

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,120

REPORT ON DRILLING
ON THE
GNOME CLAIM

MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES
Rec'd AUG 19 1986
SUBJECT _____
FILE _____
VANCOUVER, B.C.

FILMED

GNOME 1419 (5)

CLINTON MINING DIVISION

92P/2W

51^o ~~40~~^W 120^o ~~50~~^W
09.7' 52.6'

Owner: Chevron Canada Resources Ltd
Vancouver, B.C.

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

Submitted by: R. Wilson
Project Geologist
August 15, 1986

TABLE OF CONTENTS

	<u>PAGE</u>
LIST OF FIGURES	
1.0 INTRODUCTION.....	1
1.1 LOCATION AND ACCESS.....	1
1.2 TOPOGRAPHY AND PHYSIOGRAPHY.....	1
1.3 PREVIOUS WORK.....	1
1.4 OWNER - OPERATOR.....	1
1.5 ECONOMIC POTENTIAL.....	2
2.0 SUMMARY OF WORK DONE.....	2
2.1 DRILLING.....	2
2.2 CLAIMS WORKED.....	2
3.0 DETAILED TECHNICAL DATA AND INTERPRETATION.....	2
4.0 CONCLUSIONS.....	4
STATEMENT OF QUALICATIONS.....	5
STATEMENT OF COSTS.....	6
APPENDIX I ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS.....	8
APPENDIX II DIAMOND DRILL LOGS.....	11

LIST OF FIGURES

	<u>SCALE</u>
FIGURE 1: PROPERTY AND CLAIM LOCATION.....	1:25,000
FIGURE 2: DRILL HOLE LOCATION.....	1:5,000
FIGURE 3: DDH NGN86-1 DRILL SECTION.....	1:500

1.0 INTRODUCTION

1.1 LOCATION AND ACCESS

The Gnome property is located 65 km NW of Kamloops near the head of the Deadman Valley and just east of Vidette Lake, Figure 1. Access to the property is via an all weather gravel road (Deadman River Road) which leaves Highway #1 eight kilometers west of Savona B.C. Travel time to the property from Highway #1 is approximately one hour.

1.2 TOPOGRAPHY AND PHYSIOGRAPHY

The property is situated on a rolling plateau from 3300 to 3700 feet above sea level. The area was cleared in past and is now open rangeland with a number of small lakes occurring in small depressions. There are occasional stands of coniferous and deciduous trees.

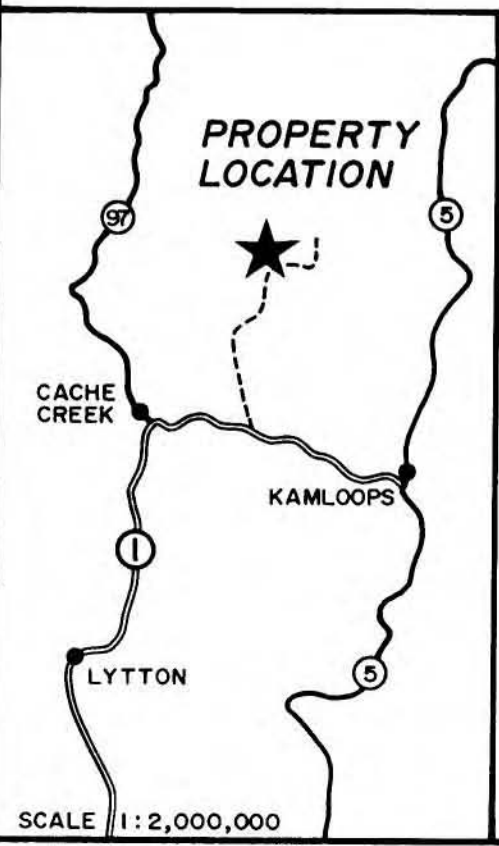
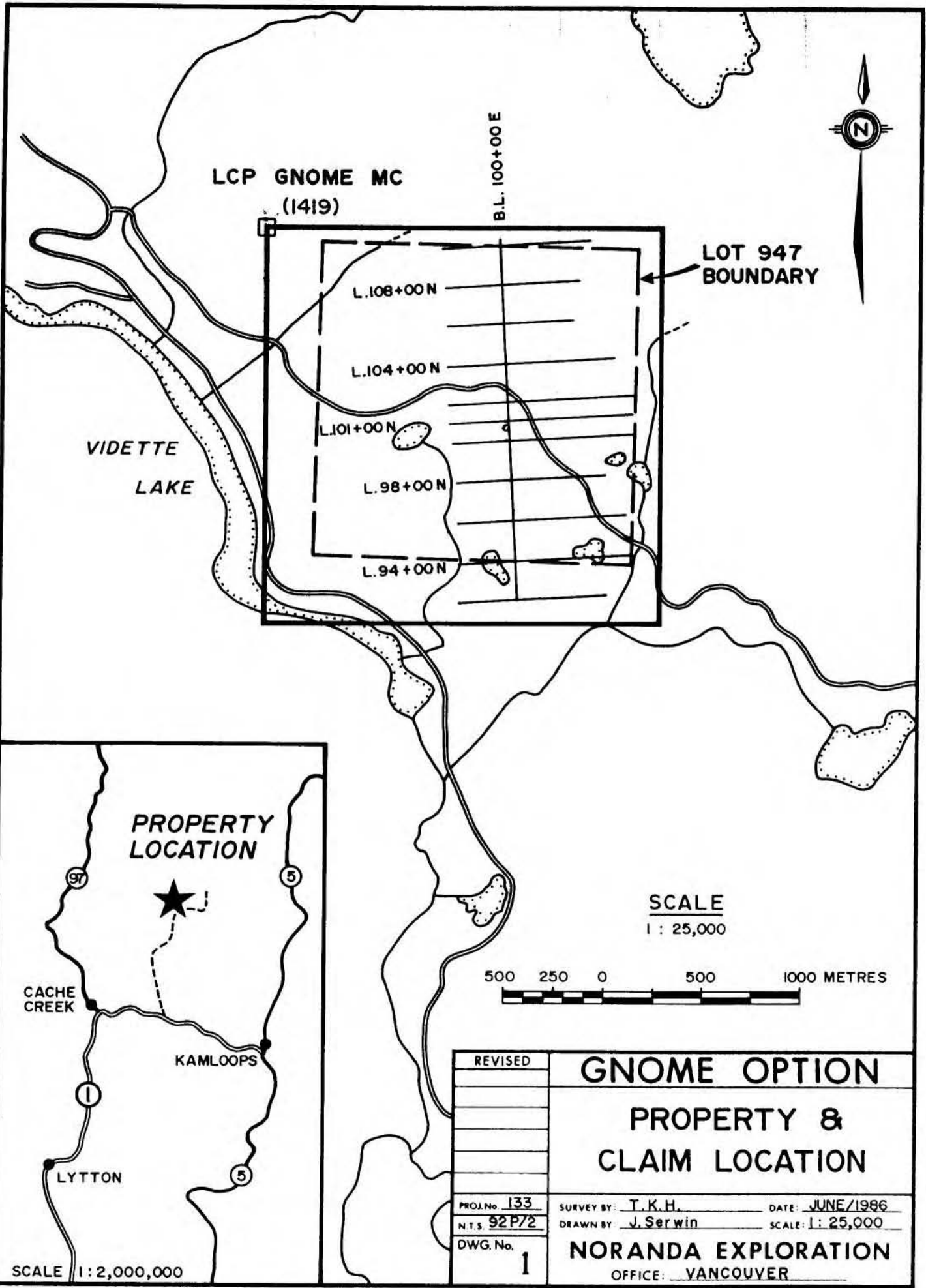
1.3 PREVIOUS WORK

The property was previously held as a molybdenum prospect by both Kerr-Dawson and Cominco. They completed geological, limited IP and magnetometer studies and soil and rock geochemistry. Chevron staked the ground in 1983 and completed geology (including thin section and fluid inclusion studies), geochemical and magnetometer surveys. Noranda optioned the property from Chevron in 1985 and completed 3.7 km of IP and 9.225 km of magnetometer surveys in November of that year. A further 3.0 km of VLF was surveyed in early April of 1986 in conjunction with limited soil sampling.

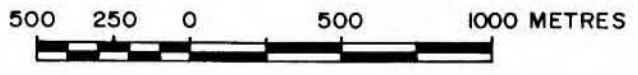
1.4 OWNER-OPERATOR

The claims are owned by:

CHEVRON CANADA RESOURCES LTD
1900-1055 WEST HASTINGS ST.,
VANCOUVER, B.C.
V6E 2E9 ph: (604) 988-4470



SCALE
1 : 25,000



REVISED	GNOME OPTION	
	PROPERTY & CLAIM LOCATION	
PROJ. No. <u>133</u>	SURVEY BY: <u>T. K. H.</u>	DATE: <u>JUNE/1986</u>
N.T.S. <u>92P/2</u>	DRAWN BY: <u>J. Serwin</u>	SCALE: <u>1 : 25,000</u>
DWG. No. <u>1</u>	NORANDA EXPLORATION	
	OFFICE: <u>VANCOUVER</u>	

NCI-774

The claims are presently optioned and operated by:

NORANDA EXPLORATION COMPANY LIMITED
(no personal liability)
BOX 2380
VANCOUVER, B.C.
V6B 3T5 ph: (604) 684-9246

1.5 ECONOMIC POTENTIAL

Due to the preliminary nature of the drilling on the Gnome, the economic potential cannot be estimated at this time. The geologic potential is considered good due to both the encouraging geology of the property and the proximity to the Vidette mine, a past producing gold mine two kilometers to the west.

2.0 SUMMARY OF WORK DONE

2.1 DRILLING

A total of 312.4m (1025') of NQ sized (47.6mm dia) diamond drilling in one drillhole was completed on the Gnome claim, Figure 2.

2.2 CLAIMS WORKED

All drilling was completed on the Gnome, a sixteen unit modified grid mineral claim.

3.0 DETAILED TECHNICAL DATA AND INTERPRETATION

The Gnome property consists of a 16 unit claim which is underlain by Triassic Nicola Volcanics exposed in a window of the Miocene Plateau Lavas.

Diamond drilling was completed to test two targets. The first is a near surface, north striking zone of higher IP frequency response which is coincident with elevated soil geochemical results. The second target is an altered tuff/chalcedony breccia unit which flanks the IP zone on its eastern boundary.

The breccia is postulated to be the cap rock of an epithermal system and is exposed over a distance of 2500m. The heat source of the epithermal system is thought to be an intrusive body 1 km to the west which lies between the breccia and the gold rich quartz fissure-fill veins of the Vidette mining camp. The veins and the breccia zone strike roughly N-S and may be splay off the GSC proposed southerly extension of the Pinci fault system.

The first target was tested near surface and the second target was tested by extending the hole to intersect the second zone at depth.

Diamond drill hole NGN86-1 encountered two chalcedony (agate) healed intermediate lapilli tuff breccia zones near surface, Figure 3. The majority of the IP zone is underlain by an intermediate (lapilli) tuff containing from 1-3% sulphides (pyrite and/or pyrrhotite). The remainder of the hole is a mixture of intermediate to basic (crystal, lapilli) tuff, augite porphyry?, and a metamorphosed (grossularite-idocrase, epidote, chlorite) equivalent of the lapilli tuff.

The drill hole was completed to sufficient depth to intersect the altered tuff/chalcedony breccia zone dipping as much as 82° east. Although minor breccias are present downhole, the zone was not intersected.

Two theories are postulated to explain why the breccia zone was not encountered in NGN86-1. One, if the zone is dipping less than 82° east the hole would not have intersected the unit. For every degree dip less than 82° the hole would have required significantly extra drilling to intersect the zone. The second theory is that the breccia zone is vertically dipping but pinches and swells along strike. The minor breccias intercepted at depth would represent a zone of pinching.

Geological mapping has shown the breccia zone to be a linear body despite a change in elevation along its strike, and supports a vertically dipping, pinch and swell theory.

Results for split core geochemical samples are presented in the drill logs in Appendix II. A zone of anomalous gold exists to a depth of 107m and corresponds to a pyrite rich (1-5%) intermediate tuff. Also included in this zone is a chalcedony (agate) healed brecciated (lapilli) tuff which is anomalous in molybdenum and arsenic. Silver results are sporadic, but do show values between 1.5 to 2.5 gmt, especially near 195m depth.

4.0 CONCLUSIONS

The main rock types intersected in DDH NGN86-1 are intermediate to basic (crystal/lapilli) tuffs, augite porphyrys?, and a metamorphosed (skarn?) equivalent of the tuffs seen at the top of the hole. Near surface a 9m core length zone of brecciated intermediate (lapilli) tuff is healed by chalcedony (agate and chert). Sulphides in this zone are mainly pyrite and pryhotite (1-5%) and correspond to the zone of higher IP frequency response.

The altered tuff/chalcedony breccia zone was not intersected at depth, and it is thought that the zone had pinched where the drillhole would have intersected the breccia.

Gold, arsenic and molybdenum are anomalous in split core samples taken from the top of the hole while silver is anomalous approximately halfway down the hole.

The property has not been fully tested by drilling and further drillholes are required on the breccia zone to determine its economic potential.

AUTHORS QUALIFICATIONS

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

- I am a geologist residing at 3328 West 15th. Avenue, Vancouver
B.C.
- I graduated from the University of British Columbia in 1976 with
a BSc degree in Geology.
- I have worked in mineral exploration since 1973 and have practised
my profession as a geologist since 1976.
- I am presently a Project Geologist with Noranda Exploration
Company, Limited.
- I am a member of the Geological Association of Canada (Cordillera
Division).



Rob Wilson

STATEMENT OF COSTS

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT: GNOME

DATE: AUGUST 1986

TYPE OF REPORT: DRILLING

a) Wages

b) Food and Accomodation:

c) Transportation:

d) Analysis:

e) Cost of Preparation of Report:

f) Other: Contractor
Olympic Diamond Drilling \$22,705.33

Total Cost \$22,705.33

UNIT COSTS

Unit Costs For Drilling

No. of Holes: 1
No. of Units: 312.4 metres
Unit Cost: 72.68/metre
Total Cost: 72.68 x 312.4 \$22,705.33

APPENDIX I

ANALYTICAL METHOD DESCRIPTIONS
FOR
GEOCHEMICAL ASSESSMENT REPORTS

ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

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

Preparation of Samples

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

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

Analysis of Samples

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

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

Elements Requiring Specific Decomposition Method:

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

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

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

Bismuth - Bi: 0.2 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 with an AA-475 complete with EDL.

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

Magnesium - Mg: 0.05 - 0.10 g sample is digested with 4 ml perchloric/nitric acid (3:1). An aliquot is taken to reduce the concentration to within the

range of atomic absorption. The AA-475 with the use of a nitrous oxide flame determines Mg from the aqueous solution.

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

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

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

LOWEST VALUES REPORTED IN PPM

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

EJvL/ie
March 14, 1984

APPENDIX II

DIAMOND DRILL LOGS

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NO		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2									
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 1 of 26									
Lot 100 + 71N		Elev 3400'		Dip -47°		RECORDED	CORRECTED	RECORDED	CORRECTED	Lot		Elev		Dip									
Dep 99 + 95E		Length 312.4		Bearing 068°		200 61.0	400 121.9	42	48	Dep		Length		Bearing									
From METRES		To METRES		Recovery %		Description		Structure		% Sulph.		Est. Grade		SAMPLE No.		Width		ASSAYS					
																		Au(ppb) Ag As Mo					
0		2.8		0		OVERBURDEN Casing to 3.0 m. No core.																	
2.8		20.8		60%		<p>INTERMEDIATE (LAPILLI) TUFF Pale green with sections of darker green tuff soft (hydro alt?), generally fine grained with some coarser grained angular tuff fragments. The rock has a developed foliation in places causing an apparent elongate breccia, including quartz layers. Eye shaped porphoroclasts are fairly common, and are a similar composition as the matrix. In places a lacy, brown network surrounds fragments which is possibly sericite. F.G. Pyrite is present in unit, usually along foliation and disseminated to 1%, locally absent. Bright green fuchsite? is seen rarely, as at 9.4 m. Reddish brown hematite; is seen disseminated occasionally as at 13.0 and 13.6 m. Calc-silicate veinlets to 5 mm wide, occur commonly in wispy and regular parallel to foliation forms: Minor calcite healed faulting is seen as at 14.8 m. Occasional quartz veins are seen to 10 cm wide are seen at 14.8 m and 14.4 m. Top 9 m is extremely fractured and broken (surface fracturing). Chalcedony is seen at 8.8 m, 16.8, 17.4 and commonly from 18.5 - 20.1. The chalcedony is at times banded (agate) and occurs as open space fillings, frequently with crystalline quartz.</p>		<p>49 Foliation (Parallel to compositional layering) 51° CA @ 5 m 58° CA @ 9.3 m 61° CA @ 12.0 m 59° CA @ 14.5 m 61° CA @ 18.3 m</p>															
						NOTE: All 'assays' are rock geochemical values in ppm except where noted.																	

DRILL LOG - 81

ppm except where noted.

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Collared May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 2 of 26			
Lat.		Elev.		Dip		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip			
100 + 71N		3400'		-47°		200	61	0		42							
Dep		Length		Bearing		400	121	9		48							
99 + 95E		312.4		068°		600	182	9		48							
						800	243	8		49							
						1025	312.4			49							
From METRES	To METRES	Recovery %	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
													Au(ppb)	Ag	As	Mo	
			The contact with below is somewhat arbitrary and is based on where calcedony (breccia) exceeds 50% of rock.														
2.8	4.4	30%	AS ABOVE No sample. Very broken.								N/S	1.6					
4.4	4.5	90%	QUARTZ VEIN Traces Py + Po?								58251	0.1	20	0.2	24	4	
4.5	5.5	40%	AS ABOVE (NOT Q.V.) Very broken up.								58252	1.0	50	0.4	2	4	
5.5	20.1	80%	AS ABOVE No sample. Minor chalcedony veining starting at 18.2.								N/S	14.6					
20.1	29.1	95%	LAPILLI TUFF/CHALCEDONY BRECCIA The rock is a coarse breccia of above unit (breccia fragments to 10 cm) which is healed by clear to milky (but appears dark purplish) silica (chalcedony).				Foliation Parallel to compositional layering										

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. Wilson

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2		
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 3 of 26		
Lot		Elev		Dip		RECORDED		CORRECTED		Lot		Elev		Dip		
100 + 71N		3400'		-47°		200 61.0		42								
Dep 99 + 95E		Length 312.4		Bearing 068°		400 121.9		48		Dep		Length		Bearing		
						600 182.9		48						HOLE No. GN 86-1		
						800 243.8		49								
From	To	Recovery	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
METRES	METRES	%										Au(ppb)	Ag	As	Mo	
			1025 312.4				49									
			In places the silica is banded as at 24.7 - 24.9 (sample petrographic). The healing was open space filling with some open pores remaining. Pyrite is present over entire unit locally to 2%, average .5% as fine grained disseminations. Mariposite spots are seen commonly in fragments of above unit. Wispy veinlers of calcite are also common throughout unit.				62° CA @ 87'									
			NOTE: Banded chalcedony is noted as agate in GN 86-2.													
			Contact with below unit @ 29.1 m is taken at a zone of fractured core.													
20.1	21.1	100%	AS ABOVE Large breccia fragments (to 10 cm). Chalcedony agate.					5-1		58253	1.0	90	0.8	20	380	
21.1	22.1	95%	AS ABOVE Maximum breccia this sample and banded chalcedony.					5-1		58254	1.0	50	0.4	16	180	
22.1	23.1	100%	AS ABOVE Large breccia fragments. Open space-filling-chalcedony.					5-1		58255	1.0	30	0.8	40	110	

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 4 of 26	
Lat	Elev.	Dip		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip	HOLE No.				
100 + 71N	3400'	-47°	200 61.0 400 121.9			42 48					GN 86-1				
Dep. 99 + 95E	Length 312.4	Bearing 068°	600 182.9 800 243.8			48 49		Dep.	Length	Bearing					
From METRES	To METRES	Recovery %	Description		Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS					
										Au(ppb)	Ag	As	Mo		
23.1	24.1	100%	AS ABOVE Mainly rock as 2.8 - 20.1, frequent mariposite? fuchite spots, minor chalcedony (agate).			.5-1		58256	1.0	70	2.8	76	240		
24.1	25.1	100%	AS ABOVE Maximum banded chalcedony, 1 cm angular breccia fragments.			.5-1		58257	1.0	170	0.6	48	2000		
25.1	26.1	100%	AS ABOVE Brecciated but less chalcedony (agate). Mariposite/fuchite.			.5-1		58258	1.0	130	0.4	100	110		
26.1	27.0	100%	AS ABOVE Mainly rock unit as 2.8 - 20.1 Py in silic fracture fillings to 2% locally. Mariposite? fuchite. F.G. tuff.			1.5		58259	0.9	90	0.4	32	120		
27.0	27.7	100%	AS ABOVE Banded chalcedony @ 10° CA for length of sample. Possibly baritic.			1		58260	0.7	80	0.4	48	360		
27.7	28.7		AS ABOVE Mainly rock unit as 2.8 - 20.1 Mariposite-fuchite? spots.			1		58261	1.0	110	0.4	92	130		
28.7	29.1		AS ABOVE Mainly rock unit as 2.8 - 20.1 with frequent chalcedonic fracture fillings.			1		58262	0.4	60	0.4	40	120		

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Collected May 8/86		Date Completed May 12/86		Core Size NQ	DIP TESTS				PROPERTY GNOME		PROJECT No. 133	N.T.S. No. 92P/2				
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lat	Elev	Dip	RECORDED		CORRECTED	RECORDED	CORRECTED	Lat	Elev	Dip	Sheet 5 of 26					
100 + 71N	3400'	-47°	200	611.0			42									
99 + 95E	312.4	068°	400	121.9			48									
			600	182.9			48									
			800	243.8			49									
From METRES	To METRES	Recovery %	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
												Au(ppb)	Ag	As	Mo	
29.1	32.0	100%	AUGITE PORPHYRY Green to dark green, fine grained matrix with augite? phenocrysts to 2mm to 10% of rock. Pyrite is disseminated to 2% locally average 1%, to 1%, to 1 mm diameter. Calc-silicate veinlets are present and regular, but not as common as above unit. Top .7 m of unit is highly altered with 30 - 40% clays and sheared zone to 15 cm. Minor banded chalcedony is present but is less than 5% of unit. Contact with below unit as taken where phenocrysts die out although last .4 m is intermixture of above and below units.				Foliation 66° CA @ 34.0 m 62° CA @ 32.4 m									
29.1	30.1	100%	AS ABOVE Sample section is a transition zone with sheared altered host and minor chalcedony fracture filling. Some fg tuff over top 40 cm.					1		58263	1.0	50	0.4	60	180	
30.1	31.1	100%	AS ABOVE Py is fine grained and disseminated throughout.					3		58264	1.0	10	0.2	44	6	
31.1	32.0	100%	AS ABOVE Py is disseminated and banded to 3 mm wide. Last .4 m is a transition between above and below units.					2-4		58265	0.9	20	0.4	40	4	

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Collected May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2					
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 6 of 26					
Lat. 100 + 71N		Elev. 3400'		Dip -47°		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No.					
Dep. 99 + 95E		Length 312.4		Bearing 068°		200 61.0		400 121.9		42 48		48 48		GN 86-1					
600 182.9		800 243.8		1025 312.4		49													
From METRES	To METRES	Recovery %	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
												Au(ppb)	Ag	As	Mo				
32.0	38.6	95%	<p><u>INTERMEDIATE (LAPILLI) TUFF (ALTERED)</u> This unit is similar to the 2.8 - 20.1 unit, but is mainly brown in color with green interbanding perhaps due to compositional layering. Brown color dies out @ 38.6.</p> <p>Pyrite is present as fine grained (frequently euhedral) crystals throughout unit but is generally 1%.</p> <p>Subround lapilli? tuff fragments are seen frequently to 4 mm diameter. Some are augen in appearance. The rock is hydrothermally altered and is soft, the core often slightly pitted, clay and sericite is present.</p> <p>Calc-silicate fracture fillings are common, at times open spaces remain and are crystal lined. The veinlets are regular.</p> <p>36.0 - 36.6 - Core well fractured.</p> <p>Below 38.6 brown color dies out and rock is similar to 2.8 - 20.1 but is slightly coarser grained. Mafic phenocrysts are seen over short sections (augite porphyry which is not as altered?). Pyrite is present locally to 2% but is generally absent.</p> <p>Siliceous chalcedonic (banded) fracture filling 38.9 - 43.0 and breccia as 20.1 - 29.1.</p> <p>As 2.8 - 20.1 but generally darker green, with chlorite and epidote and pyrite 1-2%.</p>				Foliation Parallel to color (compositional) layering												
							62° CA @ 34.7 61° CA @ 115' 64° CA @ 37.5												

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Collared May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 7 of 26	
Lat		Elev		Dip		RECORDED		CORRECTED		Lat.		Elev.		Dip	
100 + 71N		3400'		-47°		200 61.0		42							
Dep 99 + 95E		Length 312.4		Bearing 068°		400 121.9		48		Dep.		Length		Bearing	
						600 182.9		48						HOLE No.	
						800 243.8		49						GN 86-1	
From METRES	To METRES	Recovery %	Description				49 Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
												Au(ppb)	Ag	As	Mn
32.0	33.0	95%	AS ABOVE Chalcedony fracture fillings with slight blue-grey color. 32.2 - Minor 10 cm shear zone.					1		58266	1.0	70	0.2	24	36
33.0	34.0	100%	AS ABOVE Py to 2 mm diameter. Siliceous fracture fillings. Green alteration - earth.					1		58267	1.0	70	0.4	20	42
34.0	35.0	95%	AS ABOVE Chalcedony fracture filling to 5 cm. Py is fine grained and disseminated. Some rock shearing.					2		58268	1.0	70	0.4	8	38
35.0	36.0	100%	AS ABOVE As 34.0 - 35.0 but more sheared and minor breccia.					2		58269	1.0	20	0.2	2	36
36.0	37.0	80%	AS ABOVE 36.0 - 36.6 - Core well fractured. Light green + dark brown tuff. Fine to medium grained.					2		58270	1.0	40	0.2	2	28
37.0	38.0	100%	AS ABOVE Core less sheared but still foliated. Frequent siliceous fracture fillings to 2 mm. Open spaces remains. Some fine grained tuff.					1		58271	1.0	70	0.4	24	74
38.0	38.6	100%	AS ABOVE Less fractures. Py dies out. Foliated.					1-2		58272	1.0	20	0.2	16	8

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Collared May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92/2		
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 8 of 26		
Lat.		Elev.		Dip		RECORDED		CORRECTED		Lat.		Elev.		Dip		
100 + 71N		3400'		-47°		200 61.0				42						
Dep. 99 + 95E		Length 312.4		Bearing 068°		400 121.9				48				HOLE No. CN 86-1		
						600 182.9				48						
						800 243.8				49						
From METRES	To METRES	Recovery %	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
												Au(ppb)	Ag	As	Mo	
38.6	44.8	100%	<p>ALTERED (BRECCIATED) FOLIATED INTERMEDIATE TUFF Pale to medium green, fine grained soft (altered), foliated intermediate tuff. The unit is in places brecciated with (banded) silica (blue-grey) filling open spaces, surrounding breccia fragments and fracture fillings - chalcedony, at acute angles to the core axis. The rock is altered (soft) with clay? - sericite? sometimes seen as a brown colored network. Pyrite is present as fine grained disseminations. Mariposite? - fuchite spots are present but rare. Chalcedony becomes rare last 1 m of unit and contact is taken where core hardness increases and is less foliated. In places of less foliation - alteration rounded fragments/phenocrysts of mafics are seen.</p>				Foliation 65° CA @ 41.0									
38.6	39.6	100%	<p>AS ABOVE Sample 60% silica (chalcedony) Py 1%. Breccia fragments. Start of fine grained tuff.</p>					<1		58273	1.0	10	0.2	20	36	
39.6	40.6	100%	<p>AS ABOVE As 38.6- 39.6. Breccia fragments. Siliceous vein material at 10-15° CA.</p>					1		58274	1.0	40	0.8	48	130	
40.6	41.6	100%	<p>AS ABOVE Much less chalcedony. Open spaces - crystal lined. Minor breccia.</p>					<1		58275	1.0	90	0.8	96	52	

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 9 of 26	
Lat. 100 + 71N		Elev. 3400'		Dip -47°		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No. GN 86-1	
Dep. 99 + 95E		Length 312.4		Bearing 068°		200 61.0 400 121.9 600 182.9 800 243.8 1025 312.4		42 48 48 49		Dep.		Length		Bearing	
From METRES	To METRES	Recovery %	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
												Au(ppb)	Ag	As	Mo
41.6	42.6	100%	AS ABOVE Frequent fracture fillings. Py as fine grained disseminations and bands to 3 mm.					2		58276	1.0	100	0.2	68	30
42.6	43.6	100%	AS ABOVE As 41.6 - 42.6. Fine grained tuff ends at end of sample.					1		58277	1.0	50	0.2	20	8
43.6	44.8	100%	AS ABOVE Irregular fracture fillings, slightly darker green. Some open spaces.					1		58278	1.0	30	0.2	2	2
44.8	219.9	100%	ALTERED (FOLIATED) INTERMEDIATE TUFF Pale to dark green, fine grained, soft and hard (silicified) sections moderately to poorly foliated. Similar to above unit but generally not as foliated and bleached. Pyrite is present throughout as fine grained disseminations from 2-3%, locally to 5%. In places of less alteration are mafic phenocrysts, often epidotized. Fractures are common, regular and calc-silicate healed, occasionally seen with red? hematite. Chlorite and epidote alteration present throughout unit is locally strong to intense as at 49.0 - 50.8. Frequently the fragments are angular tuffaceous appearing. Fragments are to 2 mm diameter. Silica healed fractures (blue-grey banded) are seen				Foliation 55° CA @ 47.0 m 66° CA @ 61.0 m 64° CA @ 65.5 m 64° CA @ 77.9 m 70° CA @ 81.2 m 65° CA @ 85.6 m 66° CA @ 88.2 m	2-3							

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Collared May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 10 of 26	
Lat	Elev	Dip		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip	HOLE No.				
100 + 71N	3400'	-47°	200 61.0								GN 86-1				
Dep 99 + 95E	Length 312.4	Bearing 068°	400 121.9												
			600 182.9												
			800 243.8												
			1025 312.4												
From METRES	To METRES	Recovery %	Description	Structure	% Sulph.	Est Grade	SAMPLE No.	Width	ASSAYS						
									Au(ppb)	Ag	As	Mo			
			occasionally, especially at 55.0 - 57.8. This section also contains clay alteration. Sections of this unit contains foliated fine grained bands of tuff? or sheared and altered tuff. These sub units are .5 - 2 m in length and occur frequently and for the sake of sanity are not all broken out.												
44.8	47.7	100%	AS ABOVE No sample												
47.7	48.8	100%	AS ABOVE Bleaching, epidote and chlorite and fine disseminated pyrite. Silica healed breccia and open space crystals (chalcedony).		1-3		58279	1.1	50	0.2	2	1			
48.8	55.4	100%	AS ABOVE No sample		2-3		N/S	6.6							
55.4	56.4	100%	AS ABOVE Banded chalcedony to 5 cm wide filling fracture and 1 highly clay altered fracture and sericite. Py 1-3% chalcedony at 10° CA. Very fine grained tuff. Ba?		1-3%		58280	1.0	40	0.2	28	46			

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NO		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 11 of 26	
Lat. 100 + 71N		Elev. 3400'		Dip -47°		200 61.0		42		Lat.		Elev.		Dip	
Dep. 99 + 95E		Length 312.4		Bearing 068°		400 121.9		48		Dep.		Length		Bearing	
From METRES	To METRES	Recovery %	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
												Au(ppb)	Ag	As	Mo
56.4	57.4	100%	AS ABOVE As 55.4 - 56.4 Very fine grained tuff becomes coarser at 57.0 m.					1-3		58281	1.0	40	0.2	2	8
57.4	58.4	100%	AS ABOVE As 55.4 - 56.4. Contains 3-5 cm vein @ 5-10° CA of silica-slight purple color.					1-2		58282	1.0	40	0.2	2	52
58.4	65.7	100%	AS ABOVE No sample							N/S	7.3				
65.7	66.7	100%	AS ABOVE Slight increase in calc-silicate veining.					1-3		58283	1.0	30	0.2	4	4
66.7	67.7	100%	AS ABOVE As 65.7 - 66.7					1-3		58284	1.0	30	0.2	4	6
67.7	70.6	100%	AS ABOVE No sample, 69.2 crystal lined vug					1-3		N/S	2.9				
70.6	71.6	100%	AS ABOVE As 65.7 - 66.7					1-3		58285	1.0	60	0.6	2	1
71.6	74.7	100%	AS ABOVE Short sections of siliceous alteration. No sample.					3		N/S	3.1				

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Collected May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 12 of 26	
Lat.	Elev	Dip		200	61.0	RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev	Dip	HOLE No.		
100 + 71N	3400'	-47°		400	121.9			42					GN 86-1		
Dep	Length	Bearing		600	182.9			48		Dep.	Length	Bearing			
99 + 95E	312.4	068°		800	243.8			49							
From METRES	To METRES	Recovery %	Description		Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS					
				1025 312.4	49					Au(ppb)	Ag	As	Mo		
74.7	75.7	100%	AS ABOVE Bleaching, mariposite spots and porphyroclasts. Vugy veins with large calcite crystals.			3-5		58286	1.0	20	0.2	8	22		
75.7	76.7	100%	AS ABOVE As 74.7 - 75.5, Large Py.			3-5		58287	1.0	20	0.2	2	6		
76.7	80.9	100%	AS ABOVE No sample			1-3		N/S	4.2						
80.9	81.9	100%	AS ABOVE Epidote alteration along fractures, with Py. Very slight skarn appearance.			3-5		58288	1.0	30	0.6	2	2		
81.9	85.9	100%	AS ABOVE Occasional siliceous filled fractures to 1 cm wide.			1-3		N/S	4.0						
85.9	86.9	100%	AS ABOVE Transparent siliceous fracture filling mariposite--Fuchite spots. Possible barite. 42° CA bedding.			1-3		58289	1.0	30	0.6	4	130		
86.9	93.3	100%	AS ABOVE No sample. Agate and chert filled fractures to 5 cm at 89.7 and 91.8.			1-3		N/S	6.4						
93.3	94.3	100%	AS ABOVE Representative sample. Highly foliated brown + green streaked tuff? Cl + Ep alteration. Includes 10 cm siliceous vein with 10% Py and specs of sphalerite.			1-3		58290	1.0	30	0.8	28	4		

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 13 of 26	
Lat	Elev	Dip		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat	Elev	Dip	HOLE No.				
100 + 71N	3400'	-47°	200 611.0			42					CN 86-1				
Dep 99 + 95E	Length 312.4	Bearing 068°	400 121.9			48		Dep.	Length	Bearing					
			600 182.9			48									
			800 243.8			49									
From	To	Recovery	Description		Structure	% Sulph	Est Grade	SAMPLE No	Width	ASSAYS					
METRES	METRES	%								Au(ppb)	Ag	As	Mo		
94.3	98.1	100%	AS ABOVE No sample. Possible bedding 56° CA @ 95.6.			1-3		N/S	3.8						
98.1	99.1	100%	AS ABOVE Clay? alteration of feldspar phenocrysts.			1		58291	1.0	20	0.2	24	1		
99.1	105.8	100%	AS ABOVE No sample contact between 2 tuff units @ 67° CA @ 101.2 m. Minor ankerite in calc-silicate veinlets.			1		N/S	6.7						
105.8	106.8	100%	AS ABOVE Bleached pale green, x-tal tuff, slightly foliated with Py and a soft, grey, submetallic mineral along foliation - Petrographic sample.			2		58292	1.0	30	0.2	340	12		
106.8	107.8	100%	AS ABOVE As 106.8 - 107.8 Mariposite/fuchite spots. Foliation @ 70° CA @ 106.9.			2		58293	1.0	30	0.2	540	16		
107.8	114.2	100%	AS ABOVE No sample. Fine grained bleached tuff continues to 112.7 m.			1-3		N/S	6.4						
114.2	115.2	100%	AS ABOVE P _g + Py. Epidote + cl. alteration. Brown + green lapilli tuff.			2		58294	1.0	10	0.2	160	1		
115.2	121.8	100%	AS ABOVE No sample. Petrographic sample @ 118.0 m. Ep. + Cl. altered lapilli tuff.			1		N/S	6.6						

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Collected May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 14 of 26	
Lat.	Elev.	Dip		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip	HOLE No.				
100 + 71N	3400'	-47°				42					GN 86-1				
Dep 99 + 95E	Length 312.4	Bearing 068°		200 61.0		48		Dep.	Length	Bearing					
				400 121.9		48									
				600 182.9		49									
				800 243.8											
From METRES	To METRES	Recovery %	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
												Au(ppb)	Ag	As	Mo
121.8	122.8	100%	AS ABOVE As 112.7 - 121.8. Pb + Py.					1-3		58295	1.0	10	0.2	20	1
122.8	128.4	100%	AS ABOVE No sample. X-tal tuff - mafic fragments to 3 cm.					1		N/S	5.6				
128.4	129.4	100%	AS ABOVE Representative sample.					2-3		58296	1.0	48	0.4	4	1
129.4	134.5	100%	AS ABOVE No sample.					2-3		N/S	5.1				
134.5	135.5	100%	AS ABOVE Representative sample. Core is hard to moderately hard. Silicified?					2-3		58297	1.0	10	0.6	4	1
135.5	139.5	100%	AS ABOVE No sample.					1-3		N/S	4.0				
139.5	140.5	100%	AS ABOVE Mafic crystals to 5 mm in a fine grained brown + green matrix. Subdivision starts at 138.6 - 147.6 where megacrysts die out over 30 cm.					3-5		58298	1.0	50	0.6	2	1
140.5	147.8	100%	AS ABOVE No sample. Petrographic sample @ 141.4 m.					1-3		N/S	7.3				

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Collected May 8/86		Date Completed May 12/86		Core Size NO		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES			
Lot		Elev.		Dip		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 15 of 26	
100 + 71N		3400'		-47°		200	61.0			42				HOLE No.	
Dep 99 + 95E		Length 312.4		Bearing 068°		400	121.9			48				GN 86-1	
Dep 99 + 95E		Length 312.4		Bearing 068°		600	182.9			48					
Dep 99 + 95E		Length 312.4		Bearing 068°		800	243.8			49					
From METRES	To METRES	Recovery %	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
												Au(ppb)	Ag	As	Mo
147.8	148.8	100%	AS ABOVE Fracture zone rock swells on rain contact (clay?), well fractured.					1		58299	1.0	10	0.6	36	32
148.8	149.8	100%	AS ABOVE As 147.8 - 148.8.					1		58300	1.0	10	0.6	60	26
149.8	152.0	100%	AS ABOVE No sample. Mainly fine grained tuff.					1-3		N/S	2.2				
152.0	152.7	100%	AS ABOVE Fracture zone surrounding a siliceous healed fracture. Minor Py.					<1		58301	0.7	10	2.0	20	500
152.7	156.3	100%	AS ABOVE No sample. 153.9 - 20 cm shear fracture zone, below which the tuff becomes finer grained.					1		N/S	3.6				
156.3	157.3	100%	AS ABOVE Fine grained tuff, minor silica veins.					1		58302	1.0	50	1.8	110	140
157.3	158.3	100%	AS ABOVE As 156.3 - 157.3.					1-2		58303	1.0	70	1.4	100	190
158.3	161.3	100%	AS ABOVE No sample. Foliation 48° CA @ 158.4 m. Fine grained tuff continues.					1		N/S	3.0				

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 16 of 26	
Lat.	Elev.	Dip		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip	HOLE No.				
100 + 71N	3400'	-47°									GN 86-1				
Dep 99 + 95E	Length 312.4	Bearing 068°						Dep.	Length	Bearing					
From METRES	To METRES	Recovery %	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
												Au(ppb)	Ag	As	Mo
161.3	162.3	95%	AS ABOVE Fine grained tuff as 156.3 - 157.3. Some calc-silicate veining.					<0.5		58304	1.0	10	0.2	40	18
162.3	166.2	100%	AS ABOVE No sample. Fine grained tuff continues to 163.5 m contact @ 40° CA with a foliated chlorite altered lapilli tuff.					1		N/S	3.9				
166.2	167.2	100%	AS ABOVE 10 cm Fault zone with several 0.5 - 1.0 cm carbonate veins below. As 162.3 - 166.2.					1		58305	1.0	10	0.2	36	2
167.2	169.0	100%	AS ABOVE No sample. Bedding? parallel with foliation at 62° CA @ 164.0 and 42° CA @ 167.3.					1		N/S	1.8				
169.0	170.0	100%	AS ABOVE Pyrite in calc-silicate veins.					1-3		58306	1.0	10	0.4	20	1
170.0	175.3	100%	AS ABOVE No sample. Bedding? 56° CA @ 17.1 m. Streaked dark (chlorite) + light green bands. Petrographic sample @ 173.70.					< 1		N/S	5.3				
175.3	176.1	100%	AS ABOVE As 163.5 - present.					< 1		58307	0.8	10	0.6	20	1
176.1	183.4	100%	AS ABOVE BEDDING? 63° CA @ 176.8 m. As 163.5 - 183.4. Contact at ground core.					< 1		N/S	7.3				

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No 133		N.T.S. No 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 17 of 26	
Lot		Elev		Dip		RECORDED	CORRECTED	RECORDED	CORRECTED	Lot.		Elev		Dip	
Dep		Length		Bearing						Dep		Length		Bearing	
100 + 71N	3400'	-47°	200	611.0				42							
			400	121.9				48							
99 + 95E	312.4	068°	600	182.9				48							
			800	243.8				49							
			1025	312.4				49							
From METRES	To METRES	Recovery %	Description		Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS					
										Au(ppb)	Ag	As	Mo		
183.4	184.4	100%	ALTERED VEINED (LAPILLI) TUFF Similar to above with dramatic increase in calc-silicate veining, irregular and cross-cutting size to 3 cm. Rock more bleached partially obscuring foliation. Veins generally 20 - 30 CA and cross-cutting.			< 1		58308		10	0.2	130	1		
184.4	186.5	100%	AS ABOVE No sample.			< 1		N/S	2.1						
186.5	187.5	100%	AS ABOVE Approx. 10 cm fracture zone with quartz.			< 1		58309		10	0.4	64	1		
187.5	191.6	100%	AS ABOVE As 183.4 - Present			< 1		N/S	4.1						
191.6	192.6	100%	AS ABOVE Brecciated quartz-chalcedony vein at 20° CA for length of sample. Matrix as 183.4 - 191.6.			< 1		58310	1.0	40	2.2	32	500		
192.6	193.6	100%	AS ABOVE Several quartz-chalcedony veins. Rock as 183.4 - 191.6.			< 1		58311	1.0	30	1.6	36	100		
193.6	194.6	100%	AS ABOVE As 192.6 - 193.6.			< 1		58312	1.0	10	2.6	18	630		

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 18 of 26	
Lat	Elev	Dip	200	400	RECORDED	CORRECTED	RECORDED	CORRECTED	Lat	Elev	Dip	HOLE No.			
100 + 71N	3400'	-47°	611.0	121.9			42	48				GN 86-1			
Dep	Length	Bearing	600	800					Dep	Length	Bearing				
99 + 95E	312.4	068°	182.9	243.8			48	49							
			1025	312.4			49					ASSAYS			
From METRES	To METRES	Recovery %	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	Au(ppb)	Ag	As	Mo
194.6	195.4	100%	AS ABOVE As 192.6 - 193.6. Slightly more brecciation contact with below.					< 1		58313	0.8	10	1.8	12	340
195.4	200.0	100%	AUGITE PORPHYRY? Slightly foliate, similar to 44.8 to Minor bands of ? ankerite.					< 1		N/S	4.6				
200.0	200.9	100%	AS ABOVE As 195.4 - 200.0. 2 cm band of ? ankerite. Contact with below @ 73° CA.					< 1		58314	0.9	10	0.4	24	16
200.9	205.6	100%	INTERMEDIATE TUFF Mainly F.G. x-tal? tuff. Contact with below @ irregular siliceous vein 20 cm wide.					< 1		N/S	4.7				
205.6	206.6	100%	INTERMEDIATE TUFF Slightly foliated fine grained tuff. Irregular calc-silicate veinlets common. Bedding @ 48° CA @ 206.5.					< 1		58315	1.0	20	1.4	16	140
206.6	210.8	100%	AS ABOVE As 205.6 - present, rock is slightly paler green thru 210.8.							N/S	4.2				
210.8	211.8	100%	AS ABOVE As 205.6 - present. Representative sample, also ankerite? Petrographic sample @ 211.2.							58316	1.0	10	0.4	2	8
211.8	213.8	100%	AS ABOVE As 205.6 - Present. Contact with below at a 5 cm fracture zone.							N/S	2.0				

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 19 of 26	
Lot 100 + 71N		Elev 3400'		Dip -47°		RECORDED		CORRECTED		Lat.		Elev.		Dip	
Dep 99 + 95E		Length 312.4		Bearing 068°		200 611.0 400 121.9 600 182.9 800 243.8				42 48 48 49		Dep.		Length GN 86-1	
From METRES	To METRES	Recovery %	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
												Au(ppb)	Ag	As	Mo
213.8	215.3	100%	BRECCIATED INTERMEDIATE FINE GRAINED TUFF Pale green over top 1.5 m becoming darker green with increasing brecciation. Top 1.5 cm is multistage calc-silicate veining resulting to 215.3 where brecciation begins. Bedding? 47° CA @ 214.7.							58317	1.4	10	0.4	8	18
215.3	216.3	100%	AS ABOVE As 213.8 - 215.3 but true brecciation begins. Breccia frags are 2 mm - 3 cm diameter, matrix supported by calcite, quartz and baby blue chalcedony.							58318	1.0	10	0.2	32	20
216.3	217.3	100%	AS ABOVE As 215.3 - 216.3. Breccia frags to 10 cm.							58319	1.0	10	0.4	2	90
217.3	218.3	100%	AS ABOVE As 215.3 - 216.3 Petrographic sample @ 217.8 m. Lessening of breccia last 20 cm.							58320	1.0	10	0.2	2	8
218.3	219.3	100%	AS ABOVE As 213.8 - 215.3 but more intense veining and minor breccia.							58321	1.0	10	0.2	2	18
219.3	219.9	100%	AS ABOVE As 213.8 - 215.3 lessening of veining. Contact with below over 15 cm in a shear zone at 65° CA average.							58322	0.6	10	0.4	2	36

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES			DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES			Sheet 20 of 26			
Lot	Elev	Dip	200	400	RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip	HOLE No.			
100 + 71N	3400'	-47°	61.0	121.9			42	48				GN 86-1			
Dep.	Length	Bearing	600	800					Dep.	Length	Bearing				
99 + 95E	312.4	068°	182.9	243.8			48	49							
From METRES	To METRES	Recovery %	Description		Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS					
										Au(ppb)	Ag	As	Mo		
219.9	312.4	100%	1025 312.4		49										
			BASIC TO INTERMEDIATE CRYSTAL LAPILLI TUFF AND (LAPILLI TUFF) This unit is a combination of two intermixed tuff rock types. These are described here and are noted below in subunits.												
			CRYSTAL LAPILLI TUFF: Resembling a porphyry unit and seen at various locations further uphole, this subunit has amphibole (angite?) phenocrysts (x-tals) to 4 mm in a dark green fine grained matrix composed of finer grained mafic and feldspar tuff fragments. The rock has a composition of an intermediate volcanic.												
			LAPILLI TUFF: This unit is similar to the crystal lapilli tuff except that the mafic phenocrysts (x-tals) are missing or much reduced in size to that of the matrix. Lapilli tuff fragments are from 1 mm to 5 cm.												
			Features common to both are calc-silicate veining, from 1-3 mm, both as regular and irregular forms. The unit appears to be contact metamorphosed as frequent growth of garnet (grossularite) and ? idocrase (vesuvianite) - see petrographic sample from m.												
			Pyrite occurs as disseminations and with calc-silicate veining, locally to 3% but overall .5 - 1%. Unit ends at end of hole. This unit is generally massive bedded and unfoliated.												

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNPME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 21 of 26	
Lat. 100 + 71N		Elev. 3400'		Dip -47°		RECORDED		CORRECTED		Lot.		Elev.		Dip	
Dep. 99 + 95E		Length 312.4		Bearing 068°		200 61.0		400 121.9		42		48		HOLE No.	
						600 182.9		800 243.8		48		49		GN 86-1	
From METRES	To METRES	Recovery %	1025 312.4 Description				49 Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
												Au(ppb)	Ag	As	Mo
219.9	220.9	100%	LAPILLI TUFF Lapilli to 5 cm, frequent calc-silicate veinlets, garnet seen commonly. Micro fractures are common.							58323	1.0	10	0.4	2	42
220.9	225.9	100%	AS ABOVE As 219.9 - 220.9 No sample. Petrographic sample at 221.8 m. This section has frequent micro fractures.							N/S	5.0				
225.9	226.9	100%	AS ABOVE As 219.9 - 220.9 Less large lapilli. Calcite filled fractures.							58324	1.0	10	0.4	2	2
226.9	231.9	100%	AS ABOVE As 219.9 - 220.9 Frequent calc-silicate veinlets at 10-20° CA. Lapilli 1 mm to 4 mm. Garnets fairly common, associated with calcite veinlets							N/S	5.0				
231.9	232.9	100%	AS ABOVE As 219.9 - 220.9 Representative sample - no garnets. Few calc-silicate veinlets.							58325	1.0	10	0.4	2	1
232.9	235.0	100%	AS ABOVE As 219.9 - 220.9 No sample. Garnets, especially associated with a calcite-epidote veinlet @ 234.5.							N/S	2.1				
235.0	238.0	100%	BASIC X-TAL TUFF (PORPHYRY?) No sample. Amphibole crystals to 4 mm, average 2 mm. Garnet associated with calcite, epidote and olivine?.							N/S	3.0				
238.0	239.0	100%	AS ABOVE As 235.0 - 238.0 Garnet-epidote growths in matrix. Calc-silicate veinlets 20-30° CA.							58326	1.0	10	0.2	4	58

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NO		DIP TESTS				PROPERTY GNOME		PROJECT No 133		N.T.S. No 92P/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 22 of 26			
Lot	Elev	Dip	Length	RECORDED	CORRECTED	RECORDED	CORRECTED	Lot	Elev	Dip	Length	Bearing	HOLE No. GN 86-1				
100 + 71N	3400 *	-47°	312.4	200	611.0			42									
99 + 95E		068°		400	121.9			48									
				600	182.9			48									
				800	243.8			49									
From METRES	To METRES	Recovery %	Description				Structure	% Sulph	Est. Grade	SAMPLE No	Width	ASSAYS					
												Au(ppb)	Ag	As	Mo		
239.0	242.7	100%	AS ABOVE As 235.0 - 238.0 No sample. Petrographic sample at 239.1 m. Bedding or weak foliation. 52° CA @ 239.4 - Stronger epidote-garnet growth.							N/S	3.0						
242.7	243.6	90%	FAULT ZONE Fault in rock as 235.0 - 238.0 m with fault breccia and gouge and calc-silicate and minor chert fracture filling and breccia matrix. Zone at 47° CA.							58327	0.9	10	0.2	16	4		
243.6	244.1	80%	FAULT ZONE Mainly fault gouge with calc-silicate vein to 10 cm.							58328	0.5	10	0.4	32	4		
244.1	249.1	100%	BASIC X-TAL TUFF (METAMORPHOSED) As 235.0 - 238.0 No sample. Petrographic sample at 245.2. Quartz augens, some with garnet.							N/S	5.0						
249.1	250.1	100%	AS ABOVE As 235.0 - 238.0 Representative sample.							58329	1.0	10	0.6	2	1		
250.1	254.5	95%	AS ABOVE As 235.0 - 238.0 No sample. Minor breccia at 251.0 - 251.7. Driller lost core sample. Quartz augens increase in size below 251.7 to 3 to 10 mm to							N/S	4.4						
254.5	255.5	100%	AS ABOVE Py to 2%. Garnet and epidote in matrix. Bedding ? @ 40° CA Contact with below gradational over 30 cm.					2		58330	1.0	10	0.6	2	20		
255.5	258.9	100%	LAPILLI TUFF Similar to 219.9 - 235.0. Pervasive chlorite and limited epidote, garnet in calc-silicate veins.							N/S	3.4						

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Collected May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 23 of 26			
Lot 100 + 71N		Elev. 3400'		Dip -47°		RECORDED		CORRECTED		Lot.		Elev.		Dip			
Dep. 99 + 95E		Length 312.4		Bearing 068°		200 61.0 400 121.9 600 182.9 800 243.8				42 48 48 49		Dep.		Length		Bearing GN 86-1	
From METRES	To METRES	Recovery %	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
													Au(ppb)	Ag	As	Mo	
258.9	259.9	100%	AS ABOVE Weak alteration of feldspar. Pyrite to 2%. May be a tuff unit.						2		58331	1.0	10	0.8	2	4	
259.9	261.0	100%	AS ABOVE No sample. As 258.9 - 259.9								N/S	1.1					
261.0	265.0	100%	AS ABOVE No sample. As 219.9 - 235.0								N/S	4.0					
265.0	266.0	100%	AS ABOVE Representative sample. As 219.9 - 235.0								58332	1.0	10	0.4	16	2	
266.0	271.0	100%	AS ABOVE No sample. Increase in calcite, epidote and garnet. As 219.9 - 235.0								N/S	5.0					
271.0	272.0	100%	AS ABOVE Includes 30 cm siliceous (Very fine grain) vein @ 271.7 - 272.0 @ 35° CA. Minor breccia, pyrite and (stibinite or moly) blue-grey and very soft. As 219.9 - 235.0								58333	1.0	10	0.4	48	16	
272.0	274.1	100%	AS ABOVE No sample. Contact with below at 58° CA along a minor fracture. As 219.9 - 235.0								N/S	2.1					
274.1	276.6	100%	CRYSTAL TUFF No sample. No olivine seen, minor 30 cm sections of epidote, calcite and garnet. Contact with below sharp @ 34° CA along a calcite vein. As 235.0 - 255.5								N/S	2.5					

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Collected May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S No. 92P/2		
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 24 of 26		
Lat	Elev.	Dip		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip	HOLE No.					
100 + 71N	3400'	-47°				42					GN 86-1					
Dep 99 + 95E	Length 312.4	Bearing 068°		200 61.0		48		Dep.	Length	Bearing						
				400 121.9		48										
				600 182.9		49										
				800 243.8												
From METRES	To METRES	Recovery %	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
												Au(ppb)	Ag	As	Mo	
276.6	278.9	100%	(LAPILLI) TUFF As 219.9 - 235.0. Increase in epidote-garnet down this subunit to a max @ 283.5 with the presence of tourmaline. Petrographic sample @ 278.8.							N/S	2.3					
278.9	279.9	100%	AS ABOVE As 219.9 - 235.0 Epidote-garnet common.					1		58334	1.0	10	0.4	2	4	
279.9	281.8	100%	AS ABOVE As 219.9 - 235.0 No sample. Epidote-garnet common. Contact with below sharp @ 55° along a calcite vein.							N/S	1.9					
281.8	283.9	100%	AS ABOVE Tourmalized? zone. 10% .5 X 2 mm slender prismatic needles set in mafic-intermed.(lapilli) tuff. Minor 30 cm host parting 282.5 - 282.8. Petrographic sample 281.0 Parting contacts @ 53° and 74° CA. Bottom contact 65° CA @ 283.9 on micro fracture.							N/S	2.1					
283.9	285.0	100%	AS ABOVE As 219.9 - 235.0 Minor Py blebs. Minor garnet. Common calc-silicate veinlets last 30 cm.							N/S	1.1					
285.0	286.0	100%	AS ABOVE As 219.9 - 235.0 Minor Py blebs and minor garnet. Mafics as slightly larger to 3 mm.							58335	1.0	10	0.6	2	2	
286.0	291.0	100%	AS ABOVE As 219.9 - 235.0 No sample. Bedding? 65° CA @ 287.6							N/S	5.0					

DRILL LOG - #1

Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 25 of 26	
Lat.	Elev.	Dip		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.	Elev.	Dip	HOLE No.				
100 + 71N	3400'	-47°				42					GN 86-1				
Dep. 99 + 95E	Length 312.4	Bearing 068°				48		Dep.	Length	Bearing					
				1025	312.4			49							
From METRES	To METRES	Recovery %	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
												Au(ppb)	Ag	As	Mo
291.0	292.0	100%	AS ABOVE Representative sample. Bedding 55° CA @ 291.9. Minor moly? or stibinite.							58336	1.0	10	0.2	2	2
292.0	293.1	100%	AS ABOVE No sample. Contact with below gradational over 20 cm.							N/S	1.1				
293.1	296.1	100%	CRYSTAL TUFF No sample.							N/S	3.0				
296.1	297.2	100%	METAMORPHOSED LAPILLI TUFF Much stronger epidote-garnet (chlorite) this unit throughout. Quartz crystal lined calc-silicate veins to 2 cm. Rock is moderately hard to moderately soft.							N/S	1.1				
297.2	298.2	100%	AS ABOVE Representative sample. Garnet/epidote common.							58337	1.0	10	0.2	2	2
298.2	303.6	100%	AS ABOVE No sample. Herkimer diamond in fracture @ 302.0 m. Petrographic sample @ 303.5 m. Garnet/epidote common.							N/S	5.4				
303.6	304.6	100%	AS ABOVE Representative sample. Garnet/epidote common.							58338	1.0	10	0.2	2	4

DRILL LOG - 81

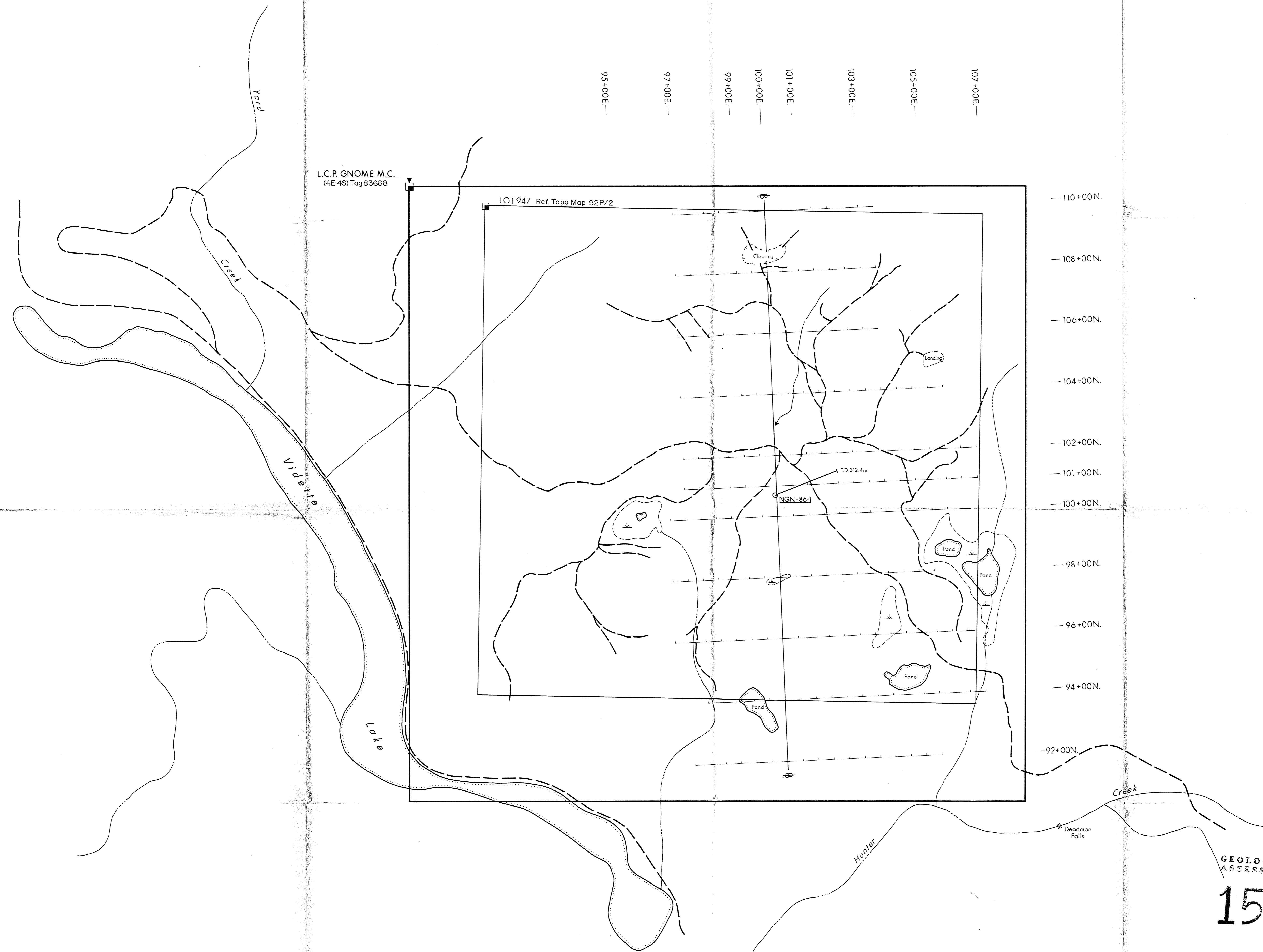
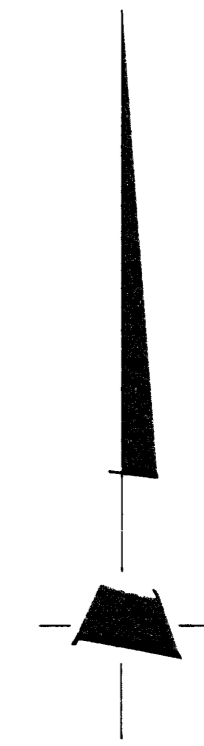
Date MAY 9, 1986 Logged By R.G. WILSON

NORANDA EXPLORATION COMPANY LTD.

Date Colored May 8/86		Date Completed May 12/86		Core Size NQ		DIP TESTS				PROPERTY GNOME		PROJECT No. 133		N.T.S. No. 92P/2		
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 26 of 26		
Lat. 100 + 71N		Elev. 3400'		Dip -47°		200	61.0			42	Lat.		Elev.		Dip	
Dep. 99 + 95E		Length 312.4		Bearing 068°		400	121.9			48	Dep.		Length		Bearing	
						600	182.9			48					HOLE No.	
						800	243.8			49					GN 86-1	
						1025	312.4			49						
From METRES	To METRES	Recovery %	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
													Au(ppb)	Ag	As	Mo
304.6	308.1	100%	AS ABOVE As 296.1 - 297.2 No sample. Rock becomes foliated at 306.0 m @ 47° CA. Garnet still common, epidote decreases.								N/S	3.5				
308.1	309.4	100%	AS ABOVE (FOLIATED) As 296.1 - 297.2 but strongly foliated and very fine grained. Foliation @ 42° CA.								N/S	1.3				
309.4	310.5	100%	FINE GRAINED TUFF As 258.9 - 259.9 Clay altered feldspar fragments to 1 mm. Calc-silica veins parallel to core axis to 2 cm. Includes minor breccia and fault @ 310.4.								58339	1.0	10	0.2	12	22
310.5	312.4	100%	METAMORPHOSED LAPILLI TUFF (CRYSTAL) As 296.1 - 206.0, mafic crystals 1-3 mm. No sample.								N/S	1.9				
312.4			END OF HOLE Casing, casing shoe, (12') left in hole.													
			<i>The core is stored near the drill site.</i>													

DRILL LOG - 81

Date MAY 9, 1986 Logged By R.G. WILSON



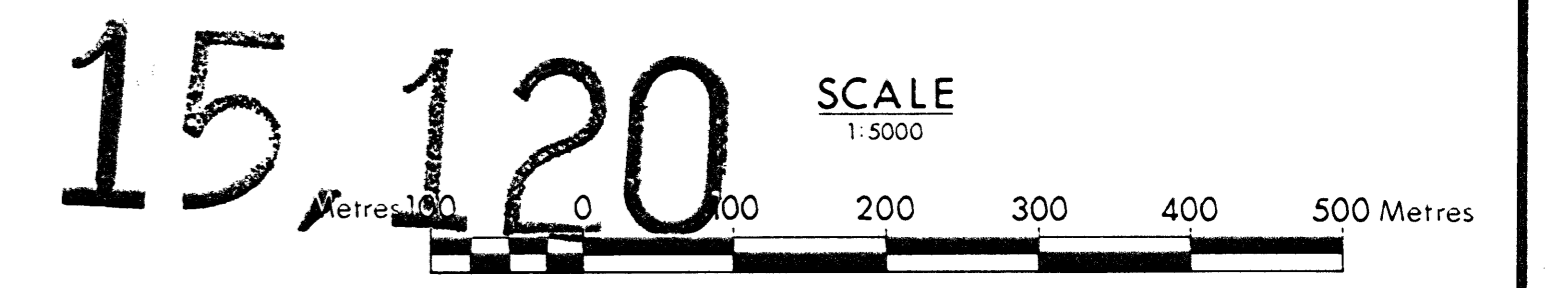
L.C.P. GNOME M.C.
(4E4S) Tag 83668

LOT 947 Ref. Topo Map 92P/2

110+00N.
108+00N.
106+00N.
104+00N.
102+00N.
101+00N.
100+00N.
98+00N.
96+00N.
94+00N.
92+00N.

95+00E
97+00E
99+00E
100+00E
101+00E
103+00E
105+00E
107+00E

GEOLOGICAL BRANCH
ASSESSMENT REPORT



REVISED	GNOME OPTION	
	D.D.H. LOCATION MAP	
	NGN-86:1	
PROJ. No. 133	SURVEY BY: R. Wilson	DATE: Aug /86
N.T.S. 92P/2	DRAWN BY: [Signature]	SCALE: 1:5000
DWG. No. 2	NORANDA EXPLORATION	
	OFFICE: Vancouver	

W

10000E

10100E

10200E

10300E

E

NGN86-1

1000

900

800

INTERMEDIATE (LAPILLI) TUFF

INT LAPILLI TUFF/CHALCEDONY BRECCIA

ALTERED PORPHYRY

INT (LAPILLI) TUFF (ALTERED)

ALTERED FOLIATED INT TUFF (BRECCIA)

ALTERED (FOLIATED) INT TUFF

INT LAPILLI TUFF

INT TO BASIC CRYSTAL TUFF

FALZ ZONE

INT TO BASIC XTAL TUFF (METAMORPHOSED)

INT LAPILLI TUFF

INT CRYSTAL TUFF

INT (LAPILLI) TUFF

INT XTAL TUFF

INT LAPILLI TUFF (METAMORPHOSED)

EQVA 312.4 m

Bar Graph 1cm. = 100ppb Au

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,120

SCALE
1:500

METRES 10 5 0 10 20 30 40 METRES

REVISED	GNOME OPTION	
	NGN-86-1	
PROJ. No. 155/156	SURVEY BY: R.G.W.	DATE: AUGUST /1986
N.T.S. 92P/2	DRAWN BY: J.S.	SCALE: 1:500
DWG. No. 3	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

NS-790