHYRY Dark grey, 10% 2-5mm hornblende and augite phenocrysts, 2-5% dissem pyrite in fractures and vugs, 5% 1 cm calcite veinlets.		2-5 py	90541	7.9-8.8	0.9		50		(0.1		116		39		4
8.8	13.7	93	SILTSTONE/TUFF Hornfelsed, light grey to tan (bleached) fairly massive. 10% quartz/carbonate veinlets, bleached around veinlets, (1% pyrite.		(1 py	90542	8.8-9.4	0.6		200		0.1		110		18		10
13.7	14.6	85	ANDESITE (TUFF?) Hornfelsed, dark green/grey, highly fractured, pervasive quartz/carbonate alteration with 5% quartz/calcite veinlets, 2-5% dissem pyrite, trace chalcopyrite.		2-5 py trace cp	90543	13.7-14.6	0.9		900		(0.1		580		36		6

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION HOLE NO : 271-87-4 PAGE 2

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
14.6	14.9	92	BRECCIA Medium grey/green brecciated siltstone, weakly silicified, 1-2% pyrite, highly fractured.		1-2 py	90544	14.6-14.9	0.3		190	(0.1		81		22		5	
14.9	15.2	89	MASSIVE SULPHIDE 50% pyrrhotite, 30% pyrite, 1% sphalerite? (magnetite), trace chalcopyrite, 20 cm band of massive sulphide with quartz/carbonate vein. boxwork pyrite. crude banding.	Banding at 61 deg to CA Veining at 73 deg to CA	50 po, 30 py, 1 mag, trace cp	90545	14.9-15.2	0.3		6200	1.3		780		29		11	
15.2	17.1	91	ANDESITE Hornfelsed, dark green, massive andesite, weakly fractured with 1-2% quartz/calcite veinlets filled with 2-3% pyrite. 2% dissem pyrite throughout.	Fractures at 44, 20 and 08 deg to CA Veinlets at 40 to 60 deg to CA	2-5 py 2-5 py	90546 90547	15.2-16.2 16.2-17.1	1.0 0.9		440 260	0.1 0.1		510 260		38 30		4 2	
17.1	18.6	98	SILTSTONE/TUFF Hornfelsed, pale green, fairly massive siltstone with 5% pyrite in fractures, badly fractured, seams of pyrite up to 2 cm	Fractures at 38 and 52 deg to CA Sulphide bands at 70 to 80 deg to CA	5 py	90548	17.1-18.6	1.5		660	0.2		180		19		(2	
18.6	21.0	98	SULPHIDE ZONE Bands of massive and stringer sulphides with 20 cm quartz vein in brecciated, bleached siltstone with pervasive carbonate, minor chlorite alteration. 25% pyrrhotite, 10% pyrite, 1% chalco-pyrite. 20.1m: 20cm quartz vein with banded, massive pyrite, pyrrhotite and chalco-pyrite. Slug of massive chalcopyrite in vein. Boxwork pyrite. Pyrite filling hairline fractures. 18.6-20.1m: sulphide zone 20.1-21.0m: mineralized andesite with blebs of pyrrhotite, pyrite, pyrrhotite and chalcopyrite in fractures, 5cm quartz/carbonate vein with 2-5% pyrite, 3 cm band of massive pyrite, pyrrhotite and chalcopyrite, boxwork pyrite.	Banding at 55 deg to CA	25 po, 10 py, 1 cp. 10 po, 2-5 py, (1 cp.	90549 90550	18.6-20.1 20.1-21.0	1.5 0.9	8.81	400	0.1 3.0		700 3600		29 52		3 8	

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION HOLE NO : 271-87-4 PAGE 3

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
21.0	24.4	100	SILTSTONE/TUFF Hornfelsed, mottled, pale green, moderately fractured; 2% (1mm calcite veinlets. 21.0-22.3m: seams of pyrite and pyrrhotite, traces of chalcopyrite.	Fractures at 21 and 84 deg to CA	1-2 py, 1 po, trace cp	90551	21.0-22.3	1.3		360		<0.1		140		18		<2
24.4			END OF HOLE															

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: June 12, 1987
DATE COMPLETED: June 14, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 50006N
DEP: 49978E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 3

DIP: -65 deg
BEARING: 100 deg

DIP TESTS:
DEPTH: 49.1 m.
ANGLE: -45 deg.

HOLE NO: 271-87-5

ELEV: 1045 m.
LENGTH 49.1 m.

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	6.1		CASING															
6.1	17.1	68	SILTSTONE Light pale green to grey, highly fractured and blocky, very siliceous, 1% pyrite in some sections. 6.1-7.3m: mottled buff and pale green, bleached. 7.3-8.2m: highly fractured, very blocky, 10-20% quartz/carbonate veinlets, brecciated with fine grey matrix. 8.2-8.8m: pale green to buff (bleached), 10% quartz/calcite veinlets some sections of breccia. 8.8-9.4m: mottled, light green and pale green, 1-2% dissem pyrite, trace chalcopyrite. 9.4-10.1m: light pale green, very blocky 10.1-10.7m: medium green, fine, wispy laminations 10.7-11.3m: mottled, green and light pale green with 1-10mm laminations. 11.3-11.9M: grey to pale green, spotted siltstone 11.9-17.1m: fairly massive, pale, medium green siltstone, blocky, 10% py	Laminations at 45 deg to CA Laminations at 48 deg to CA	(1 py	90576	7.3-8.2	0.9	10	0.1	168	40	2		
17.1	21.3	92	ANDESITE (SILTSTONE/TUFF) Light-medium grey, finely laminated tuff, some mottled sections (siltstone) (1% pyrite in some sections. 17.1-18.0m: finely laminated, grey	Laminations at 45 deg to CA														

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION HOLE NO : 271-87-5 PAGE 2

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
17.1	21.3	92	Continued from previous page 18.0-18.6m: fractured, mottled, grey to light green to dark green to pale green, altered along fractures. 18.6-18.9m: massive, pale grey 18.9-19.2m: massive, light green 19.2m: 2cm quartz/calcite vein 19.2-20.1m: hornblende-augite porphyry 2-3mm hornblende-augite phenocrysts, 2-3% dissem. pyrrhotite 20.1-21.3m: massive pale green (1% py															
21.3	22.6	97	MINERALIZED BRECCIA Dark reen to grey mottled siltstone, fine calcite stringers with pervasive carbonate alteration, 10-15% pyrite in fractures and stringers, 2-5% dissem pyrite throughout, trace chalcopyrite, white to cream bleaching in some sections.		10-15 py trace cp	90577	21.3-22.6	1.3	7000	0.8	670	49	<2					
22.6	24.4	95	SILTSTONE/TUFF Hornfelsed, mottled, dark green to grey some intense bleaching, 1-2% pyrite in fractures. 22.6-22.9m: heavily weathered, fractured, brecciated, limonite staining.		1-2 py	90578	22.5-24.4	1.8	240	0.1	65	20	<2					
24.4	25.9	95	BRECCIA Massive to highly brecciated, pale green siltstone with 10% pyrite, 5% pyrrhotite, trace chalcopyrite in fractures, boxwork pyrite, pervasive carbonate alteration.		10 py, 5 po, trace cp	90579	24.4-25.9	1.5	3900	0.6	760	35	2					
25.9	26.8	100	MASSIVE MAGNETITE-PYRRHOTITE Massive magnetite with patches of calcite and pyrrhotite, 60% magnetite, 15% pyrrhotite, 20% calcite, 5% pyrite. Chlorite at top contact, banded pyrite, pyrrhotite, calcite and chlorite, also some for 10cm at bottom contact.	Banding at 77 deg to CA	60 mag, 15 po, 5 py, trace cp	90580	25.9-26.8	0.9	6300	0.9	575	23	4					

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-5

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
26.8	32.0	100	SILTSTONE/TUFF Hornfelsed, green to grey, fairly massive to finely laminated siltstone with 5-10% pyrite in fractures and stringers; fine calcite veinlets. 26.8-28.3m: mildly fractured with 10-15% boxwork pyrite in fractures and in thin seams, vuggy. 28.3-29.9m: siltstone 1-2% pyrrhotite	Veinlets at 18, 35 and 81 deg to CA	10-15 py trace cp 1-2 po	90581 90582	26.8-28.3 28.3-29.9	1.5 1.6	1300 75		0.3 0.2		1050 75		40 36		2 2
32.0	33.2	98	ANDESITE Pale green to grey, mottled texture, some spotted sections, weakly silicified, 1% dissem pyrite.		1 py													
33.2	35.7	98	SILTSTONE/TUFF Hornfelsed, mottled green to grey, finely laminated to massive siltstone, 2% fine calcite veinlets.	Laminations at 36 deg to CA Veinlets & Fractures at 72 deg to CA														
35.7	36.1	92	ALTERED SILTSTONE/TUFF Hornfelsed, highly silicified, intensely bleached, pale grey to pale green siltstone with pervasive carbonate alteration, 10% pyrite and 10% pyrrhotite.	Banding at 72 deg to CA	10-15 py, 10-15 po	90583	35.7-36.1	0.4	7700		1.1		5000		44		5
36.1	44.8	92	BRECCIA Hornfelsed, mottled, pale cream/buff (bleached) to light and dark green, highly brecciated siltstone, pervasive carbonate alteration, 2-3% blebs of pyrite and fracture filling. 41.1-43.3m: badly broken core		2-3 py 2-3 py 1-2 py 1-2 py 2-3 py 2-3 py	90584 90585 90586 90587 90588 90589	36.1-37.2 37.2-38.7 38.7-40.2 40.2-41.8 41.8-43.3 43.3-44.8	1.1 1.5 1.5 1.6 1.5 1.5	55 30 15 400 200 45		(0.1 (0.1 (0.1 (0.1 (0.1 (0.1		168 100 120 105 93 150		28 20 21 20 19 26		(2 (2 (2 (2 (2 2
44.8	49.1	100	SILTSTONE/TUFF Fairly massive, hornfelsed grey-green siltstone, fine calcite veinlets.	Veinlets at 21 deg to CA														
49.1			END OF HOLE															

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: June 14, 1987
DATE COMPLETED: June 16, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 50040N
DEP: 49968E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 3

DIP: -45 deg
BEARING: 095 deg

DIP TESTS:
DEPTH: 66.8 m
ANGLE: -43 deg.

HOLE NO: 271-87-6

ELEV: 1040 m
LENGTH 66.8 m

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	4.6		CASING															
4.6	13.1	87	GRANODIORITE Weakly hornfelsed, pale green, medium grained, highly fractured, few (1%) calcite veinlets, 1 cm xenoliths of argillite-siltstone, some partially assimilated, (1% pyrite.	Fractures at 72 and 45 deg to CA														
13.1	14.6	98	SILTSTONE Hornfelsed, medium to pale green, highly fractured, fairly massive siltstone, some sections weakly mottled, especially along fractures; 10% calcite veins (2-5mm), 1% pyrite in blebs.	Fractures at 45 and 68 deg to CA														
14.6	18.3	99	GRANODIORITE as above - 4.6-13.1m minor siltstone bands															
18.3	28.7	100	ARGILLITE-SILTSTONE Hornfelsed, dark grey to black, massive argillite, weak pervasive carbonate alteration, 5% calcite stringers and veins, 1-2% pyrite in fractures & blebs	Veining @ 03, 27 & 42 deg to CA Fractures @ 10, 42 & 75 deg to CA														
28.7	30.1	100	SILTSTONE Hornfelsed, mottled, pale green-grey badly fractured siltstone, 1% pyrite in blebs and dissem 2% calcite veinlets. 28.7-30.1m: siltstone, 1% pyrite 29.6-30.1m: breccia, 2-5% pyrite and 1% pyrrhotite.		1 py, 1 po	90590	28.7-30.1	1.4		65		(0.1		105		41		(2
30.1	31.1	86	DIORITE Medium grey, 5% pyrite in thin seams and disseminated		5 py, trace cp	90591	30.1-31.1	1.0		4100		1.0		1350		68		3

NORANDA EXPLORATION COMPANY LIMITED) D.D.H. #
(NO PERSONAL LIABILITY)

PROPERTY: TAS OPTION HOLE NO : 271-87-6 PAGE 2

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
31.1	31.5	100	MASSIVE AND STRINGER SULPHIDES Massive and stringer pyrrhotite, pyrite and chalcopyrite, 60% po, 15% py, 5% cp 10% ch, siltstone, quartz gangue.		60 po, 15 py, 2 cp	90592	31.1-31.5	0.4	36.27		11.0		5100		78		16	
31.5	35.4	98	MINERALIZED SILTSTONE Hornfelsed, medium green topale green, fairly massive siltstone, 2-5% pyrrhotite, 1-2% pyrite and (1% chalcopyrite; 2-10 cm bands of massive to stringer pyrrhotite, pyrite and chalcopyrite, vuggy, pyrite dissem and in fractures, pyrrhotite in blebs and fractures. 32.6-33.2m: diorite dyke, grey massive fine grained, 2-5% po, 1-2% py.	Banding at 47 deg to CA	2-5 po, 5 py, (1 cp. 2-5 po, 2-3 py, (1 cp. 2-3 po, 2-3 py, (1 cp.	90693 90694 90695	31.5-32.6 32.6-34.1 34.1-35.4	1.1 1.5 1.3	6700 7900 7800		0.3 0.8 0.4		2100 1650 365		50 51 39		(2 2 (2	
35.4	36.9	100	SILTSTONE Hornfelsed, massive, pale green, weakly mottled, badly fractured, (1% pyrite in blebs.		(1 py	90676	35.4-36.9	1.5	50		0.1		90		24		(2	
36.9	38.1	96	HORNBLENDE-AUGITE PORPHYRY Medium grey, 5-10% 1mm-5mm, hornblende augite and plagioclase phenocrysts. Badly broken core, (1% pyrite		(1 py	90677	36.9-38.1	1.2	130		0.2		105		30		(2	
38.1	43.0	100	SILTSTONE Hornfelsed, pale to light green, fairly massive, (1% pyrite.		(1 py	90678	38.1-43.0	1.5	25		(0.1		27		18		(2	
43.0	44.2	100	HORNBLENDE-AUGITE PORPHYRY As above - 36.9-38.1m, 10-20% 1-10mm hornblende-augite, plagioclase phenocrysts.															
44.2	54.3	100	SILTSTONE As above - 38.1-39.6m, some breccia and bleached zones, (1% py, po. 50.3-50.6m: Dyke or tuff 50.6-52.4m: highly bleached, (1% py	Contact at 45 deg to CA														
54.3	55.8	97	GRANODIORITE Medium, green-grey, equigranulant, medium grained, 1% dissem pyrrhotite, weak chlorite-biotite alteration.		1 py	90701	54.3-55.8	1.5	20		0.1		130		14		3	

NORANDA EXPLORATION COMPANY LIMITED) D.D.H. #
(NO PERSONAL LIABILITY)

PROPERTY: TAS OPTION HOLE NO : 271-87-6 PAGE 3

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
55.8	56.4	86	CALCITE AND SULPHIDE VEIN 10% pyrite, 10% pyrrhotite, (1% chalco- pyrite	Banding at 65 deg to CA	10 py, 10 po, (1 cp.	90596	55.8-56.4	0.6	15.53		1.2		1700		45		4
56.4	57.0	96	HORNBLENDE-AUGITE PORPHYRY Hornblende, pale green-grey, 10% ghosty 1-5mm hornblende and augite phenocrysts		(1 py	90702	56.4-57.9	1.5		40	0.2		125		23		6
57.0	57.9	96	BRECCIATED SILTSTONE Hornfelsed buff to pale green to medium green, intensely bleached, (1% pyrite and pyrrhotite.															
57.9	58.5	100	GRANODIORITE As above ~ 54.3-55.8m															
58.5	66.8	92	SILTSTONE-ARGILLITE Dark grey, massive, hornfelsed argillite, brecciated in some sections, pervasive carbonate alteration, some sections badly fractured; weak chlorite and epidote alteration.															
66.8			END OF HOLE															

NORANDA EXPLORATION COMPANY LIMITED
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: June 16, 1987
DATE COMPLETED: June 17, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 49989N
DEP: 49716E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 4

DIP: -45 deg
BEARING: 120 deg

DIP TESTS:
DEPTH: 75.3 m
ANGLE: -42 deg.

HOLE NO: 271-87-7

ELEV: 1060 m.
LENGTH 75.3 m.

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	5.8		CASING															
5.8	10.1	88	ANDESITE Hornfelsed, massive pale grey green, 5% biotite, 1% 1mm calcite veinlets, (1% dissem pyrite.		(1 py													
10.1	13.7	85	BRECCIA Mottled pale green grey with mainly siltstone fragments, intense carbonate alteration, pervasive clay/chlorite alteration, vuggy. 2-5% dissem pyrite and in blebs.		2-5 py 2-5 py 1-2 py	90597 90598 90599	10.0-11.2 11.2-12.2 12.2-13.7	1.2 1.2 1.5		130 160 6000	(0.1 0.1 0.5	135 160 158	20 21 26	(2 4 3			
13.7	17.7	92	ALTERED GRANODIORITE Hornfelsed grey-green, very silicious, pervasive carbonate alteration. 2-5% dissem pyrite, some ghosty black to grey xenoliths, epidote in fractures.	Fractures at 02 deg to CA	2-5 py 2-5 py 15-20 py, 5 po	90600 90601 90602	13.7-15.2 15.2-16.7 16.7-17.8	1.5 1.5 1.1		45 110 1300	0.1 0.1 (0.1	116 135 435	26 19 22	4 5 3			
17.7	17.8	100	SULPHIDE ZONE Massive pyrite and pyrrhotite with calcite veining, chlorite gouge, vuggy, boxwork pyrite 60% py, 15% po, 25% cc veining and chl gouge.	Veinging at 45 deg to CA														
17.8	30.5	98	MINERALIZED SILTSTONE Pale green grey, mottled siltstone, chlorite alteration, 2-3% pyrite throughout calcite and epidote veinlets 25.6-26.2m: 1-2 cm bands of massive pyrite, pyrrhotite. 60% py, 15% po, 1% cpy, epidote and chlorite in vugs, strings of py and po, minor cpy.	Fractures at 27 and 64 deg to CA Veinlets at 05 deg to CA Banding at 42 deg to CA	2-3 py 2-3 py 2-3 py 1-2 py, 1 po 2-3 py 5 py, 1 po 60 py, 15 po, 1 cp	90603 90604 90605 90606 90607 90608 90609	17.8-19.5 19.5-20.7 20.7-22.2 22.2-23.8 23.8-24.7 24.7-25.6 25.6-26.2	1.7 1.2 1.5 1.6 0.9 0.9 0.6		130 860 110 90 320 65 190	(0.1 (0.1 (0.1 (0.1 (0.1 (0.1 0.1	174 72 375 230 144 145 1000	23 19 28 28 23 22 36	(2 (2 (2 2 (2 (2 3			

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-7

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
30.5	32.6	98	ALTERED SILTSTONE Mottled grey to pale green, with patchy irregular calcite veining and alteration, 30% calcite veinlets. 30.5-31.7m: 2-5% dissem pyrite and blebs. 31.7-32.6m: intense chlorite, epidote and carbonate alteration, 5-10% pyrite, slightly brecciated.	Veining at 20 to 45 deg to CA	2-5 py 5-10 py	90610 90611	30.5-31.7 31.7-32.6	1.2 0.9		50 360		(0.1 (0.1		135 360		35 35		4 7
32.6	35.7	98	MINERALIZED SILTSTONE Dark green/grey, massive siltstone, highly fractured, 10% pyrite in blebs and stringers, 5% dissem pyrrhotite, some 1 cm seams of massive pyrite and pyrrhotite, minor calcite veinlets.	Fractures and Veinlets at 45-50 deg to CA	5 py, 1-2 po 10 py, 5 po 5 py, 1 po	90612 90613 90614	32.6-34.1 34.1-34.7 34.7-35.7	1.5 0.6 1.0		200 35 940		0.1 (0.1 0.1		620 188 760		35 34 33		2 <2 2
35.7	36.9	100	HORNBLENDE AUGITE PORPHYRY Dark grey/green with 30% hornblende-augite phenocrysts, 2-5% pyrite, dissem and in fractures. 36.3m: 3 cm band of massive pyrite and pyrrhotite.	Banding at 72 deg to CA														
36.9	40.2	100	SILTSTONE/TUFF Hornfelsed, dark green to medium grey, to grey-brown, mottled texture, minor calcite veinlets. 39.3m: 4cm quartz/carbonate vein	Fractures at 78 and 42 deg to CA Veining at 42 deg to CA														
40.2	43.3	97	HORNBLENDE-AUGITE DIORITE 10% hornblende augite phenocrysts, fine calcite veinlets, 1-2% pyrite, dissem and in fractures.															
43.3	43.6	100	ALTERED SILTSTONE/TUFF Grey to brown mottled texture, intense carbonat alteration, weak biotite alteration. 10% calcite veinlets, 2-3% dissem. pyrite.															
43.6	44.5	97	HORNBLENDE-AUGITE DIORITE As above - 40.2-43.3m.															

NORANDA EXPLORATION COMPANY LIMITED
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION HOLE NO : 271-87-7 PAGE 3 of 4

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
44.5	46.0	92	MINERALIZED SILTSTONE Hornfelsed dark green to grey mottled texture. 2-5% pyrite and 5% pyrrhotite 44.5-45.4m: weakly mineralized siltstone with 2-3% pyrite dissem and in thin seams. 45.1-46.0m: bands of massive to stringer pyrite and pyrrhotite. 10-15% pyrrhotite, some hornblende-augite porphyry	Fractures and Veining at 14 deg to CA, Sulphide banding at 53 deg to CA	2-3 py, 2 po	90615	44.5-45.4	0.9		70		0.1		220		37		2
					5-10 py, 5 po	90616	45.4-46.0	0.6		1950		0.1		840		35		4
46.0	49.4	95	HORNBLENDE AUGITE PORPHYRY Dark green to grey with thin bands of siltstone, 2-3% dissem pyrite, quartz/carbonated and epidote veinlets. 46.0-47.5m: mineralized diorite, 5-10% pyrite, dissem and in stringers 47.5-49.4m: 1% dissem pyrite	Veining at 33 and 42 deg to CA	5-10 py	90617	46.0-47.5	1.5		150		(0.1		320		28		2
49.4	61.3	98	SILTSTONE/ANDESITE Massive grey to dark grey-green, 2-3% fine calcite veinlets	Veinlets at 33, 45 & 68 deg to CA														
61.3	64.3	98	MINERALIZED SILTSTONE Hornfelsed, mottled, green to grey to brown, with thin seams of pyrite, some sections of hornblende-augite porphyry 61.3-62.3m: intensely silicified pyrite in fractures, minor pyrrhotite and chalcopyrite. 62.3-63.9m: mottled, brown to grey to green tuff (porphyry) with seams of pyrite, pyrrhotite and chalcopyrite.	Sulphide seams at 64 deg to CA	10 py, 2 po, 2 cp	90618	61.3-62.3	1.0		460		0.1		800		25		2
				Sulphide seams at 45 to 72 deg to CA	10 py, 2 po, 1 cp	90619	62.3-63.9	1.6		420		(0.1		400		39		2
					1-2 py	90620	63.9-64.3	0.4		40		(0.1		58		28		(2
64.3	69.2	100	HORNBLENDE-AUGITE PORPHYRY As above - 46.0-49.4m 15% hornblende and augite phenocrysts, 1% calcite veinlets, (1% pyrite.		(1 py													
69.2	73.5	100	SILTSTONE/TUFF Hornfelsed grey/green, fairly massive with 2% blebs of pyrite and pyrrhotite, some pyrite in fractures.	Fractures at 12 and 45 deg to CA	2 py, 2 po													

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-7

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
73.5	74.1	100	HORNBLENDE AUGITE PORPHYRY															
			As above - 64.3-69.2m															
			40% hornblende-augite phenocrysts															
74.1	75.3	100	SILTSTONE/TUFF															
			As above - 69.2-73.5m	Veining at 09														
			10% 2-3mm calcite veining	deg to CA														
75.3			END OF HOLE															

NORANDA EXPLORATION COMPANY LIMITED
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: June 17, 1987
DATE COMPLETED: June 20, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 49968N
DEP: 49700E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 3

DIP: -45 deg
BEARING: 120 deg

DIP TESTS:
DEPTH: 93.6M
ANGLE: -42 DEG

HOLE NO: 271-87-8

ELEV: 1057 m
LENGTH 93.6 m

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	3.7		CASING															
3.7	19.2	80	SILTSTONE/TUFF Hornfelsed, dark green to pale green-grey, intensely fractured, badly broken 1-2% dissem pyrite throughout, some breccia zones, 1-2% calcite veinlets.															
			8.2-8.5m: breccia, calcite blebs and veinlets.		1-2 py	90621	8.2-9.4	1.2		130		0.4		810		41		5
			10.7m: 40cm band of massive sulphide 20-25% py, 10-15% po, 1% cp boxwork py	Banding at 17 deg to CA	20-25 py, 10-15 po, 1 cp	90622	10.5-10.8	0.3		600		0.8		1320		44		10
			14.0-14.3m: breccia, chlorite/clay alteration															
			14.9-15.8m: chlorite alteration, 2-5% pyrite		2-5 py	90623	14.0-15.5	1.5		190		0.1		220		31		5
19.2	25.9	95	HORNBLENDE AUGITE PORPHYRY Medium grey-green, 10-15% 1-10mm hornblende-augite phenocrysts, fractured, black chlorite? 21.9-22.3m: siltstone/tuff, 1-2% py															
25.9	28.0	99	ANDESITE Green-grey, massive hornfelsed andesite moderately fractured, fine (1mm calcite veinlets. 26.8m: 5 cm diorite, 1% py															
28.0	29.6	99	DIORITE Medium grained, equigranular, light to medium, green-grey hornfelsed. Some 1-5mm bands of siltstone. 28.0m: 5cm pyrite, pyrrhotite and calcite.															

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION HOLE NO : 271-87-8 PAGE 2 OF 3

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
29.6	36.0	90	SILTSTONE/TUFF Hornfelsed medium green-grey, fairly massive siltstone, with 1-2% dissem and in fractures															
36.0	40.5	85	DIORITE Hornfelsed, fine grained, medium to dark green, <1% pyrite.															
40.5	54.3	75	SILTSTONE/TUFF Pale green, fairly massive, badly broken core, some mottled light green to pale green sections, 1% py, 1% po															
54.3	57.0	95	MINERALIZED SILTSTONE Hornfelsed, pale light green (bleached) fairly massive, intensely fractured, 2-3% pyrrhotite, dissem & in fractures. <1% pyrite.	Fractures at 45 and 63 deg to CA	2-3 po, <1 py 2-3 po, <1 py	90624 90625	54.3-55.5 55.5-57.0	1.2 1.5		200 120	<0.1 0.1	40 255		13 18		2 3
57.0	57.6	95	HORNBLENDE-AUGITE DIORITE 20% 1-3 mm size hornblende and augite phenocrysts, dark grey-green.															
57.6	64.6	100	MINERALIZED SILTSTONE Hornfelsed, mottled, light grey-green to buff (bleached) to pale green. 57.6-58.8m: bleached, mottled siltstone, 1% pyrite 58.8-60.0m: bleached, mottled, 1-2% pyrite, <1% pyrrhotite. 60.0-61.0m: 10-20% pyrrhotite, 1-2% pyrite, trace chalcopyrite in intensely bleached, mottled siltstone. 61.0-64.6m: bleached, mottled, <1% pyrite and pyrrhotite.		1 py 1-2 py, <1 po 10-20 po, 1-2 py, tr cp	90626 90627 90628	57.6-58.8 58.8-60.0 60.0-61.0	1.2 1.2 1.0		50 100 280	<0.1 <0.1 0.2	25 132 700		9 13 22		2 <2 3
64.6	67.4	92	SILTSTONE/ANDESITE Pale, dark green, hornfelsed, fairly massive siltstone/andesite with 10% calcite veinlets															
67.4	68.9	2	BRECCIA 67.4-68.6m: lost core, approx 2% recovery, 10-15% pyrite. 68.6-68.9m: 2% core recovery, 10-20% pyrite.		10-15 py tr cp	90629	67.4-68.9	1.5		620	0.4	1150		37		4

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-8

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
68.9	72.2	90	MINERALIZED SILTSTONE															
			As above - 57.6-64.6m with 6-8 cm		5 po,	90630	69.8-70.7	0.9		10		0.1		147		17		2
			bands of massive pyrite & pyrrhotite		2-3 py													
			20-25% po, 5% py, trace cpy.		20 po,	90631	70.7-71.0	0.3		170		0.8		2600		97		6
			68.9-69.5m: 10-15% po, 1-2% py		10 py													
			69.5-69.8m: 40% po, 20% py, tr cpy		1-2 po	90632	71.0-72.2	1.2		35		<0.1		235		28		3
72.2	73.8	95	HORNBLENDE-AUGITE PORPHYRY															
			Dark grey, green with 2-3% 1-3 mm															
			feldspar phenocrysts and 1-2% 1-2 mm															
			hornblende and augite phenocrysts, 1%															
			dissem pyrite															
73.8	86.0	95	MINERALIZED SILTSTONE		1-2 py	90635	77.4-78.6	1.2		5		<0.1		94		16		3
			Hornfelsed, mttled, pale green to		2-3 py	90636	78.6-79.9	1.3		30		<0.1		335		19		4
			medium green-grey siltstone.		1-2 py	90637	79.9-81.4	1.5		10		<0.1		190		16		3
					2-3 py,	90638	81.4-82.6	1.2		25		<0.1		275		12		2
					1-2 po													
					10-20 po,	90639	82.6-82.9	0.3		1650		0.3		680		24		4
					2-3 py,													
					tr cpy													
					5 po,	90640	82.9-84.4	1.5		80		0.2		580		30		2
					2-3 py,													
					tr cpy													
					5 po,	90641	84.4-85.6	1.2		880		0.3		810		37		3
					1-2 py,													
					tr cpy													
86.0	93.6	80	HORNBLENDE-AUGITE PORPHYRY															
			As above - 72.2-73.7m		1-2 py	90642	86.9-87.2	0.3		1350		0.4		160		14		7
93.6			END OF HOLE															

N O R A N D A E X P L O R A T I O N C O M P A N Y L I M I T E D)
(N O P E R S O N A L L I A B I L I T Y)

D.D.H. #

DATE COLLARED: June 21, 1987
DATE COMPLETED: June 22, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 50021N
DEP: 49725E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 2

DIP: -45 deg
BEARING: 020 deg

DIP TESTS:
DEPTH: 58.5M
ANGLE: -44 DEG

HOLE NO: 271-87-9

ELEV: 1070 m
LENGTH 58.5 m

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	6.1		CASING															
6.1	23.5	75	HORNBLENDE-AUGITE PORPHYRY Medium grey, green with 5% 1-5 mm hornolende and augite phenocrysts, 1-2% py, trace cpy. 17.1-18.6m: medium grey dyke, 2-3% 5-10mm rounded phenocrysts, 1-2% pyrite															
23.5	30.2	70	SILTSTONE/TUFF Hornfelsed, mottled, pale green to medium to dark green, badly broken core 2-3% pyrite.															
			25.3-26.5m: mildly brecciated, mottled alteration, badly broken core, 3-5% py		3-5 py	90643	25.3-26.5	1.2		9		0.5		1324		35		99
			26.5-27.1m: intensely fractured and broken core, 1-2% pyrite		1-2 py	90644	26.5-27.1	0.6		7		0.3		111		10		58
			27.1-28.7m: 10% core recovery, 1-2% py		1-2 py	90645	27.1-28.7	1.6		4		0.1		71		33		22
			28.7-30.2m: broken core		1-2 py	90646	28.7-30.2	1.5		83		0.2		44		12		25
30.2	37.2	100	DIORITE Fine to medium grained diorite, highly silicified along fractures, mottled grey to green.	Fractures at 45 deg to CA														
37.2	40.2	99	SILTSTONE/TUFF Hornfelsed, dark green to medium grey, fairly massive siltstone with (1% pyrite and 1-2% calcite veinlets.															
40.2	48.8	100	DIORITE Light to medium grey, hornfelsed, medium grained, equigranular diorite with weak biotite alteration (5%) and 1% pyrite in fractures.															

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-9

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
48.8	51.8	95	SILTSTONE/TUFF Hornfelsed, highly altered, bleached, siltstone, brecciated siltstone. Large 20-30 mm argillite fragments in green chloritic matrix, <1% pyrite.															
51.8	57.6	99	HORNBLENDE-AUGITE PORPHYRY Highly silicified, medium grey to light green with 10% ghosty 1-5mm hornblende and/or augite phenocrysts, 1-2% pyrite															
57.6	58.5	100	SILTSTONE Medium gren to grey, fairly massive, moderately fractured with <1% pyrite.															
58.5			END OF HOLE															

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: June 22, 1987
DATE COMPLETED: June 24, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 50021N
DEP: 49725E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 3

DIP: -45 deg
BEARING: 120 deg

DIP TESTS:
DEPTH: 76.8 m.
ANGLE: -44 deg.

HOLE NO: 271-87-10

ELEV: 1070 m
LENGTH 76.8 m

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	9.1		CASING															
9.1	25.3	55	SILTSTONE/TUFF															
			Mottled, medium grey green, pale grey, green, badly fractured, 1-2% pyrite, dissem and in fractures, <1% pyrrhotite	Contact at 42 deg to CA	1-2 po, <1 py.	90679	15.6-17.1	1.5		20		0.1		230		13		<2
					1-2 py, <1 po.	90680	17.1-18.6	1.5		20		<0.1		63		12		4
			15.6-17.1m: altered, mottled	Fractures at 05, 80 deg to CA	1 py,	90681	18.6-20.1	1.5		55		<0.1		56		25		7
			18.6-20.1m: py dissem and in blebs		1 po.													
			21.6-23.2m: dissem pyrite		1 py,	90682	20.1-21.6	1.5		10		<0.1		123		18		3
			23.2-24.7M: dissem pyrite		2-3 py	90683	21.6-23.2	1.6		80		<0.1		54		31		2
					2-3 py, <1 po	90684	23.2-24.7	1.5		480		0.1		230		19		<2
					1-2 py	90685	24.7-25.3	0.6		120		<0.1		76		29		<2
25.3	26.5	85	DIORITE															
			Medium grey, massive, fine to medium grained, 2-30 mm calcite veins, 5-10% calcite veinlets	Veining at 32, 46 deg to CA														
26.5	27.1	95	MINERALIZED SILTSTONE															
			2-3cm bands of massive pyrite and pyrrhotite +/- chalcopyrite, mottled/ altered siltstone, 10% calcite veinlets	Banding at 38 deg to CA	20 po, 10 py, <1 cpy	90647	26.5-27.1	0.6		580		0.3		800		41		2
27.1	34.7	90	SILTSTONE															
			Mottled, medium grey, dark green, dark grey. 5% irregular calcite veins and veinlets, some chloritic sections, <1% dissem pyrite.	Fractures at 04, 78 deg to CA	<1 py													
			29.3-29.6m: silicified section, light grey, 2% pyrite															
			32.2m: 15 cm calcite vein															
			33.5-34.8m: chloritized section, 2-3% pyrite, <1% pyrrhotite		2-3 py, <1 po	90686	33.5-34.8	1.3		1000		0.5		850		33		2

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-10

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
34.7	36.3	98	MINERALIZED SILTSTONE Highly bleached, pervasive chlorite alteration, minor quartz/carbonate alteration. 35.8-36.3m: 50% calcite, irregular veining 34.7-35.1m: stringer to massive pyrite pyrrhotite and chalcopyrite 35.1-36.3m: dissem pyrite and pyrrhotite.		40 po, 1 py, (1 cpy. 2-5 py, 2-3 po.	90648 90649	34.7-35.1 35.1-36.3	0.3 1.2		860 170		0.6 0.1		1400 400		38 21		5 (2
36.3	37.2	98	SILTSTONE As above - 27.1-34.7m 1% dissem pyrite		1 py	90687	36.3-37.2	0.9		45		(0.1		91		38		(2
37.2	38.1	95	MINERALIZED SILTSTONE Mottled and altered siltstone with stringers of pyrite, pyrrhotite and chalcopyrite.		10 po, 10 py, 1-2 cpy	90650	37.2-38.1	0.9		2200		0.6		4200		42		3
38.1	46.0	90	SILTSTONE Medium grey to pale green with 1-2% dissem pyrite, some sections of hornblende-augite porphyry. 38.1-39.6m: altered siltstone, 2-3% pyrite dissem and in blebs. 39.6-39.9m: Hornblende-augite porphyry (1% pyrite 39.9-40.2m: Siltstone, 1% pyrite 40.2-41.2m: Hornblende-augite porphyry 41.2-46.0m: Siltstone, (1% dissem py	Contact at 82 deg to CA	2-3 py 1 py	90688 90689	38.1-39.6 39.6-41.2	1.5 1.6		35 (5		(0.1 0.1		109 240		25 38		(2 2
46.0	47.9	90	MINERALIZED SILTSTONE Mottled and altered siltstone with blebs and stringers of pyrite and pyrrhotite. 1-2 cm bands of massive pyrite, some slickensides and minor chlorite alteration. 10-15% py, 10-20% po, (1% cpy. 47.2-47.9m: massive pyrrhotite & pyrite		10-15 py, 1-2 po. 30 po, 10 py, (1 cpy	90651 90652	46.0-47.2 47.2-47.9	1.2 0.7	11.69	140		0.1 1.8		420 1300		38 38		(2 2
47.9	57.3	90	SILTSTONE As above - 38.1-46.0m Medium green/grey, 1-2% dissem pyrite 48.5-48.8m: Tuff? lapilli size fragments.	Bedding at 38 deg to CA	1-2 py 1-2 py 1-2 py 2-3 py 1-2 py 1 py 2-5 py	90690 90691 90692 90693 90694 90695 90696	47.9-48.8 48.8-50.3 50.3-51.8 51.8-53.3 53.3-54.9 54.9-56.1 56.1-57.3	0.9 1.5 1.5 1.5 1.6 1.2 1.2		520 (5 5 40 20 85 480		(0.1 (0.1 (0.1 0.1 0.3 (0.1 (0.1		193 76 86 104 109 125 260		35 27 27 25 23 33 33		2 6 (2 (2 (2 (2 (2

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-10

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
57.3	58.8	90	CARBONATE ALTERED SILTSTONE Pale grey-green with 20-30% irregular calcite veinlets, 2-5% pyrite, minor chlorite alteration.	Foliation at 36 deg to CA	2-5 py	90697	57.3-58.8	1.5		120		<0.1		220		43		3
58.8	63.1	90	MINERALIZED SILTSTONE As above - 46.0-47.9m 2-10% dissem pyrite, pyrite in blebs, stringers and some coarse cubic dissem pyrite.		2-5 py 5-10 py 2-3 py	90698 90699 90700	58.8-60.4 60.4-61.9 61.9-63.1	1.6 1.5 1.2		600 4300 15		0.2 0.7 0.1		460 740 200		29 29 22		2 2 <2
63.1	67.4	95	SILTSTONE Mottled pale green/light grey, <1% dissem pyrite, fairly massive, weakly fractured.															
67.4	68.6	95	HORNBLENDE-AUGITE PORPHYRY Hornfelsed, light grey to pale green with 10% 1-5 mm hornblend and augite phenocrysts, <1% pyrite															
68.6	70.1	95	SILTSTONE As above - 63.1-67.4m															
70.1	71.6	95	HORNBLENDE-AUGITE PORPHYRY As above 67.4-68.6m															
71.6	76.8	95	DIORITE Light, medium grey, medium grained, silicified, <1% dissem pyrite															
76.8			END OF HOLE															

N O R A N D A E X P L O R A T I O N C O M P A N Y L I M I T E D)
(N O P E R S O N A L L I A B I L I T Y)

D.D.H. #

DATE COLLARED: July 13, 1987
DATE COMPLETED: July 14, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 50060N
DEP: 49942E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 4

DIP: -45 deg
BEARING:

DIP TESTS:
DEPTH: 92.0 m
ANGLE: -42 deg

HOLE NO: 271-87-11

ELEV: 1040 m
LENGTH 92.0 m

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	1.5		CASING															
1.5	10.1	45	DIORITE Pale grey-green, weakly porphyritic, medium grained, weak chlorite & biotite alteration, moderately fractured. Hematite staining on fractures, (1% fine calcite veinlets, 1% dissem po 9.8m: 2 cm calcite vein	Fractures at 45 and 75 deg to CA Veining at 47 deg to CA Sharp Contact at 43 deg to CA														
10.1	12.2	88	HORNBLENDE-AUGITE PORPHYRY Dark green with 10-20% 1-10mm hornblende and augite phenocrysts, highly fractured	Contact at 15 deg to CA														
12.2	16.8	75	SILTSTONE/SHALE Dark grey to black, fairly massive, moderately fractured, (1% fine calcite veinlets. 15.8-16.8m: highly brecciated, badly broken core, vuggy															
16.8	25.0	90	SILTSTONE Dark grey to medium green-grey, moderately tractured, 5% calcite veinlets. (1% pyrite in fractures and disseminated		(1 py													
25.0	26.8	80	ALTERED HORNBLENDE-AUGITE PORPHYRY Brown to green/grey with 10% ghosty 1-3mm hornblende-augite phenocrysts, pervasive carbonate altertion, (1% py, 10% 2-10mm calcite veinlets, badly fractured.		(1 py (1 py	90703 90704	25.0-25.9 25.9-26.8	0.9 0.9		(5 (5	0.2 0.2	104 80	49 43	4 10				

NORANDA EXPLORATION COMPANY LIMITED) D.D.H. #
(NO PERSONAL LIABILITY)

PROPERTY: TAS OPTION HOLE NO : 271-87-11 PAGE 2

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
26.8	29.2	85	CARBONATE ALTERED SILTSTONE															
			Weakly brecciated, highly fractured,		1 py	90705	26.8-28.3	1.5		(5		0.2		100		36		8
			dark grey, pervasive carbonate altera-		1 py	90706	28.3-29.2	0.9		(5		0.2		140		32		10
			tion, 20% calcite veins, 1% dissem py.															
29.2	29.6	85	MINERALIZED SILTSTONE															
			Bands of massive and stringer pyrite	Banding at 25	25 po,	90707	29.2-29.6	0.4		560		1.2		1300		57		16
			and pyrrhotite. 25% po, 20% py calcite	deg to CA	20 py													
			and chlorite veining															
29.6	31.1	70	CARBONATE ALTERED SILTSTONE															
			Brown to grey, highly fractured with		1-2 py	90708	29.6-31.1	1.5		35		0.1		200		38		4
			pervasive carbonate alteration, 10-20%															
			calcite veins and veinlets, 1-2% dissem															
			pyrite.															
31.1	47.6	75	SILTSTONE															
			Massive to weakly bedded, medium green-	Bedding at 45														
			grey, (1% dissem pyrite and pyrrhotite,	deg to CA	1-2 py,	90709	42.1-43.2	1.1		(5		0.1		102		19		5
			small traces of chalcopyrite, some		1 po,													
			bands of porphyry (diorite).		tr cpy													
			46.4-47.1m: mineralized diorite, 2-5%		2-5 py,	90710	46.4-47.1	0.7		5		0.1		134		36		7
			pyrite in fractures, 1-2% pyrrhotite,		1-2 po,													
			dissem and in blebs, trace chalcopyrite		tr cpy													
47.6	48.9	95	HORNBLENDE-AUGITE PORPHYRY															
			Medium green-grey, chlorite alteration															
			with 10-15% 1-10mm size hornblende-															
			augite-feldspar phenocrysts.															
48.9	54.8	99	SILTSTONE															
			As above - 16.8-25.0m		1-2 py	90711	53.3-54.8	1.5		(5		0.1		96		19		6
			Weakly brecciated with 1-2% pyrite,															
			dissem and in fractures.															
54.8	57.0	99	DIORITE															
			As above - 1.5-10.1m															
57.0	60.0	98	SILTSTONE															
			As above - 48.9-54.8m (1% pyrite															
			57.3m: 15cm hornblende-augite porphyry															
			dyke															
60.0	60.3	98	HORNBLENDE-AUGITE PORPHYRY															
			As above - 47.6-48.9m		1 py	90712	60.0-60.3	0.3		10		0.2		90		29		8
			brecciated, vuggy with 5-10% calcite															
			veins and veinlets, 1% pyrite.															

NORANDA EXPLORATION COMPANY LIMITED) D.D.H. #
(NO PERSONAL LIABILITY)

PROPERTY: TAS OPTION HOLE NO : 271-87-11 PAGE 3 of 4

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
60.3	61.3	98	BRECCIATED SILTSTONE Intensely to moderately brecciated, mottled pale green to grey siltstone, (1% pyrite in blebs.		(1 py	90713	60.3-61.3	1.0		10		0.2		107		19		8
61.3	62.8	98	SILTSTONE As above - 57.0-60.0m 2-5% pyrite in fractures and dissem.		2-5 py	90714	61.3-62.8	1.5		15		0.1		210		11		4
62.8	64.3	98	HORNBLENDE-AUGITE PORPHYRY Dark grey-green with 10-15% 1-10mm size hornblende and augite phenocrysts, 5-10mm calcite vein, 1-2% dissem py	Veining at 02 deg to CA	1-2 py	90715	62.8-64.3	1.5		140		0.7		920		57		6
64.3	65.5	92	SILTSTONE As above - 61.3-62.8m Moderately brecciated															
65.5	66.1	92	HORNBLENDE-AUGUTE PORPHYRY As above - 62.8-64.3m															
66.1	73.8	99	SILTSTONE As above - 64.3-65.5m 70.3m: 20cm hornblende-augite porphyry dyke		(1 po, py													
73.8	74.6	99	HORNBLENDE-AUGITE PORPHYRY 20% pale green feldspar, phenocrysts, 10% 1-5mm hornblende-augite phenocrysts (1% pyrrhotite		(1 po													
74.6	77.1	99	BRECCIATED SILTSTONE As above - 60.3-61.3m		1 po, 1 py.	90716	74.6-76.1	1.5		(5		0.1		64		26		(2
			With some hornblende-augite porphyry intense fracturing, 1% dissem py & po		1 po, 1 py.	90717	76.1-77.1	1.0		15		0.1		88		23		(2
77.1	77.9	99	MINERALIZED SILTSTONE Mottled pale grey-green to medium grey siltstone with 2-5% pyrite, 1% pyrrhotite and traces of chalcopyrite 77.2m: 2cm band of massive py & po		2-5 py, 1 po, tr cpy.	90718	77.1-77.9	0.8		45		0.5		530		30		3
77.9	87.0	85	SILTSTONE As above - 66.1-73.8m Moderately brecciated and fractured, pale green, weakly mottled, 1-2% py throughout in fractures.		(1 py	90719	77.9-78.9	1.0		10		0.1		87		12		4
					(1 py	90720	78.9-79.8	0.9		20		0.2		101		18		7
					2-3 py	90721	79.8-80.9	1.1		10		(0.1		95		19		6
					1-2 py	90722	80.9-82.4	1.5		5		0.1		144		23		11
					25 po, 25 py, tr cpy.	90723	86.9-87.0	0.2		10		1.0		185		21		29

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-11

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
87.0	87.8	90	HORNBLENDE-AUGITE PORPHYRY As above - 73.8-74.6m		(1 py,po	90724	87.0-87.8	0.8		(5		0.3		310		36		10
87.8	88.1	90	SILTSTONE As above - 77.9-87.0m															
88.1	92.0	95	DIORITE Moderately to intensely brecciated, light to medium grey diorite, medium grained, equigranular, pervasive chlorite/alteration, (1% dissem pyrite															
92.0			END OF HOLE															

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: July 15, 1987
DATE COMPLETED: July 17, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 49984N
DEP: 49905E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 3

DIP: -45 deg
BEARING: 110 deg

DIP TESTS:
DEPTH: 82.9 m
ANGLE: -45 deg

HOLE NO: 271-87-12

ELEV: 1040 m
LENGTH 82.9 m

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	4.6		CASING															
4.6	16.3	75	HORNBLENDE-AUGITE PORPHYRY Medium green-grey to light-medium grey. 15% 1-10mm size hornolende and augite phenocrysts, 1-2% dissem pyrite, (1% pyrrhotite in fractures.		1-2 py, (1 po.	90725	10.1-11.6	0.8		10		0.1		104		25		5
					2-5 py, (1 po.	90726	11.6-12.2	0.6	12.58			0.9		400		32		6
					1-2 py, (1 po.	90727	12.2-13.7	1.5		150		0.2		82		24		7
					2-3 py, 1 po.	90728	13.7-15.0	1.3		440		0.2		300		29		4
					1-2 py.	90729	15.0-16.3	1.3		280		0.6		1250		49		6
16.3	19.8	72	SILTSTONE Massive, medium green-grey, moderately fractured 19.2-19.8m: brecciated, intense chlorite alteration, vuggy, 1-10cm size fragments, 2-5% pyrite	Fractures at 20, 38, 66 deg to CA	2-5 py	90730	19.2-19.8	0.6		15		0.1		86		23		2
19.8	20.4	95	HORNBLENDE-AUGITE PORPHYRY As above - 4.6-16.3m (1% pyrite															
20.4	26.5	98	SILTSTONE As above - 16.3-19.2m 1% pyrite															
26.5	28.3	100	ANDESITE Dark green-grey porphyritic 1-10mm calcite and epidote phenocrysts															
28.3	39.6	90	SILTSTONE Mottled, tan (bleached) to pale green to medium green grey, massive to moderately brecciated, some narrow (10-30cm) hornblende-augite porphyry dykes.															

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-12

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
28.3	39.6	90	Continued from previous page															
			28.3-29.6m: brecciated 20-25% calcite veins and veinlets															
			29.6-32.1m: mottled/bleached siltstone															
			32.1-32.2m: hornblende-augite porphyry	Contact at 45 deg to CA														
			32.2-34.3m: mottled/bleached siltstone slightly brecciated															
			34.3-34.7m: hornblende-augite porphyry 1% pyrite	Contact at 45 deg to CA														
			34.7-35.4m: mottled siltstone															
			35.4-36.7m: laminated siltstone	Laminations at 76 deg to CA Contact at 74 deg to CA														
			36.7-38.2m: highly bleached siltstone, 1-2% pyrite		1-2 py	90731	36.7-38.2	1.5		(5		0.1		86		23		2
			38.2-38.6m: hornblende-augite porphyry		1 py	90732	38.2-38.6	0.4		10		0.2		250		33		3
			38.6-39.6m: intense silicification and bleaching		2-3 py	90733	38.6-39.6	1.0		15		0.2		96		21		2
39.6	40.9	100	HORNBLENDE-AUGITE PORPHYRY															
			As above - 19.8-20.4m		1 py	90734	39.6-40.9	1.3		(5		0.1		107		36		6
			20% 1-10mm hornblende and augite phenocrysts, 1% pyrite in blebs															
40.9	51.0	85	SILTSTONE															
			Mottled pale green to light grey-white to dark green-grey, 2-5% dissem pyrite, 1-2% calcite veins and veinlets.															
			40.9-42.1m: weakly mottled, mildly brecciated.		2-3 py	90735	40.9-42.1	1.2		(5		0.1		73		38		6
			42.1-42.9m: weakly laminated andesite tuff, <1% dissem pyrite		<1 py	90736	42.1-42.9	0.8		(5		0.1		70		44		10
			42.9-44.4m: intensely bleached, finely laminated pyrite	Laminations at 73 deg to CA	2-5 py	90737	42.9-44.4	1.5		10		0.1		103		10		3
			44.4-45.9m: highly fractured, intensely bleached, 2% calcite veinlets		2-3 py	90738	44.4-45.9	1.5		80		0.2		126		9		(2
			45.9-47.4m: as above		2-3 py	90739	45.9-47.4	1.5		15		0.1		96		20		2
			47.4-48.9m: weakly schistose	Schistosity at 20 deg to CA	2-5 py	90740	47.4-48.9	1.5		30		0.2		79		30		6
			48.9-50.4m: as above-20cm calcite vein		2-5 py	90741	48.9-50.4	1.5		85		0.3		104		32		11
			50.4-51.0m: mottled siltstone		1-2 py	90742	50.4-51.0	0.6		25		0.3		235		32		7
51.0	52.8	97	HORNBLENDE-AUGITE PORPHYRY															
			As above - 39.0-40.9m		2 py	90743	51.0-51.9	0.9		25		0.3		215		33		12
			5-10% 1-8mm hornblende and augite phenocrysts, 2-5% pyrite in fractures and blebs.		2-5 py	90744	51.9-52.8	0.9		5		0.2		210		30		6

NORANDA EXPLORATION COMPANY LIMITED) D.D.H. #
(NO PERSONAL LIABILITY)

PROPERTY: TAS OPTION HOLE NO : 271-87-12 PAGE 3 of 3

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
52.8	61.0	99	SILTSTONE		2-3 py	90745	52.8-54.3	1.5		10		0.2		136		18		10
			Mottled, grey white to pale green to		2-3 py	90746	54.3-55.8	1.5		(5		0.1		136		10		5
			medium grey green, intensely fractured		2-3 py	90747	55.8-57.3	1.5		50		0.1		178		20		4
			and bleached.		2-5 py	90748	57.3-58.8	1.5		30		0.1		30		21		4
					2-3 py	90749	58.8-59.8	1.0		(5		0.1		15		12		3
					1-2 py	90750	59.8-61.0	1.2		10		0.1		796		13		2
61.0	68.0	100	HORNBLENDE-AUGITE PORPHYRY		1-2 py	90752	61.0-62.5	1.5		30		0.5		210		59		45
			Dark green, 10-20% 1-15mm hornblende		2-3 py,	90753	62.5-63.4	0.9		25		0.5		192		40		22
			and augite phenocrysts, 5-10% pyrite,		10 po.													
			2-5% pyrrhotite, trace chalcopyrite		10-15 py,	90754	63.4-64.9	1.5		760		1.1		1500		59		21
			61.0-62.5m: weakly porphyritic, 1-2%		5-10 po,													
			pyrite in fractures.		tr cpy.													
					2-3 py,	90755	64.9-66.4	1.5		40		0.4		116		32		29
					1-2 po.													
					2-5 py,	90756	66.4-68.0	1.6		25		0.2		140		35		8
					1-2 po													
68.0	72.7	100	SILTSTONE		1-2 py	90757	68.0-69.5	1.5		15		0.2		196		27		23
			As above - 52.8-61.0m		2-3 py	90758	69.5-71.0	1.5		10		0.2		124		18		18
			2-3 dissem pyrite		1-2 py	90759	71.0-72.0	1.0		20		0.2		158		13		10
					2-5 py,	90760	72.0-72.7	0.7		5		0.2		215		36		12
					tr cpy.													
72.7	82.9	100	HORNBLENDE-AUGITE PORPHYRY		1-2 py	90761	72.7-73.1	0.4		40		0.6		560		44		13
			As above - 61.0-68.0m		10-15 py,	90762	76.5-77.5	1.0		1450		0.9		740		44		7
					1 po,													
					tr cpy.													
82.9			END OF HOLE															

NORANDA EXPLORATION COMPANY LIMITED
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: July 17, 1987
DATE COMPLETED: July 21, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 49973N
DEP: 49748E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 3

DIP: -45 deg
BEARING: 120 deg

DIP TESTS:
DEPTH: 101.5m
ANGLE: -43 deg

HOLE NO: 271-87-13

ELEV: 1055 m
LENGTH 101.5 m.

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	7.0		CASING															
7.0	25.2	82	SILTSTONE		<1 py	90563	7.6-9.2	1.6		25	0.1		18	26		<2		
			Mottled dark grey to medium grey to		1-2 py	90564	9.2-10.7	1.5		25	<0.1		36	25		4		
			pale green, moderately fratured, 1-2%		1-2 py	90565	10.7-12.2	1.5		110	0.1		60	28		<2		
			calcite, veinlets, 1% dissem pyrite,		2-3 py	90566	12.2-13.7	1.5		30	0.1		230	36		<2		
			inor epidote alteration.		2-3 py	90567	13.7-15.1	1.4		15	0.1		305	30		<2		
			7.0-7.6m: rubble and badly broken core		5-10 py,	90568	15.1-15.8	0.7		35	0.2		174	31		3		
			7.6-9.2m: mottled dark grey/black to		1 po.													
			pale light green		2-5 py	90569	15.8-17.3	1.5		10	0.1		260	37		<2		
			15.1-15.8m: quartz/calcite vein with	Veining at 42	1-2 py	90570	17.3-18.8	1.5		20	<0.1		170	38		<2		
			5-10% dissem pyrite, 1% pyrrhotite,	deg to CA	1 py,	90571	18.8-20.3	1.5		<5	0.1		96	28		<2		
			intense quartz/carbonate/chlorite/		1 po													
			sericite alteration		1 py,	90572	20.3-21.8	1.5		100	0.1		147	15		<2		
			15.8-17.3m: buff to dark green-brown,		1 po													
			mild carbonate alteration, mild		1-2 py	90573	21.8-23.3	1.5		30	0.1		68	35		<2		
			sericite/chlorite alteration.		2-3 py,	90574	23.3-24.3	1.0		15	<0.1		61	19		5		
					1 po													
					1-2 py	90575	24.3-25.2	0.9		20	0.1		36	10		<2		
25.2	34.3	95	ANDESITE		1 po,	90653	25.2-28.2	3.0		<5	0.2		188	34		2		
			Massive, dark grey green, 1% calcite		1 py													
			veinlets, 1-2 % pyrrhotite		1-2 po,	90654	28.2-31.2	3.0		<5	0.1		215	30		<2		
					1 py													
					2-3 po,	90655	31.2-34.3	3.1		75	0.2		275	35		<2		
					1 py,													
					tr cpy													
34.3	38.8	99	MINERALIZED SILTSTONE		5-10 po,	90656	34.3-35.8	1.5		4900	0.9		1650	34		<2		
			Mottled, pale green to dark green,	Sulphide banding	2-5 py,													
			highly fractured, massive to stringer	at 45 deg to CA	tr cpy.													
			sulphides, mild chlorite altertion		20 po,	90657	35.8-36.9	1.1		1150	0.4		1050	26		<2		
					10 py,													
					1 cpy.													
					5-10 po,	90658	36.9-37.8	0.9		50	0.2		370	20		<2		
					2-5 py,													
					tr cpy.													
					2-3 po,	90659	37.8-38.8	1.0		160	0.3		575	25		<2		
					2-3 py,													
					tr cpy.													

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-13

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
38.8	41.8	100	DIORITE															
			Medium green grey, equigranular to weakly porphyritic, weak chlorite alteration, 1-2% calcite veins, 1-2% pyrite, 1% pyrrhotite in fractures and blebs.		1-2 py, 1 po.	90660	38.8-40.3	1.5		45		0.2		163		28		2
					1-2 py, 1 po.	90661	40.3-41.8	1.5		25		0.1		114		22		(2
41.8	45.4	95	SILTSTONE		1 po, py	90662	41.8-43.8	2.0		75		0.2		240		22		(2
			As above - 7.0-25.2m		1 po, py	90663	43.8-45.4	1.6		90		0.2		169		25		(2
			1% pyrite & pyrrhotite, minor epidote alteration															
45.4	47.6	95	HORNBLENDE-AUGITE PORPHYRY		2-5 py, 1 po, (1 cpy.	90664	45.4-46.5	1.1		4800		2.5		3400		78		(2
			Medium green-grey to light grey, 10-20% 1-15mm hornblende and augite phenocrysts, 2-3% 2-10mm calcite veins, 1% pyrrhotite, 2-5% pyrite, minor siltstone.		1-2 py, (1 po	90665	46.5-47.6	1.1		60		0.2		182		20		(2
47.6	56.1	100	SILTSTONE		2-3 py	90666	47.6-49.1	1.5		70		0.2		225		14		(2
			Fairly massive, medium green grey, weakly mottled, 2-5% calcite-epidote veins and veinlets, 2-5% pyrite in blebs and fractures.	Veins at 56 deg to CA	1 py	90667	49.1-50.6	1.5		25		0.1		154		21		(2
					1 py	90668	50.6-52.1	1.5		30		0.1		154		15		(2
					2-3 py	90669	52.1-53.6	1.5		35		0.1		235		16		(2
					5 py	90670	53.6-55.1	1.5		40		0.2		230		20		2
					5 py	90671	55.1-56.1	1.0		35		0.2		270		23		(2
56.1	63.4	95	HORNBLENDE-AUGITE PORPHYRY															
			As above - 45.4-47.6m (1% pyrite and pyrrhotite	Contact at 42 deg to CA														
63.4	72.5	97	SILTSTONE		1 py	90672	63.4-64.9	1.5		35		0.2		200		40		(2
			Mottled pale green to medium grey-green 1-2% pyrite, (1% pyrrhotite		1 py	90673	64.9-66.4	1.5		60		0.1		205		37		(2
					1-2 py	90674	66.4-67.9	1.5		70		0.1		205		30		(2
					2-3 py, 1 po.	90675	67.9-69.5	1.6		90		0.2		186		23		(2
					2-3 py	91151	69.5-70.9	1.4		10		0.2		173		18		(2
					2-5 py, 1 po,	91152	70.9-72.5	1.6		400		(0.1		485		24		2
					tr cpy.													
72.5	73.8	100	HORNBLENDE-AUGITE PORPHYRY															
			As above - 56.1-63.4m 10-15% 1-10mm hornblende and augite phenocrysts, bands of (1-4cm) massive pyrrhotite.	Banding at 82 deg to CA	10-15 po, 1-2 py, (1 cpy.	91153	72.5-73.8	1.3		75		(0.1		565		31		(2

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-13

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
73.8	78.5	100	SILTSTONE															
			Medium green-grey, fairly massive,		1-2 py,	91154	73.8-75.3	1.5		45		(0.1		250		23		(2
			weakly mottled, mild carbonate altera-		(1 po.													
			tion, 2-3% pyrite, (1% pyrrhotite.		2-3 py,	91155	75.3-76.8	1.5		15		(0.1		290		25		(2
					(1 po.													
					2-5 py,	91156	76.8-78.5	1.7		220		0.2		530		34		(2
					1 po.													
78.5	81.6	92	ANDESITE															
			Dark green massive, 2-3% calcite		2-5 py	91157	78.5-80.1	1.6		540		0.2		220		33		3
			veinlets, 2-3% pyrite.		1 py	91158	80.1-81.6	1.5		20		0.1		143		51		(2
81.6	83.5	95	SILTSTONE															
			Pale green, highly fractured, intense		2-3 py	91159	81.6-83.5	1.9		20		(0.1		121		23		3
			quartz-carbonate alteration, 2-3%															
			dissem pyrite.															
83.5	85.6	99	MINERALIZED SILTSTONE		20 po,	91160	83.5-84.6	1.1		7400		2.0		2350		84		6
			Mottled buff to pale green to medium		5 py,													
			grey-green, massive and stringer		(1 cpy.													
			pyrrhotite, pyrite and chalcopyrite,		5-10 po,	91161	84.6-85.6	1.0		760		0.6		1100		35		(2
			(1% calcite veins.		2-5 py,													
			83.5m: 5cm band of massive sulphides		(1 cpy.													
85.6	101.5	100	SILTSTONE		2-5 py,	91162	85.6-86.7	1.1		3300		0.7		900		32		3
			As above - 81.6-83.5m		2-3 po,													
			Intensely fractured, brecciated, mild		tr cpy.													
			chlorite and carbonate alteration.		2-3 py,	91163	86.7-89.3	2.6		220		0.1		121		17		7
			Some hornblende-augite porphyry.		1-2 po.													
					2-3 py,	91164	89.3-91.6	2.3		35		0.1		65		21		(2
					1-2 po.													
					2-5 po,	91165	91.6-93.8	2.2		70		0.1		269		23		7
					1-2 py.													
101.5			END OF HOLE															

N O R A N D A E X P L O R A T I O N C O M P A N Y L I M I T E D)
(N O P E R S O N A L L I A B I L I T Y)

D.D.H. #

DATE COLLARED: July 22, 1987
DATE COMPLETED: July 24, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 49894N
DEP: 49958E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 2

DIP: -45 deg
BEARING: 270 deg

DIP TESTS:
DEPTH: 61.0 m
ANGLE: -45 deg

HOLE NO: 271-87-14

ELEV:
LENGTH 61.0 m

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0.0	2.7		CASING															
2.7	6.3	75	SILTSTONE															
			Massive dark grey to medium grey-green,		1-2 py	91166	2.7-4.0	1.3		10		(0.1		132		37		(2
			weakly mottled with 1-2% dissem pyrite.		1-2 py	91167	4.0-6.3	1.2		10		(0.1		240		35		3
6.3	7.4	75	HORNBLENDE-AUGITE PORPHYRY															
			Medium grained equigranular to weakly		1 py	91168	6.3-7.4	1.1		320		(0.1		400		36		3
			porphyritic, 1-2% 1-5mm hornblende and															
			augite phenocrysts, 1% pyrite in															
			fractures.															
7.4	21.4	92	DIORITE															
			Medium to finegrain, medium grey,															
			equigranular to weakly porphyritic,															
			1% fine calcite veinlets, (1% pyrite															
			throughout.															
21.4	25.3	87	ANDESITE		2-3 py	91169	21.4-22.9	1.5		150		0.6		500		49		8
			Medium green-grey, fairly massive,	Veinlets at 21	2-5 py	91170	22.9-23.9	1.0		(5		(0.1		250		38		2
			1-2% calcite veinlets, 2-5% dissem py	deg to CA	2-5 py	91171	23.9-25.3	1.4		50		(0.1		720		40		2
25.3	32.7	81	SILTSTONE		1 py	91172	25.3-26.8	1.5										
			As above - 2.7-6.3m		1 py	91173	26.8-28.3	1.5		5		(0.1		100		30		(2
			1-2% pyrite throughout.		1-2 py	91174	28.3-29.8	1.5		10		(0.1		128		24		(2
					1 py	91175	29.8-31.4	1.6		35		0.2		76		28		(2
					1-2 py	91176	31.4-32.7	1.3		10		(0.1		185		33		(2
32.7	34.0	100	HORNBLENDE-AUGITE PORPHYRY															
			As above - 6.3-7.4m															
			Some minor siltstone															
34.0	34.8	95	PORPHYRITIC DIORITE															
			Dark green, 20% 1-5mm plagioclase															
			phenocrysts.															

NORANDA EXPLORATION COMPANY LIMITED
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-14

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
34.8	43.9	92	SILTSTONE															
			As above - 25.3-32.7m		1-2	91177	34.8-37.8	3.0		15	(0.1		156		30		(2
			2-3% dissem pyrite, trace chalcopyrite		2-5 py, tr cpy.	91178	37.8-40.8	3.0		(5	(0.1		152		29		2
					1-2 py, tr cpy.	91179	40.8-43.9	3.1		(5	(0.1		194		25		(2
43.9	46.3	90	MINERALIZED HORNBLENDE-AUGITE PORPHYRY															
			As above - 32.7-34.0m		5 po, 2-3 py, tr cpy.	91180	43.9-45.0	1.1		(5	0.2		340		25		(2
			5% 1-10mm hornblende and augite phenocrysts, 5-10% pyrrhotite, 5% pyrite, (1% chalcopyrite in fractures and stringers.		10 po, 5 py, (1 cpy.	91181	45.0-46.3	1.3			1.7		1500		39		4
			45.5m: 8cm band of massive pyrite, pyrrhotite and chalcopyrite (boxwork type pyrite mineralization) chalcopyrite in fine cross fractures.															
46.3	51.2	99	SILTSTONE															
			Mottled light maroon, buff, pale green-grey, to pale green, highly fractured, weak pervasive chlorite alteration, fine 1-2mm sulphide band, 1-2% pyrite.		2-3 py 1 py	91182	46.3-49.2	2.9		85	0.2		72		22		(2
						91183	49.2-51.2	2.0		100	(0.1		90		24		(2
51.2	56.9	75	HORNBLENDE-AUGITE PORPHYRY															
			As above - 32.7-34.0m															
			10-15% 1-15mm hornblende and augite phenocrysts, dark green with (1% pyrite															
56.9	61.0	25	SILTSTONE															
			As above - 46.3-51.2m															
			large sections of lost core, badly broken															
61.0			END OF HOLE															

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: July 25, 1987
DATE COMPLETED: August 5, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 49920N
DEP: 49953E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 3

DIP: -45 deg
BEARING: 280 deg

DIP TESTS:
DEPTH: 72.3m
ANGLE: -41 deg.

HOLE NO: 271-87-15

ELEV:
LENGTH 73.2 m

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	4.6		CASING															
4.6	16.6	47	ANDESITE TUFF Medium to dark green, finely laminated, (1% pyrite, 2-3% calcite veinlets, appears to be gradational with below 4.6-7.0m: very badly broken core, poor core recovery 9.0-9.1m: Diorite	Laminations at 46 deg to CA Veining at 42 deg to CA						÷								
16.6	21.4	72	DIORITE Light medium grey, equigranular to very weakly porphyritic, badly fractured. 1-2% dissem pyrite throughout		2-3 py 1-2 py 1 py	91226 91227 91228	16.6-17.7 17.7-19.2 19.2-21.4	1.1 1.5 2.2	10 (5 25	(0.1 0.1 0.1	355 235 210	15 8 13	(2 2 (2						
21.4	24.2	75	SILTSTONE Medium green-grey, weakly mottled, very weakly laminated, badly fractured weak chlorite alteration, 1-2% dissem pyrite.	Laminations at 52 deg to CA	1-2 py 1-2 py	91229 91230	21.4-22.7 22.7-24.2	1.3 1.5	10 5	(0.1 (0.1	119 82	13 16	3 3						
24.2	25.2	92	MINERALIZED SILTSTONE As above - 21.4-24.2m 5cm quartz calcite veins, stringer to massive pyrite, 20-25% pyrite, trace chalcopyrite.	Veining at 40 deg to Ca Fractures at 15 deg to CA	20-25 py, tr cpy.	91231	24.2-25.2	1.0	380	1.3	1200	50	9						
25.2	29.4	95	SILTSTONE As above - 21.4-24.2m		(1 py (1 py	91232 91233	25.2-26.7 26.7-29.4	1.5 2.7	35 10	0.1 (0.1	130 144	30 23	(2 3						
29.4	36.7	99	ANDESITE TUFF As above - 4.6-16.6m (1% pyrite throughout		2-3 py tr cpy	91234	35.2-36.7	1.5	(5	(0.1	210	31	(2						

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-15

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
36.7	39.9	95	HORNBLENDE-AUGITE PORPHYRY Dark grey, 20% 1-10mm hornblende, augite and plagioclase phenocrysts, 1% pyrrhotite in blebs.	Contact at 60 deg to CA	1 po	91235	36.7-39.9	3.2	2100		0.3		365		30		(2	
39.9	41.6	99	ANDESITE Dark green-grey, badly fractured, fairly massive, 10% calcite veins and veinlets, 1-2% dissem pyrite, 5cm calcite vein at 39.9m, weak chlorite alteration.		1-2 py	91236	39.9-41.6	1.7	500		0.1		340		24		4	
41.6	42.8	100	HORNBLENDE-AUGITE PORPHYRY As above - 36.7-39.9m 2-5% dissem pyrite, trace chalcopyrite		25 py, tr cpy.	91237	41.6-42.8	1.2	200		0.2		550		20		2	
42.8	43.1	95	MINERALIZED SILTSTONE Mottled dark green, medium green-grey, 10-25% stringer pyrite, trace chalco-pyrite		10-25 py, tr cpy.	91238	42.8-43.1	0.3	2000		0.2		465		23		2	
43.1	46.1	95	SILTSTONE Mottled, highly altered dark green-grey medium green-grey, pale green to buff. Highly fractured, minor epidote alteration.		1 py	91239	43.1-44.6	1.5	35		(0.1		48		16		(2	
					2 py	91240	44.6-46.1	1.5	5		0.1		22		16		(2	
46.1	46.6	91	ANDESITE TUFF Dark green-grey, fine laminated tuff 1-2% dissem pyrite	Laminations at 68 deg to CA	1-2 py	91241	46.1-46.6	0.5	10		(0.1		159		10		2	
46.6	48.3	94	SILTSTONE As above - 25.2-29.4m 2-3% dissem pyrite		2-3 py	91242	46.6-48.3	1.7	10		(0.1		104		11		2	
48.3	49.5	95	HORNBLENDE-AUGITE PORPHYRY Mottled dark green to light green-grey badly fractured with numerous calcite and epidote veins, 5% 1-5mm ghosty hornblende and augite phenocrysts, 2-5% dissem pyrite.	Veining at 15 deg to CA	2-5 py	91243	48.3-49.5	1.2	(5		(0.1		50		24		(2	
49.5	55.1	99	SILTSTONE As above - 43.1-46.1m Mottled, chlorite alteration, minor drusy quartz, 1-2% pyrrhotite, (1% py		1 po, (1 py.	91244	49.5-51.0	1.5	(5		(0.1		52		11		3	
					1-2 po, (1 py.	91245	51.0-52.5	1.5	10		(0.1		38		11		2	
					1-2 po, (1 py.	91246	52.5-54.0	1.5	25		(0.1		7		4		2	
					(1 py	91247	54.0-55.1	1.1	60		0.1		54		17		(2	

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-15

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
55.1	57.2	87	BRECCIATED ANDESITE															
			Dark grey-green highly brecciated		1-2 py	91248	55.1-57.2	2.1		15		(0.1		126		33		(2
			sections with calcite filled vugs,															
			1-2% pyrite in vugs.															
57.2	58.0	90	HORNBLENDE-AUGITE PORPHYRY															
			As above - 41.6-42.8m		2-3 py	91249	57.2-58.0	0.8		95		0.1		188		15		(2
			2-3% dissem pyrite															
58.0	68.1	95	SILTSTONE/TUFF/ANDESITE															
			Medium green-grey to dark grey to		2-5 py	91250	58.0-59.9	1.9		130		(0.1		180		20		(2
			brown grey, intense to moderate															
			chlorite alteration, minor biotite,		2-3 py	94401	59.9-61.6	1.7		25		(0.1		154		14		3
			some sections with 2-3% 2-10mm mafic		2-3 py	94402	61.6-63.4	1.8		55		0.1		55		15		(2
			or shale fragments, 2-5% pyrite in		2-5 py	94403	63.4-64.5	1.1		260		0.1		260		17		(2
			fractures and disseminated.		2-5 py	94404	67.7-68.1	0.4		30		0.1		30		42		(2
68.1	69.2	100	HORNBLENDE-AUGITE PORPHYRY															
			As above - 57.2-58.0m															
69.2	71.0	78	ANDESITE															
			As above - 39.9-41.6m		2-3 py	94405	69.2-71.0	0.8		10		(0.1		106		32		(2
			2-3% dissem pyrite															
71.0	73.2	25	SILTSTONE															
			As above - 46.6-48.3m															
			Badly broken core															
			END OF HOLE															

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: August 5, 1987
DATE COMPLETED: August 6, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 49972N
DEP: 49018E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 2

DIP: -45 deg
BEARING: 260 deg

DIP TESTS:
DEPTH: 50.3 m
ANGLE: -45 deg

HOLE NO: 271-87-16

ELEV:
LENGTH 50.3 m.

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	1.8		CASING															
1.8	7.8	75	DIORITE Light grey, equigranular to weakly porphyritic, 1% shale xenoliths, 1-2% calcite veinlets.															
7.8	13.1	87	ANDESITE TUFF Dark green, finely laminated tuff, badly fractured and broken, (1% disseminated pyrite.	Laminations at 68 deg to CA														
13.1	31.1	95	SILTSTONE Medium green, fairly massive with some mottled sections. 19.7-21.2m: mottled pale green to buff to medium green grey 21.2-22.6m: buff to pale green 29.0-31.1m: mottled pale green to buff		2-5 po, 1 py. 1-2 py, 1 po. 1-2 py	94406 94407 94408	19.7-21.2 21.2-22.6 29.0-31.1	1.5 1.4 2.1	40 60 40	(0.1 (0.1 0.2	166 74 240	18 10 12	(2 (2 225				
31.1	35.3	99	DIORITE As above - 1.8-7.8m No xenoliths.		1-2 py 2-5 py	94409 94410	32.7-33.8 33.8-39.1	1.1 1.5	60 860	0.2 0.1	330 395	23 23	43 18				
35.3	39.1	95	SILTSTONE Mottled pale grey to grey green to buff 2-5% pyrite in fractures and blebs, chlorite and ankerite in fractures.		2-5 py 1-2 py	94411 94412	35.3-36.8 36.8-39.1	1.5 2.3	55 75	0.2 0.1	390 370	22 25	4 3				
39.1	40.5	90	DIORITE Mottled light grey to buff, moderately fractured, 2-5% pyrite, dissem and in fractures.		2-5 py	94413	39.1-40.5	1.4	50	0.1	325	23	2				
40.5	43.6	100	SILTSTONE Mottled as above - 35.3-39.1m		2-5 py 2-3 py	94414 94415	40.5-42.0 42.0-43.6	1.5 1.6	95 120	0.1 0.1	200 156	30 20	(2 (2				

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-16

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
43.6	45.1	95	MINERALIZED HORNBLENDE-AUGITE PORPHYRY Highly altered, pale green, dark green to black, 1-2% 1-5mm hornblende and augite phenocrysts, minor ankerite alteration. Semi-massive-stringer pyrite, pyrrhotite and chalcopyrite.		20-25 py, 2-5 po, (1 cpy.	94416	43.6-45.1	1.5		1000		0.6		1400		37		3
45.1	49.7	100	SILTSTONE Massive, light to medium green		1-2 py	94417	45.1-45.8	0.7		95		(0.1		100		8		5
49.7	50.3	100	DIORITE As above - 39.1-40.5m															
			END OF HOLE															

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

DATE COLLARED: August 7, 1987
DATE COMPLETED: August 9, 1987
CORE SIZE: NQ
PROPERTY: TAS OPTION
N.T.S. # 93 K/16

FIELD CO-ORDINATES:
LAT: 49955N
DEP: 49059E

SURVEYED CO-ORDINATES:

PROJECT: 271
PAGE 1 OF 3

DIP: -45 deg
BEARING: 080 deg

DIP TESTS:
DEPTH: 89.3 m
ANGLE: -42 deg

HOLE NO: 271-87-17

ELEV:
LENGTH 89.3 m

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
0	6.4		CASING															
6.4	6.7	85	HORNBLENDE-AUGITE PORPHYRY Medium grey with 5-10% 2-5mm hornblende augite phenocrysts, badly broken core.															
6.7	12.0	78	SILTSTONE Massive and mottled, pale green to medium grey-green, 2-3% pyrite, 1% pyrrhotite in fractures and thin seams, some hornblende-augite porphyry dykes.		1-2 py, 1 po.	91184	6.7-8.2	1.5		30		0.2		191		17		2
					2-3 py, 1 po.	91185	8.2-9.7	1.5		80		0.2		198		16		2
					2-3 py, 1 po, tr cpy.	91186	9.7-11.2	1.5		80		0.2		187		15		3
					1-2 py	91187	11.2-12.0	0.8		120		0.2		155		15		2
12.0	14.8	78	DIORITE Medium grey, equigranular to weakly porphyritic, 1% dissem pyrite, minor siltstone		1 py	91188	12.0-14.8	2.8		65		0.2		215		16		4
14.8	18.5	78	SILTSTONE As above - 6.7-12.0m 1-3% dissem pyrite, trace chalcopyrite		1-2 py	91189	14.8-16.3	1.5		(5		(0.1		134		16		3
					1-2 py	91190	16.3-17.8	1.5		(5		0.1		220		16		2
					2-3 py, tr cpy.	91191	17.8-18.5	0.7		(5		0.2		188		16		3
18.5	19.2	78	MINERALIZED SILTSTONE Mottled pale grey-green with bands of massive and stringer pyrite, pyrrhotite and chalcopyrite, boxwork type pyrite, vuggy	Banding at 85 deg to CA	20-25 py, 5 po, (1 py.	91192	18.5-19.2	0.7		1350		0.9		1600		39		3
19.2	22.6	75	SILTSTONE As above - 14.8-18.5m 1-2% dissem pyrite	Contacts at 39 deg to CA	1 py	91193	19.2-20.9	1.7		30		0.3		680		20		2
					1-2 py	91194	20.9-22.6	1.7		10		0.1		198		16		3

NORANDA EXPLORATION COMPANY LIMITED) D.D.H. #
(NO PERSONAL LIABILITY)

PROPERTY: TAS OPTION HOLE NO : 271-87-17 PAGE 2 of 3

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
22.6	28.6	95	HORNBLENDE-AUGITE PORPHYRY															
			Dark grey-green, 5-10% 1-2mm hornblende		2-5 py,	91195	22.6-24.1	1.5		65		0.2		480		18		3
			augite phenocrysts, highly fractured		1 po.													
			and vuggy, minor breccia, 2-5% pyrite,		2-3 py,	91196	24.1-26.0	1.9		30		0.1		320		19		3
			1% pyrrhotite in fractures and blebs.		(1 po.													
			23.1-23.5m: siltstone		10-15 py,	91197	26.0-27.3	1.3		360		0.4		905		30		2
			26.0-28.6m: fine ((1mm) fractures		2-5 po,													
			filled with py, po and cpy., stringer		tr cpy.													
			and massive sulphides.		20 py,	91198	27.3-28.6	1.3		320		0.4		965		28		4
					5-10 po,													
					tr cpy.													
28.6	34.6	95	SILTSTONE															
			Mottled, pale green-grey to medium	Laminations at	2-5 py,	91199	28.6-30.1	1.5		60		0.2		465		19		3
			green grey, finely laminated pyrite	37 deg to CA	1-2 po,													
			and ankerite stringers in fractures.		tr cpy.													
			30.7m: 4cm band of massive py & po		5-10 py,	91200	30.1-31.6	1.5		440		0.3		620		25		(2
					2-3 po,													
					tr cpy.													
					1-2 py,	91201	31.6-33.1	1.5		860		0.2		325		18		3
					(1 po.													
					1-2 py	91202	33.1-34.6	1.5		85		0.2		187		15		2
34.6	37.5	97	DIORITE															
			As above - 12.0-14.8m		2-3 py,	91203	34.6-37.5	2.9		25		0.2		465		25		7
			2-3 pyrite, 1-2% pyrrhotite, dissem		1-2 po.													
			and in fractures.															
37.5	41.4	87	SILTSTONE															
			As above - 28.6-34.6m		1-2 py	91204	37.5-39.0	1.5		110		(0.1		235		13		2
			Minor chlorite alteration		(1 py	91205	39.0-40.5	1.5		320		(0.1		174		11		3
					1-2 py	91206	40.5-41.4	0.9		5		0.1		141		37		2
41.4	42.8	87	HORNBLENDE-AUGITE PORPHYRY															
			As above - 22.6-28.6m		(1 py	91207	41.4-42.8	1.4		(5		0.1		126		57		2
			Minor chlorite alteration, (1% pyrite															
			in fractures.															
42.8	50.3	90	SILTSTONE		2-5 py	91208	42.8-44.3	1.5		160		0.2		495		20		3
			As above - 37.5-41.4m	Fractures at	1-2 py	91209	44.3-45.8	1.5		25		0.1		181		12		(2
			Highly fractured	10 deg to CA	1-2 py	91210	45.8-47.3	1.5		5		(0.1		102		19		5
					1 py	91211	47.3-50.3	3.0		(5		(0.1		120		18		3
50.3	55.7	90	HORNBLENDE-AUGITE PORPHYRY/DIORITE		2-3 py	91212	50.3-51.8	1.5		5		0.1		270		20		(2
			Pale grey-green diorite, with 1-2%		2-5 py,	91213	51.8-53.3	1.5		75		0.1		490		21		(2
			hornblende and augite phenocrysts,		1 po.													
			2-3% dissem pyrite, 1% pyrrhotite.		2-3 py,	91214	53.3-54.8	1.5		30		0.1		380		22		2
					1 po.													
					1-2 py.	91215	54.8-55.7	0.9		800		0.1		305		19		2

NORANDA EXPLORATION COMPANY LIMITED)
(NO PERSONAL LIABILITY)

D.D.H. #

PROPERTY: TAS OPTION

HOLE NO : 271-87-17

FROM (m)	TO (m)	REC (%)	DESCRIPTION	STRUCTURE m/deg. WCA	% SULPH	SAMPLE NO.	INTERVAL (m)	WIDTH (m)	ANALYTICAL RESULTS AU gmt	AU ppb	AG gmt	AG ppm	CU %	CU ppm	ZN %	ZN ppm	PB %	PB ppm
55.7	74.1	88	SILTSTONE		1 py	91216	55.7-57.2	1.5		50		(0.1		159		12		2
			As above - 42.8-50.3m		1-2 py	91217	57.2-58.7	1.5		5		(0.1		53		49		(2
			1-2 dissem pyrite		2-5 py	91218	58.7-59.4	0.7		15		0.2		16		14		3
			58.7-59.4m: 2-5% pyrite, calcite vein		1-2 py	91219	59.4-62.4	3.0		35		(0.1		105		14		(2
			with sericite and epidote alteration		1-2 py	91220	62.4-65.4	3.0		(5		(0.1		96		14		(2
					1-2 py	91221	65.4-67.0	1.6		10		(0.1		129		18		3
					20-38 py,	91222	67.0-67.7	0.7		320		0.8		1750		43		5
					2-5 po,													
					tr cpy.													
					2-3 py	91223	67.7-69.2	1.5		5		(0.1		86		15		3
					1 py	91224	69.2-72.2	3.0		15		(0.1		180		27		(2
					1 py	91225	72.2-74.1	1.9		10		0.1		205		29		3
74.1	89.3	92	HORNBLENDE-AUGITE PORPHYRY															
			Medium grey-green, 20-25% 1-10mm															
			hornblende and augite phenocrysts,															
			minor epidote alteration, (1% dissem py															
			END OF HOLE															