

ARIS SUMMARY SHEET

District Geologist, Nelson

Off Confidential: 89.02.19

ASSESSMENT REPORT 17345

MINING DIVISION: Greenwood

PROPERTY: Wendy
 LOCATION: LAT 49 05 11 LONG 118 35 43
 UTM 11 5438065 383517
 NTS 082E02E

CLAIM(S): Wendy 13
 OPERATOR(S): Noranda Ex.
 AUTHOR(S): Gill, D.G.
 REPORT YEAR: 1987, 32 Pages

COMMODITIES
 SEARCHED FOR: Gold

GEOLOGICAL

SUMMARY: The drill hole collared and ended within Triassic Brooklyn Group sharpstone conglomerate. Anomalous gold values are associated with coarse-grained pyrite-pyrrhotite hosted in quartz-calcite vein material.

WORK

DONE: Drilling, Geochemical
 ROTD 54.9 m 1 hole(s)
 Map(s) - 2; Scale(s) - 1:2500, 1:250
 SAMP 34 sample(s) ;AU

RELATED

REPORTS: 09817, 10588
 MINFILE: 082ESE117

LDC NO. 0502	RD.
ACTION:	
FEE \$:	

ASSESSMENT REPORT
ON
REVERSE CIRCULATION DRILLING OF THE
PHOENIX I GROUP OF CLAIMS
GREENWOOD MINING DIVISION
Latitude 49°06'N Longitude 118°33'W

FILED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,345

D. Graham Gill
Noranda Exploration Company, Limited (no personal liability)
September 11, 1987 - September 17, 1987

SL: 1128-017
APR 27 1988
M.R. # 3
VANCOUVER, B.C.

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Drawing #3: Drill Hole Section RC-CR-87-9 (1:250)

1. INTRODUCTION

During the period September 11 - September 17, 1987 Noranda Exploration Company, Limited (no personal liability) of 1050 Davie Street, Vancouver, B.C. drilled a reverse circulation hole on the Wendy 13 (18055) claim unit of the Phoenix I group of claims.

This hole totalled 54.88 m and is one of 10 reverse circulation holes drilled for Noranda by Western Hydro-Air Drilling Ltd. of Calgary, Alberta in the Greenwood area. The remaining 9 holes were drilled on the Crown II Group to test structurally controlled Au mineralization as seen on the Wendy 13 claim. Results of these 9 holes can be seen in the Assessment Report on Reverse Circulation Drilling on the Crown II Group (1987).

2. LOCATION AND ACCESS

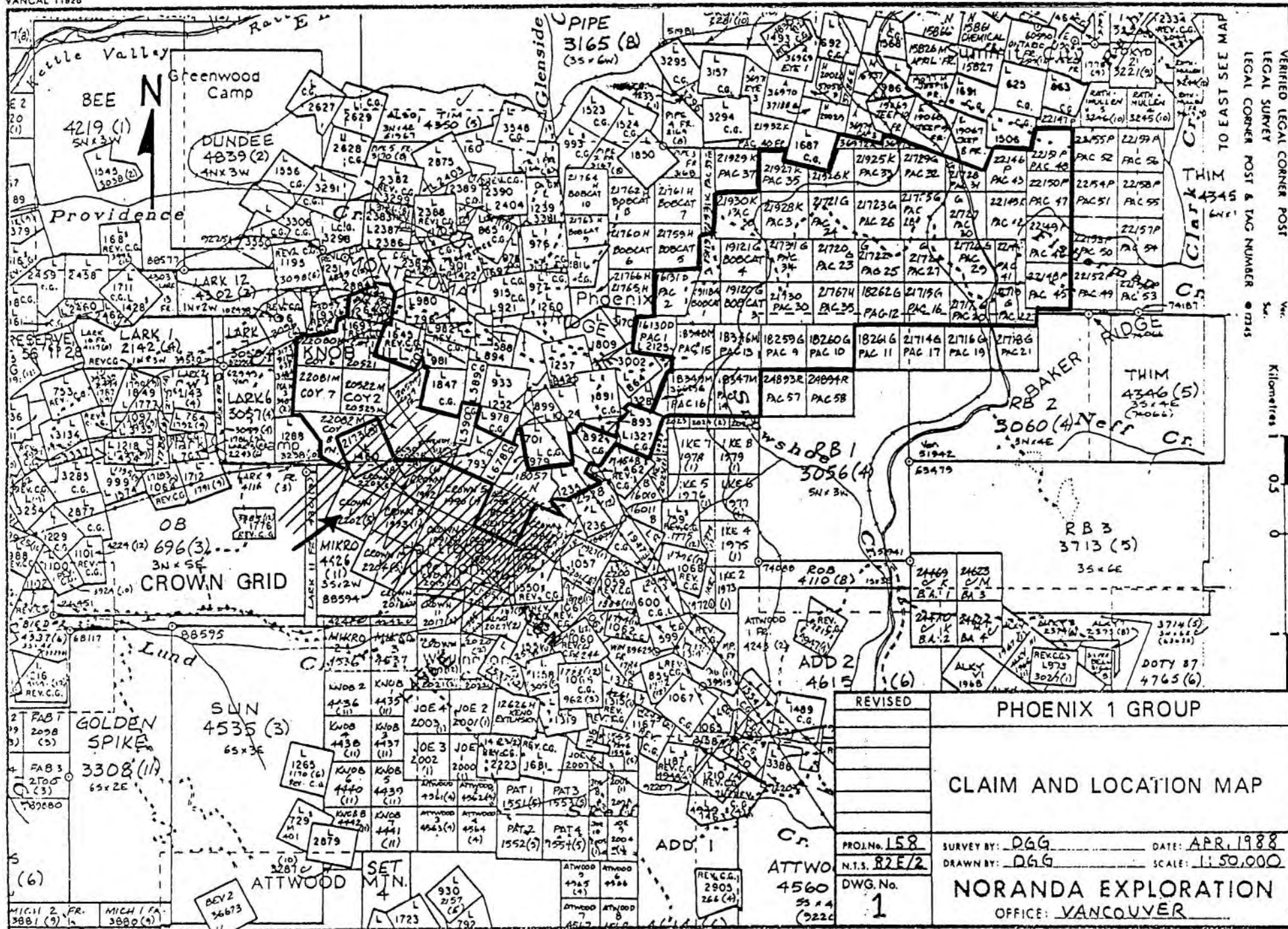
The Phoenix I Group of claims cover an area some 5 to 12 km east of Greenwood, B.C. at longitude 118°33'W and latitude 49°06'N, within the Greenwood Mining Division, on N.T.S. mapsheet 82E/2E.

The old Phoenix tailings are centrally situated within the claim group and can be easily accessed by taking the Phoenix Mine (Twin Creek) Road for some 10 km east of Greenwood, B.C.

3. TOPOGRAPHY AND PHYSIOGRAPHY

The Phoenix I Group is situated in gentle to relatively rolling hilly terrain, with a maximum elevation of 5183 ft. (Knob Hill) and a minimum elevation of 3200 ft. (headwaters of Fisherman Creek).

Southern slopes are often open with sparse spruce, where as, northern slopes and creeks tend to be dense with a second growth of cedar, spruce and alders.



VERIFIED LEGAL CORNER POST
 LEGAL SURVEY
 LEGAL CORNER POST & TAG NUMBER 07345

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REVISED	PHOENIX 1 GROUP	
CLAIM AND LOCATION MAP		
PROJ. No. 158	SURVEY BY: DGG	DATE: APR. 1988
N.T.S. 82E/2	DRAWN BY: DGG	SCALE: 1:50,000
DWG. No. 1	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	

MICH 2 FR. 3881 (9)
 MICH 1 FA. 3882 (4)

REV 2 26673

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 (222C)

3714 (5)
 30 x 66
 (222B)

DOTY 87
 4765 (6)

RB 3
 3713 (5)
 35 x 66

THIM
 4346 (5)
 35 x 46
 (2066)

RB 2
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 31 x 46

3056 (4)
 51 x 34

ADD 2
 4615 (6)

ADD 1

OB
 696 (3)
 31 x 56
 CROWN GRID

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 65 x 36

GOLDEN SPIKE
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SET Mtn.

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 L 792

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4. PROPERTY INFORMATION

Ten of the units comprising the Phoenix I Group of claims are owned by Kettle River Resources Ltd. of P.O. Box 130, Greenwood, B.C. The remaining 78 units of the claim group are owned by Noranda Exploration Company, Limited of 1050 Davie Street, Vancouver, B.C. Both companies operate the property.

The following is a list of claims within the Phoenix I Group. Assessment will be applied to only those claims with an asterik beside its name.

PHOENIX I GROUP OF CLAIMS

TABLE 1

<u>Claim Name</u>	<u>Owner</u>	<u>Record Number</u>	<u>Record Date</u>
Woodstock	NORANDA EXPLORATION	L2627 (C.G.)	Jul.2/88
May	COMPANY, LIMITED	L2629 (C.G.)	"
Denver	(No Personal Liability)	L2875 (C.G.)	"
Little Dalles	"	L2628 (C.G.)	"
Log Cabin Fr.	"	L3299 (C.G.)	"
Rob Roy	"	L1556 (C.G.)	"
Pilot	"	L3297 (C.G.)	"
Dexter Fr.	"	L3298 (C.G.)	"
Four Paw	"	L3550 (C.G.)	"
Garfield	"	L1264 (C.G.)	"
Surprise Fr.	"	L2384 (C.G.)	"
Sylvester-K	"	L2385 (C.G.)	"
Coy 1	"	20521	Sep.21/91
Coy 2	"	20522	"
Coy 3	"	20523	"
Coy 4 Fr.	"	20524	Sep.21/90
Coy 5 Fr.	"	20525	"
Coy 6	"	22080	Sep.22/90
Coy 7	"	22081	"
Coy 8 Fr.	"	22082	"
Grey Eagle	"	L793 (C.G.)	Jul.2/88
Knob Hill	"	L590 (C.G.)	"
War Eagle	"	L678 (C.G.)	"
Missing Link	"	L979 (C.G.)	"
Wendy 13	"	18055	Oct.26/89
Wendy 15	"	18057	"
Val 3 Fr.	"	18075	Dec. 1/88

Claim Name	Owner	Record Number	Record Date
Bank of England	"	L1235 (C.G.)	July 2/88
Rawhide	"	L892 (C.G.)	"
Val 1 *	"	16010	Feb. 20/89
Val 2 Fr. *	"	16011 (C.G.)	"
Yellow Jacket	"	11327 (C.G.)	July 2/88
Pac 60	"	36625	June 20/90
Pac 16	"	18349	Sept. 8/90
Pac 15	"	18348	"
Pac No. 9 Fr. *	"	18259	June 21/89
Pac 1	"	16130	Apr. 3/90
Pac 2	"	16131	"
Pac 13	"	18346	Sept. 8/90
Pac 14	"	18347	"
Pac #10 Fr.*	"	18260	June 21/89
Pac 35	"	21927	Aug. 12/90
Pac 36	"	21928	"
Pac 38	"	21930	Aug. 12/90
Bobcat #1	"	19118	June 13/86
Bobcat #2	"	19119	"
Bobcat #3	"	19120	"
Bobcat #4	"	19121	"
Pac #12 *	"	18262	June 21/89
Pac #18	"	21715	June 25/90
Pac #20	"	21717	"
Pac #21	"	21718	"
Pac #22	"	21719	"
Pac #23	"	21720	"
Pac #24	"	21721	"
Pac #25	"	21722	"
Pac #26	"	21723	"
Pac #27	"	21724	"
Pac #28	"	21725	"
Pac #29	"	21726	"
Pac #30	"	21727	"
Pac #31	"	21728	"
Pac #32	"	21729	"
Pac #33	"	21925	Aug. 12/90
Pac #33 Fr.	"	21730	June 25/90
Pac #34 Fr.	"	21926	Aug. 12/90
Pac #34 Fr.	"	21731	June 25/90
Pac #35	"	21767	July 7/90
Pac #41	"	22144	Nov. 2/90
Pac #42	"	22145	"
Pac #43	"	22146	Nov. 2/89
Pac #44 Fr.	"	22147	"
Pac #45	"	22148	"

Claim Name	Owner	Record Number	Record Date
Pac #46	"	22149	"
Pac #47	"	22150	"
Pac #48	"	22151	"
Belmont Fr.	"	M220 (M.L.)	Oct. 26/88
Boston-Willamena- Stafford Fr.	"	M115 (M.L.)	Nov. 21/88
Pipe 5 Fr. *	KETTLE RIVER RESOURCES LTD.	3170	Aug. 23/89
Cracker Jack		3098	June 8/90
Cracker Jack 1 Fr. *	"	3173	Aug. 23/90
Cracker Jack 2 Fr. *	"	3174	"
Oronoco	"	3096	June 8/90
Yukon Fr.	"	3097	"
Pax Fr.	"	3773	June 17/90
Little Burne Fr.	"	3186	Aug. 4/90
Wendy Fr. *	"	3120	July 6/89
Val 4 Fr.	"	3102	June 18/90

(M.L.) Mineral Lease
(C.G.) Crown Grant

5. ECONOMIC POTENTIAL

Results obtained from surveys done on the Crown II Group of claims by Noranda (see Assessment Report on the Crown II Group of Claims, 1986 and 1987 by D. Graham Gill) indicated that similar gold bearing, flat lying shear zones may be present on the Phoenix I claim group. This drilling programme was conducted to test the gold potential to depth of such a shear found by earlier prospecting.

6. SURVEY CONTROL

The Crown Grid, which was originally established during the 1986 and 1987 field seasons by Noranda on the Crown II Group of claims, (see Assessment Report on the Crown II Group of Claims, 1986 and 1987 by D. Graham Gill) was extended onto the Wendy 13 claim of the Phoenix I Group. Each slashed and metrically chained line of this grid was cut in order to measure in drill hole locations corresponding to an exact northing and easting on the grid.

7. SAMPLING

Sampling of the reverse circulation chips was done at 5 foot intervals. All samples taken were sent to Bondar-Clegg laboratories in Vancouver, B.C. and fire assayed for g/tonne Au. A total of 34 samples were analyzed. Samples contaminated by overburden have not been entered on detailed drill logs.

See Appendix #2 for a more detailed description of rotary drilling sampling techniques, and Appendix #1 for laboratory analytical methods.

8. CLAIMS WORKED

All work done between September 11, 1987 and September 17, 1987 was completed on the Wendy 13 (18055) claim.

9. PRESENTATION OF DATA

Drilling parameters are displayed in Table #1 below. Refer to Drawing #3 for the cross-section of Hole RC-CR-87-9.

TABLE #1
DRILLING PARAMETERS

HOLE #	TOTAL LENGTH (m)	HOLE CO-ORD (East. North.)	AZIMUTH (True)	DIP	DATE Collared	DATE Completed
RC-CR-87-9	54.88	449+97; 462+28	218°	-53.5°	Sep. 11/87	Sep. 12/87

The drill hole section displays the main lithological units as well as gold fire assays greater than 0.07 g/tonne with accompanying sample number.

Appendix #3 contains drill logs for the hole along with the gold fire assays for all samples taken.

Appendix #4 contains all assay analyses by sample number which can be cross-referenced to sample intervals on the drill logs or cross-section.

10. SYNOPSIS OF DRILL HOLE

Hole RC-CR-87-9 collared and ended within Brooklyn (Triassic) Fm. sharpstone conglomerate. See Appendix #3 for detailed lithological descriptions and Drawing #3 for the cross-section.

Minor pervasive silicification of the rock was noted sporadically throughout the hole but only where pyrite/pyrrhotite was hosted within quartz-calcite vein material did an increase in gold values result. The sulphides in these sections were also coarser grained relative to samples without vein material. Only slight increases in gold were noted in areas of quartz-carbonate flooding.

The two sections within RC-CR-87-9 that contained coarse grained pyrite/pyrrhotite hosted within quartz-calcite vein material are listed below:

<u>INTERVAL (m)</u>	<u>SAMPLE #</u>	<u>Au g/tonne</u>
6.10 - 7.62	14130	3.84
7.62 - 9.15	14131	1.37
41.16 - 42.68	14153	0.41
42.68 - 44.21	14154	0.48
44.21 - 45.73	14155	0.38
45.73 - 47.26	14156	0.41

=====

11. SUMMARY AND RECOMMENDATIONS

Although two distinct sections within RC-CR-87-9 contained slightly anomalous gold values (associated with coarse grained pyrite/pyrrhotite hosted in quartz-calcite vein material), these sections do not correspond to the extrapolation of the shear zone on surface to depth. Gold values associated with intervals expected to contain this known structure (18.65 - 27.30 m) assayed either background or gold positive but do not reveal any oxidation, quartz-carbonate alteration or veining or an increase in sulphide content which is expected along these flat to moderately dipping shear zones. This leads to the conclusion that the known shear either pinches out or has been faulted off itself.

The two sections mentioned above that do contain slightly anomalous gold results may be associated with similar shears but these have not been seen on surface.

Although reverse circulation drilling is cheaper and faster than conventional diamond drilling, valuable geological and structural information seems to be lost due to the method of core recovery. Also, the sampling technique used in this operation creates a mixing of material over a 5 foot interval and does not allow for systematic sampling of structural features or certain lithologies. Because of these reasons testing of the structurally controlled mineralized zones may be more efficiently evaluated using solid coring techniques.

REFERENCES

- Little, M.W., (1983) G.S.C. Paper 79-29, Geology of the Greenwood Map Area, British Columbia.
- Gill, D. Graham (1986) Assessment Report on the Geological Survey on the Crown II Group of Claims.
- Gill, D. Graham (1987) Assessment Report on Reverse Circulation Drilling on the Crown II Group of Claims.
- Keating, J. (1985) Assessment Report on Drilling of the Phoenix I Group.

APPENDIX I

LABORATORY ANALYTICAL METHODS

ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS (NORANDA)

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 - 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 MLBK 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	

2. Geochemical methods (Bondar-Clegg)

All of the analytical methods used by Bondar-Clegg have proven to be dependable and accurate. However, our continuing method development and response to technological advances have altered a few procedures over the years. Listed below are the most common techniques:

Element	Extraction	Method of Analysis
*Cu, *Pb, *Zn, *Mo, *Ag, *Cd, *Ni, *Co, *Mn, *Fe	Lefort Aqua Regia <i>→ 1.5 ml H₂O₂, 1 ml HCl → 10 ml H₂O</i>	Atomic Absorption
*U	HN03	Fluorimetric
*W 0.2 g	Basic Oxidation Fusion	Colourimetric
F 0.2 g	Basic Fusion	Citrate Buffer-Specific Ion
Au, Pt, Pd 10.5 g	Fire Assay	Atomic Absorption (or gravimetric for assay)
*As 0.1	HCL04 - HN03 Arsine	Colourimetric
Hg	Aqua Regia	Closed Cell, Flameless Atomic Absorption
*Sn, *Sb, *Ba, *Rb, *Sr, Y Zr, *Nb, La, Ce, Ti	<i>~ 5.0 g</i>	Energy dispersive XRF
Th, *Se, *Ta, Ga, In		Wavelength dispersive XRF
*Sb (low detection)	HCL - organic extraction	Atomic Absorption
*Bi 1.0 g	HN03	Atomic Absorption
*V, *Be, *Li	HCL04 - HN03 - HF	Atomic Absorption
*Cr	Sodium Peroxide Fusion	Atomic Absorption
*Te	HBr - Br + Organic Extraction	Atomic Absorption
Tl	Multi-acid HBr - Br + Organic extraction	Atomic Absorption
B	Basic Fusion	Plasma
Re	Alkali Fusion + Organic Extraction	Atomic Absorption
C		Leco Induction Furnace

* These elements are now available by plasma; please refer to the price list for clarification.

BONDAR-CLEGG
ASSAYING PROCEDURES

Au/Ag - Fire Assay

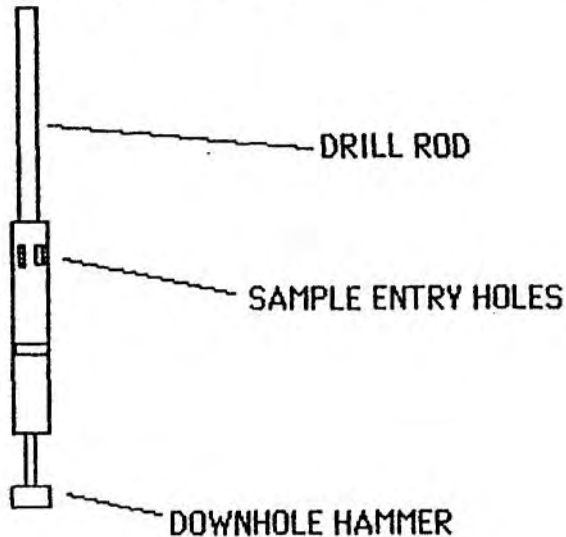
As - A 0.5 gram pulverized sample is digested in HNO_3/HCL and KClO_4 on a hot plate overnight. After decomposition of the sample, 50% HCL is added to form As Cl_3 . Arsenic chloride is distilled and the arsenic is determined in the distillate by Titration with KI.

APPENDIX 2

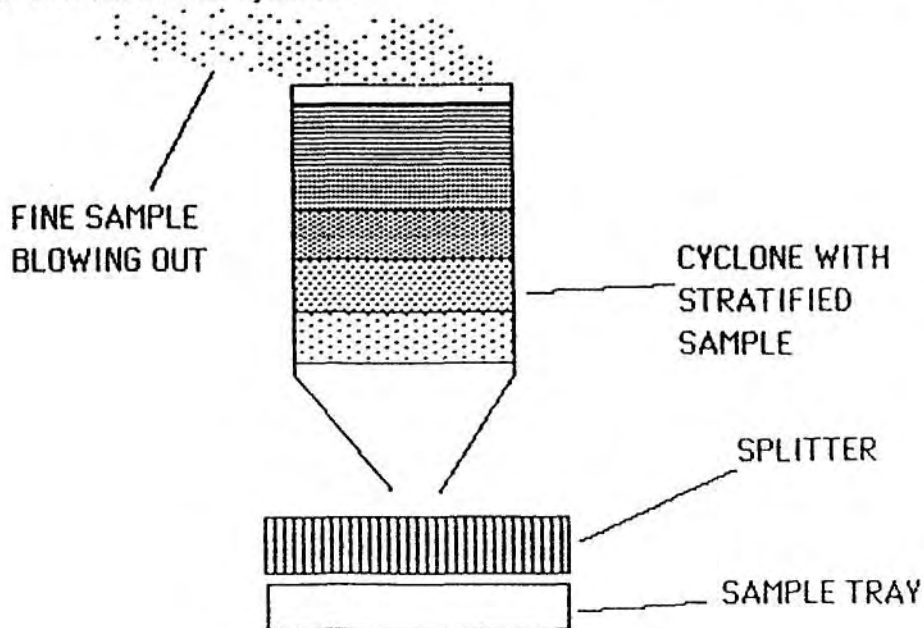
ROTARY DRILLING SAMPLING TECHNIQUES

NORANDA EXPLORATION
ROTARY DRILLING SAMPLING TECHNIQUES
BLACK PINE PROPERTY, IDAHO

Drill in use is a down hole hammer, rotary drill. Some 60% of the material from the hole is lost to "blow-by" at the bottom of the hole. The remaining 40% is taken up the drill pipe.



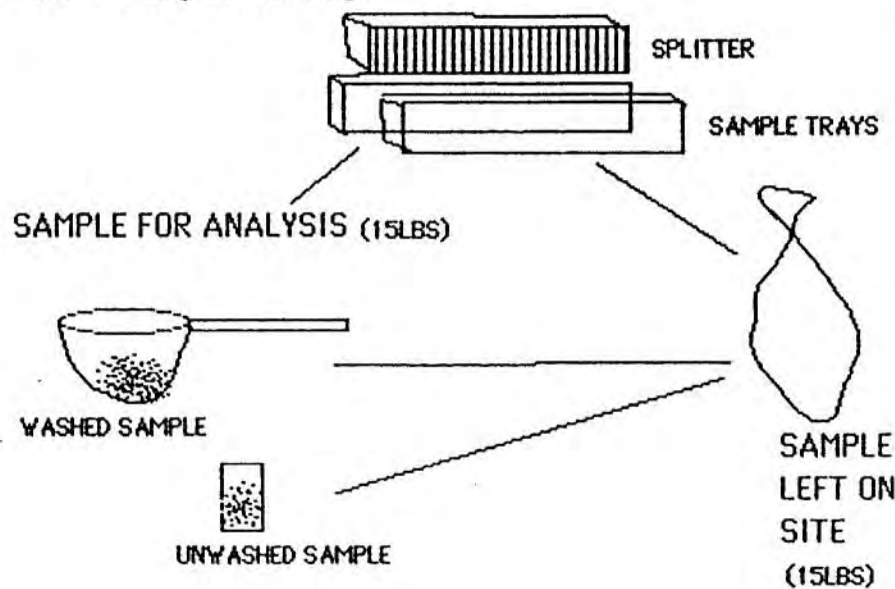
The sample comes out of the drill pipe into the cyclone where the fines are "condensed" along with the chips. Some estimate of the amount of fines lost can be made by the amount of material coming out of the top of the cyclone. Within the cyclone, the sample ends up stratified, with the top of the hole in the bottom of the cyclone.



If necessary the extremely fine dust can be also collected, though it takes a great amount of effort. It may be justified if the drilling is for economic evaluation purposes and there is evidence that the gold content is higher in the fines.

The sample is first split below the cyclone, where the retained volume is adjusted to get the necessary sample size (about 30lbs). The samples are taken every 5ft, which is estimated by the driller watching the rods go down.

The sample is then split a second time into two 15lb samples, one of which is left on site and the other is sent for analysis. The sample left on site is probably useless after a few months due to deterioration of the bag and loss of the writing on the bag.



Two scoops are taken out of the reject bag. One is put as is into a chip tray and is labelled as an unwashed sample. The second is put into a kitchen sieve and dipped into a pail of water to produce a washed chip sample. This is retained in a second chip tray.

The unwashed sample gives information about colour of sample (which reflects oxidation, carbon content, quartz or calcite content, etc.), clay content, etc. The washed sample is used to study the chips for lithological logging. Small amounts of the unwashed sample may be used at a later date, if the original sample is lost, for geochemical studies (alteration haloes, arsenic content, etc.)

APPENDIX 3
DETAILED DRILL LOGS

DATE COLLARED: Sept. 11, 1987		DATE COMPLETED: Sept. 12, 1987		CORE SIZE:		PROPERTY : CONSOLIDATED BOUNDARY		N.T.S. No. : B2E/2	
LATITUDE : 462 + 28N		ELEVATION : 449 + 97E		DIP : -53.5°		PROJECT No. : 158		LOGGED BY : D.G. Gill	
DEPARTURE : 449 + 97E		LENGTH : 54.88m/180'		BEARING : 218°(T)				HOLE No. : RC-CR-87-9	
								SHEET : 1 of 4	
A S S A Y S									
FOOTAGE (m)	WASHED GEOLOGICAL DESCRIPTION	% Sulph.	UNWASHED ALTERATION	% Sulph	Sample No.	Width (m)	Au g/t		
0 - 3.05	OVERBURDEN					3.04			
3.05 - 4.57	SHARPSTONE CONGLOMERATE (SSC) Mottled white, tan, green, grey, siliceous, oxidized. Fragments of chert, siltstone, tuffs + andesite. Siliceous green matrix Calcareous fractures.	1% Py	Light tan-brown due to overburden contamination. Moderately calcareous. Silt to pebble sized chips.		14128	1.52	<0.07		
4.57 - 6.10	SSC Light green, grey, white, tan, siliceous with calcareous fractures + veins. Fragments range from very distinct to "washed out" due to silicification.	Tr Py	Light tan grey. Slight overburden contamination. Very calcareous. Sand to pebble sized chips.		14129	1.52	0.07		
6.10 - 7.62	SSC Mostly green-grey due to large andesite content. Large chunks of Py/Po in quartz/cc host. Py/ Po also has fine grained disseminations & fracture coatings.	3-5% Po/Py	Whitish grey. Very calcareous. Silt to pebble sized chips.		14130	1.52	3.84		
7.62 - 9.15	SSC Greyish green, white overall color due to silts & chert. Minor andesite. Po/Py noted in quartz/ cc host.	2-3% Po/Py	Same as 6.10 - 7.62m.		14131	1.52	1.37		
9.15 - 10.67	SSC Same as 7.62 - 9.15m. Calcareous fragment rims. Fine grained disseminated pyrite in siliceous matrix.	Py 1%	Light green-grey. Sand to pebble sized chips. Very calcareous.		14132	1.52	0.27		
10.67 - 12.20	SSC Greenish-grey, white, mottled, siliceous. Fragments ranging in size from <1mm to 1cm. Minor chlorite in matrix.	Tr Py	Whitish-grey with green tint. Sand to pebble sized chips. Very calcareous.		14133	1.52	0.10		
12.20 - 13.72	SSC Same as 10.67 - 12.20m.	1% Py	Same as 10.67 - 12.20m.		14134	1.52	0.17		

DATE COLLARED: Sept. 11, 1987	DATE COMPLETED: Sept. 12, 1987	CORE SIZE:	PROPERTY : CONSOLIDATED BOUNDARY	N.T.S. No. : 82E/2
LATITUDE : 462 + 28N	ELEVATION :	DIP : -53.5°	PROJECT No. : 158	LOGGED BY : D.G. Gill
DEPARTURE : 449 + 97E	LENGTH : 54.88m/180'	BEARING : 218°(T)	HOLE No. : RC-CR-87-9	
				SHEET : 2 of 4

FOOTAGE (m)	WASHED GEOLOGICAL DESCRIPTION	% Sulph.	UNWASHED ALTERATION	% Sulph	Sample No.	Width (m)	A S S A Y S				
							Au	g/t			
13.72 - 15.24	SSC Same as 10.67 - 12.20m. Minor clay alteration of matrix + fragments.	1% Py	Grey-white with green tint. Pow- der to pebble sized chips. Calcareously cemented. Extremely calcareous.		14135	1.52	0.17				
15.24 - 16.77	SSC Same as 10.67 - 12.20m. Minor hematite & very fine grained disseminated pyrite in matrix.	1% Py	Whitish-grey with green tint. Sand to pebble sized chips. Very calcareous.		14136	1.52	<0.07				
16.77 - 18.29	SSC Same as 10.67 - 12.20m. Chloritic fractures, fine grained pyrite rimming fragments.	1% Py	Same as 15.24 - 16.77m.		14137	1.52	0.31				
18.29 - 19.82	SSC Same as 10.67 - 12.20m.	Tr Po/Py	Same as 15.24 - 16.77m. Some cemented "conglomerates".		14138	1.52	0.14				
19.82 - 21.34	SSC Same as 10.67 - 12.20m.	Tr Po/Py	Whitish-grey with green tint. Extremely calcareous. Powder to pebble sized chips. Calcareously cemented.		14139	1.52	0.10				
21.34 - 22.87	SSC Same as 10.67 - 12.20m. Some fracture coated Po/Py. Alignment + elongated fragments due to strain.	1% Po/Py	Same as 19.82 - 21.34m.		14140	1.52	<0.07				
22.87 - 24.39	SSC Same as 10.67 - 12.20m.	Tr Py	Very light grey with green tint. Very calcareous. Powder to pebble sized chips.		14141	1.52	0.07				
24.39 - 25.92	SSC Same as 10.67 - 12.20m.	Tr Py	Same as 22.87 - 24.39m. Calcareously cemented.		14142	1.52	0.10				
25.92 - 27.44	SSC Same as 10.67 - 12.20m. Average fragment size has increased.	Tr Py	Light grey with greenish tint. Very calcareous. Silt to pebble sized chips.		14143	1.52	<0.07				
27.44 - 28.96	SSC Same as 10.67 - 12.20m.	Tr-1% Py	Light grey with green tint. Silt to pebble sized chips. Very calcareous.		14144	1.52	0.14				

DATE COLLARED: Sept. 11, 1987	DATE COMPLETED: Sept. 12, 1987	CORE SIZE:	PROPERTY : CONSOLIDATED BOUNDARY	N.T.S. No. : 82E/2
LATITUDE : 462 + 28N	ELEVATION :	DIP : -53.5°	PROJECT No. : 158	LOGGED BY : D.G. Gill
DEPARTURE : 449 + 97E	LENGTH : 54.88m/180'	BEARING : 218°(T)	HOLE No. : RC-CR-87-9	
				SHEET : 3 of 4

FOOTAGE (m)	WASHED GEOLOGICAL DESCRIPTION	% Sulph.	UNWASHED ALTERATION	% Sulph.	Sample No.	Width (m)	A S S A Y S				
							Au g/d				
28.96 - 30.49	SSC Same as 10.67 - 12.20m. Increase of chlorite in matrix. Py (secondary) noted on fragments + fractures.	1-2% Py	Same as 27.44 - 28.96m.		14145	1.52	0.14				
30.49 - 32.01	SSC Same as 10.67 - 12.20m.	1% Py	White, grey with green tint. Sand to pebble sized chips. Very calcareous.		14146	1.52	<0.07				
32.01 - 33.54	SSC Same as 10.67 - 12.20m. Increase of pyrite along fractures. Chunks of Py/Po in quartz/cc host.	2% Py/Po	Same as 30.49 - 32.01m.		14147	1.52	<0.07				
33.54 - 35.06	SSC Same as 10.67 - 12.20m.	Tr Py	White-grey with green tint. Powder to pebble sized chips. Very calcareous.		14148	1.52	<0.07				
35.06 - 36.59	SSC Same as 10.67 - 12.20m.	1% Py	Same as 30.49 - 32.01m.		14149	1.52	<0.07				
36.59 - 38.11	SSC Same as 10.67 - 12.20m.	1% Py	Same as 30.49 - 32.01m.		14150	1.52	<0.07				
38.11 - 39.63	SSC Same as 10.67 - 12.20m.	Tr 1% Py	White-grey with green tint. Powder to pebble sized chips. Very calcareous. Cemented.		14151	1.52	<0.07				
39.63 - 41.16	SSC Same as 10.67 - 12.20m. Siliceous matrix, calcareous fractures. Minor hematite. Disseminated pyrite in matrix.	1% Py	White-grey with green tint. Sand to pebble sized chips. Cemented. Very calcareous.		14152	1.52	<0.07				
41.16 - 42.68	SSC Same as 10.67 - 12.20m. Increase of quartz/cc hosted pyrite.	3-5% Py	Same as 39.63 - 41.16. Minor visible sulfide.	1% Py	14153	1.52	0.41				
42.68 - 44.21	SSC Same as 41.16 - 42.68m.	3-4% Py	Same as 39.63 - 41.16m. Visible sulfides. Non - cement forming.	3-5% Py	14154	1.52	0.48				
44.21 - 45.73	SSC Same as 10.67 - 12.20m. Py observed in fragments as fracture coatings and within quartz/cc flood zones.	1-2% Py	White-grey with green tint. Silt to pebble sized chips. Very calcareous. Cement forming. Sulfides visible.	Py 1%	14155	1.52	0.38				

APPENDIX 4
DRILL CORE ASSAYS

Bondar-Clegg & Company Ltd.
 130 Pemberton Ave.
 North Vancouver, B.C.
 Canada V7P 2R5
 Phone: (604) 985-0681
 Telex: 04-352667



Certificate
 of Analysis

REPORT: 427-7685

PROJECT: NONE GIVEN

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au GHT
ZZ RC-CR-87-9 14128		<0.07
ZZ RC-CR-87-9 14129		0.07
ZZ RC-CR-87-9 14130		3.84
ZZ RC-CR-87-9 14131		1.37
ZZ RC-CR-87-9 14132		0.27
ZZ RC-CR-87-9 14133		0.10
ZZ RC-CR-87-9 14134		0.17
ZZ RC-CR-87-9 14135		0.17
ZZ RC-CR-87-9 14136		<0.07
ZZ RC-CR-87-9 14137		0.31
ZZ RC-CR-87-9 14138		0.14
ZZ RC-CR-87-9 14139		0.10
ZZ RC-CR-87-9 14140		<0.07
ZZ RC-CR-87-9 14141		0.07
ZZ RC-CR-87-9 14142		0.10
ZZ RC-CR-87-9 14143		<0.07
ZZ RC-CR-87-9 14144		0.14
ZZ RC-CR-87-9 14145		0.14
ZZ RC-CR-87-9 14146		<0.07
ZZ RC-CR-87-9 14147		<0.07
ZZ RC-CR-87-9 14148		<0.07
ZZ RC-CR-87-9 14149		<0.07
ZZ RC-CR-87-9 14150		<0.07
ZZ RC-CR-87-9 14151		<0.07
ZZ RC-CR-87-9 14152		<0.07
ZZ RC-CR-87-9 14153		0.41
ZZ RC-CR-87-9 14154		0.48
ZZ RC-CR-87-9 14155		0.38
ZZ RC-CR-87-9 14156		0.41
ZZ RC-CR-87-9 14157		0.21
ZZ RC-CR-87-9 14158		0.10
ZZ RC-CR-87-9 14159		0.10
ZZ RC-CR-87-9 14160		<0.07
ZZ RC-CR-87-9 14161		<0.07

APPENDIX 5
STATEMENT OF COSTS

NORANDA EXPLORATION COMPANY, LIMITED
STATEMENT OF COSTS

PROJECT: GREENWOOD
TYPE OF REPORT: DRILLING

DATE: April 11, 1988

a) Wages:

No. of Days 4 Mandays
Rate per Day \$ 110.00
Dates From: September 11 - September 17, 1987
Total Wages 4 x \$ 110.00 \$440.00

b) Food & Accomodations:

No. of Days 4 Mandays
Rate per Day \$ 45.00
Dates From: September 11 - September 17, 1987
Total Costs 4 x \$ 45.00 \$180.00

c) Transportation:

No. of Days 4 Mandays
Rate per Day \$ 45.00
Dates From: September 11 - September 17, 1987
Total Costs 4 x \$ 45.00 \$180.00

d) Instrument Rental:

Type of Instrument
No. of Days
Rate per Day \$
Dates From:
Total Costs x \$

Type of Instrument
No. of Days
Rate per Day \$
Dates From:
Total Costs x \$

e) Analysis: (See attached schedule)	\$ 620.50
f) Cost of preparation of Report	
Author:	\$ 220.00
Drafting:	\$ 150.00
Typing:	\$ 110.00
g) Other:	
Contractor	
Reverse Circulation (Western Hydro Air)	
180' x \$11.36/foot	\$2,044.80
(Includes costs for casing, mob-demob, sample bags, handling charges, W.C.B.)	
 Total Cost	 \$3,945.30
h) Unit costs for DRILLING	
No. of Days	
No. of Units 180'/54.88 m	
Unit costs \$71.89 / metre	
Total Cost 54.88 m x \$71.89	\$3,945.30

NORANDA EXPLORATION COMPANY, LIMITED
(WESTERN DIVISION)

DETAILS OF ANALYSES COSTS

PROJECT: GREENWOOD

<u>ELEMENT</u>	<u>NO. OF DETERMINATIONS</u>	<u>COST PER DETERMINATION</u>	<u>TOTAL COSTS</u>
Au	34	\$18.25	\$620.50

NOTE: \$18.25 includes:

Fire Assay @ \$8.50/sample
Sample preparation @ \$3.75/sample
Excessive Wetness @ 0.20/lb/sample
Overweight Samples @ 0.40/lb/sample
Plus a 9% Contract Discount

APPENDIX 6
STATEMENT OF QUALIFICATIONS

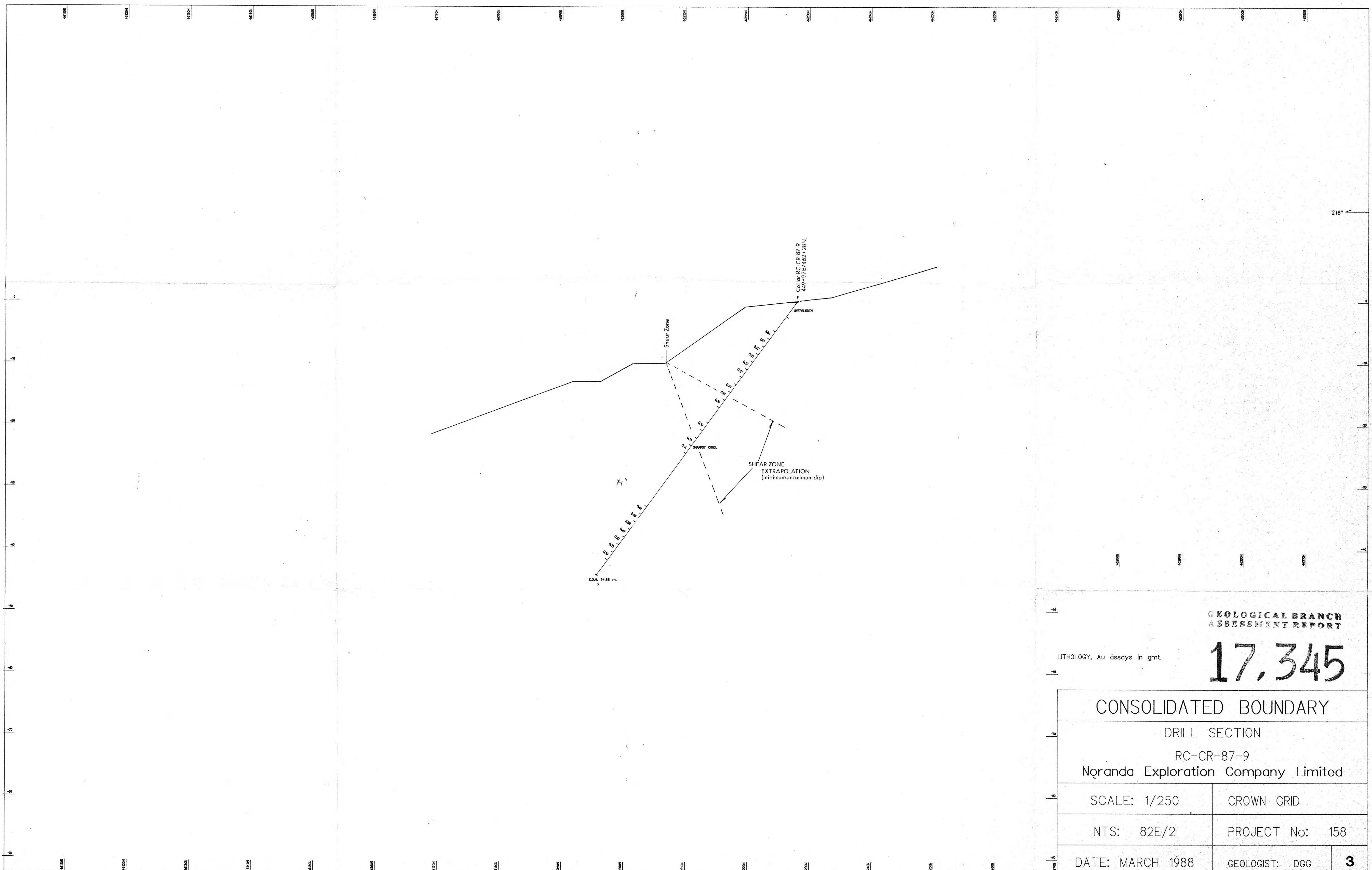
STATEMENT OF QUALIFICATIONS

I, D.Graham Gill of the city of Vancouver, Province of British Columbia, hereby certify that:

1. I am a geologist residing at #302 - 5890 Balsam Street, Vancouver, B.C.
2. I have graduated from the University of British Columbia in 1983 with a BSc in geology.
3. I have worked in mineral exploration since 1979.
4. I have been a temporary employee with Noranda Exploration Company, Limited since May, 1983 and a permanent employee since November, 1987.



D. Graham Gill

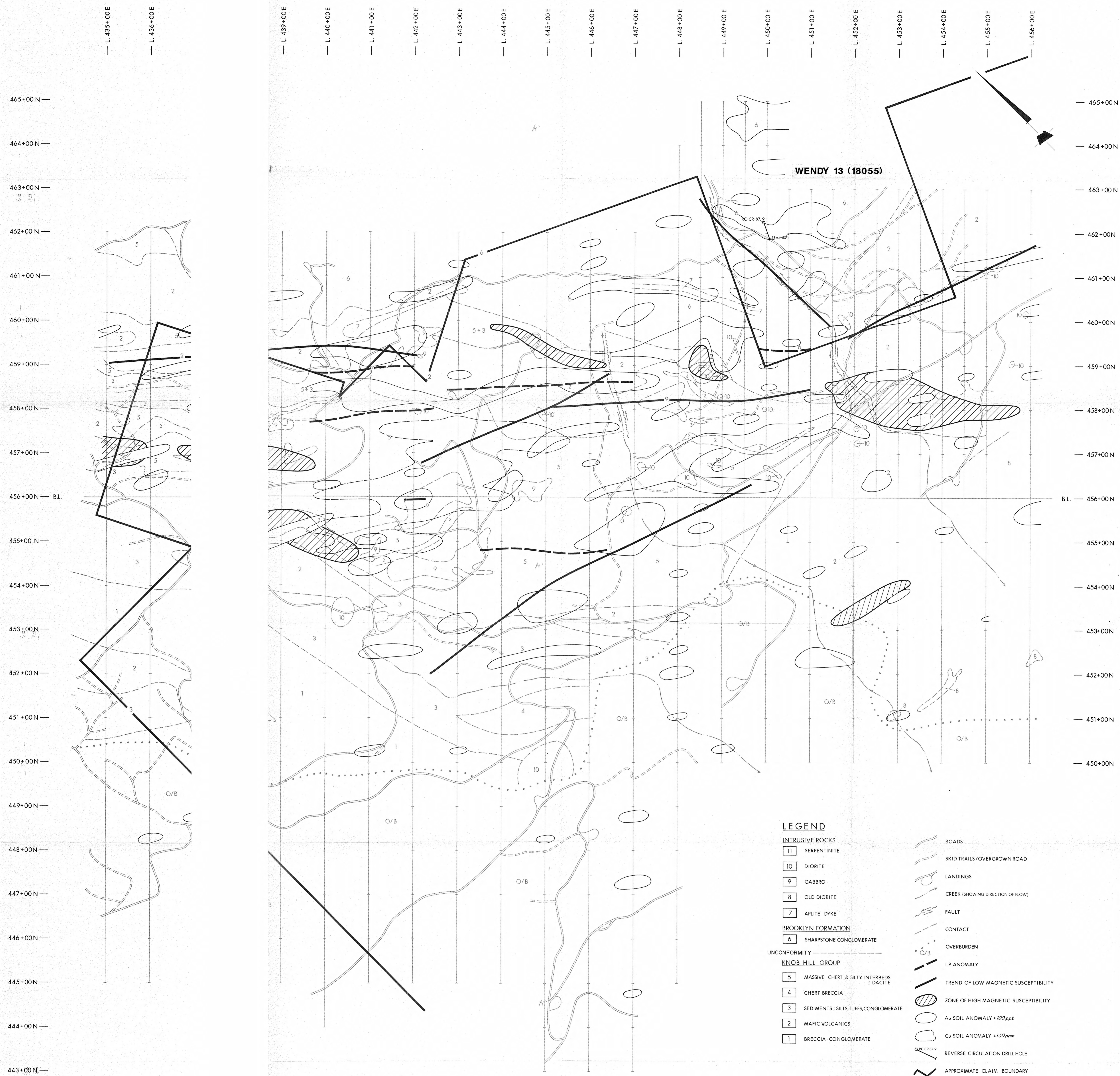


GEOLOGICAL BRANCH
ASSESSMENT REPORT

LITHOLOGY, Au assays in gmt.

17,345

CONSOLIDATED BOUNDARY	
DRILL SECTION	
RC-CR-87-9	
NORANDA Exploration Company Limited	
SCALE: 1/250	CROWN GRID
NTS: 82E/2	PROJECT No: 158
DATE: MARCH 1988	GEOLOGIST: DGG
	3



LEGEND

- INTRUSIVE ROCKS**
- 11 SERPENTINITE
- 10 DIORITE
- 9 GABBRO
- 8 OLD DIORITE
- 7 APLITE DYKE
- BROOKLYN FORMATION**
- 6 SHARPSTONE CONGLOMERATE
- UNCONFORMITY**
- KNOB HILL GROUP**
- 5 MASSIVE CHERT & SILTY INTERBEDS ± DACITE
- 4 CHERT BRECCIA
- 3 SEDIMENTS; SILTS, TUFFS, CONGLOMERATE
- 2 MAFIC VOLCANICS
- 1 BRECCIA - CONGLOMERATE
- ROADS
- SKID TRAILS/OVERGROWN ROAD
- LANDINGS
- CREEK (SHOWING DIRECTION OF FLOW)
- FAULT
- CONTACT
- OVERBURDEN
- I.P. ANOMALY
- TREND OF LOW MAGNETIC SUSCEPTIBILITY
- ZONE OF HIGH MAGNETIC SUSCEPTIBILITY
- Au SOIL ANOMALY > 100 ppb
- Cu SOIL ANOMALY > 150 ppm
- REVERSE CIRCULATION DRILL HOLE
- APPROXIMATE CLAIM BOUNDARY

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,345 SCALE
1:2,500
METRES 50 25 0 50 100 150 200

REVISED	GREENWOOD PROJECT	
	COMPILATION	
PROJ. No. 115	SURVEY BY: G. Gill	DATE: JULY 1987
N.T.S. 82E/2	DRAWN BY: J. Serwin	SCALE: 1:2,500
DWG. No. 2	NORANDA EXPLORATION	
	OFFICE: VANCOUVER	