

MAP NO.	ASSESSMENT REPORT X	DOCUMENT NO.:	092099
	PROSPECTUS	MINING DISTRICT:	WHITEHORSE
105 K 2, 3	CONFIDENTIAL X	TYPE OF WORK:	DIAMOND DRILLING
105 F 15	OPEN FILE		

REPORT FILED UNDER: Noranda Exploration Company Limited

DATE PERFORMED: July 15 - December 10, 1987

DATE FILED: February 22, 1988

LOCATION: LAT.: 62°03'N

AREA: Grew Creek

LONG.: 132°50'W

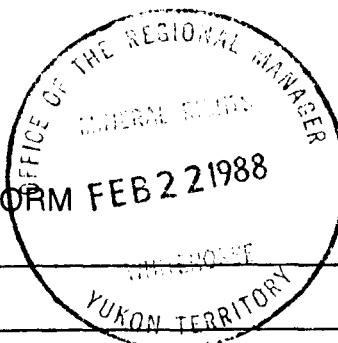
VALUE \$: 204,000.00

CLAIM NAME & NO.: CANYON 1-6 YA75717-722; CANYON 27-32 YA75743-748; CANYON 37-40
YA75757-760

WORK DONE BY: H. Copland

WORK DONE FOR: Noranda Exploration Company Limited

DATE TO GOOD STANDING	REMARKS: #88 GREW CREEK



TRANSMITTAL FORM FEB 22 1988

M.R. file no.

R.M.M.R. file no.

Date forwarded

19 Feb 88

From Mining Recorder at:

Whitehorse

To ► Regional Manager, Mineral Rights at Whitehorse, Y.T.

For action are:

☐ NEW APPLICATION FOR PLACER LEASE TO PROSPECT	Name	
☐ RENEWAL APPLICATION PLACER LEASE TO PROSPECT	Name	Lease no.
☐ AFFIDAVIT OF EXPENDITURE ON PLACER LEASE	Name	Lease no.
☐ SECURITY DEPOSIT		
☐ FINANCIAL ABILITY		
☐ ASSIGNMENT OF PLACER LEASE NO.	From	To
☐ GROUPING APPLICATION UNDER SEC. 52(2) PLACER MINING ACT.	Owner	
☐ DIAMOND DRILL LOGS	Claims	Claim sheet no.
☐ QUARTZ ASSESSMENT REPORT	Claims <i>CANYON 1-6, 27-37, 37-40</i>	Claim sheet no. <i>105-K-2</i>
	Type of report <i>DIAMOND DRILLING.</i>	Submitted by <i>NORRIS</i>
	Cls. work performed on <i>CANYON 1-2</i>	# req. for ren. application <i>204.000</i>

Signature

REPLY ACTION

For Information

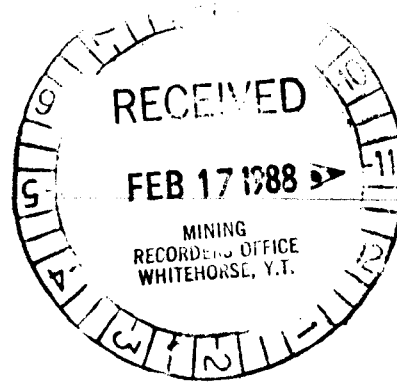
Date returned
20 Feb. 88

Signature

Signature _____

Noranda Exploration Company, Limited
(no personal liability)
Suite 203 - 107 Main Street
Whitehorse, Yukon Territory
Y1A 2A7

noranda



Phone (403) 667-4805

88 02 17

Mr. M Fish
Whitehorse Mining Recorder
Federal Building
Whitehorse, Y.T.
Y1A 2B5

Dear Sir

Please find enclosed 2 copies of the Diamond Drilling Report on the Canyon 1-6, Canyon 27-32, & Canyon 37-40 claims. The Certificate of Work has previously been filed.

One more report on the Canyon 7-16 & Canyon 33-36 claims will follow shortly. This should clear all outstanding work certificates on the Grand & Canyon claims.

Yours truly

Hugh Copland
Project Geologist

enc.

09209

DIAMOND DRILLING REPORT

on the

CANYON 1 - 6

CANYON 27 - 32

CANYON 37 - 40

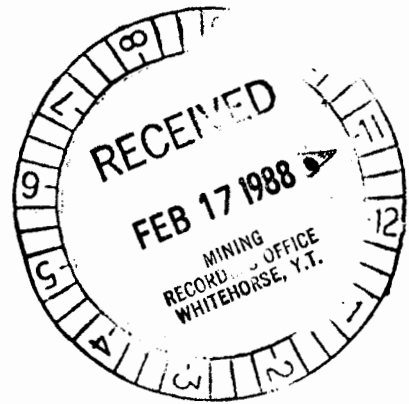
CLAIMS

Whitehorse Mining Division

N.T.S.: 105 K/2

Latitude: $62^{\circ} 03' N$

Longitude: $132^{\circ} 50' W$



Owned & Operated by:

Noranda Exploration Company Limited

(no personal liability)

Hugh Copland

January, 1988

092099.

SUMMARY

Diamond drilling on the Canyon claims was concentrated on the Main zone just west of Grew Creek. A total of 17 holes (2972 metres, HQ) were put down. Drilling intersected a rhyolitic crystal-lithic tuff carrying significant gold and silver values. More diamond drilling is recommended.

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CHAPTER ONE: INTRODUCTION

1-1: INTRODUCTORY STATEMENT

The Canyon claims form part of the Grew Creek Project of Noranda Exploration Company Limited. A program of diamond drilling consisting of 17 holes totalling 2972 metres was conducted on the Grew Creek Main Zone in 1987.

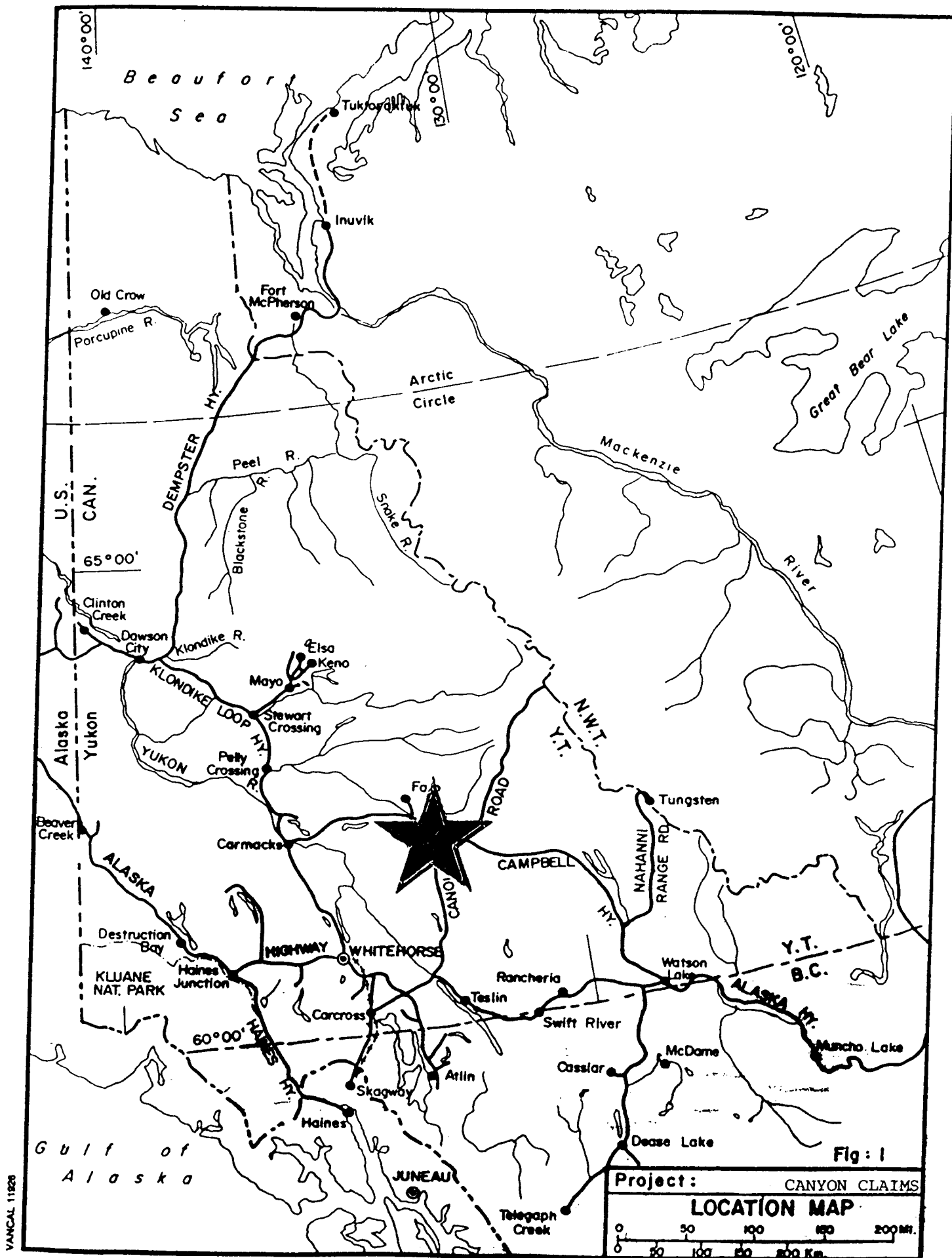
1-2: LOCATION & ACCESS

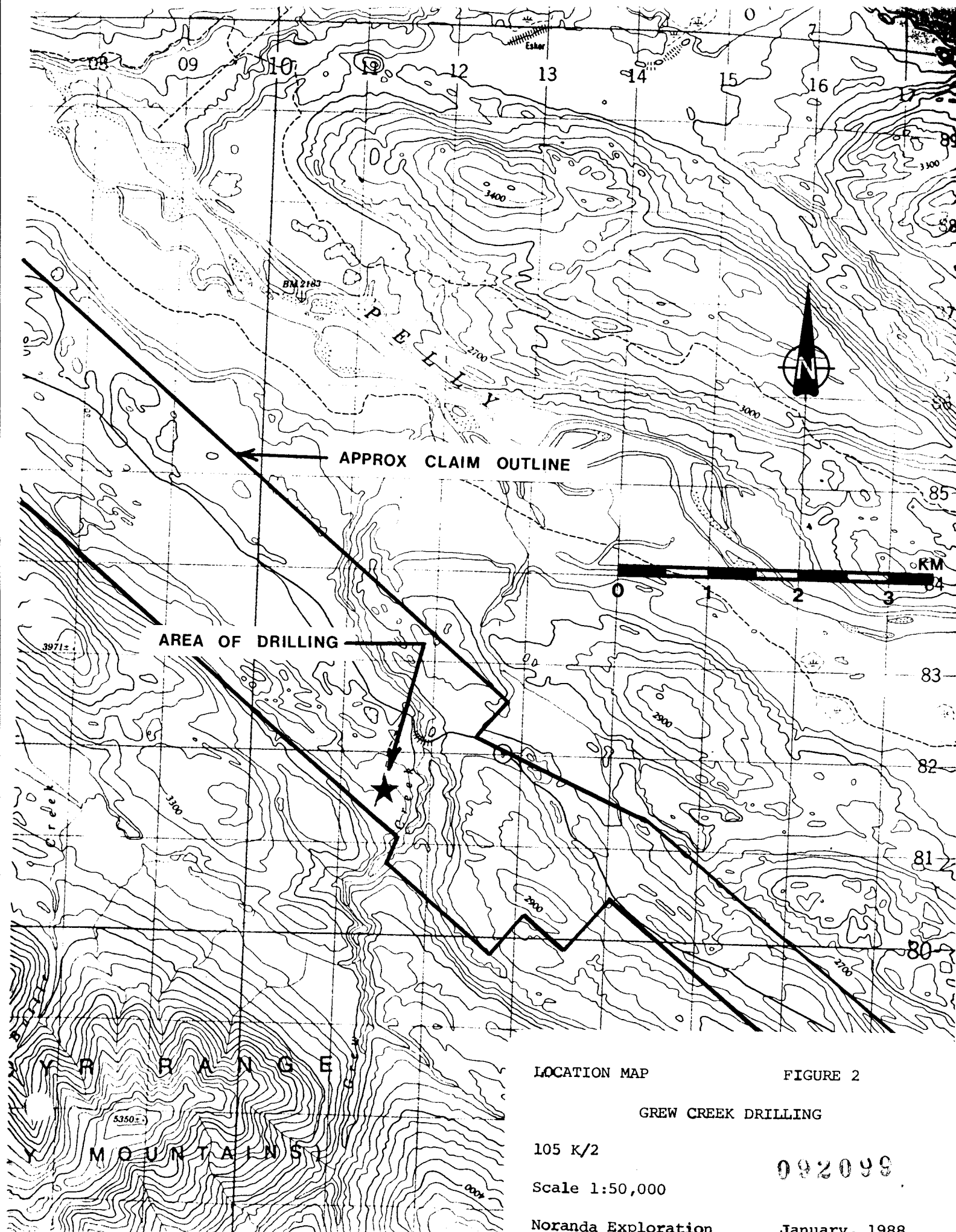
The property (NTS 105 K/2,3, 105 F/15, Lat: $62^{\circ}03'N$, Long. $132^{\circ}50'W$) lies south of the Robert Campbell Highway between Ross River and Faro, Y.T.. (see Figs. 1&2). A number of 2WD and 4WD roads access portions of the property off the highway. A powerline connecting Ross River to the main grid from Whitehorse passes parallel to the highway through the claims.

1-3: TOPOGRAPHY & VEGETATION

The claims lie along the southwestern edge of the Tintina Trench in the Pelly Mountains. Within the Tintina Trench topography is characterized by low rolling glacial features (drumlins, moraines, etc.) of low relief. Elevation on the property varies between 700 & 975 metres. A fire during the late 1960's destroyed most of the first growth on the claims and the area has been revegetated with poplar, birch and pine. Some mature stands of spruce and pine do remain.

Numerous small pothole lakes cover the property. Drainage by several small creeks is generally to the north into the Pelly River. Major creeks through the claims include Buttle, Grew, Rat, Danger Creek and the Lapie River.





LOCATION MAP

FIGURE 2

GREW CREEK DRILLING

105 K/2

Scale 1:50,000

Noranda Exploration

092099

January, 1988

1-4: HISTORY

Exploration in the area was first conducted in the late 1800's. Recorded instances of exploration in the area are not known until 1965 when the area east of Grew & Rat Creeks (Tarn Zone) was staked by General Enterprises. EM and IP surveys and three diamond drill holes were completed in that area in subsequent years. Small placer operations have been attempted on Grew Creek proper since the early 1980's. The first of what is now the Grew Creek property was staked by Whitehorse prospector Al Carlos in June 1983 and optioned by Hudson Bay Exploration and Development later that year. They performed numerous geophysical, geochemical, and geological surveys and diamond drilling (13 holes, 1732 metres), trenching, and rotary holes (19 holes, 1660 metres) during the next 3 years. Drilling was concentrated on the Grew Creek Main and Tarn zones, whereas other surveys covered the entire property. Hudson Bay dropped the option and it was picked up by Noranda Exploration Company Limited in June 1987.

1-5: CLAIMS DEFINITION

This report covers the following claim groups:

Claim Name	Grant No.	Anniversary Date
Canyon 1-6	YA 75717 - 722	Jan. 4, 2001
Canyon 27-32	YA 75743 - 748	Jan. 4, 2001
Canyon 37-40	YA 75757 - 760	Jan. 4, 2001

The above anniversary date is pending acceptance of this report.

10008

1-6: 1987 PROGRAM

The 1987 drilling program was designed to further delineate the gold mineralization tested by Hudson Bay Exploration and Development on the Grew Creek Main Zone. Seventeen holes (HQ) were collared in 1987 for a total of 2972 metres of drilling. Drilling was conducted during the period July 15 - Dec. 10, 1987.

The following personnel and contractor were involved with program.

Hugh Copland	Project Geologist	Whitehorse
Jan Helsen	" "	Vancouver
Chris Wild	" "	Whitehorse
Randy Singh	Contract Geologist	Edmonton
Robert Copland	Field Assistant	Vancouver
Joey Mazumdar	" "	Edmonton
E. Caron Drilling Ltd.	Contractor	Whitehorse

CHAPTER TWO: DIAMOND DRILLING

2-1: PROCEDURE

Table #1 summarizes drill holes NGC 87-17 to 87-30. Core sampling was conducted on 1.5 metre intervals, or shorter in some cases. All samples were fire assayed for Au & Ag and analysed geochemically for Hg and As. Samples were sent to the Vancouver and/or the Whitehorse facilities of Bondar Clegg Ltd. for preparation and analysis. All drill core is presently stored on site.

REGIONAL GEOLOGY

The Canyon claims lie within a large Cretaceous-Tertiary transcurrent fault system known as the Tintina Trench. A section from southwest to northeast in the area of the claims reveals four faults separating units of different ages: Late Paleozoic sediments; Buttle Creek fault; Tertiary felsic volcanic & sedimentary rocks; Danger Creek fault; Permian limestone & basalt; Lapie River fault; and Hadrornian Schist. It is within the block faulted section of Tertiary rocks that drilling is concentrated in. Crystal-lithic-lapilli tuff is intruded by quartz-feldspar porphyritic dykes or sills which are in turn in fault (?) contact with volcanoclastic and clastic units to the northeast.

TABLE #1 DRILL HOLE SUMMARY

Hole	Location	Azimuth	Angle	Depth (m)
87-14	10250E, 10005N	199	-50	165
15	10250E, 9995N	"	-45	140
16	10300E, 10000N	"	-45	171
17	10300E, 10000N	"	-70	353
18	10250E, 10000N	"	-70	292
19	10200E, 10000N	"	-45	171
20	10150E, 10000N	"	"	143
21	10100E, 10000N	"	"	150
22	10100E, 9920N	"	"	143
23	10050E, 10000N	"	"	140
24	10050E, 10030N	"	"	84
25	10275E, 10000N	"	"	170
26	10275E, 10030N	"	"	190
27	10225N, 10030N	"	"	189
28	10225E, 10000N	"	"	140
29	10175E, 10000N	"	"	143
87-30	10175E, 10030N	"	"	189

2-2: RESULTS

Complete drill logs and results for holes 14 to 30 are included in the appendix. The main lithologies encountered are summarized below:

- 1) Crystal/lithic tuff: this is the main type encountered in drilling. It is feldspar (k-spar) porphyritic with crystals commonly euhedral to subhedral up to 1mm in size, and comprising up to 10% of the rock. Fragments of plagioclase, quartz, and exotic rock types (rhyolite, argillite) are also present in varying degrees. The groundmass is fine grained and composed largely of K-feldspar. Secondary flooding with silica and ankerite is common in some sections. The tuff is weakly to intensely argillically altered throughout. Trace to 5% disseminated pyrite and marcasite is common throughout the tuff.
- 2) Rhyolite flow: this unit ranges from feldspar porphyritic to quartz-feldspar porphyritic. Quartz eyes upwards to 2mm in size and subhedral K-feldspar vary in percentage from 0 - 10%. Feldspar is typically altered to clay. Disseminated to bleby pyrite/marcasite is present in the flow with percentages upwards to 10%.
- 3) Sedimentary Rocks: a variety of sediments including sandstone, conglomerate, argillite and associated volcanoclastic rocks are encountered in the upper sections of some holes. An assumed fault contact separates the sedimentary package to the north from the volcanic rocks encountered in the bulk of most holes.

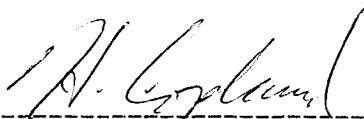
4) Intermediate to Basic Volcanic Rocks: Hole #21 in particular intercepted these units. The rock is typically highly chloritized, with abundant quartz and calcite veining and minor disseminated pyrite. They may represent a later stage event in the sequence, but the exact nature of this has yet to be determined.

Significant values of gold and silver have been encountered in most holes. All values occur in the crystal-lithic tuff and seem to be related to fracturing and a quartz, quartz-carbonate stockwork.

CHAPTER THREE: CONCLUSIONS & RECOMMENDATIONS

Diamond drilling on the Grew Creek Main Zone has confirmed and expanded the gold horizon obtained by previous drilling. Further diamond drilling in the Main Zone is recommended to determine accurate tonnages in the area.

Respectfully submitted by



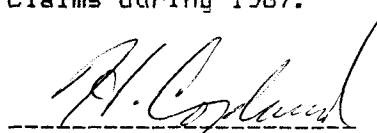
Hugh Copland

Project Geologist

STATEMENT OF QUALIFICATIONS

I, Hugh Copland of the City of Whitehorse, Yukon, do hereby certify that:

1. I have been an employee of Noranda Exploration Company Limited (NPL) in Whitehorse since May, 1985.
2. I am a graduate of the University of British Columbia with a B.Sc. in Geology and of McMaster University, Hamilton, Ontario with a B.Eng..
3. I am a member of the Yukon Professional Geoscientist Society, and the Geological Association of Canada.
4. I supervised work on the CANYON Claims during 1987.

A handwritten signature in cursive script, appearing to read 'H. Copland', is written over a horizontal dashed line.

Hugh Copland
Project Geologist

SELECTED REFERENCES

Copland, H.

1988: Geochemical & Geophysical Report on the Canyon & Grand Claims: Assessment Report; Noranda Exploration Company Limited.

Garagan, T.

1985: Canyon Project, 1984 & 1985 Exploration Activities; Hudson Bay Exploration & Development; internal report.

Stroshein, R.

1986: Canyon Project, 1986 Exploration Activities; Hudson Bay Exploration & Development; internal report.

COST STATEMENT

Diamond Drilling (2972 metres, HQ)

9750 ft. X \$21/ft.

\$204,750.00

APPENDIX 1

Core Logs

092099

14

Date Collared July 15, 1987	Date Completed July 20, 1987	Core Size HQ	Dip Tests				Property Grew Creek	Project No. 331	N.T.S. No. 105 K/02
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES	
Lat. 10 + 005 N	Elev. 845 m	Dip -50°	76.2 m			-56°	-49°	Lat.	Elev.
Dep. 10 + 250 E	Length 165 m	Bearing 199°				-60°	-53°	Dep.	Length
								Bearing	
ASSAYS									
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No. From	to	Width
0	36.6	N/A	OVERBURDEN No Sample	-	0	-			
FOR ANALYSIS SEE SEPARATE SHEET									
36.6	53.3	0.5	OVERBURDEN Glacial clay (thought to be close to bedrock). Predominantly sand & clay.	-	0	-			
53.3	55.2	0.5	OVERBURDEN Boulder clay.	-	0	-			
55.2	56.7	1.5 (100%)	OVERBURDEN Dark grey boulder clay matrix supported, polymictic; boulders vary from subrounded to angular, metasediments to volcaniclasts.	-	0	-			
56.7	58.2	1.45 (97%)	OVERBURDEN Dark grey boulder clay. Same as above.	-	0	-			
58.2	59.7	1.5 (100%)	OVERBURDEN Dark grey boulder clay. Same as above.	-	0	-	58.2 m	58.7 m	0.5m
							58.7 m	59.2 m	0.5m
							59.2 m	59.7 m	0.5m
59.7	61.3	1.6 (62%)	OVERBURDEN Dark grey boulder clay - at 60.1m, changing to sandy interlayer (poor recovery) and back to boulder clay.	-	0	-	59.7 m	60.1 m	0.4m
							60.1 m	61.07m	0.97m
							61.07m	61.30m	0.23m
61.3	61.7	0.4 (100%)	OVERBURDEN Dark grey boulder clay at 61.7m sharp contact with volcanic bedrock. Angle 50° with drill direction.	-	0	-	7. 61.3m	See next page	

Date July 19, 1987 Logged By J. Helsen

Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.	N.T.S. No.				
July 15, 1987	July 20, 1987	HQ	BEARING		ANGLE		Grew Creek	331	105 K/02				
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES		Sheet 2 of 25			
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.		
10 + 005 N	845 m	-50°	76.2 m			-56°	-49°						
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC - 87 - 14		
10 + 250 E	165 m	199°				-60°	-53°						
From	To	Recovery	Description	Structure	Z	Est.	Sample			ASSAYS			
(m)	(m)	(m)			Sulph.	Grade	No. From	to	Width	Au	Ag	Hg	As
61.7	62.8	1.1 (100%)	ALTERED RHYOLITE PORPHYRY Medium (fragments) to light grey matrix; matrix contains dark quartz fenocrysts; rock totally altered to clay, very pervasive. @ 62.2m: 1 to 2mm veinlet with fresh pyrite. @ 62.3m: 1 to 2mm veinlet with fresh pyrite. -pockets of very fine grained pyrite occur adjacent to these veinlets as a consequ- ence of the pervasive argillic alteration. Angle of veinlet= 45° with core axis. Pervasive alteration took place through dense network of micro veinlets which are now often filled with carbonates. Pyrite occurs in pockets associated with veinl- ets, and are carbonate rich as well, hence varying degree of sulphide content. @ 62.45m: small pool of pyrite @ 62.7 m: small pool of pyrite @ 62.8 m: rock obtains more sugary texture medium grey, slightly less clay alter- ed, no carbonate along fractur- es. Contact with higer up, clay altered rhyolite lies parallel to core axis.		<1% to 5%	N/A	(con't from p.1)	61.75m 62.45m	0.45m 0.70m 0.36m	FOR ANALYSIS SEE SEPARATE SHEET			

Date Collared	Date Completed	Core Size	Dip Tests				Property	Dip Tests		Project No.	N.T.S. No.			
July 15, 1987	July 20, 1987	HQ	BEARING		ANGLE		Grew Creek	331		331	105 K/02			
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 3 of 25			
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.			
10 + 005 N	845 m	-50°	76.2 m			-56°	-49°							
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC - 87 - 14			
10 + 250 E	165 m	199°				-60°	-53°							
From (m)	To (m)	Recovery (m)	Description	Structure	Z	Est. Grade	Sample No.	From	to	Width	ASSAYS			
											Au	Ag	Hg	As
62.8	64.3	1.5 (100%)	CRYSTAL LITHIC TUFF Light grey, felsic, fine grained, crystals are quartz predominantly, groundmass slightly darker when less altered, pervasive alteration is argillic. Pods of sulphides, mainly pyrite, associated with vein pattern responsible for pervasive alteration. Frequent calcite with pools of pyrite, pyrite disseminated and in pools throughout. Very variable %. Lithic fragments often less altered ie. remnants of original rock.		1% to 10%		62.8m	63.3m	0.50m		FOR ANALYSIS SEE SEPARATE SHEET			
							63.3m	63.8m	0.50m					
							63.8m	64.3m	0.50m					
64.3	65.8	1.5 / 100%	CRYSTAL LITHIC TUFF Same as above but reduction in pyrite content. @ 64.52m: thin clay-shear @ 64.80m: thin clay-shear @ 65.2 m: thin clay-shear @ 65.25m: thin clay-shear				64.3m	64.8m	0.50m					
							64.8m	65.3m	0.50m					
							65.3m	65.8m	0.50m					
65.8	67.4	1.6 / 94%	CRYSTAL LITHIC TUFF Very similar to above; slight increase in lithic fragments (accidental) and altered K feldspar relict phenocrysts; pyrite disseminated throughout and in association with veinlets causing pervasive alteration. Pyrite content very variable.				65.8m	66.3m	0.50m					
							66.3m	66.8m	0.50m					
							66.8m	67.4m	0.60m					

Date July 19, 1987 Logged By J. Helsen

Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.	N.T.S. No.		
July 15, 1987	July 20, 1987	HQ	BEARING		ANGLE		Grew Creek	331	105 K/02		
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES		Sheet 4 of 25	
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.
10 + 005 N	845 m	-50°	76.2 m			-56°	-49°				
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC - 87 - 14
10 + 250 E	165 m	199°				-60°	-53°				
From (m)	To (m)	Recovery (m)	Description	Structure	Z Sulph.	Est. Grade	Sample No.	From to	Width	ASSAYS	
			From 65.95m to 66.00m: increase in pyrite along veinlets (3mm).	45° from Core Axis	1% to 15%					FOR ANALYSIS SEE SEPARATE SHEET	
			From 66.37m to 67.02m: increase in pyrite along veinlets (3mm).								
			@ 66.65m: small shearzone	45° with Core Axis	5% to < 1%						
			@ 66.68m: 1cm wide dark red - brown & pyrite zone.								
			@ 66.90m: 4cm wide pyrite pocket.								
			@ 67.3 m: increase in K-feldspar, caolimitized, phenos.								
67.4	68.9	1.5 / 100%	CRYSTAL LITHIC TUFF Very similar to above - gradually more calcite rich; Pyrite concentrations associated with veins @ 67.46m @ 67.6 m @ 67.9 m @ 68.15m @ 68.3m : 1 to 2mm dark grey - brown vein running parallel to Core Axis. @ 68.8m : concentration of calcite (2 to 3 mm wide) veinlets.				67.4m 67.9m 68.4m	67.9m 68.4m 68.9m	0.50m 0.50m 0.50m		
68.9	69.95	1.04/100%	CRYSTAL LITHIC TUFF Very similar to above - pyrite concentrations associated with veinlets occur from: 69.04m to 69.25m 69.25m to 69.32m 69.55m to 69.70m Where pyrite occurs disseminat	45° with Core Axis	1% to 25%		68.9 m 69.4 m	69.4 m 69.95m	0.50m 0.55m		

092099

Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.		N.T.S. No.				
July 15, 1987	July 20, 1987	HQ		BEARING		ANGLE		Grew Creek	331	105 K/02				
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 5 of 25			
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.			
10 + 005 N	845 m	-50°	76.2 m			-56°	-49°							
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC - 87 - 14			
10 + 250 E	165 m	199°				-60°	-53°							
From (m)	To (m)	Recovery (m)	Description		Structure	% Sulph.	Est. Grade	Sample No.	From to	Width	ASSAYS			
											Au	Ag	Hg	As
69.95	70.4	0.45/100%	LITHIC TUFF	Light tan grey very fine grained matrix, very altered to clay, with abundant hairline veinlets containing occasional calcite. White clasts of no well defined shape may be altered rhyolite porphyry. Disseminated pyrite occurs throughout, as well as pods of pyrite associated with hairline cracks and veinlets. Lithic fragments consist of altered rhyolite porphyry (matrix supported) and occasional slate of shale (black) and graphite clasts. Rock shows crystal fragments but much less abundant than in crystal lithic tuffs. Some chlorite occurs along a few fractures. Carbonate occurs in many, not all, white lithic fragments.				69.95m	70.4m	0.45m	FOR ANALYSIS SEE SEPARATE SHEET			
70.4	71.9	1.5/100%	LITHIC TUFF	Same tan grey lithic tuff as above but becomes more broken with increase in clay in veins, calcite throughout, and pyrite pods. @ 71.05 : clay fault zone, +5cm wide @ 71.3 : tiny clay joint @ 71.45 to 71.8: drastic increase in calcite (layered, multiphase) veinlets @ 71.8 to 71.9: strong clay	<+/- 90° to C.A. <+/- 30° to C.A.			70.4m 70.9m 71.4m	70.9m 71.4m 71.9m	0.50m 0.50m 0.50m				

092099

[illegible][illegible]

Date Collared	Date Completed	Core Size	Dip Tests				Property		Project No.		N.T.S. No.				
July 15, 1987	July 20, 1987	HQ	BEARING		ANGLE		Grew Creek		331		105 K/02				
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 7 of 25				
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.				
10 + 005 N	845 m	-50°	76.2 m			-56°	-49°								
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC - 87 - 14				
10 + 250 E	165 m	199°				-60°	-53°								
From (m)	To (m)	Recovery (m)	Description		Structure	% Sulph.	Est. Grade	Sample No.	From	to	Width	ASSAYS			
												Au	Ag	Hg	As
75.0	75.2	0.2	CRYSTAL LITHIC TUFF With aspect of breccia to glassy (devitrifying)					75.0 m	75.2 m	0.20m	FOR ANALYSIS SEE SEPARATE SHEET				
75.2	76.5	1.3 (100%)	VITRIC TUFF Light greenish grey, very fine grained to glassy (devitrifying) with quartz phenos, both angular and very rounded. Smaller feldspar crystals are dull creamy coloured. Bedding or layering is visible. Non welded, some quartz phenos are rounded and contain a rim of glass. Calcite drastically reduced, except in veinlets.					75.2 m	75.7 m	0.50m					
			@ 75.9 contorted calcite vein, brecciated, 2 cm wide.		<135° to C.A.			75.7 m	76.2 m	0.50m					
			@ 76.2 increase in cream colour red, round fragments up to 4mm calcite vein (2mm)		< 50° to C.A.			76.2 m	con't						
			" " (3mm)			0.5%									
			Pyrite strongly reduced.												
76.5	77.4	0.9 (100%)	VITRIC TUFF FOLA Greenish grey and creamy coloured matrix very fine grained, glass fragments to shards. Mild alteration of matrix, devitrifying very similar to above. Becoming more crystal tuff downwards			0.5%		-	76.7m	0.50m					
								76.7m	77.2m	0.50m					
								77.2m	con't						
77.4	78.9	1.5 (100%)	VITRIC TUFF (RHYOLITE) Very similar to above, very fine grained grey green to creamy matrix, with glass fragments, occasionally grading into a more crystal tuff. Alteration much less strong than in			0.5%		-	77.7m	0.50m					
								77.7m	78.2m	0.50m					
								78.2m	78.7m	0.50m					
								78.7m	con't						

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Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.		N.T.S. No.				
July 15, 1987	July 20, 1987	HQ	BEARING		ANGLE		Crew Creek	331	105 K/02					
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 9 of 25			
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.			
10 + 005 N	845 m	-50°	76.2 m			-56°	-49°							
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC - 87 - 14			
10 + 250 E	165 m	199°				-60°	-53°							
From (m)	To (m)	Recovery (m)	Description	Structure	Σ	Est. Grade	Sample No.	From	to	Width	ASSAYS			
											Au	Ag	Hg	As
			@ 80.0 to 80.2m: crystal lithic tuff. Overall alteration is argillic. Although pyrite is not abundant in core. Very small grains accumulate along clay filled joints and fractures.								FOR ANALYSIS SEE SEPARATE SHEET			
81.1	82.6	1.5 (100%)	CRYSTAL LITHIC TUFF Same as above. @ 81.1 to 81.3m: very contorted calcite vein of variable thickness. Rounded quartz and feldspar fragments seem to have a vesicular filling aspect.				81.1m 81.6m 82.1m	81.6m 82.1m 82.6m	0.50m 0.50m 0.50m					
82.6	84.1		CRYSTAL LITHIC TUFF Very similar to above, only more shattered. Also occasionally creamy tan coloured fragments (feldspars) become more abundant. Numerous small calcite filled cracks. White lithic fragments (quartz + calcite) have reaction rim of quartz (?) and often shape of big shards.				82.6m 83.1m 83.6m	83.1m 83.6m 84.1m	0.50m 0.50m 0.50m					
84.1	84.85	0.75 (100%)	CRYSTAL LITHIC TUFF Same as above.				84.1m	84.85m	0.75m					
84.85	85.65	0.8 (100%)	CRYSTAL LITHIC TUFF Dark grey to medium grey crystal lithic tuff with K. feldspar phenocrysts. The phenocrysts are euhedral frequently but often broken and pervaded by chlorite veinlets. They also may				84.85m 85.35m	85.35m 85.85m	0.50m					

Date Collared July 15, 1987	Date Completed July 20, 1987	Core Size HQ	Dip Tests				Property Grew Creek	Project No. 331	N.T.S. No. 105 K/02				
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES		Sheet 10 of 25			
Lat. 10 + 005 N	Elev. 845 m	Dip -50°	76.2 m			-56°	-49°	Lat.	Elev.	Dip	Hole No.		
Dep. 10 + 250 E	Length 165 m	Bearing 199°				-60°	-53°	Dep.	Length	Bearing	NGC - 87 - 14		
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From to	Width	ASSAYS			
			contain small blebs of pyrite. The pyrite content has been increased drastically in comparison with more bleached crystal lithic tuffs above. Calcite veinlets are numerous, and some calcite tension fractures are about parallel to the Core Axis. Some flowage pattern is visible, and quite broken, clay alteration increases with depth as does the number of blebs. Bedding is recognized @ 84.6 to 84.65.	< 60° to C.A.	10%		85.85m	86.35m	0.50m	Au	Ag	Hg	As
85.65	86.3	0.65 (100%)	CRYSTAL LITHIC TUFF Some dark grey tuff but due to pervasive alteration, mainly argillic, the rock shows on a burly texture with calcite veinlets curving around pyrite content varies between less than 1% to about 5%							FOR ANALYSIS SEE SEPARATE SHEET			
86.3	87.2	0.9 (100%)	CRYSTAL LITHIC TUFF Similar to above but more intensive clay alteration, maybe associated with thin clay shear. Close to clay shear (2mm) amount of disseminated pyrite (along fractures mainly) increases over the next 2cm close to shear and downward. @ 86.75m rock becomes more brecciated and increase of pyrite along fractures.	< 40° to C.A.			86.35m 86.85m	86.85m 87.35m	0.50m 0.50m				

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Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.		N.T.S. No.				
July 15, 1987	July 20, 1987	HQ	BEARING		ANGLE		Grew Creek	331	105 K/02					
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 11 of 25			
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.			
10 + 005 N	845 m	-50°	76.2 m			-56°	-49°							
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC - 87 - 14			
10 + 250 E	165 m	199°				-60°	-53°							
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From	to	Width	ASSAYS			
											Au	Ag	Hg	As
87.2	88.7	1.5 (100%)	CRYSTAL LITHIC TUFF Strong clay alteration very pervasive relicts of original dark to medium grey crystal lithic tuff with aspect of brecciation. Rock becomes eventually less clay altered downward.	15%			87.35m	87.85m	0.50m		FOR ANALYSIS SEE SEPARATE SHEET			
							87.85m	88.35m	0.50m					
							88.35m	88.85m	0.50m					
88.7	90.2	1.5 (100%)	CRYSTAL LITHIC TUFF Dark grey crystal lithic tuff with fractured phenocrysts of k-feldspar. Rock gradually becomes more clay altered (matrix). @ 89.3m: clayshear @ 89.4m: shattered quartz fragments (or vein?) @ 90.15m: clay gouge zone, very brittle				88.85m	89.35m	0.50m					
							89.35m	89.85m	0.50m					
							89.85m	90.20m	0.35m					
90.2	90.3	0.1	Clay gouge zone of crystal lithic tuff Clay gouge zone.				90.20m	90.30m	0.10m					
90.3	91.75	1.45 (100%)	CRYSTAL LITHIC TUFF Dark to medium grey, crystal lithic tuff, strong clay alteration, strong pervasive alteration to clay through numerous cracks now filled with predominantly calcite - An astromosing pattern - Pyrite content very variable but lower. @ 90.3m: small (2cm?) totally shattered quartz veinlet few sulphides in it.	3%			90.3m	90.8 m	0.50m					
							90.8m	91.3 m	0.50m					
							91.3m	91.75m	0.50m					

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Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.		N.T.S. No.				
July 15, 1987	July 20, 1987	HQ	BEARING		ANGLE		Grew Creek	331		105 K/02				
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 12 of 25			
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.			
10 + 005 N	845 m	-50°	76.2 m			-56°	-49°							
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC - 87 - 14			
10 + 250 E	165 m	199°				-60°	-53°							
From	To	Recovery	Description	Structure	Z	Est.	Sample			ASSAYS				
(m)	(m)	(m)			Sulph.	Grade	No.	From	to	Width	Au	Ag	Hg	As
91.75	93.3	1.55 (100%)	CRYSTAL LITHIC TUFF Medium grey, matrix very altered to clay, @ 92.25m: contorted lens of 10cm of white quartz too broken to indicate angle. @ 92.75m: shattered clay & quartz zone.		< 1%		91.75m 92.25m 92.75m	92.25m 92.75m 93.30m	0.50m 0.50m 0.55m		FOR ANALYSIS SEE SEPARATE SHEET			
93.3	94.8	1.5 (100%)	CRYSTAL LITHIC TUFF medium to light grey with k-feldspar phenocrysts. Calcite alteration strongly reduced. Some chlorite veinlets. Some k-feldspar phenos up to 18mm @ 93.6m: 1 to 2mm wide veinlet along joint (?) which shows some evidence of quartz or chalcedony @ 94.0m: 2 to 4cm wide quartz vein. Vein is contorted, squeezed, (boudinaged) and consists of multiple bands.	<130°/AC turns to parallel to Ac and disappears	1%		93.3m 93.8m 94.3m	93.8m 94.3m 94.8m	0.50m 0.50m 0.50m					
94.8	96.3	1.5 (100%)	CRYSTAL LITHIC TUFF Similar to above. @ 95.3m: small clay fracture zone		1%		94.8m 95.3m 95.8m	95.3m 95.8m 96.3m	0.50m 0.50m 0.50m					
96.3	97.8	1.5 (100%)	CRYSTAL LITHIC TUFF Same as above. @ 97.45m: dense grey (bluish) to beige layered clay; contact with tuff is wavy. Clay is brittle with almost slaty cleavage.	< 160°/CA			96.3m 96.8m 97.2m	96.8m 97.2m 97.8m	0.50m 0.50m 0.50m					

Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.		N.T.S. No.			
July 15, 1987	July 20, 1987	HQ		BEARING		ANGLE		Grew Creek	331	105 K/02			
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 13 of 25		
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.		
10 + 005 N	845 m	-50°	76.2 m			-56°	-49°						
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC - 87 - 14		
10 + 250 E	165 m	199°				-60°	-53°						
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From to	Width	ASSAYS			
										Au	Ag	Hg	As
97.8	99.4	1.6 (100%)	CRYSTAL LITHIC TUFF Very		1-2%					FOR ANALYSIS SEE SEPARATE SHEET			
			similar to above with slightly				97.8m	98.3m	0.50m				
			larger lithic fragments, and				98.3m	98.8m	0.50m				
			pyrite visible in clay filled					98.8m	99.4m	0.6 m			
			joints, much less in core										
			itself. At bottom, very fractu-										
			red.										
99.4	100.9	1.5 (100%)	CRYSTAL LITHIC TUFF Very		< 1%								
			similar to above				99.4m	99.9m	0.5 m				
			@ 100.2 to 100.9m: clay seem				99.9m	100.4m	0.5 m				
			runs through core almost					100.4m	100.9m	0.5 m			
			parallel to core axis.										
100.9	102.4	1.5 (100%)	CRYSTAL LITHIC TUFF Same as		1%								
			above:				100.9m	101.4m	0.50m				
			@ 100.9 to 101.0m: clay zone				101.4m	101.9m	0.50m				
			(feeder) for above seam				101.9m	102.4m	0.50m				
			@ 101.6 to 102m: very brittle,										
			clayey and crumbly	30°/CA									
			@ 101.6m: white and beige										
			quartz vein, max 3 mm	40°/CA									
			@ 102.0m grey bluish quartz										
			vein, 2mm, pyrite										
			disseminated and adjacent to										
			veinlets.										
102.4	103.9	1.45 (97%)	CRYSTAL LITHIC TUFF Very		1%								
			similar to above				102.4m	102.9m	0.50m				
			@ 102.65m: grey quartz vein;	40°/CA			102.9m	103.4m	0.50m				
			2.5cm wide, with some tan k					103.4m	103.9m	0.50m			
			feldspar running through; the										
			quartz vein ends in a pocket										
			of more intensely clay										
			altered rock.										

Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.	N.T.S. No.
July 15, 1987	July 20, 1987	HQ	BEARING		ANGLE		Grew Creek	331	105 K/02
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES	
Lat.	Elev.	Dip						Lat.	Elev.
10 + 005 N	845 m	-50°	76.2 m			-56°	-49°		
Dep.	Length	Bearing						Dep.	Length
10 + 250 E	165 m	199°				-60°	-53°		
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From to	Width
			@ pockets of stringers of quartz and clay occur throughout section.						
			@ 104.9m: brittle quartz and clay shear, 1cm wide.	130°/CA	<1%				
103.9	105.5	1.6m (100%)	CRYSTAL LITHIC TUFF Same as above, with schlieren of tan coloured, altered k-feldspar (?), No carbonate alteration as above.		1%		103.9m	104.4m	0.5m
			@ 104.05m: 1cm wide clay shear				104.4m	104.9m	0.5m
			@ 104.4 to 104.6m: brittle quartz-zone, contorted				104.9m	105.5m	0.6m
			@ 104.6m: is going over into a small quartz vein with tan coloured k-feldspar.	150°/CA					
			@ 105.4m: sheared quartz vein cut by other.	45° & 135°	< 1%				
105.5	107.0	1.5 (100%)	CRYSTAL LITHIC TUFF Same as above, medium grey, very brittle where sheared quartz veins occur.				105.5m	106.0m	0.50m
			@ 105.9 to 106.0cm: quartz vein very brittle, sheared, no sign of chalcedony, no pyrite				106.0m	106.5m	0.50m
			Shot through by tiny, clay veinlets.				106.5m	107.0m	0.50m
			@ 106.2 to 106.5m: very sheared quartz and clay zone, some banding in quartz -chalcedony evidence	No angle	< 1%				
			@ 106.7m: irregular, 2mm wide chalcedony veinlet	45°/CA					

FOR ANALYSIS SEE SEPARATE SHEET

Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.	N.T.S. No.					
July 15, 1987	July 20, 1987	HQ		BEARING		ANGLE		Grew Creek	331	105 K/02				
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES		Sheet 15 of 25				
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.			
10 + 005 N	845 m	-50°	76.2 m			-56°	-49°							
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC - 87 - 14			
10 + 250 E	165 m	199°				-60°	-53°							
from	to	recovery	Description		Structure	Z	Est.	Sample		ASSAYS				
(m)	(m)	(m)				Sulph.	Grade	No. From	to	Width	Au	Ag	Hg	As
107.0	108.5	1.5 (100%)	CRYSTAL LITHIC TUFF Same as above, becoming slightly lighter grey and with larger lithic fragments. No quartz run through this section. Instead a small vein(?) runs through the section, with a wave pattern along the core axis. The material is sometimes hard, too fine to determine any mineral but may very well contain high sulphide %, dark brown grey colour. This vein runs from @ 107.05 to 107.3m @ 107.50 to 107.9m @ 107.95: some evidence of chalcedony associated with thin pyrite-clay vein. @ 108.2m: tiny black brown and grey blueish (quartz/chalcedony) vein was cut by a dark brown vein similar? @ 108.0 to 108.3m: (pyrite?) as above and widening to 2cm from 1cm.			1%		107.0m 107.5m 108.0m	107.5m 108.0m 108.5m	0.50m 0.50m 0.50m				
						1%								
						> 52%								
108.5	110.0	1.5 (100%)	CRYSTAL LITHIC TUFF Same as above. Core is competent in that it is not crumpled. Handling however, will lead to total break up because of numerous fractures. Pyrite increases slightly (diss.)			2%		108.5m 109.0m	109.0m 110.0m	0.50m 1.00m				

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Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.	N.T.S. No.							
July 15, 1987	July 20, 1987	HQ	BEARING		ANGLE		Grew Creek	331	105 K/02							
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 16 of 25					
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.					
10 + 005 N	845 m	-50°	76.2 m			-56°	-49°									
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC - 87 - 14					
10 + 250 E	165 m	199°				-60°	-53°									
from	to	recovery	Description			Structure	% Sulph.	Est. Grade	Sample No.	From	to	Width	ASSAYS			
(m)	(m)	(m)											Au	Ag	Hg	As
			@ 108.7 to 108.9m: 1 to 3mm, beige veinlet waving through core. Some banded quartz associated with it.										FOR ANALYSIS SEE SEPARATE SHEET			
			@ 108.85m: dark grey clay shear			45°/CA										
			@ 109.25m: dark grey, very fine greasind vein (shear) thickening from 1cm to 3cm. Adjacent to this vein occurs a small rim of beige dull (clay?) mineral and banded quartzite as if cut and offset by dark vein.			20°/CA	< 1%									
			This dark vein runs roughly parallel to core axis, widens and thins drastically to expand into a vein of white quartz													
			@ 109.85m: quartz is very broken, but some banding is visible.			parallel to CA	0									
110.0	111.6	1.6 (100%)	CRYSTAL LITHIC TUFF Very similar to above						110.0m	110.5m	0.5 m					
			@ 110.0 to 110.5m: quartz vein thickens, and leaves core at 110.5.			170°/CA	0		110.5m	111.0m	0.5 m					
			Quartz vein is white, grey, beige and slightly banded.						111.0m	111.6m	0.6 m					
			@ 110.5m: branching off of quartz vein into anastomosing pattern. Width +/- 1cm			135°/CA	< 1%									
			@ 110.65m: this vein turns parallel to core axis.													

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Date Collared July 15, 1987	Date Completed July 20, 1987	Core Size HQ	Dip Tests				Property Grew Creek	Project No. 331	N.T.S. No. 105 K/02					
FIELD CO-ORDINATES			DEPTH	BEARING Rec. Corr.		ANGLE Rec. Corr.		SURVEYED CO-ORDINATES		Sheet 17 of 25				
Lat. 10 + 005 N	Elev. 845 m	Dip -50°	76.2 m			-56°	-49°	Lat.	Elev.	Dip	Hole No.			
Dep. 10 + 250 E	Length 165 m	Bearing 199°				-60°	-53°	Dep.	Length	Bearing	NGC - 87 - 14			
from (m)	to (m)	recovery (m)	Description		Structure	% Sulph.	Est. Grade	Sample No. From	to	Width	ASSAYS Au Ag Hg As			
			@ 110.95m to 111.05m: white quartz vein.		90°/CA						FOR ANALYSIS SEE SEPARATE SHEET			
			@ 110.1m to 111.3m: white quartz vein.		110°/CA									
111.6	113.1	1.5 (100%)	CRYSTAL LITHIC TUFF Very similar to above, no quartz veins, but a few tan coloured stringers of very soft material disseminated pyrite.			1 to 2%		111.6m 112.1m 112.6m	112.1m 112.6m 113.1m	0.5 m 0.5 m 0.5 m				
113.1	114.6	1.5	CRYSTAL LITHIC TUFF Very similar to above, except slight increase in mafic minerals: disseminated pyrite. @ 113.2 to 113.5m: extremely clayey alteration. @ 113.95m: 1mm wide, tan coloured, veinlet, very fine grained & soft (Fe,Co3=?) Not Clay. @ 113.97m: medium grey.1mm wide veinlet. @ 113.99m: dark grey brown (pyrite) 1mm veinlet @ 113.97m: quartz vein: 4 to 6cm wide quartz vein with some stringers of beige coloured quartz and 1mm interrupted chalcedony rims. Towards bottoms becomes very broken.		135°/CA 135°/CA 135°/CA 135°/CA	< 1%		113.1m 113.6m 114.1m	113.6m 114.1m 114.6m	0.5 m 0.5 m 0.5 m				
114.6	116.1	1.5 (100%)	CRYSTAL LITHIC TUFF Medium grey, very similar to above. 114.8 - 115.1m: 2mm wide tan greenish veinlet changing into white quartz vein.					114.6m 115.1m 115.6m	115.1m 115.6m 116.1m	0.50m 0.50m 0.5 m				

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Date Collared July 15, 1987	Date Completed July 20, 1987	Core Size HQ	Dip Tests				Property Grew Creek	Project No. 331	N.T.S. No. 105 K/02		
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES		Sheet 18 of 25	
Lat. 10 + 005 N	Elev. 845 m	Dip -50°	76.2 m			-56°	-49°	Lat.	Elev.	Dip	Hole No.
Dep. 10 + 250 E	Length 165 m	Bearing 199°				-60°	-53°	Dep.	Length	Bearing	NGC - 87 - 14
from (m)	to (m)	recovery (m)	Description	Structure	Z Sulph.	Est. Grade	Sample No. From	to	Width	ASSAYS Au Ag Hg As	
			@ 115.1 to 115.3m: 2 small quartz veins with some banding and dark grey vein. @ 115.35: 3.5m quartz & chalcedony vein, and dark grey softer, very fine grained This vein is cut by tan greenish veinlet. @ 115.5m small stringer of quartz and chalcedony and dark grey (chloritic?) fine grained material.	45°; 70° ; 70° 55°/CA	1%					FOR ANALYSIS SEE SEPARATE SHEET	
116.1	117.6	1.5 (100%)	CRYSTAL LITHIC TUFF Very similar to to above: @ 116.2 to 116.45m: 1.5 to 2.5cm wide quartz vein waving through section, with chalcedony rim, causing fractured clay zone & quartz at 116.45m @ 116.9m: shattered quartz vein 6cm wide, cut by some later tan veinlets @ 117.0m to 117.6m: quartz vein +/- 8cm wide white to creamy quartz with light grey to banded quartz (chalcedony) in centre.	parallel to CA	< 1% < 1%		116.1m 116.6m 117.1m	116.6m 117.1m 117.6m	0.50m 0.50m 0.50m		
117.6	119.2	1.6 (100%)	CRYSTAL LITHIC TUFF Very similar to above but becomes more lithic. Very porous and no carbonates. @ 117.6 to 117.9m: very broken sheared quartz vein shear fractures filled with 2nd quartz.	135°/CA			117.6m 118.1m 118.6m	118.1m 118.6m 119.2m	0.50m 0.50m 0.60m		

Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.		N.T.S. No.			
July 15, 1987	July 20, 1987	HQ	BEARING		ANGLE		Grew Creek	331	105 K/02				
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 19 of 25		
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.		
10 + 005 N	845 m	-50°	76.2 m			-56°	-49°						
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC - 87 - 14		
10 + 250 E	165 m	199°				-60°	-53°						
from	to	recovery	Description	Structure	Z	Est.	Sample			ASSAYS			
(m)	(m)	(m)			Sulph.	Grade	No. From	to	Width	Au	Ag	Hg	As
119.2	120.7	1.5 (100%)	CRYSTAL LITHIC TUFF Similar to above, but more clay altered. Tiny fractures causing pervasive alteration contain occasionally some chalcedony (not rule). @ 120.2m to 120.4m: strong alteration zone, lighter grey very clayey and with quartz from sheared quartz vein (?) weak calcite alteration in fractures throughout section.				119.2m 119.7m 120.2m	119.7m 120.2m 120.7m	0.50m 0.50m 0.50m	FOR ANALYSIS SEE SEPARATE SHEET			
120.7	122.2	1.5 (100%)	CRYSTAL LITHIC TUFF Lighter grey than above and more mafic crystals. Shot through by several stringers of tan, siliceous clay (?) and veins. Very porous, no carbonate alteration but pervasive clay alteration.				120.7m 121.2m 121.7m	121.2m 121.7m 122.2m	0.50m 0.50m 0.50m				
122.2	123.75	1.55 (100%)	CRYSTAL LITHIC TUFF Medium grey, otherwise similar to above. No carbonate alteration but pervasive clay alteration. @ 122.27m: 5mm wide quartz, cut by 2 tiny tan coloured clay fractures. @ 123.2m: 3mm white quartz veinlet with beige coloured quartz or siliceous clay. @ 123.50m: contorted tan coloured siliceous clay veinlet (may have been k-fel-dspar).	135°/CA 30°/CA		< 1%	122.2m 122.7m 123.2m	122.7 m 123.2 m 123.75m	0.5 m 0.5 m 0.55m				

Date Collared July 15, 1987	Date Completed July 20, 1987	Core Size HQ	Dip Tests				Property Grew Creek	Project No. 331	N.T.S. No. 105 K/02					
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 20 of 25			
Lat. 10 + 005 N	Elev. 845 m	Dip -50°	76.2 m			-56°	-49°	Lat.	Elev.	Dip	Hole No.			
Dep. 10 + 250 E	Length 165 m	Bearing 199°				-60°	-53°	Dep.	Length	Bearing	NGC - 87 - 14			
from (m)	to (m)	recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From	to	Width	ASSAYS Au Ag Hg As			
123.75	125.3	1.5 (100%)	CRYSTAL LITHIC TUFF Very similar to above, pervasive clay alteration. Tuff becomes coarser to bottom. @ 124.25m: max 3cm wide quartz vein with buff coloured quartz or silicified clay. @ 124.95m: small stringer along joint (?) of beige siliceous clay and quartz. @ 125.1m: quartz and chalcedony vein.	120°/CA	1%		123.75m 124.25m 124.75m	124.25m 124.75m 125.30m	0.5 m 0.5 m 0.55m		FOR ANALYSIS SEE SEPARATE SHEET			
125.3	126.8	1.5 (100%)	CRYSTAL LITHIC TUFF -rhyolitic becoming coarser than above with feldspathic clasts partly altered to clay (buff coloured dull). Contains a few clay shears (joints). Towards bottom section is very broken. @ +/- 126.1m: 2cm wide quartz vein and chalcedony @ +/- 126.5m: 2cm wide chalcedony and quartz vein. @ 126.05m: quartz and chalcedony along joint wth pyrite associated clay.	no angle no angle (H.S.)	1% 2%		125.30m 125.8 m 126.3 m	125.8 m 126.3 m 126.8 m	0.50m 0.50m 0.50m					
126.8	127.9	1.1 (100%)	CRYSTAL LITHIC TUFF Same as above. Very broken, contains a few small quartz & chalcedony veins.				126.8 m 127.3 m	127.3 m 127.9 m	0.5 m 0.6 m					
127.9	128.3	0.4	VITRIC TUFF Very fine grained light to medium grey tuff with a few quartz fragments.				127.9 m	128.3 m	0.4 m					

RR0260

Date Collared July 15, 1987	Date Completed July 20, 1987	Core Size HQ	Dip Tests				Property Grew Creek	Project No. 331	N.T.S. No. 105 K/02					
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES		Sheet 21 of 25				
Lat. 10 + 005 N	Elev. 845 m	Dip -50°	76.2 m			-56°	-49°	Lat.	Elev.	Dip	Hole No.			
Dep. 10 + 250 E	Length 165 m	Bearing 199°				-60°	-53°	Dep.	Length	Bearing	NGC - 87 - 14			
from (m)	to (m)	recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From	to	Width	ASSAYS			
											Au	Ag	Hg	As
128.3	129.8	1.5 (80%)	CRYSTAL LITHIC TUFF to lapilli tuff. Medium grey badly broken pervasive clay alteration, no carbonate @ 129.7m: small quartz vein, broken	No angle.	< 1%		128.3 m	128.8 m	0.5 m		FOR ANALYSIS SEE SEPARATE SHEET			
							128.8 m	129.3 m	0.5 m					
							129.3 m	129.8 m	0.5 m					
129.8	131.4	1.6 (100%)	CRYSTAL LITHIC TUFF Clay alteration, badly broken, no carbonate alteration. @ 130.4 to about 131.2: quartz chalcedony vein, 1cm wide thin vein seems to run parallel to the core axis.		< 1%		129.8 m	130.3 m	0.5 m					
							130.3 m	130.8 m	0.5 m					
							130.8 m	131.4 m	0.6 m					
131.4	132.0	0.6	LAPILLI TUFF Clay alteration blebs of sulphides. @ 131.75m: 1mm wide quartz vein		3%		131.4 m	132.0 m	0.6 m					
132.0	133.5	1.5 (100%)	CRYSTAL LITHIC TUFF Medium grey, medium grained, pervasive clay alteration. No carbonate alteration. Occasionally a few buff coloured veinlets (silice- ous clay?) @ 132.90m: quartz-chalcedony vein, +/- 10 cm wide.	110°/CA	2%		132.0 m	132.5 m	0.5 m					
							132.5 m	133.0 m	0.5 m					
							133.0 m	133.5 m	0.5 m					
133.5	134.4	0.9 (100%)	CRYSTAL LITHIC TUFF Same as above, mafic fragments increase in number, size of some of fragments as long as 4cm (accidental) dark fragments may be argillite of phyllite. Numerous hairline cracks with buff colour to greenish. These cracks seem to be the last phase of alteration. Frequently these hairline cracks occupy				133.5 m	134.0 m	0.5 m					
							134.0 m	134.4 m	0.5 m					

092099

Date Collared July 15, 1987	Date Completed July 20, 1987	Core Size HQ	Dip Tests				Property Grew Creek	Project No. 331	N.T.S. No. 105 K/02		
FIELD CO-ORDINATES			DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES			Sheet 22 of 25
Lat. 10 + 005 N	Elev. 845 m	Dip -50°	76.2 m			-56°	-49°	Lat.	Elev.	Dip	Hole No.
Dep. 10 + 250 E	Length 165 m	Bearing 199°				-60°	-53°	Dep.	Length	Bearing	NGC - 87 - 14
from (m)	to (m)	recovery (m)	Description	Structure	Z Sulph.	Est. Grade	Sample No. From	to	Width	ASSAYS Au Ag Hg As	
			diffuse into wall rock. @ 133.6m: diffuse buff alteration along joint. @ 133.75m: diffuse buff alteration along joint. @ 133.85m: diffuse buff alteration along joint.	60°/CA 120°/CA						FOR ANALYSIS SEE SEPARATE SHEET	
134.4	135.9	1.5 (100%)	CRYSTAL LITHIC TUFF Very similar to above numerous buff veinlets. Pyrite (diss) seems associated with it. @ 135.1m: buff coloured veinlets. @ 135.7m to 135.9m: beige coloured veinlet with chalcedony parallel to core axis.		5%		134.4m 134.9m 135.4m	134.9m 135.4m 135.9m	0.5 m 0.5 m 0.5 m		
135.9	137.5	1.6	CRYSTAL LITHIC TUFF Very similar to above numerous buff coloured veinlets. Sometimes aspect of almost granitic rock.				135.9m 136.4m 136.9m	136.4m 136.9m 137.5m	0.5m 0.5m 0.6m		
137.5	139.0	1.5 (100%)	CRYSTAL LITHIC TUFF Same as above, clay alteration seems to diminish, as does pyrite @ 138.2m: quartz vein, 1cm wide	30°/CA	< 1%		137.5m 138.0m 138.5m	138.0m 138.5m 139.0m	0.5m 0.5m 0.5m		
139.0	139.25	0.25 (100%)	CRYSTAL LITHIC TUFF Same as above.		< 1%		139.0m	139.25m	0.25m		
139.25	140.5	1.5 (100%)	CRYSTAL LAPILLI TUFF Fragments become much coarser, often altered to clay.				139.25m 139.75m 140.25m	139.75m 140.25m 140.5 m	0.5 m 0.5 m 0.25m		
140.5	142.0	1.5 (100%)	CRYSTAL LAPILLI TUFF Same as above, no carbonate alteration, less clay alteration, often				140.5 m 141.0 m	141.0 m 141.5 m	0.50m 0.50m		

Date Collared July 15, 1987	Date Completed July 20, 1987	Core Size HQ	Dip Tests				Property Grew Creek	Project No. 331	N.T.S. No. 105 K/02		
FIELD CO-ORDINATES			DEPTH	BEARING Rec. Corr.		ANGLE Rec. Corr.		SURVEYED CO-ORDINATES			Sheet 23 of 25
Lat. 10 + 005 N	Elev. 845 m	Dip -50°	76.2 m			-56°	-49°	Lat.	Elev.	Dip	Hole No.
Dep. 10 + 250 E	Length 165 m	Bearing 199°				-60°	-53°	Dep.	Length	Bearing	NCC - 87 - 14
from (m)	to (m)	recovery (m)	Description	Structure	X Sulph.	Est. Grade	Sample No. From	to	Width	ASSAYS Au Ag Hg As	
			altered feldspar phenocrysts but is not rule. Often they are concretions or agglomerates of various material. Invariably they are white to cream coloured. @ 140.85m :1cm wide quartz vein	50°	1X					FOR ANALYSIS SEE SEPARATE SHEET	
142.0	143.6	1.6 (100%)	CRYSTAL LAPILLI TUFF Same as above. @ 142.15:Sample chalcedony vein @ 142.25:Sample chalcedony vein @ 142.5 :Clay shear	No angle. 90°/CA	1X		142.0m 142.5m 143.0m	142.5m 143.0m 143.6m	0.5m 0.5m 0.6m		
143.6	145.1	1.5 (100%)	CRYSTAL LAPILLI TUFF Same as above.		3X		143.6m 144.1m 144.6m	144.1m 144.6m 145.1m	0.5m 0.5m 0.5m		
145.1	146.6	1.5	CRYSTAL LAPILLI TUFF Same as above.		3 to 5X		145.1m 145.6m 146.1m	145.6m 146.1m 146.6m	0.5m 0.5m 0.5m		
146.6	148.1	1.5 (100%)	CRYSTAL LAPILLI TUFF TO BRECCIA Very similar to above again cream to buff coloured tiny veins occur. Some of clasts look rhyolitic. Al @ 147.2m:Tiny chalcedony vein @ 147.9m:Dull buff coloured siliceous clay towards transition to crystal lithic tuff.	150°/CA	3X		146.6m 147.1m 147.6m	147.1m 147.6m 148.1m	0.5m 0.5m 0.5m		
148.1	149.65	1.55 (100%)	CRYSTAL LITHIC TUFF Predominantly feldspar crystals and matrix, very little quartz. Seems less argillic alteration than higher up. joints generally filled with		2X		148.1m 148.6m 149.1m	148.6m 149.1m 149.65m	0.50m 0.50m 0.6 m		

Date Collared July 15, 1987	Date Completed July 20, 1987	Core Size HQ	Dip Tests				Property Grew Creek	Project No. 331	N.T.S. No. 105 K/02					
FIELD CO-ORDINATES			DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES			Sheet 24 of 25			
Lat. 10 + 005 N	Elev. 845 m	Dip -50°	76.2 m			-56°	-49°	Lat.	Elev.	Dip	Hole No.			
Dep. 10 + 250 E	Length 165 m	Bearing 199°				-60°	-53°	Dep.	Length	Bearing	NGC - 87 - 14			
from (m)	to (m)	recovery (m)	Description		Structure	Z Sulph.	Est. Grade	Sample No. From	to	Width	ASSAYS			
											Au	Ag	Hg	As
151.2	152.7	1.5 (100%)	CRYSTAL LITHIC TUFF Light grey tuff, not carbonaceous, very similar to above. @ 152.45m: buff coloured, fine grained siliceous clay (?) vein about 1cm wide thinning to 1mm			2%		151.2m 152.2m	152.2m 152.7m	1.0 m 0.5 m	FOR ANALYSIS SEE SEPARATE SHEET			
152.7	154.2	1.5 (93%)	CRYSTAL LITHIC TUFF Same as above. @ 152.8m: small medium grey, fine grained rhyolitic intrusion? ~~not~~ not clay @ 153.0m: definitely rhyolitic intrusion, from 2 to 5mm wide.		120°/CA			152.7m 153.2m 153.7m	153.2m 153.7m -	0.5m 0.5m				
154.2	154.3	0.1	CRYSTAL LITHIC TUFF Same as above.					-	154.3m	0.6m				
154.3	155.75	1.45 (100%)	QUARTZ VEIN Very shattered - where in contact with tuff brecciation filled with buff vein material; sometimes very hard, sometimes soft, too fine to say what it is.					154.3m 154.8m 155.3m	154.8m 155.3m 155.75m	0.5 m 0.5 m 0.45m				
155.75	157.3	1.5 (100%)?	CRYSTAL LITHIC TUFF Same as above; sulphide pods along veinlets. @ 156.25m: end of quartz vein. No sulphides in quartz vein.			5%		155.75m 156.25m 156.75m	156.25m 156.75m 157.3 m	0.5 m 0.5 m 0.55m				
157.3	158.8		CRYSTAL LITHIC TUFF Same as above.					157.3 m 157.8 m 158.3 m	157.8 m 158.3 m 158.8 m	0.5 m 0.5 m 0.5 m				

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Date Collared July 15, 1987	Date Completed July 20, 1987	Core Size HQ	Dip Tests				Property Grew Creek	Project No. 331	N.T.S. No. 105 K/02
FIELD CO-ORDINATES			DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES	
Lat. 10 + 005 N	Elev. 845 m	Dip -50°	76.2 m	Rec.	Corr.	Rec.	Corr.	Lat.	Elev.
Dep. 10 + 250 E	Length 165 m	Bearing 199°				-56°	-49°	Dep.	Length
						-60°	-53°	Bearing	NGC - 87 - 14
from (m)	to (m)	recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No. From	to	Width
ASSAYS									
Au Ag Hg As									
158.8	160.3	1.5 (100%)	CRYSTAL LITHIC TUFF Same as above. @ 159.5m: 2cm wide vein, 2mm quartz, rest dark siliceous clay (?) material, too fine grained. Disseminated pyrite associated with vein (i.e.pods)	No angle			158.8m 159.3m 159.8m	159.3m 159.8m 160.3m	0.5m 0.5m 0.5m
FOR ANALYSIS SEE SEPARATE SHEET									
160.3	161.8	1.5 (100%)	CRYSTAL LITHIC TUFF Same as above, very broken		2%		160.3m 160.8m 161.3m	160.8m 161.3m 161.8m	0.5m 0.5m 0.5m
161.8	163.4	1.6 (100%)	CRYSTAL LITHIC TUFF Same as above, very broken, very clayey no veins, except clay filled fractures.		1%		161.8m 162.3m 162.8m	162.3m 162.8m 163.4m	0.5m 0.5m 0.6m
163.4	164.9	1.5 (100%)	CRYSTAL LITHIC TUFF Same as above. No veins.		1%		163.4m 163.9m 164.4m	163.9m 164.4m 164.9m	0.5m 0.5m 0.5m
			END OF HOLE						

Date July 19, 1987

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Date Collared July 21, 1987	Date Completed July 25, 1987	Core Size HQ	Dip Tests				Property GREW CREEK	Project No. 331	N.T.S. No. 105 K/02					
FIELD CO-ORDINATES			DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES			Sheet 2 of 20			
Lat. 9 + 995N	Elev. 845	Dip -45°	67m			-53.5°	-46°	Lat.	Elev.	Dip	Hole No.			
Dep. 10+250E	Length 140m	Bearing 199°	125.6m			-54.5°	-47°	Dep.	Length	Bearing	NGC-87-15			
From (m)	To (m)	Recovery (m)	Description		Structure	% Sulph.	Est. Grade	Sample No.	From to	Width	ASSAYS Au Ag Hg As			
			Rhyolite porphyry contains quartz eyes frequently rounded and altered feldspar phenocrysts, probably k-feldspar to a creamy clay and plagioclase to a more buff clay ? Matrix is green, without mafic minerals								FOR ANALYSIS SEE SEPARATE SHEET			
61.3	62.8	1.5 (100%)	RHYOLITE PORPHYRY Similar to above rock is competent on top of section but becomes very broken towards bottom, also more clayey in matrix; mildly carbonaceous @ 61.8 clay shears @ 61.95 clay shears		36°/CA 50°/CA	< 1%		61.3 m 61.8 m 62.3 m	61.8m 62.3m 62.8m	0.5 m 0.5 m 0.5 m				
62.8	63.4	0.6 (100%)	RHYOLITE PORPHYRY Similar to above but recognizable only from less altered fragments, extreme pervasive clay alteration, very porous, not carbonaceous.			< 1%		62.8 m	63.4m	0.6m				
63.4	64.5	1.1 (100%)	LITHIC TUFF Dark grey, lithic tuff with numerous calcite veinlets (stockwork?) with increase in carbonate comes in crease in pyrite. @ 63.4 to 63.7m: extreme by clay altered gouge zone @ 64.0 to 64.3m: clay gouge zone, below which pyrite increases to 5%		35°/CA	5%		63.4 m 63.9 m	63.9m 64.5m	0.5m 0.6m				

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092089

Date Collared July 21, 1987	Date Completed July 25, 1987	Core Size HQ	Dip Tests				Property GREW CREEK		Project No. 331		N.T.S. No. 105 K/02		
FIELD CO-ORDINATES			DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 3 of 20	
Lat. 9 + 995N	Elev. 845	Dip -45°	67m			-53.5°	-46°	Lat.	Elev.	Dip	Hole No.		
Dep. 10+250E	Length 140m	Bearing 199°	125.6m			-54.5°	-47°	Dep.	Length	Bearing	NGC-87-15		
From (m)	To (m)	Recovery (m)	Description		Structure	% Sulph.	Est. Grade	Sample No.	From to	Width	ASSAYS Au Ag Hg As		
64.5	66.1	1.6 (100%)	CRYSTAL LITHIC TUFF	Medium	140°/CA 45°/CA	1%		64.5 m	65.0m	0.5m	FOR ANALYSIS SEE SEPARATE SHEET		
			grey, crystals consist predomi-	65.0 m				65.5m	0.5m				
			nantly of small, black, grey and transparent quartz grains in a clay matrix. pervasive clay alteration with a burly pattern gradually larger feldspar phenocrysts enter which are very broken and filled with clay, one k-felds- par (?) pseudomorph reaches a length of 15mm. Pyrite occurs in blebs. Carbonaceous character disappeared. @ 64.75m: medium grey, clay shear. @ 65.1 to 65.60m: clay, bedded?, gouge zone partly. @ 65.7m: core becomes more competent, less clayey and pyrite increases.	65.5 m				66.1m	0.6m				
66.1	67.4	1.3 (100%)	CRYSTAL LITHIC TUFF	Very				66.1 m	66.6m	0.5m			
			similar to above but smaller quartz veinlets grey blueish make first appearance. Core very brittle, but less clayey. Pyrite increase with blebs disseminat-	66.6 m				67.1m	0.5m				
			ed up to 3% i.e. pyrite content probably higher overall @ 66.6m : 2mm clay shear zone @ 66.85 to 67.1m: stockwork of tiny quartz chalcedony veinlets	67.1 m				67.4m	0.3m				

Date _____ Logged By _____

092099

Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.		N.T.S. No.	
July 21, 1987	July 25, 1987	HQ	BEARING		ANGLE		GREW CREEK	331		105 K/02	
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 4 of 20
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.
9 + 995N	845	-45°	67m			-53.5°	-46°				
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC-87-15
10+250E	140m	199°	125.6m			-54.5°	-47°				
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From to	Width	ASSAYS Au Ag Hg As	
			with associated pyrite. All < 2mm wide except @ 67.0m: 5mm wide vein of quartz and chalcedony (?) @ 67.05m: 1mm wide vein of quartz and chalcedony (?) @ 67.80m: 3mm wide vein of quartz and chalcedony and buff coloured alteration	70°/CA 90°/CA 120°/CA	3%					FOR ANALYSIS SEE SEPARATE SHEET	
67.4	68.9	1.5 (100%)	CRYSTAL LITHIC TUFF Rhyolitic very similar to above: not carbonaceous, but more silicified which shows up in numerous small cracks and stringers throughout (pervasive alteration). Pyrite veins from 2 to 10% Pyrite occurs in blebs but also in quartz chalcopyrite veinlets @ 67.65m : 2-3 mm wide dark to medium grey siliceous veinlet with almost 50% pyrite filling in centre of veinlet between blueish grey chalcopyrite. Occasional euhedral k-feldspar phenocrysts @ 68.25m: 1mm quartz chalcopyrite veinlets @ 68.3m: 1mm quartz chalcopyrite veinlets @ 68.4m: 1mm quartz chalcopyrite veinlets @ 68.65m: rock becomes more	130°/CA 45°/CA 95°/CA 90°/CA			67.4 m 67.9 m 68.4 m	67.9m 68.4m 68.9m	0.5m 0.5m 0.5m		

Date August 1987

Logged By J. Helsen

Date Collared	Date Completed	Core Size	Dip Tests				Property		Project No.		N.T.S. No.		
July 21, 1987	July 25, 1987	HQ	BEARING		ANGLE		GREW CREEK		331		105 K/02		
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 5 of 20		
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.		
9 + 995N	845	-45°	67m			-53.5°	-46°						
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC-87-15		
10+250E	140m	199°	125.6m			-54.5°	-47°						
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From to	Width	ASSAYS			
			clayey @ 68.75m: 40mm wide vein of quartz breccia, medium to light grey with dark tuff(?) layer in centre which contains pyrite.							Au	Ag	Hg	As
										FOR ANALYSIS SEE SEPARATE SHEET			
68.9	70.4	1.5 (100%)	CRYSTAL LITHIC TUFF Very similar to above with rhyolite aspect. Not carbonaceous, rather silicified. 1 black fine grained (phyllite?) fragment of 20mm in length. @ 69.1m: grey and buff creamy coloured veinlet wavy, i.e. quartz and altered k-feldspar (?) with abundant pyrite. @ 69.35m: clayshear @ 69.40m: buff coloured, to clay altered veinlet @ 69.55m: 70mm wide silicified zone with pyrite in centre, pyrite increased sharply below zone. @ 69.7m: 50 mm wide, light grey and creamy quartz, vein offset by later event i.e. fractures which carries the sulphides.	< 70°/CA < 115°/CA < 70°/CA < 65°/CA < 115°/CA	1% 5%		68.9 m 69.4 m 69.9 m	69.4m 69.9m 70.4m	0.5 m 0.5 m 0.5 m				

Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.		N.T.S. No.		
July 21, 1987	July 25, 1987	HQ		BEARING		ANGLE		GREW CREEK	331		105 K/02	
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 6 of 20	
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.	
9 + 995N	845	-45°	67m			-53.5°	-46°					
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC-87-15	
10+250E	140m	199°	125.6m			-54.5°	-47°					
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From	to	Width	ASSAYS	
			@ 69.8 to 70.4m: intense veining (anastomosing) with reintroduction of calcite in veins accompanying quartz and chalcedony. Calcite may be later thus attacking the silicified rock. Pyrite in pods seemed to increase with calcite.		10%						FOR ANALYSIS SEE SEPARATE SHEET	
70.4	71.9	1.5 (100%)	CRYSTAL LITHIC TUFF Rhyolitic still strongly silicified but diminishes slowly, pyrite in pods and cracks. @ 74.5m: several very tiny quartz stringers, pyrite in pods, @ 74.6 to 74.7m: vuggy (from pyrite crystals weathered out?) quartz and chalcedony vein. @ 74.9m: small pyrite & chalcedony vein. @ 71.7m: chalcedony - quartz 5mm wide fragments looks like interrupted vein.	130°/CA 125°/CA	3%		70.4 m 70.9 m 71.4 m	70.9m 71.4m 71.9m	0.5m 0.5m 0.5m			
71.9	73.45	1.55 (100%)	CRYSTAL LITHIC TUFF Very similar to above overall silicified with occasionally small fragments of chalcedony. Not carbonaceous. Pyrite variable throughout core. A few brittle zones as well as some limonite straining along some sheared joints or fractures. Sharp drop in pyrite content except where		1-3%		71.9 m 72.4 m 72.9 m	72.4m 72.9m 73.45m	0.5m 0.5m 0.5m			

660760

Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.	N.T.S. No.					
July 21, 1987	July 25, 1987	HQ	BEARING		ANGLE		GREW CREEK	331	105 K/02					
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES		Sheet 7 of 20				
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.			
9 + 995N	845	-45°	67m			-53.5°	-46°							
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC-87-15			
10+250E	140m	199°	125.6m			-54.5°	-47°							
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From	to	Width	ASSAYS			
			veins occur, some lithic fragments strongly kaolinized @ 72.4m: 50mm wide limonitized pyrite zone. @ 72.25m: quartz & chalcopryite & pyrite veinlet, 1 to 5mm wide								Au	Ag	Hg	As
											FOR ANALYSIS SEE SEPARATE SHEET			
73.45	75.0	1.5 (100%)	CRYSTAL LITHIC TUFF Same as above with silicification, and fine fragments or veinlets indicating chalcedony precipitation. However, gradually becoming more brittle, and clayey. Also increase in carbonaceous veinlets. pyrite content seems to increase with clay content i.e. when approaching fault zone towards the bottom				73.45 m	73.95 m	0.50m					
							73.95 m	74.45 m	0.50m					
							74.45 m	75.0 m	0.55m					
75.0	75.6	0.6 (100%)	CRYSTAL LITHIC TUFF Very similar to above but less siliceous, more broken and clayey @ 75.5m: evidence for chalcedony veinlets (3mm) sharp decline in pyrite content		<1%		75.0 m	75.6 m	0.6 m					
75.6	76.5	0.9 (100%)	CRYSTAL LITHIC TUFF Same as above. Silicification seems to be gradually making place for a more clayey alteration. No carbonaceous alteration at all. Frequently kaolinization of feldspars and in veinlets.		<1%		75.6 m	76.1 m	0.5 m					
							76.1 m	76.5 m	0.4 m					
76.5	78.0	1.5	CRYSTAL LITHIC TUFF Same as above with variable amounts of pyrite		1%		76.5 m	77.0 m	0.5 m					
							77.0 m	77.5 m	0.5 m					
							77.5 m	78.0 m	0.5 m					

Date Collared	Date Completed	Core Size	Dip Tests				Property		Project No.		N.T.S. No.			
July 21, 1987	July 25, 1987	HQ	BEARING		ANGLE		GREW CREEK		331		105 K/02			
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 8 of 20			
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.			
9 + 995N	845	-45°	67m			-53.5°	-46°							
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC-87-15			
10+250E	140m	199°	125.6m			-54.5°	-47°							
From (m)	To (m)	Recovery (m)	Description		Structure	% Sulph.	Est. Grade	Sample No.	From to	Width	ASSAYS			
											Au	Ag	Hg	As
			@ 76.6m: 2mm chalcopryrite-quartz veinlet @ 77.1m: broken, brittle zone with 10mm wide quartz vein. From here to bottom of section sharp increase in disseminated pyrite. @ 77.8m: barren quartz vein		50°/CA	5%					FOR ANALYSIS SEE SEPARATE SHEET			
78.0	79.55	1.55 (100%)	CRYSTAL LITHIC TUFF Very similar to above, pyrite disseminated and long cracks but diminishes to <1% at bottom of section. @ 78.05m: blueish grey chalcopyrite quartz veinlets, 5mm @ 78.2 to 78.45m: patchy but intense clay alteration of matrix @ 78.5m: clayshear zone @ 78.4m: bedding noticeable in tuff @ 79.5m: dense clay shear		40°/CA 40°/CA	5% 1%		78.0 m 78.5 m 79.0 m	78.5m 79.0m 79.55m	0.5m 0.5m 0.55m				
79.55m	81.1	1.55 (100%)	CRYSTAL LITHIC TUFF Same as above, but rather broken, clay alteration. @ 80.05m: waving quartz chalcedony vein with various shales of grey parallel to vein direction. Only vein which was not shattered (sheared) so far including NGC-87/14. Disseminated pyrite <1%		30°/CA	<1%		79.55m 80.05m 80.55m	80.05m 80.55m 81.1 m	0.5m 0.5m 0.5m				

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Date Collared	Date Completed	Core Size	Dip Tests				Property		Project No.	N.T.S. No.			
July 21, 1987	July 25, 1987	HQ	BEARING		ANGLE		GREW CREEK		331	105 K/02			
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 9 of 25		
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.		
9 + 995N	845	-45°	67m			-53.5°	-46°						
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC-87-15		
10+250E	140m	199°	125.6m			-54.5°	-47°						
From (m)	To (m)	Recovery (m)	Description	Structure	Z Sulph.	Est. Grade	Sample No.	From to	Width	ASSAYS			
			@ 80.35m: dark chalcedony vein, 3mm	<140°/CA						Au	Ag	Hg	As
			@ 80.45m: grey to dark grey quartz chalcedony vein with +/- 3% sheared pyrite along bedded plane of quartz.	<135°/CA						FOR ANALYSIS SEE SEPARATE SHEET			
81.1	82.6	1.5 (100%)	CRYSTAL LITHIC TUFF Same as above. no more silicification Several clay fractures.		<1%		81.1m 81.6m 82.1m	81.6m 82.1m 82.6m	0.5m 0.5m 0.5m				
82.6	84.1	1.5 (100%)	CRYSTAL LITHIC TUFF Same as above. @ 83.05m to 84.0m: thick quartz and chalc. white, grey and creamy, with very brittle pyrite, running in & out of core. @ 83.8m: rock so ground it became pebbles of volcanic rock unless brought in it looks very similar to rhyolite porphyry at top of drill core only 10cm wide.	sub-parallel/CA	<1%		82.6m 83.1m 83.6m	83.1m 83.6m 84.1m	0.5m 0.5m 0.5m				
84.1	85.65	1.55 (100%)	CRYSTAL LITHIC TUFF Very similar to above may slightly more siliceous. pyrite occ. in a few blebs. @ 84.1m: 2mm siliceous clay shear. @ 84.9 to 85.2m: broken tuff with two 10mm quartz chalc. veins but no pyrite. @ 85.35m: small quartz vein	90°/CA No angle // to 90°/CA	<1%		84.1m 84.6m 85.1m	84.6m 85.1m 85.65m	0.5m 0.5m 0.55m				

Date Collared July 21, 1987	Date Completed July 25, 1987	Core Size HQ	Dip Tests				Property GREW CREEK		Project No. 331	N.T.S. No. 105 K/02	
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 10 of 20
Lat. 9 + 995N	Elev. 845	Dip -45°	67m			-53.5°	-46°	Lat.	Elev.	Dip	Hole No.
Dep. 10+250E	Length 140m	Bearing 199°	125.6m			-54.5°	-47°	Dep.	Length	Bearing	NGC-87-15
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No. From	to	Width	ASSAYS Au Ag Hg As	
85.65	87.15	1.5	CRYSTAL LITHIC TUFF Similar to above but increasingly more affected by clay alteration of matrix accompanied by slight increase in carbonate. Matrix more affected than lithic fragments or phenocrysts. Colour of rock becomes slightly lighter grey (tan) due to pervasive alteration. No quartz or chalcedony.		<1%		85.65m 86.15m 86.65m	86.15m 86.65m 87.17m	0.5m 0.5m 0.5m	FOR ANALYSIS SEE SEPARATE SHEET	
87.15	88.7	1.53	CRYSTAL LITHIC TUFF Same as above.				87.17m 87.67m 88.17m	87.67m 88.17m 88.70m	0.5 m 0.50m 0.53m		
88.7	90.2	1.5 (100%)	CRYSTAL LITHIC TUFF Same as above, some evidence for siliceous precipitation but very minimal. Gradually becoming more clayey 88.7 - 89.2m: fractured quartz vein and chalcedony winding through core parallel @ 89.3m: 5mm wide quartz vein @ 90.0m to 90.2m: clay shear gouge zone, ie. fault zone.	< // to 90°/CA 165°/CA	1%		88.70m 89.20m 89.70m	89.2 m 89.70m 90.2 m	0.50m 0.50m 0.50m		
90.2	90.3	0.1	CRYSTAL LITHIC TUFF Continuation of very altered clay gouge fault zone.		<1%		90.2 m	-			
90.3	91.7	1.4 (100%)	CRYSTAL LITHIC TUFF Similar to above @ 90.3 to 90.5m: tuff becoming lapilli tuff with 10mm fragments		<1%		- 90.7 m 91.2 m 91.7 m	90.7m 91.2m 91.7m	0.5m 0.5m 0.5m		

092099

Date Collared July 21, 1987	Date Completed July 25, 1987	Core Size HQ	Dip Tests				Property GREW CREEK		Project No. 331		N.T.S. No. 105 K/02	
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 11 of 20	
Lat. 9 + 995N	Elev. 845	Dip -45°	67m			-53.5°	-46°	Lat.	Elev.	Dip	Hole No.	
Dep. 10+250E	Length 140m	Bearing 199°	125.6m			-54.5°	-47°	Dep.	Length	Bearing	NGC-87-15	
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From to	Width	ASSAYS Au Ag Hg As		
			@ 90.5 to 90.55m: sheared quartz and chalc. vein. @ 90.7m to 91.7m: increasingly more clayey to 91.7 ending in fault zone. @ 91.7: evidence of broken quartz vein.							FOR ANALYSIS SEE SEPARATE SHEET		
91.7	93.3	1.6 (100%)	CRYSTAL LITHIC TUFF Very similar to above. No carbonates Intense clay alteration but patches that are less altered hence more siliceous @ +/- 93.3m: core very broken with evidence of a few small quartz veins.		1%		91.7m 92.2m 92.7m	92.2m 92.7m 93.3m	0.5m 0.5m 0.6m			
93.3	94.8	1.5 (100%)	CRYSTAL LITHIC TUFF Very similar tuff some of fragments are altered rhyolite. bottom section almost pure clay. @ 94.25m: 50mm wide quartz and clay vein		<1%		93.3m 93.8m 94.3m	93.8m 94.3m 94.8m	0.5m 0.5m 0.5m			
94.8	96.3	1.5 (100%)	CRYSTAL LITHIC TUFF Very similar to above almost completely altered to clay matrix. No carbonates @ 96.25m: small veinlet with buff clay		1%		94.8m 95.3m 95.8m	95.3m 95.8m 96.3m	0.5m 0.5m 0.5m			
96.3	97.85	1.5 (100%)	CRYSTAL LITHIC TUFF Very similar to above not carbonaceous; with a few veinlets with buff siliceous clay alteration.				96.3m 96.8m 97.3m	96.8m 97.3m 97.85m	0.5m 0.5m 0.5m			

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Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.		N.T.S. No.			
July 21, 1987	July 25, 1987	HQ	BEARING		ANGLE		GREW CREEK	331		105 K/02			
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 12 of 20		
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.		
9 + 995N	845	-45°	67m			-53.5°	-46°						
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC-87-15		
10+250E	140m	199°	125.6m			-54.5°	-47°						
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From to	Width	ASSAYS			
										Au	Ag	Hg	As
97.85	99.4	1.5 (100%)	CRYSTAL LITHIC TUFF Lapilli tuff. gradual change completed @ +/- 98.0 m. Gradual change beige alteration of parts (pervasive) of the matrix which has already undergone clay alteration. Fragments and phenocrysts become larger to lapilli size (> 4mm). Fragment- ts seem to have been kaolinized		<1%		97.85m 98.35m 98.85m	98.35m 98.85m 99.4m	0.5m 0.5m 0.55m	FOR ANALYSIS SEE SEPARATE SHEET			
99.4	100.9	1.5 (100%)	LAPILLI TUFF Similar to above modest increase in pyrite cont- ent (blebs) but still very low, as well as black (phyllite?) fragments, and in buff coloured clay veinlets		<1%		99.4m 99.9m 100.4m	99.9m 100.4m 100.9m	0.5m 0.5m 0.5m				
100.9	102.4	1.5 (100%)	CRYSTAL LITHIC TUFF Same crystal lithic tuff as previou- sly abundant and spotty clay alteration, mildly carbonaceous. Abundant buff veinlets and schlicken @ 100.9m: 10mm wide clay shear zone. @ 102.1m: fracture with black fragments	90°/CA	<1%		100.9m 101.4m 101.9m	101.4m 101.9m 102.4m	0.5m 0.5m 0.5m				
102.4	103.9	1.5 (100%)	CRYSTAL LITHIC TUFF Very similar to above, 2 black dykes or shoots, cut in turn by small buff coloured tiny veinlets. @ 102.6m: clay shear with some pyrite associated	20°/CA	<1%		102.4m 102.9m 103.4m	102.9m 103.4m 103.9m	0.5m 0.5m 0.5m				

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Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.	N.T.S. No.					
July 21, 1987	July 25, 1987	HQ	BEARING		ANGLE		GREW CREEK	331	105 K/02					
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES		Sheet 13 of 20				
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.			
9 + 995N	845	-45°	67m			-53.5°	-46°							
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC-87-15			
10+250E	140m	199°	125.6m			-54.5°	-47°							
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From	to	Width	ASSAYS			
			@ 102.6m: quartz and some pyrite.	145°/CA							FOR ANALYSIS SEE SEPARATE SHEET			
			@ 103.05m: 1 black, rhyolitic or dacitic vein or small dyke 0.5to 5cm wide.	30°/CA										
			@ 103.2m: black, rhyolitic to dacitic & vein or injection cut by tiny buff veinlets.	45°/CA 130 35°/CA										
103.9	104.15	0.25 (100%)	VITRIC-CRYSTAL TUFF dark brown to black fine grained vitric matrix with feldspar phenocrysts and fragments. Very fine grained pyrite unevenly by distribution as disseminations in matrix and phenocrysts. A few 1mm wide clay veinlets. More mafic composition because no quartz. Trachytic to latitic.		1% to 5%		103.9m	104.15m	0.25m					
104.15	104.3	0.15	CRYSTAL LITHIC TUFF Similar to all previous crystal lithic tuffs.		1%		104.15m	104.30m	0.15m					
104.3	104.6	0.3	CRYSTAL LITHIC TUFF Dark brown to black fine grained matrix Trachytic to Latite.				104.30m	104.60m	0.30m					
104.6	105.5	0.9 (100%)	CRYSTAL LITHIC TUFF the same as all above crystal lithic tuffs. Slight increase in mafic minerals and occasional euhedral k-feldspar psudomorphs, which are fractured pyrite in blebs occasionally. Soft, clay altered rock, but not carbonaceous		<1%		104.60m 105.1 m	105.1m 105.5m	0.50m 0.40m					

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Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.	N.T.S. No.					
July 21, 1987	July 25, 1987	HQ	BEARING		ANGLE		GREW CREEK	331	105 K/02					
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES		Sheet 14 of 20				
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.			
9 + 995N	845	-45°	67m			-53.5°	-46°							
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC-87-15			
10+250E	140m	199°	125.6m			-54.5°	-47°							
From	To	Recovery	Description		Structure	%	Est.	Sample		ASSAYS				
(m)	(m)	(m)				Sulph.	Grade	No. From	to	Width	Au	Ag	Hg	As
105.5	107.0	1.5 (100%)	CRYSTAL LITHIC TUFF Very similar to above slight increase in k-feldspar pseudomorphs towards bottom of section @ 106.45m: small quartz stringer			<1%		105.5m 106.0m 106.5m	106.0m 106.5m 107.0m	0.50m 0.50m 0.50m	FOR ANALYSIS SEE SEPARATE SHEET			
107.0	108.5	1.5 (100%)	CRYSTAL LITHIC TUFF Very similar to above increase in late episode buff clay veinlet alterations (anastomosing pattern) spotty pyrite blebs @ 107.8 to 108.10m: late episode buff clay veinlet 1mm wide until widens to patchy alteration, is strongest here. @ 108.2m: small clay shear.		145°/CA	<1%		107.0m 107.5m 108.0m	107.5m 108.0m 108.5m	0.5 m 0.5 m 0.5 m				
108.5	110.0	1.5 (100%)	CRYSTAL LITHIC TUFF Very similar to above pyrite is patchy, alteration clayey but less spotty mild carbonation. @ 108.65m: 10mm square pyrite bleb surrounded by earlier alteration white to glassy (soft) which is attached (replaced) by later creamy alteration.			<1%		108.5m 109.0m 109.5m	109.0m 109.5m 110.0m	0.50m 0.50m 0.50m				
			@ 109.45m: slight increase in pyrite dissemination.											

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Date Collared	Date Completed	Core Size	Dip Tests				Property		Project No.		N.T.S. No.			
July 21, 1987	July 25, 1987	HQ	BEARING		ANGLE		GREW CREEK		331		105 K/02			
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 16 of 20			
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.			
9 995N	845	-45°	67m			-53.5°	-46°							
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC-87-15			
10+250E	140m	199°	125.6m			-54.5°	-47°							
From	To	Recovery	Description	Structure	Z	Est.	Sample				ASSAYS			
(m)	(m)	(m)			Sulph.	Grade	No.	From	to	Width	Au	Ag	Hg	As
			noticeable. Three small quartz vein-shear zones occur from @ 112.2 to 112.6m: 3 quartz veins +/- 20cm apart contain fair amounts of calcite but no pyrite, also chlorite as thin veneer in between beds.								FOR ANALYSIS SEE SEPARATE SHEET			
113.1	113.9	0.8 (100%)	CRYSTAL LITHIC BRECCIA Abrupt change from the crystal lithic tuff to a crystal tuff quartz breccia. The groundmass remains crystal tuff but now big quartz and other clasts (up to 8cm of rhyolite clast?) becomes predominant. Except for a few spotty pyrite concentrations the overall content is low.		1%		113.1m	113.6m	0.5m					
							113.6m	113.9m	0.3m					
113.9	114.6	0.7 (100%)	CRYSTAL LITHIC TUFF Same tuff as before but more veined. @ 114.0m : 15mm wide feldspar (?) to clay altered vein @ 114.05m: 2 small clayshears @ 114.45m: 10mm wide quartz & chalcedony and minor pyrite @ 114.55m: buff siliceous clay, 5mm wide.	90°/CA 40°/CA 40°/CA	<1%		113.9m	114.4m	0.5m					
							114.4m	con't.	-					
114.6	116.1	1.5 (100%)	CRYSTAL LITHIC TUFF Similar to above crystal lithic tuff with numerous veinlets of various types. @ 114.7m: 5mm wide quartz vein, expanding into small quartz	135°/CA	<1%		con't.	114.9m	0.5m					
							114.9m	115.4m	0.5m					
							115.4m	115.9m	0.5m					
							115.9m	116.4m	0.5m					

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Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.	N.T.S. No.
July 21, 1987	July 25, 1987	HQ	BEARING		ANGLE		GREW CREEK	331	105 K/02
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES	
Lat.	Elev.	Dip						Lat.	Elev.
9 + 995N	845	-45°	67m			-53.5°	-46°		
Dep.	Length	Bearing						Dep.	Length
10+250E	140m	199°	125.6m			-54.5°	-47°		
From (m)	To (m)	Recovery (m)	Description	Structure	Z Sulph.	Est. Grade	Sample No.	From	to
			pocket. No pyrite associated.						
			@ 114.85m: 2mm buff clay veinlet	<130°/CA					
			@ 115.10m: 2mm grey brown, very fine grained siliceous clay with some larger fragments	< 20°/CA					
			@ 115.4m: 2mm wide chloritic vein.	<130°/CA					
			@ 115.65m: 2 to 5mm wide clay (silic) vein with veneer chlorite on footwall & associated pyrite.						
			@ 115.7m: 1 to 3mm wide veinlet with grey	<40°/CA					
			@ core, creamy edges and possibly outer edge of minor chalcedony.						
116.1	117.65	1.55 (100%)	CRYSTAL LITHIC TUFF Becoming slightly more lithic (lapilli) otherwise very similar. Not carbonaceous, nor siliceous, rather argillic		<1%		116.4m	116.9m	0.5m
			@ 116.5m: 10mm wide grey dry clay vein	<130°/CA			116.9m	117.4m	0.5m
			@ 117.3m: 10mm wide grey dry clay vein	<130°/CA			117.4m	117.9m	0.5m
			@ 117.6m: 10mm wide grey dry clay vein						
117.65	118.2	0.55 (100%)	CRYSTAL LITHIC TUFF Same as above but becoming more coarse (lithic) fragments. Also increase in pyrite blebs		3%		117.9m	con't.	

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Date Collared July 21, 1987	Date Completed July 25, 1987	Core Size HQ	Dip Tests				Property GREW CREEK	Project No. 331	N.T.S. No. 105 K/02
FIELD CO-ORDINATES			DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES	
Lat. 9 + 995N	Elev. 845	Dip -45°	67m	Rec.	Corr.	Rec.	Corr.	Lat.	Elev.
Dep. 10+250E	Length 140m	Bearing 199°	125.6m			-53.5°	-46°	Dip	Hole No.
						-54.5°	-47°	Dep.	Length
								Bearing	NGC-87-15
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No. From	to	Width
			@ 117.75m: 2mm wide grey buff dry clay veinlet	120°/CA					
			@ 117.85m: 3mm wide grey buff dry clay veinlet	140°/CA					
			@ 117.95m: 2mm wide grey buff dry clay veinlet	45°/CA					
			@ 118.05m: 2mm wide grey buff dry clay veinlet	<120°/CA					
118.2	119.2	1.0 (100%)	CRYSTAL LITHIC TO LAPILLI TUFF Very similar to above rocks but increase in lithic fragments and phenocryst. Phenocrysts look like k-feldspar pseudomor- ph altered to clay and fractur- ed also occurrence of angular fragments up to size of lapilli (>4mm). Many are from 0.5cm to 1.5cm. Many fragments are also altered to carbonate. Rock is not silicified but argillized. Fragments are generally white but a few are black (quartz). Occasional pyrite blebs. The rock obtains a burly aspect from the pervasive alteration A few light grey clay veinlets pinch and swell from 2mm to 20mm causing a patchy burly alteration pattern. @ 118.50m: 1 to 2mm wide buff grey veinlet of clay.		2%		con't. 118.4m 118.9m	118.4m 118.9m 119.2m	0.5m 0.5m 0.3m
ASSAYS									
FOR ANALYSIS SEE SEPARATE SHEET									

Date August 1987

Logged By J. Helsen

Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.	N.T.S. No.
July 21, 1987	July 25, 1987	HQ	BEARING		ANGLE		GREW CREEK	331	105 K/02
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES	
Lat.	Elev.	Dip						Lat.	Elev.
9 + 995N	845	-45°	67m			-53.5°	-46°		
Dep.	Length	Bearing						Dep.	Length
10+250E	140m	199°	125.6m			-54.5°	-47°		
								Bearing	NGC-87-15
From (m)	To (m)	Recovery (m)	Description	Structure	% Sulph.	Est. Grade	Sample No.	From to	Width
ASSAYS									
119.2	120.7	1.5 (100%)	LAPILLI TUFF Very similar to above but the k-feldspar pseudomorphs become more frequent and larger. Increase in joints filled with clay (clay veinlets)				119.2m	119.7m	0.5m
			@ 119.6m: clay filled (1mm joint)- clay is grey	130°/CA	1%		119.7m	120.2m	0.5m
			@ 119.7m: clay filled (1mm joint)-clay is grey	50°/CA			120.2m	120.7m	0.5m
			@ 119.8m: clay filled (1mm joint)-clay is grey	90°/CA					
			@ 119.85m: clay filled (1mm joint)-clay is grey	100°/CA					
			@ 119.9m: buff clay vein (3mm)	sub // to CA					
			@ 120.15m to 121.0m: dry clay seem No. 1. This clay seem almost cause loss of hole	20°/CA					
120.7	122.8	2.1 (100%)	CRYSTAL LITHIC TUFF Same as before fragments less abundant and decreased in size Section cut by several dry clay seems. Rock occasionally badly broken.		3%		120.7m	121.2m	0.5m
			@ 120.7 to 120.95m: continuation of clay seem. Clay seem in contact with lithic tuff tough quartz stringer at foot wall.	<25°/CA			121.2m	121.7m	0.5m
			@ 121.45 to 121.70m: clay seem No2. Badly broken but contact with lithic tuff is at about	<50°/CA			121.7m	122.2m	0.5m
							122.2m	122.8m	0.6m

Date August 1987 Logged By J. Helsen

Date Collared	Date Completed	Core Size	Dip Tests				Property	Project No.		N.T.S. No.				
July 21, 1987	July 25, 1987	HQ	BEARING		ANGLE		GREW CREEK	331		105 K/02				
FIELD CO-ORDINATES			DEPTH	Rec.	Corr.	Rec.	Corr.	SURVEYED CO-ORDINATES			Sheet 20 of 20			
Lat.	Elev.	Dip						Lat.	Elev.	Dip	Hole No.			
9 + 995N	845	-45°	67m			-53.5°	-46°							
Dep.	Length	Bearing						Dep.	Length	Bearing	NGC-87-15			
10+250E	140m	199°	125.6m			-54.5°	-47°							
From	To	Recovery	Description		Structure	%	Est.	Sample	ASSAYS					
(m)	(m)	(m)				Sulph.	Grade	No. From	to	Width	Au	Ag	Hg	As
			@ +/- 121.6 dry clay seems of variable thickness								FOR ANALYSIS SEE SEPARATE SHEET			
			@ +/- 121.8 difficult to estimate because so											
			@ +/- 121.9 broken											
			Very broken at bottom of section. The clay seems to react with HCl but also to expand with water. Pyrite increases in number of blebs.											
122.8	123.15	0.35 (100%)	LAPILLI TUFF Very similar as @ 119.2m					122.8m	123.15m	0.35m				
123.15	123.4	0.35	Very dense dry clay seem.					123.15m	123.4m	0.35m				
123.4	125.0	1.6	LAPILLI TUFF Very similar to description @ 119.2m: phenocrysts are like k-feldspar pseudomorphs.			1%		123.4m	123.9m	0.5m				
			@ 123.9m: brittle clay zone					123.9m	124.4m	0.5m				
								124.4m	125.0m	0.6m				
125.0	125.6	0.6	LAPILLI TUFF As above, @ 125.3m: another clay shear zone					125.0m	125.6m	0.6m				
			END OF HOLE											

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NORANDA EXPLORATION COMPANY LTD.

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Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY Crew Creek		PROJECT No. 332		N.T.S. No. 105K-2	
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES			
Lat 10000N		Elev		Dip -45°		171M		RECORDED		CORRECTED		RECORDED		CORRECTED	
Dep 10300E		Length 171M		Bearing 199°								Lat.		Elev.	
												Dep.		Length	
												Dip		Bearing	
												HOLE No.		NGC 87-16	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
0	48.77	0%	0-68.58m. OVERBURDEN-TILL -dark grey to black, v. clay rich pebbly TILL-CARBONACEOUS -v. angular fragments & isolated sections of cobble size fragments -fragments are volcanic and sedimentary in origin-polymictic -moderately → strongly calcareous matrix	carb									
48.77	49.99	19%	49.76-49.99 -98% pebbles -all clay till matrix have been washed out -moderately well rounded fragments - both volcanic & sedimentary -95% of pebbles are in the 4-20 mm size range										
49.99	51.82 (170)	17%	49.99-60.96 - v. clay rich till with 5-10% angular fragments -extensive desiccation cracks developed in core -high plasticity clay till - easily moulded between the fingers	carb									
51.82	53.34	25%	-polymictic										
53.34	54.86	0%	53.34-54.86 WASH OUT										
54.86	55.47	79%	55.47- 5cm sandstone fragments										

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

062087

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size H0		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No. 105K-2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 2 of 33			
Lat 10000N		Elev		Dip -45°		171M		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No.	
Dep 10300E		Length 171M		Bearing 199°												NGC 87-16	
From	To	Recovery	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS					
55.47	56.998	38%	56.998 -6cm long weakly carbonitized felsic lapilli tuff frag.														
56.998	59.74	7%	59.74 -7cm. long weakly carbonitized felsic lapilli tuff & chalcedonic qtz. xyls & 2-5% glassy quartz eyes up to 6mm in diameter														
59.74	60.96	21%															
60.96	64.01	75%	60.96-68.58 -dark grey to black, v. stiff pebble rich sandy clay TILL -v. well compacted, but easily crumbles between fingers on moulding -v. strongly carbonaceous in places														
64.01	66.59	12%	-64.01 -10cm long altered and highly brecciated & embayed contact RHYOLITE - v. strongly silicified														
66.59	67.36	70%	66.98-67.13 - 15cm. long altered dyke rock-DIABASIC														
67.36	68.58	18.75%															

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size H0		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S No 105K-2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lot 10000N		Elev		Dip -45°		171M		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 3 of 33	
Dep 10300E		Length 171M		Bearing 199°												HOLE No. NGC 87-16	

From	To	Recovery	Description	Structure	Alteration	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
			68.58-170.99 FELSIC PYROCLASTICS -weakly - strongly carbonitized, light grey to tan felsic pyroclastic ⇒ CRYSTAL LITHIC - lithic lapilli TUFF		ARGILLIC								
			-strongly argillically altered throughout -highly porous & in places very strongly weathered -moderately ⇒ well mineralized throughout-Py -Py occurs as euhedral to v.f.g. stringers & blebs -buckshot py occurs in places -moderately to strongly faulted clay infilled fault & fault gouges -poor core recovery appears to coincide with fault gouge area. Areas also experiences slow drilling -easily weathers zones are either previously exposed surfaces which developed & regolith or are due to later stage hydrothermal fluid movement -strongly argillically altered areas impart a brecciated textured core ⇒ brecciation is probably fluid induced -isolated secondary qtz + feld + carbonate veining in places		ARGILLIC + MICRO CARB								
68.58	69.19	91.7%	68.58-69.27- extremely soft, extensively clay altered easily weathers CRYSTAL LITHIC TUFF -1-3% Py mineralization throughout Py occurs as 1-3mm euhedral xyls.		ARGILLIC	1-3%		12851	68.58-69.27	34			
			69.27-71.34 -strongly -pervasively argillically (clay) altered CRYSTAL LITHIC ⇒ LITHIC LAPILLI TUFF -numerous 1-2cm wide feld ⇒ clay veinlets -embayed margins of feld ⇒ clay xyls.		ARGILLIC CARB			12852	69.27-70.40	34			

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

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NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size H0		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot 10000N		Elev		Dip -45°				RECORDED	CORRECTED	RECORDED	CORRECTED	Lot		Elev		Dip	
Dep 10300E		Length 171M		Bearing 199°								Dep		Length		Bearing	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
			-numerous black glossy (-3cm.) volcanic fragments enclosing v.f.g. diss. Py ≈ 5% Rx. -1-3% Py mineralization throughout occurring as 3-5mm blebs up to 5% Py in places								12853	70.40-71.01					
			-moderately carbonitized in places with up to 5% calcite xyls. mantled by Py														
70.14	71.93	100%	@69.83 fracture @ 40° cba 70.67 qtz. + feld → clay veining @ 32° cba 70.94 qtz + feld → clay veining @ 100° cba				40° cba 32° cba 100° cba										
			71.01-71.34 -well mineralized zone up to 10% Py								12854	71.01-71.34					
71.93	73.46	100%	71.34-73.46 -moderately to strongly clay altered CRYSTAL LITHIC TUFF -isolated calcite xyls in places -randomly oriented hairline feldspar → clay veinlets - ≈ 10cm wide, v. soft fluid metasomatic zone along clay filled fractures								12855	71.34-72.85					
			72.26 fracture @ 55° cba 72.49 fracture @ 50° cba				55° cba 50° cba										
			72.85 2cm wide clay filled fracture @ 55° cba 73.18 5mm. thick stratiform pyrite mineralization up to 15% Py which pinch & swell at ≈ 75° cba				55° cba				12856	72.85-73.46					
73.46	74.98	100%	73.46-73.99 -buff to light grey, pervasively clay altered CRYSTAL TUFF < 5% lithic fragments < 5-7mm size -1% diss. Py throughout with blebs up to 3-5% Py in places						1%		12857	73.46-73.99					

DRILL LOG #1

Date Oct. 24, 1987 logged By Kandy Singh

002099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No. 332		N.T.S No. 105K-2	
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES			
Lat 10000N		Elev		Dip -45°		171M		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat		Elev	
Dep 10300E		Length 171M		Bearing 199°								Dep		Length	
												Dip		HOLE No. NGC 87-16	
												Bearing			

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
			-70% of visible xyls are qtz. 73.99 -5mm. wide clay filled fracture @45° cba & non clay filled fracture @122° cba	45° cba 122° cba								
			73.99-74.98 -moderately clay altered CRYSTAL LITHIC TUFF 1-5% Py mineralization throughout with up to 20% Py on slip surfaces -minor chalcodonic qtz, xyls. throughout 70% of all feldspars xyls. alt to clay -15-20% feld. has embayed crystalline outline 74.74 fracture @ 135° cba		1-5%		12858	73.99-74.98				
74.98	76.50	100%	74.98-76.50 -weakly to moderately clay altered -not pervasive-LITHIC LAPILLI to CRYSTAL LITHIC TUFF with noticeable increase in K-spar content-microdine? 1-3% Py overall occurring mostly as Py blebs 75.51 fracture @ 46° cba 76.0 randomly oriented hairline feld → clay veinlets	40° cba	1-3%		12859	74.98-76.50				
76.50	77.11	100%	76.50-77.11 -strongly altered and fractured CRYSTAL LITHIC TUFF -numerous clay filled faults 76.70 clay filled fracture @162° cba 76.85 clay coated slip plane @ 39° cba 76.95 clay coated slip plane @107° cba 77.00 clay coated slip plane @ 43° cba	162° cba 39° cba 170° cba 43° cba	tr.		12860	76.50-77.11				
77.11	78.03	100%	77.11-78.03 -f.g. pervasively argillically altered CRYSTAL TUFF -numerous randomly oriented hairline feld → clay ± carb veinlets		1-3%		12861	77.11-78.03				

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot 10000N		Elev		Dip -45°				RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 6 of 33	
Dep 10300E		Length 171M		Bearing 199°						43°				Lot		Elev	
														Dep.		Length	
														Bearing		HOLE No. NGC 87-16	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
			77.63 -10cm. wide clay filled fault @90° cba -clay infilling is v. stiff, but easily moulded v. plastic & high water content -becomes very soft & sticky and could easily flow on remoulding -possibly high salt-chloride content	90° cba								
			-isolated qtz ± feld. veining, very contorted -moderately mineralized @ 1-3% f.g. euhedral xyls -Py throughout									
78.03	79.55	100%	78.03-78.50 -ALTERED LITHIC LAPILLI TUFF @ 70% lapilli size fragments -lapilli ranges from 5mm - 55mm -mod. mineralized @ 3-5% Py throughout -alteration is exclusively argillic up to 15% volcanic glass lithic fragments -shards 3-4mm in size		3-5%		12862	78.03-78.50				
			78.13 -minor hairline feld → clay filled fractures @ 132° cba	132° cba								
			78.50-80.01 -strongly pervasively clay altered CRYSTAL LITHIC TUFF with 32 cm ash tuff horizon				12863	78.50-80.01				
79.55	81.08	45%	79.07-79.39 -thinly laminated/bedded light grey ash tuff -bedding @ 159° cba -2% Py throughout @ 2mm blebs of v.f.g. Py	≈ 159° cba								
			78.50 -3mm clay filled fracture @ 140° cba -minor core displacement -core lost area	140° cba								
			80.01-81.58 -FAULT ZONE -FAULT GOUGE AREA @ 4cm wide clay filled fault -entire horizon is v. soft and easily weathers @ 5% Py mineralization throughout -somewhat brecciated		5%		12864	80.01-81.58				

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 7 of 33	
Lat 10000N		Elev				Dip -45°		RECORDED		CORRECTED		RECORDED			
Dep 10300E		Length 171M		Bearing 199°										HOLE No. NGC 87-16	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
			-clay filling is very pyritic 81.08 clay filled fault @166 cba 81.58 clay filled fault @14 cba	166° cba 14° cba									
81.08	82.60	100%	81.58-82.60 -weakly carbonitized, extensively clay altered CRYSTAL LITHIC TUFF -minor blebs & hairline stringers of siderite + ankerite -v. weakly fizzles		3-5%		12865	81.58-82.60	0.137				
			-numerous hairline Pyritic clay/chlorite veining ≈10 cba ≈3-5% Py	10° cba									
82.60	84.12	100%	82.60-83.78 -FAULT GOUGE HORIZON -highly fractured & faulted fault gouge horizon -somewhat brecciated -weakly carbonitized with feld → clay + ankerite		tr. 1%		12866	82.60-83.78	2.331				
			hairline fracture/filling? -randomly oriented -strongly silicified horizon with 15mm wide brecciated qtz. vein.										
			-tr. -1% Py mineralization throughout -qtz + ankerite veins are randomly oriented - contorted and brecciated										
			83.78-91.44 -extensively broken core & poor core recovery -moderately altered CRYSTAL LITHIC TUFF - numerous qtz. + feld ± carbonate (ankerite veins. (10-3-mm wide)		tr. 1%		12867	83.78-84.12	0.554				
84.12	84.73	58%	84.12-84.73 -broken core with 20 cm wide qtz + feld ± carb. vein ⇒ brecciated		tr. 1%		12868	84.12-84.73	0.160				

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
								RECORDED		CORRECTED		RECORDED		CORRECTED			
Lot 10000N		Elev		Dip -45°		171M				43°				Elev		Dip	
Dep 10300E		Length 171M		Bearing 199°										Dep		Length	
														Bearing		HOLE No. NGC 87-16	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
84.73	85.65	86%	84.73-85.65 -m.g. greyish-blue CRYSTAL LITHIC TUFF -numerous qtz. + carb hairline veining -10% 2mm size lithic frag. predominantly volcanic glass-shards		tr. 1%		12869	84.73-85.65	2.22%				
85.65	87.12	16%	85.65-87.12 -strongly ankeritized horizon, highly broken -blebs of Py within volcanic fragments-rhyolitic -overall tr.-1% Py throughout		tr. 1%		12870	85.65-88.697	1.20%				
87.12	88.697	10%	87.12-90.5 -CRYSTAL LITHIC TUFF -pieces of core ± qtz. + carb veining -minor chalcodonic qtz xyls										
88.697	90.22	16%	88.697-90.22 -10% 2mm. size volcanic glass fragments throughout -core becomes Lithic Lapilli towards the bottom 90.22-90.5 ground up Rx.		tr. 1%		12871	88.697-90.94	0.514				
90.22	91.44	100%	90.5-91.44 -CRYSTAL LITHIC becoming very lithic Lapilli Tuff highly broken core ± 10cm wide qtz ± feld + carbonate veins @ 137° cba -sharp but contorted contact -carbonate is maulted in banded veins	137° cba	1%		12872	90.94-91.44	14.94%				
			91.14-91.24 -broken pieces of v.f.g. 2-3mm fourmalene??? veined VITRIC TUFF										
			-minor angular qtz + carb. fragments ± 1% diss. Py throughout										
91.44	92.96	100%	91.44-96.01 m.g. - c.g. CRYSTAL LITHIC TUFF with 10-20 cm wide qtz ± carb. ± feld. veins -individual feldspar xyls. exhibit clay alteration + TALC??		tr. 1%		12873	91.44-92.57	0.66%				

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

092098

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2		
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES						
						RECORDED	CORRECTED	RECORDED	CORRECTED							
Lat	10000N	Elev		Dip	-45°	171M			43°		Lat		Elev		Dip	
Dep	10300E	Length	171M	Bearing	199°						Dep		Length		Bearing	
From	To	Recovery	Description				Structure	Alteration	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
			-isolated clay altered horizons but still no pervasive alteration -minor <5% calcite xyls 10-15% large glassy quartz eyes -tr. 1% v.f.g. diss. Py in places -minor ankeritization -numerous hairline carb. + Clay veinlets - randomly oriented								12874	92.57 92.96	3.251			
			91.64 fracture @ 45° cba 91.70 15mm wide band of feld → clay @ 108° cba 91.80 10mm wide band of feld → clay @ 75° cba 92.64 9mm wide banded Qtz + feld + carb. vein @ 27° cba (wavy contorted contact)				45° cba 108° cba 75° cba 27° cba									
			92.66 5mm pinch & swell clay alt. "vein" @ 22° cba				22° cba									
			92.66-93.36 -only 55% recovery in section -highly broken core 93.06 -10mm wide Qtz. vein minor clay alteration -orientation uncertain													
92.96	94.49	85%	-10-15% glassy Qtz. eyes closely -associated? feld → clay + TALC xyls -minor (<5%) plant/organic fragments inclusions -tr. 1% Py throughout, with blebs of up to 3% Py in places 93.69 -minor fracturing @ 153° cba & 123° cba						tr. 1%		12875	92.96-93.66	0.266			
							153° & 123° cba		tr. 1%		12876	93.66-94.49	0.266			
			93.89 -clay filled fracture @ 120° cba 94.49 -5cm clay filled fault @ 82° cba				120° cba 82° cba		tr. 1%		12877	94.49-95.40	0.514			

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2										
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES												
Lat 10000N		Elev		Dip -45°		171M		RECORDED		CORRECTED		RECORDED		CORRECTED		Lot.		Elev		Dip		HOLE No.		
Dep 10300E		Length 171M		Bearing 199°												Dep.		Length		Bearing		NGC 87-16		
From	To	Recovery	Description					Structure	ALTERATION	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS										
94.49	96.01	95%	94.49-95.40 -very pronounced increase feldspar xyls. altered to clay +TALC??? -still retain its very xyalline shape -minor sulphide associated with clay + TALC -slight increase in plant/organic fragments																					
			95.19 -fracture @138° cba & joints @45° cba					138° 45°																
96.01	97.54	10%	96.01-100.10 -altered Lithic Lapilla Tuff distinct zones of CRYSTAL - CRYSTAL LITHIC TUFF -numerous pervasively clay altered zones large embayed fragments up to 15mm in diameter -weakly carbonitized							1-2%		12878	95.40-99.06	7.234										
97.54	99.06	6%	-v. poor core recovery -minor calcite xyls. throughout 95.60 -clay altered zones (4cm) wide possibly defining bedding @132° cba					bedding? @132° cba																
			99.06 -4cm core section 2mm pyrite vein																					
99.06	99.97	61%	99.06-100.10 -strongly silicified & altered LAPILLI TUFF -60% lapilli of qtz +feld +carb. -isolated 4cm X 2.5cm qtz. feld. frags. -numerous hairline feld->clay veinlets-randomly oriented							tr. 1%		12879	99.06-100.10	6.54										
99.97	100.89	100%	100.10-100.89 -thinly laminated/pseudo banding, black easily shatters VITRIC LITHIC TUFF -tr. mineralization qtz ± feld ± carbonate fragments up to 16mm in size -weakly carbontized frags.							tr. 1%		12880	100.10-100.89	6.51										

Drill Log #1

Date Oct. 24, 1987 Logged By Randy Singh

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NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size H0		DIP TESTS				PROPERTY Grew Creek		PROJECT No. 332		N.T.S. No. 105K-2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 11 of 33			
Lat 10000N		Elev		Dip -45°		171M		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No. NGC 87-16	
Dep 10300E		Length 171M		Bearing 199°													

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
			100.10 -10cm wide clay filled shear zone -exhibiting well developed slicken side -clay is very soft & shiny exhibiting extensive shear movement -orientation uncertain										
100.89	102.41	100%	100.89-103.94 -LITHIC LAPILLI TO CRYSTAL LITHIC TUFF -strongly pervasively clay altered horizon minor carbonitization ≈5% calcite xyls. throughout lithic lapilli up to 5mm long		tr.		12881	100.89-102.41					
			-10% glassy qtz. eyes 10-15% black volc. glass frags. 2-5mm in size -enclosing Py										
			100.89-102.41 -tr. Py min. 102.41-103.94 -2-3% Py 101.27 -30cm highly silicified zone ± qtz. + feld. ± carb. "boudin" lens										
			-part of a pinch and swell ≈65° cba 101.57 -10mm wide extensively sheared zone ±1-3% Py 101.60 -qtz. + feld. + carb. fracture filling @127° cba -x-cutting fracture are pyritic chlorite hairlines	≈65° cba 127° cba									
102.41	103.94	100%	102.41-103.94 -darker grey color than above with a pronounced increase in lapilli size fragments -2-3% Py min. throughout -generally a bit more silicified & distinctly more clay altered veins		2-3%		12882	102.41-103.94					
			-towards the bottom of section the lithic frags increase										
103.94	105.46	100%	103.94-105.16 -light grey to buff white LITHIC LAPILLI TUFF -v. easily weathers, strongly argillically altered moderately fractured, weakly carbonitized ± tr. -1% Py mineralization with up to 3% Py blebs in places		tr.		12883	103.94-105.16					

Drill Log 87

Date Oct. 24, 1987 Logged By Randy Singh

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NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size H0		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N T S No 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot 10000N		Elev		Dip -45°				RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 12 of 33	
Dep 10300E		Length 171M		Bearing 199°		171M				43°				Lot		Elev	
														Dep		Length	
														Bearing		HOLE No NGC 87-16	
From	To	Recovery	Description				Structure	Alteration	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
			$<5\%$ lithic fragments with up to 5% glassy qtz.-eyes -lapilli up to 15mm isolated 60mm size 104.02 fracture @ 75° cba 104.25 fracture @ 90° cba 104.31 fracture @ 20° cba 105.16 fracture @ 116° cba				75° cba 90° cba 20° cba 116° cba										
105.46	106.98	100%	105.16-106.46 LITHIC LAPILLI → CRYSTAL LITHIC TUFF -dark grey with less pervasive clay alteration -90% of felds. -has been alt. to clay. + TALC. - $\approx 5\%$ v. soft -argillite lithic fragments					ARGILLITE pyrite chlorite	1-3%		12884	105.16-106.46	0.103				
			-1-3% Py mineralization throughout with up to 5% occurring as 5mm blebs in places -numerous discontinuous hairline feld → clay + carb. veinlets -minor calcite xyls & ankerite -v. weakly carbonitize overall														
106.98	108.51	100%	106.46-107.34 -light grey to buff white easily weathers pervasively clay altered tuff 1-3% v.f.g. diss. Py throughout isolated 3-5mm massive Py blebs -20% lithic frags $\approx 1-2$ mm size 106.56 -pyrite + chlorite defining flow structure and/or remnant bedding plane $\approx 135^\circ$ cba				$\approx 135^\circ$ cba		1-3%		12885	106.46-107.34	0.343				
			107.34-108.51 -CRYSTAL LITHIC-LITHIC LAPILLI TUFF -pronounced decrease in lapilli and lapilli size fragments -minor calcite + ankerite in sections					ARGILLITE			12886	107.34-108.51	0.554				

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY Grew Creek		PROJECT No. 332		N.T.S. No. 105K-2										
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES												
Lat 10000N		Elev		Dip -45°		171M		RECORDED		CORRECTED		RECORDED		CORRECTED		Lot.		Elev.		Dip		HOLE No.		
Dep 10300E		Length 171M		Bearing 199°												Dep.		Length		Bearing		NGC 87-16		
From	To	Recovery	Description					Structure	Alteration	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS										
			107.69 -10cm wide zone of v. soft easily weathers and easily crumbles core					165° vba																
			107.84 -2mm thick clay filled joint @165° cba																					
			108.11 -108.31 soft, extremely easily weathers, fault zone																					
			-orientation uncertain																					
108.51	110.03	100%	108.51-110.03 -pervasively clay altered CRYSTAL LITHIC TUFF → LITHIC LAPILLI TUFF @ 10cm wide zone - LAPILLI TUFF -80% lapilli							tr. 1%		12887	108.51-110.03	C.069										
			108.96 -2mm clay filled shear @30° cba					30° cba																
			-moderately carbonitized with up to 10% calcite xyls. -tr. 1% Py min. 10-15% organic lithic frags.																					
110.03	111.56	100%	110.03-111.56 -CRYSTAL LITHIC → LITHIC LAPILLI TUFF -moderately carbonitized & pervasive clay alteration -numerous xyalline feld → clay + ankerite/siderite -1-3% Py min throughout							1-3%		12888	110.03-111.56	C.069										
			-7% of lithic frags are organic/plant remains -soft & easily-weathers																					
			111.06-111.56 -becomes more crystal lithic finer grained with less clay alteration																					
111.56	113.08	100%	111.56-112.78 -CRYSTAL LITHIC -LITHIC LAPILLI TUFF -unit becomes more lithic lapilli lower down in sequence									12889	111.56-112.78	C.137										
			-90% of all feldspars xyls has been altered to clay +carb.																					
			-weakly carbonitized																					
			-numerous hairline feld → clay veinlets (randomly oriented)																					

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

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NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size H0		DIP TESTS				PROPERTY Grew Creek		PROJECT No. 332		N.T.S. No. 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot 10000N		Elev.		Dip -45°		171M		RECORDED	CORRECTED	RECORDED	CORRECTED	Lot.		Elev.		Dip	
Dep 10300E		Length 171M		Bearing 199°								Dep		Length		Bearing	
																HOLE No. NGC 87-16	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
			111.76 -fracture @160° cba -90% of lithic frags are organic in nature & up to 12mm long	160° cba									
			112.78-113.60 -moderately-strongly silicified CRYSTAL LITHIC TUFF with 10 cm. wide qtz ± feld ± carb. fracture filling at 112.98 & 152° cba	152° cba	3-5%		12890	112.78-113.60	1.543				
113.08	114.60	100%	3-5% diss. Py throughout -strong clay alteration										
			* NOTE: FROM THE LAST COUPLE OF SECTIONS IT IS EVIDENT THAT THIS IS A SOMEWHAT GRADED SEQUENCE										
			113.60-115.08 -LITHIC LAPILLI TUFF -pervasively clay altered with 40mm blebs of feld clay + ankerite -numerous feld → clay veinlets randomly oriented										
114.60	116.13	100%	-10-15% lithic frags up to 17mm in size -1-3% diss. Py mineralization 7-10mm blebs 114.30 fracture @153° cba	153° cba	2-3%		12891	113.60-115.08	6.305				
			115.08-115.83 -c.g. LITHIC LAPILLI TUFF ± lapilli ranging from 10-17mm in size pronounced increase in carbonate content ≈ 10%-ankerite -tr. 1% Py mineralization		tr. 1%		12892	115.08-116.58	0.123				

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-numerous randomly oriented 2-3mm feld + clay + carb. veinlets

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NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
								RECORDED	CORRECTED	RECORDED	CORRECTED						
Lot 10000N		Elev		Dip -45°		171M				43°		Lat		Elev		Dip	
Dep 10300E		Length 171M		Bearing 199°								Dep		Length		Bearing	
HOLE No. NGC 87-16																	

From	To	Recovery	Description	Structure	Alteration	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
			@115.34 possibly bedding? @ 54° cba defined by a 'boudinage like' qtz + tourmaline?? structure	bedding @ 54° cba										
116.13	117.65	100%	115.83-116.58 -LITHIC LAPILLI TUFF 70% 2-6mm size lapilli -weakly carbonitized minor calcite xyls. -strongly clay altered throughout with isolated qtz + feld → clay + carb. veining -tr. Py mineralization											
			116.58-117.65 -c.g. LITHIC LAPILLI TUFF -60%-70% lapilli ranging from 10-15mm in size -15mm wide qtz + carb ± feldspar vein -10-15% -10mm long lithic fragments - argillaceous and/or organic?? -moderately carbonitized -mod. - strongly clay altered		ARGILLIC CARB			12893	116.58-117.65	0.20%				
117.65	119.18	100%	117.65-119.18 -CRYSTAL LITHIC → LITHIC LAPILLI TUFF -pervasively clay altered -minor calcite (<5%) with up to 5% ankerite occurring as smears - ~10% lithic frags 2-3mm size volc. glass + argillite + organics (plant remains) -numerous 1-2mm hairline clay + carbonate veinlets (randomly oriented) -isolated large lapilli - 15mm size completely altered to clay + carb.		ARGILLIC CARB			12894	117.65-119.18	0.40%				

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2									
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES											
Lot 10000N		Elev		Dip -45°		171M		RECORDED		CORRECTED		RECORDED		CORRECTED		Lot		Elev.		Dip		HOLE No.	
Dep 10300E		Length 171M		Bearing 199°												Dep		Length		Bearing		NGC 87-16	
From	To	Recovery	Description					Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS										
119.18	120.70	100%	119.18-120.60 -buff white-cream strongly bleached, pervasively clay altered, mod→strongly silicified -CRYSTAL LITHIC→LITHIC LAPILLI TUFF becoming more crystal lithic towards the bottom 119.58-119.93 -somewhat brecciated with 70mm angular qtz + feld ± carb fragments -bomb shaped rhyolite fragments up to 60mm long making up 20% of Rx. -20% glassy quartz eyes throughout -mod. carbonitized -up to 10% ankerite smears throughout (7-10mm)					Structure 355° cba K bedding?	1-3%		12895	119.18-120.60											
			120.60 -2-4mm wide discontinuous tourmaline + Pyrite fracture filling? ≈155° cba Pyritic clay/chlorite horizon possibly defining bedding ≈120° cba -up to 3% Py in veins					≈155° cba ≈120° cba															
120.70	122.22	100%	120.60-123.35 -CRYSTAL LITHIC TUFF with less pervasive argillic alteration but still strongly clay altered -med. grey to dark grey in color -up to 15% unaltered feldspar xyls. -very noticeable -1-3% Py mineralization throughout with numerous 3-5mm Py blebs -5-10% lithic fragments ≈1-2mm size -10% glassy quartz eyes throughout					Structure	1-3%		12896	120.60-122.22											
									4%		12897	122.22-123.35											

Drill LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 17 of 33	
Lat 10000N		Elev		Dip -45°				RECORDED	CORRECTED	RECORDED	CORRECTED	Lat		Elev			
Dep 10300E		Length 171M		Bearing 199°								Dep		Length		Bearing	
																HOLE No. NGC 87-16	

From	To	Recovery	Description	Structure	Alteration	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
122.22	123.75	100%	-isolated feld → clay hairline veinlets -alteration increases towards the bottom, so also does lithic fragments size and crystal size -Py increases to 4%										
			121.62 -clay coated shear plane @25° cba	25° cba									
			123.35-127.39 -LITHIC LAPILLI → CRYSTAL LITHIC TUFF -strongly pervasively clay altered throughout -up to 20% lithic fragments up to 20mm in size (predominantly a volc. glass-shard material) -3-5% v.f.g. disseminated Py. mineralization throughout -up to 10% crystalline calcite -weakly carbonitized			3-5%		12898	123.35-124.82	0.054			
123.75	125.27	100%	124.82-125.72 -qtz + feld stockwork -4-10mm contorted & altered veins mod. carbonitize -up to 10% calcite xyls.					12899	124.82-125.72	0.171			
			@125.12 -qtz. + feld vein exhibit 10mm displacement ≈ 30° cba	30° cba									
			125.47 -qtz + feld -vein stockwork @50° cba	50° cba									
			125.55 -qtz + feld veins @28° cba	28° cba									
			125.64 -qtz + feld vein @52° cba	52° cba									

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NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2									
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES											
Lot 10000N		Elev		Dip -45°		171M		RECORDED		CORRECTED		RECORDED		CORRECTED		Lat.		Elev		Dip		HOLE No.	
Dep 10300E		Length 171M		Bearing 199°												Dep.		Length		Bearing		NGC 87-16	
From	To	Recovery	Description					Structure	INTERPOLATION	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS									
125.27	126.797	100%	125.72-127.39 -dark grey, clay altered LAPILLI TUFF -70% lapilli, but still matrix supported -10-15% lithic fragments predominantly a volc. glass -minor argillite + plant remains							tr. 1%		12900	125.72- 126.57	0.171									
126.797	128.32	100%								tr. 1%		12901	126.57- 127.39	0.265									
			127.39-128.72 -buff white to v. light grey pervasively clay altered CRYSTAL LITHIC - LITHIC LAPILLI TUFF							tr. 1%		12902	127.39- 128.12	0.157									
			127.69 -isolated 20-30mm wide banded qtz + feld + ankerite siderite vein -micro fracturing displaces vein -carbonate mantles qtz + feld.					157° cba															
			127.92 -4mm clay filled fracture/fault @40° cba -noticeable textural change across fault -core becomes less crystalline below fault -minor feld → clay + talc? (bluish-green v. soft soapy fell mineral)					40° cba															
			128.12-128.72 -core becomes more pervasively clay altered towards the bottom -tr. 1% v.f.g. Py min.							tr. 1%		12903	128.12- 128.72	0.343									
128.32	129.84	100%	128.72-129.84 -dark grey CRYSTAL LITHIC TUFF strongly clay altered									12904	128.72- 129.84	0.171									

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

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NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lot 10000N		Elev		Dip -45°		171M		RECORDED	CORRECTED	RECORDED	CORRECTED	Lot		Elev		Dip	
Dep 10300E		Length 171M		Bearing 199°								Dep		Length		Bearing	
																HOLE No. NGC 87-16	
From	To	Recovery	Description				Structure	Alteration	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
			129.12-129.57 -extensively broken core														
			129.72 -4mm qtz. vein @154° cba truncated by another vein @99° cba														
			-4mm feld → clay + carb														
			-discontinuous exhibits frag. fracture-filled qtz.														
			-40% glassy qtz eyes of 70% total qtz.														
			-30% all feld xyls < 10% matrix														
129.84	131.37	100%	129.84-131.37 -pervasively clay altered, mod. carbonitized CRYSTAL LITHIC TUFF						1-3%		12905	129.84-131.37					
			-1-3% Py v.f/g. diss. Py mineralization throughout														
			-up to 5% in places with 2-5mm size Py blebs														
			-20-30% glassy qtz. eyes														
			-10-15% lithic fragments predominantly plant remains														
			-10-15% calcite xyls. throughout														
			-numerous clay hairline size veinlets - randomly oriented														
			-core becomes more clay altered & easily weathers towards the bottom														
131.37	132.89	100%	131.37-132.22 -CRYSTAL LITHIC TUFF						1-2%		12906	131.37-132.22					
			-strongly silicified, extensively broken core with no core lost						up to 5% in places								
			-strongly clay altered in places associated with higher Py content 1-2% Py mineralization overall with up to 5% Py in altered zone.														

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

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NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2									
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES											
Lot 10000N		Elev		Dip -45°		171M		RECORDED		CORRECTED		RECORDED		CORRECTED		Lot		Elev		Dip		HOLE No	
Dep 10300E		Length 171M		Bearing 199°												Dep		Length		Bearing		NGC 87-16	
From		To		Recovery		Description				Structure		ALTERATION		% Sulph.		Est. Grade		SAMPLE No		Width		ASSAYS	
						131.67 -18mm wide qtz + feld ± carbonate veining @ 143 cba				143° cba													
						132.07 -5mm wide feld → clay vein/dykelet @159° cba				159° cba													
						132.22-133.19 -buff white to light grey pervasively clay altered moderately carbonitized CRYSTAL LITHIC LITHIC LAPILLI TUFF -mottled surface possibly due to calcite weathering int.								tr.				12907		132.22-133.19			
						-isolated hairline feld → clay veinlets ~10% glassy qtz eyes throughout																	
						132.79 -6mm wide qtz + feldspar ± carbonate lens -highly vesiculated < 1mm size vesicles																	
132.89		134.42		100%		133.19-134.42 -buff white + v. light grey, pervasively clay altered CRYSTAL LITHIC - LITHIC LAPILLI TUFF with up to 8mm size lapilli -tr. -1% Py mineralization throughout - < 5% k-spar xyls remains unaltered								tr. 1%				12908		133.19-134.42		644	
						133.49 -5mm wide banded qtz + feld vein @32° cba -numerous hairline feld → clay veinlets -randomly oriented				BRECCIATED KATZ VEIN CHLORITIC HORIZONTAL 32° cba													
						134.02 -3mm qtz + feld + carb. vein - contorted but parallel to cba																	
						134.12 -chloritic slip plane // a brecciated qtz vein @18° cba				18° cba													

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

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NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2									
FIELD CO-ORDINATES						DEPTH		BEARING RECORDED CORRECTED		ANGLE RECORDED CORRECTED		SURVEYED CO-ORDINATES											
Lat 10000N		Elev		Dip -45°		171M				43°		Lat		Elev		Dip							
Dep 10300E		Length 171M		Bearing 199°								Dep		Length		Bearing							
From		To		Recovery		Description				Structure		% Sulph.		Est. Grade		SAMPLE No		Width		ASSAYS			
						134.42 - 5mm qtz + feld vein @ 30° cba																	
134.42		135.94		100%		134.42-135.07 -less clay altered CRYSTAL LITHIC TUFF -4% v.f.g. disseminated Py mineralization throughout -5mm smears of a brown-biege carbonate-ankerite -moderately carbonitized throughout						4%				12909		134.42-135.07					
						134.8 - 3mm wide qtz vein @ 52° cba -numerous hairline feld clay veinlets -randomly oriented				52° cba													
						135.07-135.94 -altered CRYSTAL LITHIC TUFF - numerous qtz ± feld ± clay ± carb very stockwork with 3-5% Py throughout						3-5%				12910		135.07-135.94					
						135.07 - 3mm qtz ± feld vein @ 165° cba -qtz ± feld + clay ± carb @ 150° cba																	
						135.17 - 7mm qtz ± feld + clay veins @ 148° cba																	
						135.24 - uneven qtz + feld ± carb stockwork @ 15° cba 135.24-135.94 - large qtz ± feld + clay ± carb veined stockwork contorted																	
135.94		137.46		100%		135.94-137.46 -CRYSTAL LITHIC - LAPILLI TUFF - much less vein stockwork less pervasively alt. & lg. blebs of brown-lg. brown carbonate - weakly fizz on grinding - siderite?						1-2%				12911		135.94-137.46					

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

092099

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Date Oct. 24, 1987 logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size H0		DIP TESTS				PROPERTY Grew Creek		PROJECT No. 332		N.T.S No. 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat. 10000N		Elev.		Dip -45°		171M		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep. 10300E		Length 171M		Bearing 199°								Dep.		Length		Bearing	
From	To	Recovery	Description					Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
			140.01 -4-7mm qtz + feld + carb vein @20° cba					K gre. + feld + carb. 20° cba									
			140.06 -5mm wide clay filled shear plane @57° cba														
			140.31 -qtz vein @22° cba														
			-2-3mm size v.f.g. Py blebs throughout ⇒ 1-3% Py														
			140.26 -shear plane @22° cba														
140.51	142.04	100%	140.51-141.16 -highly broken core lots of qtz + feld veining								12915	140.51-141.16					
			-possibly a silicified crystal lithic tuff														
			-one 9mm vein is predominately k-spar-unaltered														
			MICROCLINE														
			141.16-141.84 -dk. grey LITHIC LAPILLI TUFF strongly bleached zone (buff-white) & extensive pervasive clay alteration								12916	141.16-141.84					
			-well developed stockwork of qtz+k-feld ± plag ± carb veining														
			-numerous hairline alt. clay ± carb veinlets														
			-lapilli 10% Rx. 4-12mm size														
			-10% lithic frag. 2-6mm size predominately volc. glass														
			+ plant remains														
			141.21 -10mm qtz + plag + carb vein @ 160° cba					K qtz + plag + carb 130° cba									
			141.41 -qtz. + plag vein @130° cba														
			141.71 -10mm qtz + plag + carb vein is displaced by K-spar + qtz + carb vein														
			-numerous hairline alt clay + carb veinlets throughout randomly oriented														

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No. 105K-2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 24 of 33	
Lat. 10000N		Elev				Dip -45°		RECORDED		CORRECTED		RECORDED			
Dep 10300E		Length 171M		Bearing 199°						43°				HOLE No. NGC 87-16	
From	To	Recovery	Description				Structure	ALTERED	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS		
142.0	143.56	100%	141.84-142.80 -strongly silicified & veined CRYSTAL LITHIC - LITHIC LAPILLI TUFF -numerous feld→clay + carb veinlets -predominantly argillic alt ≈ 10% qtz eyes (glassy) -feldspar lapilli up to 7mm long -moderately carbonitized up to 15% calcite xyls -veined carbonate is extensively ankerite/siderite					ARGILLIC CARB			12917	141.84-142.80			
			142.39-142.52 -strongly silicified zone sharp upper contact & gradual lower contact 95% qtz + min feld + carb ≈ 135 cba												
			142.70-142.76 -6cm wide qtz vein in both contact sharp & contorted ≈ 40° cba -lots of host rock assimilation into qtz. + feld. + carb. veining						tr. 1%						
			142.80-143.56 -dk. grey LAPILLI TUFF within an altered crystalline matrix -lithic frag. up to 10mm in size make up 30% Rx. Lapilli make up 60% of Rx.					ARGILLIC CARB	1-2%		12918	142.80-143.56			
			-numerous feld→clay + carb. veinlets -weakly carbonitized pervasive argillic altered												
			145.15 -calcite cooled fracture @ 132° cba ≈ feld→clay + smithsonite? veining -mod. - strongly carbonitized throughout					calcite feld-clay + carb (smithsonite?)							
143.56	145.08	100%	143.56-146.61 -Mg.-Gg. medium gray CRYSTAL LITHIC TUFF crystals & frags. range in the 2-4mm size range -strongly carbonitized up to 15-20% calcite xyls & calcite rich fracture & veining					ARGILLIC CARB			12919	143.56-144.31			

DRILL LOG #1

-10-15% black volc. glass material-angular 1-3mm size
-numerous feld.→clay + carb. veinlets

Date Oct. 24, 1987 Logged By Randy Singh

092039

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size H0		DIP TESTS				PROPERTY Grew Creek		PROJECT No. 332		N.T.S. No. 105K-2									
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES													
Lot 10000N		Elev		Dip -45°		171M		RECORDED		CORRECTED		RECORDED		CORRECTED		Lat.		Elev.		Dip		HOLE No.	
Dep 10300E		Length 171M		Bearing 199°												Dep		Length		Bearing		NGC 87-16	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
			144.31-145.08 -high veined ±5mm qtz + feld. + carb. 144.51 -qtz. + feld. + carb. @140° cba		1%		12920	144.31-145.08					
			144.66 -5mm clay filled slip surface @38° cba 144.78-145.08 -highly broken core ±10mm banded qtz. + feld. + carb. veining (orientation unknown)										
145.08	146.61	100%	145.08-146.61 -dk. grey, med - strongly carbonitized ±10-15% calcite xyls & calcite contorted fracture surfaces -pervasive argillic alteration -numerous hairline → 3mm qtz. + feld. + carbonate veins randomly oriented		Tr. 1%		12921	145.08-146.61					
			146.41-clay coated slip/fracture plane @164° cba										
146.61	148.13	100%	146.61-151.18 -CRYSTAL LITHIC becoming very LITHIC LAPILLI towards the bottom -highly bleached looking rock exhibiting extensive argillic altered - Matrix completely altered to clay -zones of intensive veining stockwork -large blebs of a dk. greenish grey carb. → smithsonite -sulphide content ranges from Tr.-1% to 1-3% -misty blebs 2-3mm Py.			1-3%	12922	146.61-147.68					
			147.08 -contact @80° cba of dk. grey crystal lithic tuff & high alt. v.c.g. lapilli tuff -lapilli tuff "layer" is only 5cm.		1-3%								

DEPT LOG #1 numerous highly contorted 5mm wide qtz. + feld. + carb. veining

Date Oct. 24, 1987 Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S No 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING RECORDED CORRECTED		ANGLE RECORDED CORRECTED		SURVEYED CO-ORDINATES				Sheet 26 of 33	
Lat 10000N		Elev		Dip -45°		171M				43°		Lat		Elev		Dip	
Dep 10300E		Length 171M		Bearing 199°								Dep		Length		Bearing	
HOLE No. NGC 87-16																	

From	To	Recovery	Description	Structure	ATTITUDE	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS					
			147.53 -4mm wide qtz. + feld. clay + carb. vein along slip plane @32° cba -weakly carbonitized due to v.f.g. calcite xyls.												
			147.68-148.43 -perva sively argillic altered zone E numerous 4-8mm wide qtz. + feld. + carb (smithsonite) veining -contoured & parallelling core axis -numerous other calcite rich veinlets throughout section			tr. 1%		12923	147.68-148.43	100%					
148.13	149.66	100%	148.43-149.66 -perva sively altered - clay crystal lithic becomes lithic lapilli tuff -highly broken section are associated qtz. ± feld. ± carb. veining			1-2%		12924	148.43-149.66	100%					
			149.51 -5mm banded qtz. + feld. ± carb vein define fracture @131° cba	131° cba											
149.66	151.18	100%	149.66-151.18 -altered and well veined E numerous slip planes 150.18 -slip plane @44° cba	44° cba				12925	149.66-151.18	100%					
			150.27 -slip plane - clay coated @127° cba & 49° cba 150.56 -3mm wide banded qtz. + feld. + carb. vein @ 21° cba												
			150.85 -fracture @51° cba												

DRILL LOG #1

Date Oct. 24, 1987 Logged By Kandy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collared Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size H10		DIP TESTS				PROPERTY Grew Creek		PROJECT No. 332		N.T.S. No. 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat 10000N		Elev		Dip -45°				RECORDED	CORRECTED	RECORDED	CORRECTED	Lot		Elev		Dip	
Dep 10300E		Length 171M		Bearing 199°								Dep		Length		Bearing	
																HOLE No. NGC 87-16	

From	To	Recovery	Description	Structure	Alteration	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
			150.91 - 3mm feld. + carb. vein @ 123° cba													
151.18	152.70	100%	151.18-152.18 - Altered Lithic Lapilli to Crystal Lithic Tuff -dk. grey to buff in pervasively clay alt. sections -numerous 1-3mm size feld. + clay + carbonate (smithsonite) possibly minor ankerite veinlets -fairly soft v.f.g. dk. brown-black carbonate, hardness 3 Mangosite?? -fizzes vigorously -mod. carbonitized throughout section -70% lapilli 2-6mm with up to 12mm size -isolated banded qtz. ± feld. + carb vein 3mm			1-3%		12926	151.18-152.18							
			152.13 - qtz. vein defining fracture @ 62° cba 152.18 - 4mm qtz. + carb. vein along fracture	62° cba 117° cba												
152.70	154.23	100%	152.18-153.33 - very light grey to buff white extensively pervasively altered - argillic -LITHIC LAPILLI TUFF - almost a breccia tuff 2-20mm v. angular rhyolite frags. make up 60% of Lithic frags. - <10% feld. xyls. shows complete alt. matrix is completely alt. to clay -mod. carbonation with up to 20% - 8mm size calcite xyls. -numerous 1mm size feld. - clay veinlets (randomly oriented)			3-5%		12927	152.18-153.33							

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		NTS No 105K-2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 28 of 33	
Lat 10000N		Elev				Dip -45°		RECORDED		CORRECTED		RECORDED			
Dep 10300E		Length 171M		Bearing 199°						43°					
Lat		Elev		Dip		HOLE No.		Dep		Length		Bearing		NGC 87-16	
Dep		Length		Bearing											

From	To	Recovery	Description	Structure	Alteration	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
			152.70 -lg. qtz. vein? angular feld. + calcite frags. -petruded out toward, the top -contorted -3-5% Py mostly as 3-5mm size blebs											
			153.13 -contorted qtz. + feld. + carb. vein -banded & exhibits cracking -oriented 10° cba											
			153.33-154.08 -extensively broken core -largest piece is approximately 10cm long -strongly silicified section numerous qtz. + carb. + feld. veining -apparently there is no core lost			tr.		12928	153.33-154.08					
			154.08-154.23 -M.g. - c.g. dk. grey Lithic Crystal Tuff -mod. carbonitized -almost crystal with <15% matrix -matrix completely alt. to clay -20-30% lithic frag. predominately 5% blue/green feld. → clay xyls. v. soft 1-1½			1-3%		12929	154.08-154.23					
154.23	156.36	50%	154.23-156.36 -obvious core lost -very competent Rx. only a 20 cm broken section -CRYSTAL LITHIC - LITHIC LAPILLI TUFF up to 7% v.f.g. diss. Py throughout -70% lithic frag. are large lapilli size feld. + banded rhyolite -up to 10% pink felds.			5-7%		12930	154.23-156.36					

DRILL LOG #1

-first & v. noticeable appearance

Date Oct. 24, 1987 Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size 110		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat 10000N		Elev		Dip -45°		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 27 of 33	
Dep 10300E		Length 171M		Bearing 199°						43°				HOLE No. NGC 87-16	
From	To	Recovery	Description				Structure	ALTERATION	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS		
			-10mm wide carbonous mudstone injected with cracks -dk. grey to brown												
			* ALL PREVIOUSLY MAPPED SMITHSONITE RICH VEIN ORIENTATION IS PROBABLY A CARBONIOUS MUDSTONE?												
156.36	156.97	100%	156.36-156.97 -CRYSTAL LITHIC - LITHIC LAPILLI 10-15mm carbonaceous mudstone injected into crack to core axis -5mm calcite & feldspar xyls inches in injected -mod. broken core & mod. silicified in sections					ALtered Calcite	1-3%		12931	156.36-156.97	343		
156.97	158.19	100%	-CRYSTAL LITHIC - LITHIC LAPILLI a few 5-10mm injection -numerous feld→clay veinlets throughout -lithic frags. & lapilli are greatly reduced in section -weakly carbonitized min. calcite xyls. -most carbonite occurs with feld→clay + calcite xyls. -numerous smears of carbonious mudstone -1-2% v.f.q. diss. Py throughout with up to 4% in places						1-2%		12932	156.97-158.19	71		
			158.0 & 158.06 calcite centered fracture @25° cba												
158.19	158.80		158.19-158.80 -pervasively altered matrix 10-15mm carbonous mudstone/silicified dykelets - injected within cracks						tr, 2%		12933	158.19-158.80			

DRILL LOG #1

Date Oct. 24, 1987 - Logged By Randy Singh

660280

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2									
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES													
Lat 10000N		Elev		Dip -45°		171M		RECORDED		CORRECTED		RECORDED		CORRECTED		Lat		Elev		Dip		HOLE No	
Dep 10300E		Length 171M		Bearing 199°												Dep		Length		Bearing		NGC 87-16	
From	To	Recovery	Description				Structure	ALTERATION	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS										
			158.64 -moderately silicified -isolated qtz. + feld. ± carb. veins @22° cba				22° cba																
158.80	160.32	100%	158.80-160.07 -strongly silicified & minor argillic alteration -carbonitized & 10% calcite xyls throughout -CRYSTAL LITHIC - LITHIC LAPILLI TUFF in silicious matrix								12934	158.80-159.47	132										
			-90% of feldspar are unaltered -50-60% lithic frag. & 90% being silicious rhyolite -up to 5% Py min. occur as 5-7mm size blebs								12935	159.47-160.07	132										
			160.02 -isolated 5mm qtz. + feld. + carb. veining being displaced by later feld. → clay alt. veinlets -maximum displacement ≈ 10mm																				
160.32	161.54	100%	160.07-166.12 -pervasively clay altered & matrix completed clay altered LITHIC LAPILLI, to CRYSTAL TUFF -easily weathers - molted surface						tr. 2%		12936	160.07-160.92	134										
			-weakly to mod. carbonitized from the more alt. zone to less alt. zones																				
			160.07 -																				
			160.07-160.32 -extremely broken & easily weathered, pervasively alt. core						tr. 2%		12937	160.92-161.54	134										
			160.62-160.77 -completely alt. zone 90% feld → clay alteration sharp contact 66° cba -numerous feld → clay veinlets																				

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		N.T.S. No 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 31 of 33	
Lot 10000N		Elev		Dip -45°				RECORDED	CORRECTED	RECORDED	CORRECTED	Lot		Elev			
Dep 10300E		Length 171M		Bearing 199°								Dep		Length		Bearing NGC 87-16	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
			161.14-161.74 -strongly broken core 5mm qtz. + feld. + carb. vein (orientation unknown)		tr. 2%		12938	161.54-162.39					
161.54	163.07	100%	162.39-163.07 -more argillith alt. section -buff brown - white -noticeable more Pyrite 1-3% occur as blebs		1-3%		12939	162.39-163.07					
163.07	163.98	100%	163.07-163.98 -moderately broken core -easily weathers -pervasively alt. - argillic -tr. -1% Py-v.f.g. diss.		tr. 1%		12940	163.07-163.98					
163.98	164.897	100%	163.98-164.897 -pervasively altered & numerous 2-3mm feld->clay + calcite fracture filling & veinlets -fracture fill //core axis -veinlets on randomly oriented		tr. 1%		12941	163.98-164.897					
164.897	166.42	100%	164.897-165.55 -strongly broken core & numerous 5mm qtz + feld + calcite vein stockwork + continuous mudstain injection & 100% calcite veinlets		tr. 1%		12942	164.987-165.55					
			165.55-166.12 -pervasively altered mottled surface becoming more lithic - lapilli towards the bottom 166.0-166.12 -90% Rx.-lithic lapilli fragments				12943	166.55-166.12					
166.42	167.94	100%	166.12-170.99 -slightly more silicified & extensively broken section CRYSTAL LITHIC - LITHIC LAPILLI TUFF -numerous qtz. + feld. + calcite veining & fracture filling										
			extensively bleached section correspond to more argillic alt. section -becomes more lithic lapilli towards the bottom		tr. 1%		12944	166.12-167.27					

Drill LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collared Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		NTS No 105K-2				
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES						
Lat 10000N		Elev		Dip -45°		171M		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat		Elev		Dip		
Dep 10300E		Length 171M		Bearing 199°								Dep		Length		Bearing		
From	To	Recovery	Description				Structure	ALTERATION	% Sulph	Est. Grade	SAMPLE No	Width	ASSAYS					
			167.27-22mm wide rhyolite dykelet <5mm size crystal tuff xenolith -rimmed by 3-5mm size qtz + feld. + calcite -sharp 1-2mm reaction contact -mod. carbonitized				SIDE OF RING OF feld + calcite dyke xenolith dyke @ 168° cba											
			167.27-167.84 -extensively broken core -crushed -with no apparent core loss -every piece is highly silicified - rhylitic								12945	167.27-167.84						
			167.84-168.54 -more competent Rx. moderately carbonitized & pervasive argillic alt. -dk. grey				gr. feld + calcite vein SIDE		tr. 1%		12946	167.84-168.54						
167.94	169.47	100%	167.84 -3mm qtz. + feld. + calcite vein 175° cba 168.14 -3mm qtz. + feld. + calcite vein @ 38° cba -fracture plane @ 140° cba				fracture											
			168.14-168.34 -highly broken core															
			168.54-169.24 -buff white, moderately silicified pervasively clay alt. section -lg. qtz. + feld. + carb. veining -minor ankerite						tr. 1%		12947	168.54-169.24						
			169.14 -25mm qtz. + feld. + carb. (calcite + ankerite) vein @ 36° cba				36° cba											

Drill LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

002099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 23, 1987		Date Completed Sept. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY Grew Creek		PROJECT No 332		NTS No 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
								RECORDED		CORRECTED		RECORDED		CORRECTED			
Lat 10000N		Elev		Dip -45°		171M				43°				Lat		Elev	
Dep 10300E		Length 171M		Bearing 199°										Dep		Length	
From		To		Recovery		Description				Structure		ALTERATION		% Sulph.		Est. Grade	
														SAMPLE No		Width	
						169.24-170.06 -silicified, alt. Lithic lapilli tuff -pronounce increase in lapilli xyls & frag. <10mm size -less feldspar → clay ateration								12948		169.24-170.06	
169.47		170.99		100%		170.06-170.99 -strongly silicified & carbonitized ± pervasive clay alteration -5cm zone of extensive-pervasive clay alt. -easily weathered possibly a shear zone numerous qtz. + feld. + carb. veining & veinlets randomly								12949		170.06-170.99	
						170.79 -10mm highly contorted qtz. + feld. + carb. vein @18 cba											
						END OF HOLE "HURRAY"											

DRILL LOG #1

Date Oct. 24, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

17

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
						RECORDED		CORRECTED							
Lot 10000N		Elev		Dip -70		152.40				-71°				Sheet 1 of 22	
Dep 10300E		Length 352.96		Bearing 199°		349.91				-78°				HOLE No.	
														NGC 87 - 17	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
0	56.998	0%	0-57.47 -OVERBURDEN - GLACIAL TILL -pebble → cobble, v. stiff, sandy clay till -v. strongly carbonitized -easily crumbles between the fingers -low plasticity -contact ≈ 117° cba -contact is very jagged - gives the impression that the O/B gradually penetrated and assimilated the bedrock				12950	56.998-57.47					
58.52	60.05	100%	57.47-78.99 -ALTERED FELSIC VOLCANOCLASTIC → REWORKED VOLCANICS OR STRANGE ALTERED RHYOLITE (broken & cemented then subsequently altered???) -extensive pervasive argillically altered		10-15		12951	57.47-58.68					
60.05	61.57	100%	-minor carbonitization -k-spar rich zones are moderately silicified		15-20		12952	58.68-59.53					
61.57	63.09	100%	-v. well mineralized throughout 10-15% with up to 30% Py in places		10		12953	59.53-60.05					
63.09	64.62	100%	-2-8mm wide massive Py in places -10-15% glassy qtz. eyes throughout		10-15		12954	60.05-60.80					
64.62	66.14	100%	-clay alteration is to a chalky white & a greenish soapy clay varieties		20		12955	60.80-61.57					
66.14	67.67	100%	- ≈ 10% small euhedral Py throughout -90% Py is v.f.g. diss.		10-15		12956	61.57-62.27					
67.67	69.20	100%	-moderately broken core with no apparent core lost -numerous clay filled slip/fracture throughout		15		12957	62.27-63.29					
69.20	70.71	100%			40		12958	63.29-63.55					
70.71	72.24	100%	57.64 -12mm clay filled shear/fracture zone	@48° cba	15-20		12959	63.55-64.36					
72.24	73.76	100%			20		12960	64.36-65.02					

DRILL LOG #1

Date Oct. 6, 1987 logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2		
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 2 of 22		
Lp 0000N		Elev		Dip -70		152.40		RECORDED		CORRECTED		RECORDED		CORRECTED		
Dep 10300E		Length 352.96		Bearing 199°		349.91						Lot.		Elev.		
												Dip		HOLE No.		
												Dep.		Length		
												Bearing		NGC 87 - 17		
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
73.76	74.68	100%	57.79 -clay filled fracture v. pyritic $\bar{c}$ up to 30% Py				130° cba		30		12961	65.02-	FL	Ho		
74.68	76.20	100%	59.23 -minor flow structure? 20mm wide. d				92° cba		5-7		12962	66.14-	FL	Ho		
76.20	77.72	100%	61.00 -fracture - highly mineralized ($\approx$ 30%Py)				148° cba		7-10		12963	67.67-	FL	Ho		
77.72	79.25	100%	61.77 -fracture @				46° cba		10-15		12964	69.20-	FL	Ho		
			62.07-62.27 -strongly silicified with numerous qtz. veining				28° cba & 132° cba		10-15		12965	70.71-	FL	Ho		
			63.44 -3mm clay filled fracture				23° cba		5-7		12966	71.21-	FL	Ho		
			69.34 -vuggy Pyritic clay + calcite fracture				40° cba		2-3		12967	72.24-	FL	Ho		
			69.59 -fracture $\bar{c}$ 5cm k-spar metasomatism				128° cba		7-10		12968	72.84-	FL	Ho		
			69.69 -3mm Py + clay fracture filling				123° cba		10-15		12969	73.76-	FL	Ho		
			70.54 -3mm clay filled fracture				42° cba		10-12		12970	74.68-	FL	Ho		
			70.87 -2-3mm Pyritic clay fracture filling				160° cba		10-15		12971	75.58-	FL	Ho		
			71.02 -clay filled fracture				47° cba		7-10		12972	76.20-	FL	Ho		
			73.07 -2mm Pyritic clay filled fracture				65° cba		15-20		12973	77.24-	FL	Ho		
			73.51 -5mm Pyritic clay filled fracture				32° cba		10-15		12974	77.72-	FL	Ho		
			74.18 -10mm clacite + feld $\pm$ qtz vein				130° cba		7-10		12975	78.27-	FL	Ho		
			74.94 -clay coated fracture				165° cba					78.99	FL	Ho		

DRILL LOG #1

Date Oct. 6, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 3 of 22	
Lat. 10000N		Elev.		Dip -70		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No.	
Dep. 10300E		Length 352.96		Bearing 199°		152.40				-71°				NGC 87 - 17	
						349.91				-78°					
From	To	Recovery	Description			Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
			71.02 -clay filled fracture			47° cba						76	46		
			73.07 -2mm Pyritic clay filled fracture			65° cba									
			73.51 -5mm Pyritic clay filled fracture			32° cba									
			74.18 -10mm calcite + feld + qtz vein			130° cba									
			74.94 -clay coated fracture			165° cba									
			75.44 -shear plane			54° cba									
79.25	79.86	100%	78.99-117.96 -ALTERED CRYSTAL LITHIC TUFF → LITHIC LAPILLI TUFF					20+		12976	78.99-	41	450		
79.86	81.38	100%	-dark grey, strongly siliceous well mineralized in places					20+		12977	79.50-	42			
81.38	82.91	100%	-up to 40% 7-10mm size lapilli in places					10-15		12978	80.16-	42			
82.91	84.43	100%	-occasional extensively bleached horizons								80.16-				
			-strongly → pervasively clay alt. throughout					2		12979	80.96-	46			
			-brecciated in places								80.96-				
84.43	85.95	100%	-numerous calcite coated slip surfaces					15		12980	81.38-	410			
			-< 5% coal frags in places								81.38-				
85.95	87.48	100%	-10-15% Py mineralization throughout occurring mostly					5		12981	82.39-	380			
			20-35mm massive blebs								82.39-				
87.48	89.0016	100%	-mod. - strongly carbonitized in places					3		12982	83.21-	340			
			-strongly juiced up in places								83.21-				
89.0016	90.53	100%	-isolated feld + calcite veining					3		12983	84.04-	360			
			-numerous feld + calcite + qtz stringers throughout								84.04-				
90.53	92.05	100%	-Py mineralization drops off towards the bottom					15-20		12984	85.03-	420			
			-v. easily weathers in places								85.03-				
92.05	93.57	100%	-lithic frags are mostly volc. glass + coal					5-7		12985	85.95-	220			
			-core becomes very rhyolitic crystal tuff in places								85.95-				

Drill Log 81

Date Oct. 6, 1987 87.48
 Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 4 of 22	
Lat 10000N		Elev		Dip -70		152.40		RECORDED		CORRECTED		-71°		Lot.	
Dep 10300E		Length 352.96		Bearing 199°		349.91		RECORDED		CORRECTED		-78°		Elev	
														Dip	
														Bearing	
														HOLE No.	
														NGC 87 - 17	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
									Fe	Hg			
93.57	95.098	100%			3-5		12986	87.48-					
95.098	96.62	100%			3-5		12987	89.0016					
96.62	98.15	100%			1-3		12988	90.78					
98.15	99.67	100%	80.16 -fault zone - fault contact between lithologies	140° cba	1-3		12989	90.78- 92.05					
99.67	101.19	100%	80.76 -clay filled fracture plane @	46° cba	1-3		12990	93.57					
101.19	101.80	100%	86.55 -16mm pyritic black clay filled fracture	45° cba	1-3		12991	95.098					
101.80	102.57	100%	86.82 -5mm clay coated shear plane - slicken sided	36° cba	3-5		12992	95.72					
102.57	105.77	100%	86.90 -5mm clay coated shear plane	108° cba	1-3		12993	96.62					
105.77	108.81	100%	86.98 -15mm pyritic clay filled fracture	133° cba	3-5		12994	97.54					
108.81	111.86	100%	87.25 -60mm pyritic clay filled fracture	38° cba	2-5		12995	98.82					
111.86	114.91	100%	90.78 -12mm clay filled fault	33° cba	2-5		12996	99.67					
114.91	117.96	100%	91.25 -7mm feld + calcite vein	40° cba	2-5		12997	101.19					
			102.37 -calcite coated fracture	119° cba	2-3		12998	101.80					
			103.02 -5mm clay filled joint	27° cba	3-5		12999	103.02					
			104.096 -clay filled fracture	120° cba				104.496					
			104.196 -clay filled fracture	33° & 32° cba									

DRILL LOG #1

Date Oct. 6, 1987 Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK				PROJECT No. 332		N.T.S. No. 105K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 5 of 22	
								RECORDED	CORRECTED	RECORDED	CORRECTED								
Lat. 10000N		Elev.		Dip -70		152.40				-71°		Lat.		Elev.		Dip		HOLE No.	
Dep. 10300E		Length 352.96		Bearing 199°		349.91				-78°		Dep.		Length		Bearing		NGC 87 - 17	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS					
			109.95 -fracture					134° cba		7-10		13000	104.496-	1001	230				
			110.31 -fracture					52° cba		5-7		14501	105.77- 105.77-	1001	200				
			113.46 -fracture plane					38° cba		5-7		14502	107.07- 107.07-	1002	230				
			113.66 -clay coated fracture					131° cba		3-5		14503	108.81- 108.81-	1002	200				
			115.01 -bedding structure?					51° cba		1-3		14504	110.51- 110.51-	1023	170				
			115.11 -bedding structure?					51° cba		1-3		14505	111.86- 111.86-	1001	190				
			116.15 -3-5mm clay filled joint/fracture					150° cba		1-3		14506	112.66- 112.66-	1001	210				
			116.46 -5mm clay filled joint					131° cba		1-3		14507	113.86- 113.86-	1001	200				
			116.56 -joints @					100° cba		7-10		14508	114.91- 114.91-	1002	180				
			116.79 -joints @					125° cba		1-3		14509	116.46- 116.46-	1002	160				
			117.81 -5mm clay filled fracture					57° cba					117.96	6					
117.96	121.006	100%	117.96-125.60 -ALTERED LAP. LLI TUFF → CYRSTAL LITHIC TUFF							1-3		14510	117.96- 119.26	1001	150				
	121.006	124.05	100% -light grey with brownish tint strongly → pervasively clay altered							1-3		14511	119.26- 121.006	1001	250				
124.05	127.10	100%	-matrix is completely clay altered							1-4		14512	121.006- 122.62	1002	220				
			-isolated smears (60mm - 50mm) of feld → clay + talc?							1-3		14513	122.62-	1001	130				
			-up to 15% 2-3mm glassy qtz eyes																
			-core becomes more siliceous towards the bottom																

DRILL LOG #1

124.05
Date Oct. 6, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK			PROJECT No. 332		N.T.S. No. 105K/2								
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 6 of 22									
Lat. 10000N		Elev.		Dip -70		152.40		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No.							
Dep. 10300E		Length 352.96		Bearing 199°		349.91		RECORDED		CORRECTED		RECORDED		CORRECTED		NGC 87 - 17							
From		To		Recovery		Description				Structure		% Sulph.		Est. Grade		SAMPLE No.		Width		ASSAYS			
						118.81 -2mm clay filled fracture - stiff black clay				164° cba		1-2				14514		124.05-125.60		1001		160	
						119.91 -10mm clay filled fracture				165° cba										1			
						120.96 -5mm clay filled joint				110° cba													
127.10		130.15		100%		125.60-137.28 -ALTERED CRYSTAL LITHIC TUFF						5-7				14515		125.60-126.30				130	
130.15		133.198		100%		-strongly silicified, dark grey, mod. mineralized						10				14516		126.30-126.30		↓		100	
133.198		136.25		100%		-stringy carbonitized within these zones						8-10				14517		127.10-127.10		1001		110	
136.25		138.38		55%		-calcite occur as tensions cracks filling in places						2-5				14518		127.85-127.85		1002		120	
						-core becomes very rhyolitic in places ⇒ rhyolitic tuff																	
						-≈50-70% of all feld has been altered to clay						1-3				14519		129.13-129.13		1002		100	
						-extensively veined with numerous qtz + feld → clay						3-5				14520		130.15-130.15		1002		130	
						+ carb veining stockwork??																	
						-strongly broken & crushed core in places																	
						-minor core lost						1-3				14521		131.25-131.25		1001		90	
						125.96-126.10 -fault gouge				105° cba		tr.1				14522		132.698-132.698		1001		80	
						127.10 -fracture				60° cba		1-3				14523		134.32-134.32		1002		210	
						127.52 -clay filled fracture				40° cba		3-5				14524		135.33-135.33		1002		150	
						128.65 -feld → clay fracture filling ± up to 30% Py within the altered clay material				132° cba		1-3				14525		136.25-136.25		1005		120	
						132.698 -fault plane				42° cba													

DRILL LOG #1

Date Oct. 6, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK			PROJECT No. 332		N.T.S. No. 105K/2		
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 7 of 22			
L ₁ 10000N		Elev.		Dip -70		152.40		RECORDED		CORRECTED		RECORDED		CORRECTED		Lot.	
Dep 10300E		Length 352.96		Bearing 199°		349.91		RECORDED		CORRECTED		RECORDED		CORRECTED		Elev.	
								-71°								Dip	
								-78°								Bearing	
																HOLE No.	
																NGC 87 - 17	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
			137.28 -9mm qtz + feld + carb vein/dykelet?				110° cba										
138.38	140.51	100%	137.28-147.94 -ALTERED LITHIC LAPILLI TO CRYSTAL LITHIC TUFF						1-3		14526	137.28-	100	130			
140.51	143.56	100%	-strongly broken core						1-2		14527	138.38	100	100			
			-strongly to pervasively clay altered														
143.56	146.61	100%	-numerous 3-5mm qtz + feld → chy veinlets - randomly oriented						1-2		14528	139.11	100	110			
146.61	148.44	100%	-easily weathers & v. soft in places						1-2		14529	139.11-	100	100			
			strongly juiced up core in places														
			-occasionally brecciated dykelets						1-2		14530	140.21	100	100			
			-well banded qtz + feld + carb veins						1-2		14531	140.21-	100	100			
			-pronounced increase in soft - soapy greenish mineral ⇒ TALC?? up to 20%														
			-extensively broken section are more qtz veined rich ⇒ qtz vein material						1-2		14532	141.31	100	400			
			145.03 -18mm feld → clay + carb + qtz vein				160° cba		tr.1		14533	141.31-	100	50			
			145.23 -25mm qtz + feld + carb vein				135° cba		tr.1		14534	142.11	100	60			
			146.81-147.21 -15-20 wide qtz + feld + carb vein						tr.1		14535	143.56-	100	50			
			147.21-147.47 -25cm wide qtz + feld + carb vein						1-3		14536	143.98	100	90			
									1-3		14537	144.81	100	80			
									tr.		14538	144.81-	100	100			
									tr.		14539	146.21	100	90			

DRILL LOG #1

Date Oct. 6, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 8 of 22			
L 10000N		Elev		Dip -70		152.40		RECORDED		CORRECTED		RECORDED		CORRECTED		Lat.	
Dep 10300E		Length 352.96		Bearing 199°		349.91										Elev.	
																Dip	
																Bearing	
																HOLE No.	
																NGC 87 - 17	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									AL	Hg		
					tr.		14540	147.47-147.94	1006	80		
148.44	151.49	100%	147.94-165.40 -ALTERED CRYSTAL LITHIC TUFF -pervasively clay altered moderately silicified with numerous qtz + feld + carb veining/stockwork -well banded qtz + feld up to 10% lmm size lithic frags		tr.		14541	147.94-148.79	1006	120		
			minor ankerite		tr.		14542	148.79-148.79	1004	110		
			-up to 20% soapy, soft light green mineral kaolinite or talc??		tr.		14543	150.19-150.19	1007	30		
151.49	154.53	100%	-c/o lithic frags vary throughout hole		tr.		14544	150.94-150.94	1005	100		
			-very easily weathers in places		tr.		14545	151.49-151.49	1004	70		
			-isolated brecciated rhyolitic horizons		tr.		14546	152.19-152.19	1003	10		
			-isolated interlayered crystal lithic tuff & brecciated volcanic glass material with lots of ankeritization		tr.1		14547	153.34-153.34	1004	160		
					-		14548	153.83-153.83	1002	30		
154.53	157.58	100%	148.27 -17mm banded smokey qtz + feld + carb vein @	17° cba	-		14549	154.93-154.93	1002	150		
			148.54-148.79 -qtz + feld + carb 20mm carbonaceous mudstone/siltstone dykelets?	8° cba	-		14550	155.63-155.63	1003	110		
			149.99 -10mm feld → clay + carb dykelet @	42° cba 332° cba 132° cba	tr.		14551	156.83-156.83	1009	100		
			150.19 -feld → clay + carb veinlets	68° cba	tr.1		14552	157.58-157.58	1007	30		
157.58	160.63	100%	150.34 -45mm qtz + feld + carb vein banded - chalcodonic??					158.13				

DRILL LOG #1

Date Oct. 6, 1987 Logged By Randy Singh

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NORANDA EXPLORATION COMPANY LTD.

Date Colored Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2									
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES													
Lp 10000N		Elev		Dip -70		152.40		RECORDED		CORRECTED		RECORDED		CORRECTED		Lat.		Elev.		Dip		Sheet 9 of 22	
Dep 10300E		Length 352.96		Bearing 199°		349.91						-71°				Dep.		Length		Bearing		HOLE No.	
												-78°										NGC 87 - 17	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Au	Hg		
			150.59 -35mm qtz + feld + carb vein - well banded	130° cba	1-3		14553	158.13-159.53	1004	80		
			151.39 -isolated 12mm qtz + feld + carb dykelet	133° cba	-		14554	159.53-	1003	30		
160.63	163.68	100%	152.10 -chalcedonic qtz vein	48° cba	-		14555	160.63-160.63-	1003	70		
			152.19 - " " "	22° cba				161.33				
			152.37 -qtz + feld → clay + carb vein	133° cba	tr		14556	161.33-162.58	1002	100		
			155.28 -13cm brecciated rhyolite horizon - remnant	54° cba	tr.		14557	162.58-	1003	120		
			flow structures					163.68				
			155.98 -5mm feld → clay + carb ± qtz fracture	154° cba	tr.		14558	163.68-	1002	110		
					tr.		14559	164.65-	1007	210		
			158.22 -10mm qtz vein @	58° cba				165.40				
			158.30 -6mm qtz vein @	35° cba								
			158.63 -159.33 -3mm qtz vein parallel to cba	//cba								
			159.53 -clay filled slip plane	43° cba								
			160.69 -17mm qtz + feld + ankerite veinlets	35° cba								
			161.33 -32mm qtz + feld + carb vein @	113° cba								
			162.48 -7mm feld → clay + carb veinlet	10° cba								
			162.93 -8-12mm qtz + feld + ankerite vein	15° cba								

DRILL LOG #1

Date Oct. 6, 1987 Logged By Randy Singh

092089

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 10 of 22			
Loc 10000N		Elev		Dip -70		152.40		RECORDED		CORRECTED		RECORDED		CORRECTED		Lat.	
Dep 10300E		Length 352.96		Bearing 199°		349.91						-71°				Elev.	
												-78°				Dip	
																HOLE No.	
																NGC 87 - 17	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
			164.90 -20mm wide qtz + feld + carb vein	162° cba					176	110		
			165.40 -35mm brecciated qtz + feld + carb vein	37° cba								
166.73	169.77	100%	165.40-170.17 SILICIFIED - WELDED LITHIC TUFF		tr.		14560	165.40-	001	050		
			-light grey with greenish tint					166.00				
169.77	172.82	100%	-up to 15% angular qtz eyes - chalcodonic		tr.		14561	166.00-		720		
			- ≅ 5% soft, green soapy mineral - TALC???									
			-strongly carbonitized		tr		14562	166.73-		360		
			-zones of 60% 2mm size fragments within an aphonitic → glassy groundmass					166.73-				
			-colour bandy/segregation v. evident		tr.1		14563	167.78-		820		
			-extensive hairline fracture/jointing with clacite infilling		"		14564	168.41-		750		
			-crude upward filling sequence?		"		14565	168.97-	001	1400		
			⇒ cumulous settling effects associated with very distinct colour banding					170.17				
			tr. 1% Py mineralization on fracture planes									
			-extensively clay altered & brecciated in places									
			-v. soft, easily weathers & strongly carbonitized									
			-brecciated qtz + feld + carb vein enclosing the host material									
172.82	175.87	100%	170.17-197.21 ALTERED CRYSTAL LITHIC TUFF		1-3		14566	170.17-	002	360		
			-dark grey - medium grey c.g., mod. clay altered & weakly carbonitized					171.42				
			-isolated 8mm wide qtz + feld + carb vein exhibiting		1-3		14567	171.42-	001	340		
			ductile deformation					172.82				
			-banded & smoky qtz		1-5		14568	172.82-	003	140		
			-strongly broken in places					173.47				
			-numerous altered chlorite + Py stringers		1-5		14569	173.47-	002	420		
								174.67				

DRILL LOG #1

Date Oct. 6, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collared Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK			PROJECT No. 332		N.T.S. No. 105K/2				
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 11 of 22	
Lgt 10000N		Elev		Dip -70		152.40				-71°		Lat.		Elev.		Dip		HOLE No.	
Dep 10300E		Length 352.96		Bearing 199°		349.91				-78°		Dep.		Length		Bearing		NGC 87 - 17	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS					
175.87	178.92	100%	-occasional strongly bleached horizons							1-5		14570	174.67-	76	140				
			-strongly vesiculated in places										175.87						
			-1-5% Py min. throughout							1-3		14571	175.87-						
			-20% glassy qtz eyes in places																
178.92	181.97	100%	173.12 -clay coated fracture					148° cba		1-3		14572	176.97-						
			173.27 -fracture					142° cba		1-3		14573	178.00-						
			174.47 -5mm feld + calcite fracture filling @					47° cba		1-3		14574	179.32-						
			175.97 -3mm Py + alt. chlorite fracture					122° cba		1-3		14575	180.72-						
181.97	185.01	100%	176.20 -7cm wide fault gouge					10° cba					181.97						
			180.12 -5mm qtz + feld + carb veining - contorted but trend:					12° cba											
			182.07 -7mm wide qtz + feld + carb vein					165° cba		1-2		14576	181.97-						
			182.47 -3mm qtz vein @					35° cba		tr.1		14577	183.47-						
185.01	188.06	100%	183.17 -3mm qtz vein @					157° cba					185.01						
			185.41 -3mm qtz + feld + carb veinlets					150° cba		tr.1		14578	185.01-						
			189.66 -3-5mm feld → clay + carb veinlets parallel to cba					// cba		tr.1		14579	186.56-						
188.06	191.11	100%	189.83 -clay coated slip plane					135° cba		1		14580	188.06-						
			190.03 -3mm feld → clay vein					164° cba		tr.		14581	189.51-						
														191.11					

DRILL LOG #1

Date Oct. 6, 1987 logged By Randy Singh

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Date Collected		Date Completed		Core Size	DIP TESTS				PROPERTY GREW CREEK		PROJECT No.	N.T.S. No.
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES			
Lgt		Elev	Dip		RECORDED	CORRECTED	RECORDED	CORRECTED	Lgt	Elev	Dip	
Dep		Length	Bearing						Dep	Length	Bearing	
10000N			-70	152.40			-71°					
10300E		352.96	199°	349.91			-78°					
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
199.796	202.69	100%	with numerous qtz + feld + carb veining throughout -occasional extensively altered & easily weathers sections -numerous chloritic lineations possibly defining bedding/flow structures		1-2		14589	199.796-201.05	100	40		
			-moderately broken core -tr. -3% Py mineralization -weakly carbonitized in places		1-2		14590	201.05-203.69	100.5	30		
202.69	205.28	80%	-up to 10% clacite xyls in places, minor talc -vesiculated in places -strongly bleached horizons		1-2		14591	202.69-203.99	100.6	50		
					1-2		14592	203.99-	100.7	30		
205.28	208.33	100%			tr.1		14593	205.28-206.18	100.7	40		
					1-2		14594	206.18-	100.5	40		
			198.796 -8mm smoky qtz + feld + carb vein @	45° cba	tr.		14595	207.20-207.80	100.6	30		
			199.40 -5mm qtz + feld → clay + carb vein	147° cba	tr.		14596	207.80-	100.22	30		
			199.796 -5-7mm qtz + calcite vein	35° cba	tr.		14597	208.43-209.55	100.5	30		
			207.10 -chlorite rich bands possibly defining stratificate bedding X-s	83° cba	tr.1		14598	209.55-	101.0	30		
			207.50 -15mm calcite + qtz + feld veining 2mm qtz veinlet	15° cba 65° cba	"		14599	211.45-212.45	100.8	30		
212.45	214.88	83%	207.70 -5mm qtz + calcite + feld vein	150° cba	"		14600	212.45-214.88	100.3	40		
114.88	216.56	91%	223.01 -3-5mm qtz vein	150° cba	"		14601	214.88-216.56	100.3	30		
216.56	219.46	100%	223.27 -8mm wide qtz + feld → clay + carb fracture filling -well banded	35° cba	"		14602	216.56-218.41	100.1	40		

DRILL LOG #1

Date Oct. 6, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collared Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 14 of 22	
Lat. 10000N		Elev.		Dip -70		152.40		RECORDED CORRECTED		RECORDED CORRECTED		Lat.		Elev.	
Dep. 10300E		Length 352.96		Bearing 199°		349.91						Dep.		Length	
												Dip		HOLE No.	
												Bearing		NGC 87 - 17	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
									Au	Hg					
219.46	222.50	100%	223.42 -5mm qtz + feld + carbonate vein - banded	162° cba	tr.1		14603	218.41-	.003	40					
			228.86 -12mm qtz + feld + carb. vein	56° cba	"		14604	219.86-	.003	30					
								221.15							
			232.64 -brecciated rhyolite dyke with tourmalene coated slip surface	52° cba	"		14605	221.15-	.003	50					
			-clay filled fractures parallel to cba	// cba				222.50							
222.50	224.64	100%			tr.		14606	222.50-	.003	40					
			237.03-237.23 20cm wide well mineralized -15% Py v.f.g. contact	61° cba	"		14607	223.52-	.002	60					
			diss. Py					223.52-							
			-thinly laminated rhyolite dyke	35° cba				224.64							
224.64	227.69	100%	237.03 -contact	61° cba	"		14608	224.64-	.002	50					
			237.23 -contact	35° cba				226.04							
			244.78 -clay coated fracture	125° cba	"		14609	226.04-	.002	50					
			244.86 -clay coated fracture	122° cba	"			227.69							
227.69	229.82	100%	245.87 -5mm clay filled fracture	35° cba	"		14610	227.69-	.005	60					
								228.24							
229.82	231.34	100%	249.47 -clay filled fracture	40° cba	tr.1		14611	228.24-	.002	40					
								229.82							
			251.07 -contact	60° cba	"		14612	229.82-	.003	50					
								231.34							
								231.34-	.002	60					
231.34	233.78	100%			tr.		14614	233.11-	.003	60					
								233.11-							
								234.53							
								234.53-	.005	50					
								235.73							
								235.73-	.004	70					

DRILL LOG 81

Date Oct. 6, 1987 237.03
Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 15 of 22			
Lat. 10000N		Elev.		Dip -70		152.40				-71°				Lot.		Elev.	
Dep. 10300E		Length 352.96		Bearing 199°		349.91				-78°				Dep.		Length	
														Bearing		HOLE No.	
																NGC 87 - 17	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
233.78	236.83	100%			15%		14617	237.03-237.23	003	30		
					tr.1		14618	237.23-237.53	011	80		
					"		14619	237.53-238.43	001	60		
236.83	239.88	100%			"		14620	238.43-239.88	002	50		
					"		14621	239.88-240.73	003	70		
					"		14622	240.73-242.03	001	60		
239.88	242.93	100%			"		14623	242.03-242.93	001	70		
					"		14624	242.93-244.53	001	60		
					"		14625	244.53-245.97	003	80		
242.93	245.97	100%			"		14626	245.97-247.12	002	70		
					"		14627	247.12-248.22	003	90		
					"		14628	248.22-249.47	002	70		
245.97	249.02	100%			"		14629	249.47-250.42	003	80		
					"		14630	250.42-251.27	003	50		
249.02	252.07	100%										

DRILL LOG 81

Date Oct. 6, 1987 Logged By Randy Singh

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002093

NORANDA EXP. RATION COMPANY LTD.

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2									
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES											
L ₁ 10000N		Elev		Dip -70		152.40		RECORDED		CORRECTED		RECORDED		CORRECTED		Lot.		Elev.		Dip		Sheet 17 of 22	
Dep 10300E		Length 352.96		Bearing 199°		349.91						-71°				Dep.		Length		Bearing		HOLE No.	
												-78°										NGC 87 - 17	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS										
			252.87 -20mm qtz + feld + carb vein @				145° cba		tr.1		14647	272.66-	AL 140										
			253.0 -clay filled joint				32° cba		"		14648	274.07-											
			254.12 -clay + chlorite + Py fracture filling offset by clay filled fracture @				30° cba 140° cba		"		14649	274.93-	001 210										
			261.41- clay coated fracture				140° cba		"		14650	274.07-											
			261.57 " " "				133° cba		"		14651	274.93-	001 210										
			261.67 -Py + clay fracture				148° cba		"			276.45-											
			263.26 -clay filled joint				53° cba		"			276.45-											
			264.36 -5mm caly filled joint				50° cba		"			276.85-											
			265.01 -rhyolite dykelet contacts - appear				15° cba						002 30										
			265.76 -lower contact				20° cba																
			268.65 -20mm brecciated qtz - rhyolite dykelet				140° cba																
			268.91 -shear plane				47° cba																
			269.01 -20mm v. stiff, v. dry clay filled fracture				76° cba						027 210										
			269.41 -shear plane				21° cba																
			269.46 -slip plane				110° & 135° cba																
			269.81 - " "				60° cba																
			269.90 - " "				60° cba						027 210										
			270.01 -6cm wide fault zone/gouge clay filled & brecciated				47° cba																
			270.30 -fracture plane				158° cba																
			270.56 -slip/shear plane				54° cba																
			270.62 - " " "				140° cba						027 210										
			271.51 -10 cm wide shear/fault zone 2.4-7mm wide clay filled fractures				50° cba																
			271.96 -shear plane				65° cba																
			272.04 - " "				16° cba																
			272.83 -2mm clay filled joint				68° cba						027 210										
			274.47 -shear plane				133° cba																

DRILL LOG #1

Date Oct. 6, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2				
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 18 of 22	
Lgt 10000N		Elev.		Dip -70			RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip		HOLE No.	
Dep 10300E		Length 352.96		Bearing 199°							Dep.		Length		Bearing		NGC 87 - 17	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
			274.59 -5mm clay filled fracture					28° cba										
			274.68 -shear plane					170° cba										
279.50	281.03	100%	278.58-280.93 -INTERLAYERED/INTERCLATED ORGANIC RICH CRYSTAL LITHIC TUFF & PORPHYRITIC WELDED ASH TUFF							tr 1		14652	278.58-					
			-ash tuff exhibit remnant bedding							"		14653	279.20-					
			-thinly laminated in places										279.50-					
			-porphyries are secondary qtz + calcite + feldspar xyls							"		14654	279.50-					
			-strange bright light lime green xyls. making up ≈ 3% of porphyries => TORBERNITE???							"		14655	280.03-					
			-oil smelling core										280.93					
			278.58-279.20 -ASH TUFF															
			279.20-279.50 -CRYSTAL TUFF (organic rich)															
			279.50-280.93 -ASH TUFF															
			278.58 -fault contact @					43° cba										
			tr. -1% Py mineralization															
281.03	284.07	100%	280.93-311.48 ALTERED CRYSTAL LITHIC TUFF with interlayered welded ash tuff horizons							tr.		14656	280.93-					
284.07	287.12	100%	-organic rich crystal lithic tuff horizons							"		14657	281.98-					
			-core also becomes very lapilli tuff in places										282.58					
287.12	290.17	100%	-mod. - strongly clay altered & up to 10% qtz eyes in places							"		14658	282.58-					
290.17	291.69	100%	10-15% talc in places							"		14659	284.07-					
			20% lithic frags -predominantly coal & organics										285.63					
291.69	294.74	100%	-k-spar makes up 70% of total feldspars							"		14660	285.63-					
			-occasional 26cm wide ash tuff flow										286.72					
294.74	297.79	100%	-faulted horizon are clay filled with purple clay material							tr.1		14661	286.72-					
													288.32					

DRILL LOG #1

Date Oct. 6, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2									
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 19 of 22									
Lat. 10000N		Elev.		Dip -70		152.40		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No.							
Dep. 10300E		Length 352.96		Bearing 199°		349.91										NGC 87 - 17							
From		To		Recovery		Description				Structure		% Sulph.		Est. Grade		SAMPLE No.		Width		ASSAYS			
297.79		300.84		100%		isolated highly bleached horizons						tr.				14662		288.32-		70		140	
300.84		303.28		100%		290.17-291.09 -up to 60% lithic frags in places. LITHIC TUFF horizon						"				14663		290.17-		100		50	
303.28		305.10		100%		291.69-293.64 -lapilli tuff horizon						"				14664		291.69-		30			
305.10		306.93		100%		293.64-294.44 -porphyritic welded ash tuff horizon						"				14665		292.99-		40			
306.93		309.98		100%		281.08 -clay coated slip surfaces				133° cba		"				14666		293.64-		270			
309.98		313.03		100%		281.18 - " " " "				135° cba		"						293.64-		30			
						281.88 - " " " "				60° cba		"				14667		294.44-					
						286.03 -flow structure				62° cba		"						294.44-					
						292.79 -shear plane				135° cba		"				14668		295.84-		40			
						292.85 - " "				51° cba		"						295.84-					
						293.64-293.74 -fault zone				62° cba		"				14669		297.09-		50			
						295.04 -clay fracture				136° cba		"						297.09-					
						295.74 -clay shear				115° cba		"				14670		298.49-		120			
						297.09 - " "				128° cba		"						298.49-					
						297.86 -clay shear				60° cba		"				14671		299.49-		650			
						299.49 -flow structure				164° cba		"						299.49-					
						307.78 -shear plane				114° cba						14672		300.77-		40			
						310.18 -5mm clay filled fracture				15° cba								300.77-		50			
						310.28 -clay filled fracture				30° cba						14673		301.87-					
																14674		302.66-		250			
																		302.66-		300			
																14675		303.54-					
																		303.54-					
																14676		304.70-		340			
																		304.70-					
																14677		305.78-		100		50	
																		305.78-					

DRILL LOG 81

Date Oct. 6, 1987 Logged By Randy Singh

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NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2									
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES													
Lot 10000N		Elev.		Dip -70		152.40		RECORDED		CORRECTED		RECORDED		CORRECTED		Lot.		Elev.		Dip		Sheet 20 of 22	
Dep 10300E		Length 352.96		Bearing 199°		349.91										Dep.		Length		Bearing		HOLE No.	
																						NGC 87 - 17	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									A ₄	H ₄		
							14678	306.93-307.78	1001	170		
							14679	307.78-		90		
							14680	309.08-		120		
							14681	309.08-309.98		140		
313.03	316.08	100%	311.48-328.57 ANDESITIC - DACITIC LAPILLI TUFF		1-3		14682	311.78-311.48-		40		
316.08	319.13	100%	-strong → pervasively clay altered in places		"		14683	312.15-		50		
			-brecciated in places									
			-moderately mineralized with euhedral 1-3mm size Py									
319.13	322.17	100%	xyls 1-3% Py throughout		1-2		14684	313.03-		40		
			-feldspars exhibit minor sausseritization					313.03-				
322.17	325.22	100%	-minor ankeritization in places		1-3		14685	313.98-		60		
			-vesiculated in places					313.98-				
325.22	328.27	100%	-possibly talc rich in places??		"		14686	314.68-		40		
			-strongly juiced up core in places					314.68-				
			311.73 -fracture	140° cba	"		14687	315.43-		50		
			311.83 - "	132° cba	"			316.08		50		
			318.53 -shear plane	128° cba	"		14688	316.08-				
			319.03 -clay filled joint	20° cba	"			317.08		70		
			325.87 -5mm clay filled fault	130° cba	"		14689	317.08-				
			328.57 -clay filled fault zone	53° cba	"		14690	318.38	1001	60		
					"			318.38-				
					"		14691	319.13	1002	80		
					"			319.13-				
					"		14692	319.78	1003	70		
								319.78-				
								320.68				

DRILL LOG #1

Date Oct. 6, 1987 Logged By Randy Singh

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NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2									
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES											
Lat 10000N		Elev		Dip -70		152.40		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 21 of 22							
Dep 10300E		Length 352.96		Bearing 199°		349.91						-71°				HOLE No.							
												-78°				NGC 87 - 17							
From		To		Recovery		Description				Structure		% Sulph.		Est. Grade		SAMPLE No.		Width		ASSAYS			
												1-3				14693		320.68-322.17		1004		130	
												"				14694		322.17-323.02		1001		130	
												1-2				14695		323.02-324.12		1002		200	
												"				14696		324.12-325.22		1003		60	
												"				14697		325.22-326.17		1002		70	
												"				14698		326.17-327.02		1002		20	
												"				14699		327.02-327.67		1001		50	
												"				14700		327.67-328.57				60	
328.27		331.32		100%		328.57-352.96 -ALTERED FELSIC PYROCLASTICS/OR A STRONGLY BLEACHED MAFIC-BASIC PYROCLASTIC						tr.2				14701		328.57-329.27				70	
331.32		334.37		100%		-strongly clay altered & extensively bleached & siderite limonite/jarosite rich						"				14702		329.27-329.92				70	
334.37		337.41		100%		-up to 20% 10-15mm long siderite xyls in places						"				14703		329.92-330.62				80	
337.41		340.46		100%		10-15% qtz-eyes in places						"				14704		330.62-331.32				30	
340.46		343.51		100%		-numerous shear & clay filled fracture zones tr. 2% Py in places						"				14705		331.32-332.57				70	
343.51		346.56		100%		-somewhat brecciated in places						"				14706		332.57-333.52				100	
346.56		349.61		100%		-mod. carbonitized & juiced up core in places						"				14707		333.52-334.37		✓		100	
349.61		349.91		100%		-coal rich zones throughout						"				14708		334.37-335.86		1001		20	
						-moderately silicified in places																	
						-chloritic stringers of veinlets in places																	

DRILL LOG #1

Date Logged By 10/1/87 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Sept. 29, 1987		Date Completed Oct. 7, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2									
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES													
Lgt 10000N		Elev		Dip -70		152.40		RECORDED		CORRECTED		RECORDED		CORRECTED		Lat.		Elev		Dip		Sheet 22 of 22	
Dep 10300E		Length 352.96		Bearing 199°		349.91						-71°				Dep.		Length		Bearing		HOLE No.	
												-78°										NGC 87 - 17	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
349.91	352.96	100%	331.32-332.57 -brecciated horizon		tr.2		14709	335.86-					
			332.57 -shear plane	52° cba				337.41					
			334.02 - " "	115° cba	"		14710	337.41-					
			334.52 -clay coated shear plane-slickensided	45° cba	"			338.96					
			334.97 -clay filled fracture	126° cba	"		14711	338.96-					
			335.47 - " " "	10° cba	"		14712	340.46-					
					"			340.46-					
					"		14713	341.91-					
					"		14714	343.51-					
					"			343.51-					
					"		14715	344.81-					
					"		14716	346.00-					
					"			346.00-					
					"		14717	346.76-					
					"		14718	348.09-					
					"			348.09-					
					"		14719	349.36-					
					"		14720	350.11-					
					"			350.11-					
					"		14721	350.81-					
					tr.7		14722	351.66-					
								351.66-					
								352.96					

DRILL LOG #1

Date Oct. 6, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

18

Date Colored Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size 110		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105K-2		
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				
Lat 10000N		Elev		Dip -70°		154.53		RECORDED		CORRECTED		RECORDED		CORRECTED		
Dep 10250E		Length 292 m		Bearing 199°		288.65						70°				
												76°				
Lat		Elev		Dip				Lat		Elev		Dip		HOLE No.		
Dep		Length		Bearing				Dep		Length		Bearing		NGC 87-18		
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
0	46.33	0%	0-54.56 -OVERBURDEN - GLACIAL TILL -dark brown → black v. dry and stiff pebble → boulder sandy clay till								14723	48.48- 49.38	100	70		
46.33	49.38	30%	-strongly carbonaceous								14724	49.38- 51.51	100	60		
49.38	51.51	43%	-poor core recovery - resulting from extensive reaming + washing - poor ground conditions								14725	51.51- 54.56	100	80		
51.51	53.95	19%	48.48-49.38 -large green extensively altered & sheared intermediate volcanics - vesiculate in places													
53.95	55.17	13%	-chlorite spots in places													
55.17	56.08	17%	54.56-56.08 -buff white - creamy white with greenish tint								14726	54.56- 56.08	100	70		
56.08	56.998	100%	-v. strongly silicified, and clay altered FELSIC VOLCANOCLASTIC/PYROCLASTIC OR ALTERED RHYOLITE								14727	56.08- 56.998	100	70		
56.998	60.05	100%	-30% lapilli size feldspar porphyries						3-7		14728	56.998- 58.55	100	70		
60.05	63.09	100%	-15-20% rounded glassy Qtz. eyes throughout -mod. -well mineralized with up to 10% Py in places -overall 3-7% Py						"		14729	58.55- 59.05	100	70		
63.09	66.14	100%	-Py mineralization occur mostly as 3-5mm blebs with occasional 3-5cm wide v.f.g. diss. Py zones						"		14730	59.05- 60.05	100	70		
66.14	69.19	100%	-soft very easily weathers in places -mod - strongly broken core in places						"		14731	60.05- 61.35	100	70		
69.19	70.104	100%	-mod. carbonitized in places with up to 7% calcite xyls. in places						"		14732	61.35- 62.09	100	70		
70.104	72.24	79%	-crude Py association with chlorite rich horizons -weakly vesiculated in places						"		14733	62.09- 63.09	100	70		
72.24	75.29	100%	-zones of feldspars exhibits sausseritization						"		14734	63.09- 64.24	100	70		
75.29	78.33	100%	-somewhat brecciated in places with large rhyolite frags -carbonates in places is ANKERITE -extensively bleached horizons						"		14735	64.24- 65.24	100	70		

DRILL LOG #1

Date _____ Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
								RECORDED	CORRECTED	RECORDED	CORRECTED						
Lat	10000N	Elev		Dip	-70°	154.53					70°		Lat		Elev		HOLE No. NGC 87-18
Dep	10250E	Length	292 m	Bearing	199°	288.65					76°		Dep		Length		

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Au	Ag		
			59.55 -shear plane @	38° cba	3-7		14736	65.24-66.14	1000	1400		
			59.80 -flow structure defining contact	≈ 41° cba	"		14737	66.14-67.69	1000			
			65.89 -shear plane @	158° cba	"		14738	67.69-69.19	1100			
			66.04 -shear plane @	122° cba	"		14739	69.19-70.104	630			
			67.57 -shear plane @	36° cba	"		14740	70.104-71.204	480			
			76.63 -contact	75° cba	"		14741	71.204-72.64	320			
					"		14742	72.64-73.89	240			
					"		14743	73.89-75.29	280			
78.33	81.38	100%	76.63-117.96 -ALTERED FELSIC PYROCLASTIC		2-5		14744	75.29-76.63	550			
81.38	83.82	100%	-dark grey		"		14745	76.63-77.33	480			
			⇒CRYSTAL LITHIC TUFF		"							
			-moderately → strongly broken core, moderately		"							
83.82	85.95	100%	silicified, moderately mineralized		"		14746	77.33-78.33	400			
			-98% of all feldspars exhibit clay - argillic alteration		"							
85.95	89.002	100%	-weakly carbonitized with up to 5% calcite xyls in places		"		14747	78.33-79.33	350			
89.002	92.05	100%	-2-5% Py. mineralization throughout occurring mostly as 5mm Py blebs		"		14748	79.33-80.13	440			
92.05	93.57	100%	-plaq. & k-spar rich horizons throughout		"		14749	80.13-81.38	340			
93.57	96.62	100%	- <5% lithic fragments, mostly as organic		"		14750	81.38-82.68	450			
			-v. easily weathers in places		"							
96.62	99.36	100%	-v. rhyolitic in places RHYOLITE TUFF		"		22226	82.68-83.82	230			
			-numerous qtz. + feld ± carb. veinlets throughout		"							

DRILL LOG #1

Date _____ Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size 110		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K-2		
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot 10000N		Elev		Dip -70°			RECORDED	CORRECTED	RECORDED	CORRECTED	Lot		Elev		Dip	
Dep 10250E		Length 292 m		Bearing 199°		154.53			70°		Dep		Length		Bearing	
				288.65					76°						HOLE No NGC 87-18	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
99.36	102.57	100%	-highly juiced up horizons						2-5		22227	83.82-				
102.57	105.77	100%	-strongly bleached in places						"		22228	85.07				
			-core becomes crystal lithic & lithic - lapilli in places									85.07-				
105.77	108.81	100%	-Py mineralization also varies in places						"		22229	85.95				
108.81	111.86	100%	89.602 -clay filled joint @				120° cba		"		22230	85.95-				
												86.55				
												86.55-				
111.86	114.91	100%	90.55 -clay + calcite coated slip plane @				30° cba		"		22231	87.80				
114.91	117.96	100%	92.62 -clay filled shear plane				17° cba		1-3		22232	87.80-				
												89.002				
			93.27 -clay filled shear plane				160° cba		"		22233	89.002-				
												90.55				
			94.57 -Py + calcite + clay vein/ fracture filling @				62° cba		7-10		22234	90.55-				
												92.05				
												92.05-				
			95.82 -clay filled joint/slip plane @				38° cba		"		22235	92.82				
			96.22 -clay filled fracture				25° cba		5-7		22236	92.82-				
												93.57				
												93.57-				
			96.32-96.62 -FAULT ZONE						2-5		22237	94.57				
			99.61 -clay coated fault plane @				55° & 140° cba		7-10		22238	94.57-				
												95.82				
												95.82-				
			99.71 -clay coated fault plane				36° cba		5		22239	96.62				
			99.96 -clay coated fault plane				42° cba		5		22240	96.62-				
												97.14				
			101.97 -clay filled slip plane				16° cba		1-3		22241	97.14-				
			109.31 -5mm clay filled fault				25° cba					99.36				
												99.36-				
												101.27				

DRILL LOG #1

Date _____ Logged By Randy Singh

680280

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot 10000N		Elev		Dip -70°		154.53				70°				Lot			
Dep 10250E		Length 292 m		Bearing 199°		288.65				76°				Dep			
														Elev			
														Dip			
														Bearing			
														HOLE No. NGC 87-18			

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Fe	Hg		
			110.29 -clay filled slip plane	145° cba	2-5		22242	101.27-	1001	160		
			110.91 -clay filled slip plane	132° cba	2-5		22243	101.77-		170		
			111.46 -clay filled fault	156° cba	2-5		22244	102.57-		160		
112.06			112.06 -clay filled fault	132° cba	5-7		22245	103.77-		130		
			112.31 -fold clay + talc shear zone	48° cba	2-5		22246	105.27-		150		
					1-5		22247	106.47-		140		
					5-7		22248	107.27-		120		
					2-5		22249	108.11-		100		
					2-5		22250	108.81-		110		
					1-3		22251	110.16-		130		
					2-4		22252	111.46-		120		
					2-4		22253	112.46-		160		
					tr.1		22254	113.31-		120		
					tr.1		22255	114.91-		130		
					tr.1		22256	115.81-		120		
					tr.1		22257	116.91-		150		

DRILL LOG #1

117.96

Date _____ Logged By Randy Singh

660280

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size 110		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K-2											
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES													
Lat 10000N		Elev		Dip -70°		154.53		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 5 of 15									
Dep 10250E		Length 292 m		Bearing 199°		288.65						70°				HOLE No.									
												76°				NGC 87-18									
From		To		Recovery		Description				Structure		% Sulph.		Est. Grade		SAMPLE No.		Width		ASSAYS					
117.96		121.006		100%		117.96-131.10 - ALTERED LAPILLI TUFF						1-3				22258		117.96-		1001		130			
121.006		124.05		100%		-strongly altered → pervasively clay altered						"				22259		119.56-		1001		110			
						-1-3% Py mineralization throughout																			
124.05		127.10		100%		-ankeritized in places 15-20% ankerite						"				22260		121.006-		1001		90			
127.10		130.15		100%		-isolated 3-5mm pyritic chlorite + clay horizons						"				22261		122.506-		1001		140			
						up to 80% lapilli in places																			
130.15		133.198		100%		-80-100% of matrix has been completely clay altered						"				22262		124.05-		1001		160			
						in places						"				22263		125.70-		1003		130			
						-numerous qtz + feld + carb (sederite & ankerite)						"													
						dykelets/veinlets						"													
												"				22264		127.10-		1002		120			
												"				22265		127.10-		1005		100			
												"													
												"				22266		128.50-		1016		110			
												"				22267		129.10-		1017		70			
												"													
												"				22268		129.65-		1003		60			
												"													
133.198		136.25		50%		131.10-141.65 - ALTERED CRYSTAL LITHIC TUFF						2-5				22269		131.10-		1002		50			
136.25		138.99		100%		-mod. clay altered, moderately silicified, moderately						"				22270		132.40-		1002		60			
						mineralized ≈ 2-5% v.f.g. diss. Py mineralization																			
138.99		140.82		100%		-numerous hairline qtz + feld veinlets throughout						"				22271		133.198-		1002		80			
140.82		142.95		100%		-up to 15% glassy qtz eyes in places						"				22272		134.15-		1005		60			
						-pervasive clay alteration in places						"													

DRILL LOG 81

Date _____ Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collared Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size H0		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K-2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lat 10000N		Elev		Dip -70°		154.53		RECORDED		CORRECTED		RECORDED		CORRECTED		Lot.	
Dep 10250E		Length 292 m		Bearing 199°		288.65		70°		76°		Dep.		Length		Bearing	
Mole No. NGC 87-18																	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Fe	Hg		
			-moderately carbonitized in places -mod. - strongly brecciated in places -Py content becomes variable towards the bottom' -up to 20% siderite + ankerite in places		1-3		22273	136.25-	1003	70		
					1-2		22274	137.15 137.15- 137.84	1003	60		
			136.45 -5mm clay filled fault	157° cba	tr.		22275	137.84-	1067	50		
					tr.1		22276	138.74- 138.74- 139.82	014	80		
					tr.1		22277	139.82-	004	50		
					tr.1		22278	140.82- 140.82- 141.65	002	60		
142.95	145.39	100%	141.65-154.00 -ALTERED LAPILLI TUFF		tr.1		22279	141.65-	011	100		
145.39	146.61	100%	-strongly clay altered, dull grey LAPILLI TUFF with numerous qtz + feld + carb veinlets (ankerite & calcite)		"		22280	142.95- 142.95- 143.65	004	70		
146.61	149.66	100%	-occasional k-spar rich horizon		"		22281	143.65-	006	80		
149.66	152.70	100%	carb. in places is probably siderite or smithsonite		1		22282	144.60- 144.60- 145.39	002	70		
152.70	155.75	100%	-core becomes less clay altered towards the bottom -up to 15% lithic frags in places		1		22283	145.39-	002	60		
			141.95 -qtz + feld + carb veins @	2° cba	1		22284	146.61-	002	70		
			142.35 -veins @	135° cba	tr.		22285	148.36- 148.36-	005	50		
			143.23 -carb vein @	150° cba	tr.		22286	149.66- 149.66-	003	60		
			143.50 -shear plane @	103° cba	1-3		22287	150.86- 150.86- 152.00	004	70		

DRILL LOG #1

Date _____ Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size 110		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K-2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 7 of 15			
Lat 10000N		Elev		Dip -70°		154.53		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No.	
Dep 10250E		Length 292 m		Bearing 199°		288.65						70°		76°		NGC 87-18	
From		To		Recovery		Description		Structure		% Sulph.		Est. Grade		SAMPLE No.		Width	
										1-3				22288		152.00-152.70	
										1-3				22289		152.70-154.00	
155.75		157.43		0%		154.00-190.80 -ALTERED CRYSTAL LITHIC TUFF				tr.				22290		154.00-155.00	
157.43		159.72		100%		-moderately silicified, moderately clay altered				"				22291		155.00-155.50	
						-up to 70% of total feldspars altered to clay											
						-15-20% lithic frags throughout											
159.72		160.63		100%		-numerous banded qtz + feld + carb => chalcodonic				"				22292		155.50-155.75	
160.63		163.68		100%		-core becomes Lapilli Tuff in places				"				22293		157.43-158.38	
						-highly broken core but becomes more competent towards the bottom										(LOST CORE AREA)	
163.68		166.27		100%		-isolated core lost								22294		158.38-159.72	
166.27		167.34		100%		154.00 -25mm banded qtz + feld + carb dykelet		150° cba						22295		159.72-160.63	
167.34		169.16		100%		155.50 -50mm banded qtz + feld + carb		15° cba						22296		160.63-162.03	
169.16		170.38		100%		158.58 -contorted 10mm qtz + feld + carb vein								22297		162.03-163.68	
170.38		171.91		75%		160.48 -8mm qtz + feld + carb veinlet		155° cba						22298		163.68-165.17	
171.91		172.82		22%		160.63 -13mm qtz + feld + carb vein - banded		90° cba						22299		165.17-166.27	
172.82		175.26		85%		166.17 -7mm qtz + feld + carb veinlet - contorted but trends		25° cba						22300		166.27-167.34	
175.26		178.31		100%		177.11 -qtz + feld + carb vein		10° cba						22301		167.34-168.86	

DRILL LOG #1

Date _____ Logged By Randy Singh

0925

NORANDA EXPLORATION COMPANY LTD.

Date Collared Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size H0		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K-2							
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES											
Lat 10000N		Elev		Dip -70°		154.53		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 8 of 15					
Dep 10250E		Length 292 m		Bearing 199°		288.65						70°				HOLE No					
												76°				NGC 87-18					
From		To		Recovery		Description		Structure		% Sulph.		Est. Grade		SAMPLE No		Width		ASSAYS			
																		Au		Hg	
178.31		180.75		100%		177.96 - 40mm wide qtz + feld + calcite dykelet		32° cba		tr.				22302		168.86- 170.38		1016		60	
180.75		182.27		100%		185.73 - 25mm qtz + feld + calcite vein/dykelet		36° cba		"				22303		170.38-		1010		60	
182.27		183.18				186.83 - 15mm carb + qtz + feld vein -brecciated		155° cba		"				22304		171.91- 171.91- 173.96		1013		50	
183.18		186.23								"				22305		173.96- 175.26		1011		40	
186.23		188.06								"				22306		175.26- 176.11		1012		60	
188.06		190.80								"				22307		176.11- 176.86		1004		40	
										"				22308		176.86-		1003		30	
										"				22309		177.51- 177.51- 178.31		1006		50	
										"				22310		178.31-		1016		50	
										"				22311		179.35- 179.35- 180.75		1002		40	
										"				22312		180.75-		1003		50	
										"				22313		182.27- 182.27- 183.18		1006		80	
										"				22314		183.18-		1012		120	
										"				22315		184.78- 184.78- 186.23		1025		40	
										"				22316		186.23- 187.33		1003		30	

DRILL LOG #1

Date _____ Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K-2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lot 10000N		Elev		Dip -70°		154.53		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 9 of 15	
Dep 10250E		Length 292 m		Bearing 199°		288.65						70°		76°		HOLE No.	
																NGC 87-18	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									g/t	g/t	g/t	g/t
					tr.		22317	187.33-188.61	100%	50		
					"		22318	188.61-189.80	100%	40		
					"		22319	189.80-190.80	100%	50		
190.80	193.85	100%	190.80-200.44 -ALTERED LAPILLI TUFF				22320	190.80-192.40	100%	60		
193.85	196.596	100%	-core becomes progressively more clay altered towards the bottom				22321	192.40-193.85	100%	40		
196.596	197.21	100%	-v. easily weathers in places				22322	193.85-195.15	100%	30		
197.21	199.34	100%	-matrix is completely clay altered				22323	195.15-	100%	50		
199.34	202.39	100%	200.14 -15mm qtz + feld + carb vein ll to cba	ll cba			22324	196.596-197.67	100%	30		
							22325	197.67-199.34	100%	20		
							22326	199.34-200.44	100%	30		
202.39	204.83	100%	200.44-211.22 -ALTERED CRYSTAL LITHIC TUFF		tr.		22327	200.44-201.59	100%	30		
204.83	207.87	100%	-dark grey moderately silicified, moderately to weakly clay altered		"		22328	201.59-202.39	100%	40		
207.87	210.92	100%	-mod. broken core throughout with extensively crushed horizons		"		22329	202.39-203.64	100%	20		
210.92	213.97	100%	-30-50% of all feldspars altered to clay		"		22330	203.64-204.44	100%	40		
			-15-20% lithic fragments throughout =>predominantly coal & plant/organics									

DRILL LOG #1

Date _____ Logged By Kandy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size H0		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat 10000N		Elev		Dip -70°		154.53		RECORDED		CORRECTED		RECORDED		CORRECTED		Lat	
Dep 10250E		Length 292 m		Bearing 199°		288.65						70°				Elev	
												76°				Dip	
																HOLE No.	
																NGC 87-18	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
210.92	213.97	100%	-tr. Py mineralization throughout 204.44-204.83 -crushed core up to 70% clay altered -numerous feld → clay + carb. hairline veinlets throughout -occasional 55mm feld → clay + talc. smears		tr.		22331	204.44-204.83	100	70		
					"		22332	204.83-	100	70		
					"		22333	206.17-207.87	100	60		
					"		22334	207.87-	100	50		
					"		22335	209.42-211.22	100	60		
			211.22-212.92 -TRANSITION ZONE CRYSTAL LITHIC TUFF gradually becomes a LAPILLI TUFF -moderately silicified, moderately clay altered -up to 65% 10-15mm feldspar lapilli ≈ 20% 3-7mm lithic frags ⇒ coal		tr. l		22336	211.22-212.92	100	40		
213.97	217.02	100%	212.92-219.32 -LAPILLI TUFF -moderately silicified, mod - pervasively clay altered in places -70-75% 10-15mm size lapilli throughout -10-15% lithic coal frags		tr. l		22337	212.92-213.97	100	50		
217.02	220.07				"		22338	213.97-215.42	100	60		
					"		22339	215.42-217.02	100	60		
			-tr. 1% Py mineralization v.f.g. diss.		"		22340	217.02-218.17	100	70		
					"		22341	218.17-219.32	100	60		

DRILL LOG #1

Date _____ Logged By Randy Singh

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NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K-2									
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 11 of 15									
Lat 10000N		Elev		Dip -70°		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No.									
Dep 10250E		Length 292 m		Bearing 199°		154.53				70°				NGC 87-18									
						288.65				76°													
From		To		Recovery		Description		Structure		% Sulph.		Est. Grade		SAMPLE No.		Width		ASSAYS					
220.07		223.11		100%		219.32-223.11 -ALTERED CRYSTAL TUFF → VITRIC TUFF -mod - strongly silicified -moderately clay altered				1-2				22342		219.32- 220.07		22343		220.07-			
						220.07-220.47 -40cm wide breccia horizon - fluid induced → qtz + feld + carb fluids -numerous feld → clay + talc blebs & stringers -1-2% Py mineralization throughout				"				22344		221.67- 221.67- 223.11		22344		223.11			
223.11		224.64		100%		223.11-224.84 -ALTERED LAPILLI TUFF -moderately silicified mod. clay altered with 70% 15mm size lapilli < 5% lithic frags. -occasional 10-15cm feld → clay + talc horizons -tr. 1% Py				tr.1				22345		223.11-		22346		224.0-			
										"				22346		224.0-				224.84			
224.64		227.69		100%		224.84-242.10 -ALTERED CRYSTAL LITHIC TUFF -medium to light grey, dull lustre, strongly → pervasively clay altered with v. easily weathers horizons up to 15% lithic frags throughout				tr.1				22347		224.84-		22348		226.29-			
227.69		229.84		100%		-f.q. - m.q. v. weakly silicified in places -occasional highly bleached horizons				"				22349		227.69-		22350		229.04-			
229.84		232.87		100%		232.87-234.52 -pervasively clay altered v. easily weathers				"				22376		230.34-		22377		231.87-			
232.87		235.61		100%		234.52-236.83 -extensively broken & crushed core -carbonate in primarily ankerite				1-3				22377		231.87-		22378		232.87-			
235.61		236.83		50%		239.95-241.40 -strongly juiced up core tr. - 3% Py in places				"				22378		232.87-		22379		234.52-			
236.83		238.35		100%						"				22379		234.52-				235.61			
238.35		241.40		100%						"													
241.40		244.45		100%						"													

DRILL LOG #1

Date _____ Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size H0		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot 10000N		Elev		Dip -70°				RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 12 of 15	
Dep 10250E		Length 292 m		Bearing 199°		154.53				70°				Lot.		Elev.	
						288.65				76°				Dep		Length	
														Dip		HOLE No.	
														Bearing		NGC 87-18	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
					1-3		22380	235.61-	70	110		
					"		22381	236.83	100	110		
					"		22382	238.35	100	80		
					"		22383	239.95	100	80		
					"		22384	241.40	100	70		
			242.10-243.40 -ALT. CRYSTAL LITHIC - LAPILLI TUFF -mod. - strongly silicified, v. dark grey to black -up to 40% lithic frags in places -moderately ankeritized		1-3		22385	242.10-243.40	100	80		
			242.10 -shear plane @ 154° cba 1-3% Py min. v.f.g. diss. Py	154° cba								
244.45	247.80	100%	243.40-247.35 -ALTERED CRYSTAL LITHIC TUFF -pervasively clay altered v. easily weathers -strongly broken core with no apparent core lost				22386	243.40-	100	80		
							22387	244.60-	100	60		
							22388	246.12-	100	70		
247.80	250.85	100%	247.35-250.85 -ALTERED, INTERLAYERED CRYSTAL LITHIC TUFF, organic rich beds & welded ash tuff -gradational contacts				22389	247.35-	100	80		
							22390	248.70-	100	50		
								250.0				

DRILL LOG #1

Date _____ Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S No. 105K-2		
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES						
						RECORDED		CORRECTED								
Lat 10000N		Elev		Dip -70°		154.53				70°				HOLE No.		
Dep 10250E		Length 292 m		Bearing 199°		288.65				76°				NGC 87-18		
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
			250.0-250.85 -welded ash tuff with ~20% glassy qtz eyes -sharp/fault contacts 250.0 contact @ 250.85 contact @				132° cba 42° cba				22391	250.00- 250.85	20	140		
			-numerous lime green - bright THORBURNITE?? xyls													
250.85	254.05	100%	250.85-270.09 - ALTERED CRYSTAL LITHIC - LITHIC LAPILLI TUFF								22392	250.85- 252.45	112	100		
254.05	257.09	100%	-strongly → pervasively clay altered, dull buff cream to light grey in colour								22393	252.45- 254.05	100	110		
257.09	260.30	100%	-moderately silicified in places								22394	254.05- 255.55	103	270		
260.30	263.35	100%	-highly sheared & fractured core -15-20% 1-5mm volc. glass lithic fragments -tr. - 1% Py mineralization throughout								22395	255.55-	101	20		
263.35	266.395	100%	-mod. carbonitized								22396	257.09- 257.09-	101	20		
266.395	269.44	100%	252.45 -shear plane @ 252.50 -clay filled fracture @				30° cba 62° cba				22397	258.59- 258.59-	101	50		
269.44	272.49	100%	252.90 -shear plane @ 256.05 -clay filled fracture @ 256.39 -shear plane @ 256.94 -clay filled fracture @				55° cba 115° cba 42° cba 116° cba				22398	260.3- 260.30-	103	50		
			259.18 -clay filled fracture @				122° cba				22399	261.63- 261.63-	101	40		
			267.145-267.345 -Fault gouge slip fault contact @ 115° & 133° cba								22400	263.35- 264.90	101	60		
											22401	264.90- 266.395-	2	20		
											22402	266.395- 267.995	103	100		

Drill Log #1

Date _____ Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S No. 105K-2											
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 14 of 15											
Lat 10000N		Elev		Dip -70°		154.53		RECORDED		CORRECTED		RECORDED		CORRECTED		Lat									
Dep 10250E		Length 292 m		Bearing 199°		288.65						70°				Elev									
												76°				Dip									
																Bearing									
																NGC 87-18									
From		To		Recovery		Description				Structure		% Sulph.		Est. Grade		SAMPLE No.		Width		ASSAYS					
																22403		267.995-							
																		269.44		1001		130			
																		269.44-		1001		110			
																		270.09							
						270.09-270.49 -ALT. WELDED ASH TUFF												22405		270.09-		1001		300	
						-moderately clay altered & fractured tuff														270.49					
						--strongly juiced up core with up to 20% calcite xyls throughout																			
						-strongly carbonitized																			
						CONTACTS 270.09 -50° cba																			
						270.49 -82° cba																			
						270.49-270.89 -moderately mineralized with 1-3% Py,						1-3						22406		270.49-		1001		160	
						altered TUFF v. soft & easily weathers														270.89					
						-pervasively clay altered																			
272.49		275.54		100%		270.89-292.0 -ALTERED CRYSTAL LITHIC TUFF												22407		270.89-		1001		180	
						-pervasively clay altered throughout														272.49					
275.54		278.59		100%		-v. easily weathers in places												22408		272.49-		1002		110	
						-weakly silicified in places														274.00					
278.59		281.64		100%		-weakly → mod. carbonitized throughout, but strongly												22409		274.00-		1001		160	
						carb. in places														275.54					
281.64		284.84		100%		-up to 20% ankerite in places												22410		275.54-		1001		120	
						≈ 25% volc. glass frags. throughout														277.09					
284.84		288.04		95%														22411		277.09-		1001		160	
																				278.59					
288.04		290.47		100%								tr.1						22412		278.59-		1001		70	
																				280.04					

DRILL LOG #1

Date _____ Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collared Oct. 8, 1987		Date Completed Oct. 16, 1987		Core Size 110		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K-2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat 10000N		Elev		Dip -70°				RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 15 of 15	
Dep 10250E		Length 292 m		Bearing 199°		154.53				70°				Lot.		Elev.	
						288.65				76°				Dep.		Length	
														Bearing		HOLE No. NGC 87-18	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Ag	Hg		
290.47	292.0	100%	290.47-292.0 -m.g. - c.g. CRYSTAL LITHIC TUFF -mod. silicified, & mod. clay altered -greenish - yellowish tint to core		tr.1		22413	280.04-	1002	140		
					"		22414	281.64-	1001	150		
					"		22415	283.29- 283.29- 284.84	1001	120		
					"		22416	284.84-	1001	30		
					"		22417	286.29- 286.29- 288.04	1001	80		
					"		22418	288.04-	1001	120		
					"		22419	289.27- 289.27- 290.47	1001	110		
					"		22420	290.47- 292.0	1001	100		

DRILL LOG #1

Date _____ logged By Randy Singh

092098

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NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 17, 1987	Date Completed Oct. 21, 1987	Core Size HQ	DIP TESTS				PROPERTY GREW CREEK	PROJECT No 332	NTS No 105 K/2
FIELD CO-ORDINATES			DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES	
Lat 10000N	Elev	Dip -45°	67.06	RECORDED 254°	CORRECTED	RECORDED	CORRECTED	Lat	Elev
Dep 10200E	Length 170.69	Bearing 199°	170.69	264°				Dep	Length
								Bearing	
From	To	Recovery	Description	Structure	% Sulph	Est Grade	SAMPLE No	Width	ASSAYS
0	49.68	0%	NO CORE RECOVERY						
49.68	54.10	100%	49.68-54.10 -TILL OVERBURDEN -pebble to cobble polymictic paraconglomeratic sandy clay TILL -easily crumbles on moulding -v. strongly carbonitized -dk. grey to black in colour				22421 22422 22423	49.68-51.20 51.20-52.72 52.72-54.10	
54.10	54.86	100%	54.10-57.05 -FELSIC PYROCLASTIC/VOLCANOCLASTIC -extensively clay altered and highly broken core -lg. green highly juiced up core						
54.86	57.30	100%	-3-7cm. calcite rich horizons -weakly to moderately carbonitized throughout -1-3% Py mineralization throughout occurring as v.f.g. diss. Py.		1-3%		22424 22425 22426	54.10-54.86 54.86-56.39 56.39-57.91	
57.30	60.35	100%	57.05-67.06 -ALTERED CRYSTAL LITHIC TUFF -dark grey, moderately silicified, strongly → pervasively clay altered CRYSTAL LITHIC TUFF -3-5% Py mineralization throughout with up to 7% Py in places		3-5%		22427	57.91-59.44	
60.35	63.398	100%	59.85-60.15 -highly silicified, thinly laminated/bedded with stratiform Py mineralization up to 5% -3-5% overall Py - CRYSTAL TUFF	bedding 125° cba	3-5%		22428 22429	59.44-60.96 60.96-62.48	

DRILL LOG - 81

Date _____ Logged By _____

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 17, 1987		Date Completed Oct. 21, 1987		Core Size H ₀		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105 K/2					
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 2 of 8			
Lot 10000N		Elev		Dip -45°		67.06		39				Lot		Elev		Dip		HOLE No.	
Dep 10200E		Length 170.69		Bearing 199°		170.69		36°				Dep		Length		Bearing		NGC 87 - 19	
From	To	Recovery	Description				Structure		% Sulph	Est. Grade	SAMPLE No	Width	ASSAYS						
64.01	67.06	100%	62.83-63.398 -extensively brecciated CRYSTAL LITHIC TUFF -fluid brecciation caused by calcite + qtz + feld rich solution						3-5%		22430	62.48-64.01		AL	Hy				
									3-5%		22431	64.01-		1001	280				
									3-5%		22432	65.53-67.06		1001	180				
67.06	70.10	100%	67.06-70.10 -LAPILLI TUFF -weakly clay altered, mod. silicified LAPILLI TUFF -60% 4-10mm size lapilli throughout -10-15% lithic fragments- predominantly volc. glass + coal -3-5% Py. mineralization throughout						3-5%		22433	67.06-68.58			200				
									3-5%		22434	68.58-70.10			210				
70.10	73.15	100%	70.10-73.15 -CRYSTAL LITHIC TUFF -mod. → strongly silicified, mod. clay altered, mod → strongly carbonitized CRYSTAL LITHIC TUFF -highly juiced up core with carbonate + qtz + feld solution								22435	70.10-71.63			220				
			-core becomes pervasively clay altered towards the bottom -gradually grades into a LAPILLI TUFF								22436	71.63-73.15			190				
			72.40 -15mm calcite + qtz + feld vein @60° cba				60° cba												
73.15	76.20	100%	73.15-76.50 -LITHIC TUFF -highly silicified, well mineralized LITHIC TUFF with 60-70% 15-40mm size lithic fragments -95% of frags are coal -5-7% Py mineralization through-						5-7%		22437	73.15-74.68			190				
									5-7%		22438	74.68-76.20			130				

DRILL LOG #1

Date _____ Logged By _____

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 17, 1987		Date Completed Oct. 21, 1987		Core Size 11Q		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		NTS No 105 K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 3 of 8	
Lot 10000N		Elev		Dip -45°		67.06		RECORDED 39		CORRECTED		RECORDED		CORRECTED		Lot	
Dep 10200E		Length 170.69		Bearing 199°		170.69		36°								Dep	
																HOLE No NGC 87 - 19	

From	To	Recovery	Description	Structure	% Sulph	Est Grade	SAMPLE No	Width	ASSAYS			
76.20	79.25	100%	76.50-79.25 -LAPILLI TUFF -moderately silicified, moderately clay altered LAPILLI TUFF -up to 60% lapilli size throughout -3-5cm wide patches of limonite in places -lg. 5-10cm blebs of feldspar alteration → KAOLINITE?? -3-5% Py mineralization throughout		3-5%		22439	76.20-77.72	100%	100		
							22440	77.72-79.25	100%	100		
79.25	82.296	100%	79.25-94.18 -CRYSTAL LITHIC TUFF -moderately to pervasively clay altered, moderately silicified in places, highly broken and crushed core -some core lost		1-3%		22441	79.25-80.77	100%	120		
					"		22442	80.77-82.296	100%	100		
82.296	84.89	70%	-1-3% Py mineralization throughout		"		22443	82.296-83.82	100%	10		
84.89	87.48	90%			"		22444	83.82-85.34	100%	90		
87.48	88.697	80%			"		22445	85.34-86.87	100%	6000		
88.697	89.61	100%			"		22446	86.87-88.39	100%	270		
89.61	92.66	100%			"		22447	88.39-89.92	100%	280		
					"		22448	89.92-91.44	100%	400		
92.66	94.18	60%	91.84-92.14 -5cm blebs of calcite + feldspars 92.66-94.18 -highly broken core with some core lost -thinly laminated/bedded in places -strongly silicified		1-3%		22449	91.44-92.96	100%	230		
					1-3%		22450	92.96-94.49	100%	230		

DRILL LOG 81

Date _____ Logged By _____

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 17, 1987		Date Completed Oct. 21, 1987		Core Size 11Q		DIP TESTS				PROPERTY GREW CREEK			PROJECT No 332		NTS No 105 K/2				
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 4 of 8					
Lat 10000N		Elev		Dip -45°		67.06		39				Lat		Elev		Dip		HOLE No	
Dep 10200E		Length 170.69		Bearing 199°		170.69		36°				Dep		Length		Bearing		NGC 87 - 19	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS						
94.18	95.098	80%	94.18-101.19 -highly broken core with no core lost -pervasively clay altered LAPILLI TUFF -~60% 6-15mm lapilli throughout -10-15% 1-3mm lithic frags throughout						tr.1%		22451	94.49-96.01	054	120					
95.098	96.62	100%							"		22452	96.01-97.54	233	400					
96.62	97.54	100%							"		22453	97.54-99.06	053	150					
97.54	99.67	100%							"		22454	99.06-100.58	010	70					
99.67	101.19	100%							"		22455	100.58-102.11	004	30					
101.19	103.33	100%	101.19-106.68 -CRYSTAL LITHIC TUFF -pervasively clay altered CRYSTAL LITHIC TUFF -highly broken core -occasional 7-10mm calcite xyls						tr.1%		22456	102.11-103.63	019	30					
103.33	104.24	100%	-numerous calcite + feld + qtz veins -broken -easily weathers in places						"		22457	103.63-105.16	072	260					
104.24	105.46	100%	tr. -1% Py throughout								22458	105.16-106.68	010	160					
105.46	106.68	100%																	
106.68	108.51	100%	106.68-109.73 -highly broken core with no apparent core lost -extensively clay altered interlayered sequence of CRYSTAL LITHIC TUFF of ASH TUFF						tr.1%		22459	106.68-108.20	001	550					
108.51	111.56	100%	-tr. -1% Py throughout 106.68-107.51 - ASH TUFF 107.51-108.31 -CRYSTAL LITHIC TUFF -more competent core, but still very easily weathers						tr.1%		22460	108.20-109.73	007	450					
			-isolated 5cm calcite + qtz + feld veins @135° cba 108.31-108.51 -ASH TUFF 108.51-109.16 -CRYSTAL LITHIC TUFF 109.16-109.73 -ASH TUFF				135° cba												

DRILL LOG #1

Date _____ Logged By _____

66020

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 17, 1987		Date Completed Oct. 21, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105 K/2		
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat 10000N		Elev		Dip -45°			RECORDED	CORRECTED	RECORDED	CORRECTED	Lat		Elev		Dip	
Dep 10200E		Length 170.69		Bearing 199°		170.69	36°				Dep		Length		Bearing	
											HOLE No					
											NGC 87 - 19					
From	To	Recovery	Description				Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
111.56	114.60	100%	109.73-124.05 -CRYSTAL LITHIC TUFF					tr.1%		22461	109.73-	108	50			
			-strongly→pervasively clay altered CRYSTAL LITHIC TUFF													
			-highly broken core													
			-moderately silicified in places													
			-easily weathers in places					tr.1%		22462	111.25-	111	100			
			112.06-112.86 -extensively broken core					tr.1%		22463	112.78	116	50			
			-qtz + feld + calcite rich horizon								114.30					
114.60	117.35	100%	114.60-124.05 -extensively broken core with no				18°cba	tr.1%		22464	114.30-	1036	70			
			apparent core lost								115.82					
117.35	118.57	100%	119.65 -30mm calcite + feld + qtz. vein @18°cba							22465	115.82-	100	50			
								"		22466	117.35-	109	70			
118.57	120.395	100%						"		22467	118.87-	109	130			
120.395	122.53	100%						"		22468	120.396-	103	50			
								"		22469	121.92-	1018	110			
								"		22470	123.44	1001	50			
											123.44-					
											124.97					
124.05	126.797	100%	124.05-126.19 -LAPILLI TUFF					tr.		22471	124.97-	100	50			
			-moderately silicified, strongly clay altered LAPILLI													
			TUFF up to 70% 4-8mm size lapilli													
			-5-10% 1-3mm lithic frags. predominantly volc. glass													
			+ feldspars													
			-tr. Py mineralization													

DRILL LOG - 81

Date _____ Logged By _____

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 17, 1987		Date Completed Oct. 21, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK			PROJECT No 332		N.T.S. No 105 K/2		
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 6 of 8
							RECORDED	CORRECTED	RECORDED	CORRECTED							
Lat 10000N		Elev		Dip -45°		67.06	39			Lat		Elev		Dip		HOLE No.	
Dep 10200E		Length 170.69		Heading 199°		170.69	36°			Dep		Length		Bearing		NGC 87 - 19	
From	To	Recovery	Description					Structure		% Sulph.	Est Grade	SAMPLE No.	Width	ASSAYS			
126.797	129.84	100%	126.19-127.71 -CRYSTAL LITHIC TUFF -moderately silicified, mod. strongly clay altered CRYSTAL LITHIC TUFF -gradational contact -numerous 3-5mm qtz + feld + calcite veins/stringers							tr.		22472	126.49- 128.02	1006	70		
			127.097 -3-5mm qtz vein-contorted ~160° cba					160° cba									
129.84	131.37	100%	127.71-145.999 -CRYSTAL LITHIC TUFF -strongly pervasively clay altered CRYSTAL LITHIC TUFF							tr.		22473	128.02- 129.54	1008	60		
131.37	133.50	100%	with occasional broken-up qtz + feld + carb. veins							tr.		22474	129.54-	1012	70		
133.50	136.25	100%								tr.		22475	131.06- 131.06-	1013	60		
										tr.		22476	132.59- 132.59-	1015	70		
													134.11				
136.25	138.07	100%	135.11-135.64 -extensively juiced up core ± qtz + feld ± carb veins up to 5mm wide - randomly oriented							tr.		22477	134.11- 135.64	1032	150		
			-numerous late stage carb. veinlets, x-cutting qtz + feld ± carb veins							tr.		22478	135.64- 137.16	015	60		
			136.81 -qtz + feld ± carb vein @					145° cba		tr.		22479	137.16- 138.68	1004	40		
138.07	139.90	100%	136.86 -carbonate vein @ (smithsonite)					30° cba		tr.		22480	138.68- 140.21	1013	50		
										tr.		22481	140.21-	1012	90		

DRILL LOG - 81

141.73
Date _____ Logged By _____

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 17, 1987		Date Completed Oct. 21, 1987		Core Size 11/2		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105 K/2						
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 7 of 8			
							RECORDED	CORRECTED	RECORDED	CORRECTED										
Lat 10000N		Elev		Dip -45°		67.06	39					Lat		Elev		Dip		HOLE No.		
Dep 10200E		Length 170.69		Bearing 199°		170.69	36°					Dep		Length		Bearing		NGC 87 - 19		
From	To	Recovery	Description				Structure		% Sulph	Est. Grade	SAMPLE No.	Width	ASSAYS							
139.90	142.65	100%	142.65-144.17 - 30% CORE RECOVERY ONLY						tr.		22482	141.73-143.26	1003	50						
142.65	144.17	30%							tr.		22483	143.26-144.17	1002	40						
144.12	145.69	100%							tr.		22484	144.78-146.30	1003	60						
145.69	148.13	100%	145.999-161.54 - LAPILLI TUFF -weakly silicified, strongly clay altered -highly broken core in places ≈ 3% calcite xyls in places 60-65% 7-10mm size lapilli throughout						tr.		22485	146.30-147.83	1004	50						
148.13	149.35	100%	148.44 - 7mm qtz + feld + carb vein @ -extensively clay altered in places				160° cba		tr.		22486	147.83-149.35	1001	40						
149.35	151.49	100%	-v. easily weathers						tr.		22487	149.35-151.49	1003	50						
151.49	152.40	100%							tr.		22488	150.88-152.40	1002	60						
									tr.		22489	152.40-153.92	1003	50						
152.40	154.23	100%							tr.		22490	153.92-155.45	1005	360						
154.23	156.06	100%							"		22491	155.45-156.97	1006	150						
156.06	158.496	100%							"		22492	156.97-158.496	1002	70						
158.496	160.63	100%							"		22493	158.496-160.02	1003	40						
160.63	161.54	100%	158.496-161.54 -extensively clay altered v. easily weathers						"		22494	160.02-161.54	1002	50						

DRILL LOG #1

Date _____ Logged By _____

66026

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 17, 1987		Date Completed Oct. 21, 1987		Core Size 11Q		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		NTS No 105 K/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lat 10000N		Elev		Dip -45°		67.06		39				Lot		Elev		Dip	
Dep 10200E		Length 170.69		Bearing 199°		170.69		36°				Dep		Length		Bearing	
																Sheet 8 of 8	
																HOLE No NGC 87 - 19	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
161.54	164.59	100%	161.54-170.69 -CRYSTAL LITHIC TUFF		tr.		22495	161.54-163.07	200	40		
164.59	167.64	100%	161.54-163.07 -strongly→pervasively clay altered									
167.64	170.69	100%	CRYSTAL LITHIC TUFF		tr.		22496	163.07-164.59	200	50		
			-very easily weathers		"		22497	164.59-166.12	200	50		
			163.07-170.69 -mod. silicified, strongly clay altered		"		22498	166.12-167.64	200	40		
			-numerous contorted qtz + feld→clay veinlets				22499	167.64-	200	50		
			-v. competent Rx.									
			-tr. Py mineralization									
							22500	169.16-170.69	200	30		

DRILL LOG #1

Date _____ Logged By _____

DRILL LOG - 01

Date Oct. 27, 1987 Logged By Randy Singh

092099

NORANDA EX. ORATION COMPANY LTD.

Date Collected Oct. 21, 1987		Date Completed Oct. 24, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2			
FIELD CO-ORDINATES						DEPTH 140.21		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat. 10000 N		Elev.		Dip -45°				RECORDED	CORRECTED	RECORDED	CORRECTED						
Dep. 10150 E		Length 142.65		Bearing 199°								Lat.		Elev.		Dip	
												Dep.		Length		Bearing	
																HOLE No. NGC 87 - 20	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
42.37	45.42	100%	42.37-51.01 -bleached, bluish green tint to white quartz eyes rich, extensively clay altered felsic volcanoclastics -OR ALTERED RHYOLITE 222 -1-3% Py mineralization throughout		1-3%		22755	42.37-43.89	AL	Ag	1-10	172
45.42	48.46	100%	45.42-46.12 - highly brecciated and altered -extensively juiced up in places		1-3%		22757	45.42-46.94				
48.46	50.29	100%	-areas of extensive limonite/or manganese-staining		1-3%		22758	46.94-48.46				
50.29	53.04	100%	46.34 shear plane @145° cba	145° cba	1-3%		22759	48.46-49.99				
			51.01-53.04 -CRYSTAL LITHIC TUFF -medium grey to dark grey moderately clay altered, moderately silicified -2-5% Py mineralization throughout		5%		22760	49.99-51.51				
			51.01 - sharp contact @105° cba	105° cba			22761	51.51-53.04				
53.04	54.86	100%	53.04-54.86 -pervasively clay altered, very easily weathers very soft FELSIC TUFF -buff cream with slight greenish tint -10-15% glassy qtz. eyes throughout				22762	53.04-54.56	✓	✓		
			54.86 -gradational contact with dark grey moderately clay altered CRYSTAL LITHIC TUFF				22763	54.56-56.08	✓	0.7		
54.86	56.998	100%	54.86-55.36 -CRYSTAL LITHIC TUFF -moderately clay altered 2-5% Py. mineralization throughout gradational contact with above unit		2-5%							

DRILL LOG - 81

Date Oct. 27, 1987 Logged By Randy Singh

660211

NORANDA EXPLORATION COMPANY LTD.

Date Collected		Date Completed		Core Size	DIP TESTS				PROPERTY		PROJECT No.		N.T.S. No.	
FIELD CO-ORDINATES		DEPTH		BEARING		ANGLE		GREW CREEK		332		105 K/2		
Lat.	Elev.	Dip		RECORDED	CORRECTED	RECORDED	CORRECTED	SURVEYED CO-ORDINATES						
Dep	Length	Bearing						Lat.	Elev.	Dip		Sheet 3 of 8	HOLE No.	
								Dep.	Length	Bearing		NGC 87 - 20		
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS					
			55.36-62.48 -FELSIC TUFF - LAPILLI TUFF		3-5%		22764	56.08-57.61	Al.	As	Hg	As		
			-extensively pervasively clay altered buff cream with greenish tint		3-5%		22765	57.61-59.13	0.07	0.7				
			-distinctly LAPILLI TUFF IN PLACES						0.14	1				
			-occasional 5cm long unaltered rhyolite fragments		3-5%		22766	59.13-60.66	0.07					
			-numerous clay filled fractures											
			-3-5% Py mineralization throughout, with up to 12% v.f.q. diss. Py. on slip surfaces		3-5%		22767	60.66-62.48						
			61.78-62.18 -entire section is limonite/hematite/manganese stained											
			61.78 -4mm clay filled fracture	42° cba										
62.48	64.01	90%	62.48 - 96.01 -CRYSTAL LITHIC TUFF		tr.		22768	62.48-64.01		0.7				
64.01	65.23	50%	-extensively broken core with some core lost		tr.		22769	64.01-65.53		1.0				
			-moderately silicified weakly mineralized (tr.) Py											
			-med. grey to dark grey											
65.23	65.84	90%	-core stinks of H ₂ S gas on breaking		tr.		22770	65.53-67.06	0.07	1.7				
65.84	67.06	55%	-a gas chromatography survey might be considered		tr.		22771	67.06-68.58	0.24	4.8				
67.06	68.58	90%	67.06-71.02 - excessive core lost				22772	68.58-70.10	0.38	3.4				
68.58	69.19	90%	-crushed core				22773	70.10-71.63	0.10	2.1				
69.19	70.10	50%					22774	71.63-73.15	0.07	2.1				
70.10	71.02	60%					22775	73.15-74.68	0.31	5.5				
71.02	73.15	90%			tr.		22776	74.68-76.20	0.07	1.7				
73.15	74.37	100%			tr.		22777	76.20-77.63	0.34	2.1				

Date Oct. 27, 1987 Logged By Randy Singh

NORANDA EXORATION COMPANY LTD.

Date Collected Oct. 21, 1987		Date Completed Oct. 24, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105 K/2							
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES									
Lat. 10000 N		Elev.		Dip -45°		140.21		40°						Lat.		Elev.		Dip		HOLE No.	
Dep. 10150 E		Length 142.65		Bearing 199°										Dep.		Length		Bearing		NGC 87 - 20	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS								
													AC	AG	HG	AL					
74.37	75.29	100%							tr.		22778	77.72-79.25	0.69	4.1							
75.29	76.81	100%	75.29-92.67 -extensively broken and crushed core with some core lost																		
76.81	77.72	100%																			
77.72	79.25	90%																			
79.25	80.77	90%							tr.		22779	79.25-80.77	1.03	5.1							
80.77	81.99	52%							tr.		22780	80.77-82.296	3.94	12.0							
81.99	82.60	100%	81.99-85.04 -extensively - pervasively clay altered -v. easily weathers						tr.		22781	82.296-83.82	0.34	1.7							
82.60	84.12	90%							tr.		22782	83.82-85.34	2.15	7.5							
84.12	85.04	100%							tr.		22783	85.34-86.87	0.48	2.7							
85.04	85.95	100%							tr.		22784	86.87-88.39	1.51	8.6							
88.95	87.48	100%							tr.		22785	88.39-89.92	0.54	4.8							

DRILL LOG #1

Date Oct. 27, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 21, 1987		Date Completed Oct. 24, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105 K/2			
FIELD CO-ORDINATES						DEPTH 140.21		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat. 10000 N		Elev.		Dip -45°				RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep 10150 E		Length 142.65		Bearing 199°								Dep.		Length		Bearing	
																HOLE No NGC 87 - 20	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Fe	Cu	Hg	As
87.48	88.54	100%			tr.		22786	89.92-91.44	0.31	1.7		
88.54	89.31	90%			tr.		22787	91.44-92.96	2.89	1.7		
89.31	90.22	90%			tr.		22788	92.96-94.49	1.82	3.8		
90.22	91.44	95%			tr.		22789	94.49-96.01	4.82	3.8		
									0.45	2.1		
91.44	92.66	100%			tr.							
92.66	94.18	100%										
94.18	95.71	100%										
95.71	97.23	100%										
97.23	98.45		96.01-101.498 -more competent Rx., but still strongly broken -core stinks of H ₂ S				22790	96.01-97.54	0.14	1.0		
98.45	99.97		-ALTERED CRYSTAL LITHIC TUFF 10-15% lithic frags. predominantly volc.-glass frags.				22791	97.54-99.06	0.07	1.4		
99.97	101.498	100%	98.81 -5mm contorted qtz. vein				22792	99.06-100.58	0.07	2.1		

DRILL LOG #1

Date Oct. 27, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 21, 1987		Date Completed Oct. 24, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot. 10000 N		Elev.		Dip -45°		140.21		40°								Sheet 6 of 8	
Dep. 10150 E		Length 142.65		Bearing 199°												HOLE No.	
																NGC 87 - 20	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									176	170	140	140
101.498	103.02	100%	101.498-103.63 -ALTERED LAPILLI TUFF -Mg-cg. strongly clay altered LAPILLI TUFF				22793	100.58-102.11	0.24	1.7		
103.02	104.55	100%	~65% 4-15mm size lapilli lapillifare predominantly feldspars 10-15% volc. glass shards lithic frags -numerous hairline feld + carb. veinlets -occasional 10mm size calcite xyls.				22794	102.11-103.63	0.10	1.4		
104.55	106.07	100%	103.63-106.68 -CRYSTAL LITHIC TUFF -core gradually becomes CRYSTAL LITHIC TUFF -moderately silicified		tr.		22795	103.63-105.16	0.14	1.0		
106.07	106.68	100%	104.23 -20 cm wide glassy Qtz. eyes rich bleached rhyolite dyke???		tr.		22796	105.16-106.68	0.34	1.0		
			-numerous blebs (10cm wide) of Qtz + feld + clay (kaolinitic + carb.) tr. Py mineralization									
106.68	108.20	100%	106.68-109.73 -moderately strongly silicified rhyolitic tuff - crystal tuff -large Qtz + feld fragments? =>no sharp crystal outline				22797	106.68-108.20	0.14	0.7		
108.20	109.73	100%	-seems like Qtz. + feld. exsolved from host rock				22798	108.20-109.73	0.21	1.0		
109.73	111.25	100%	109.73-117.96 -ALTERED CRYSTAL LITHIC TUFF -strongly clay altered CRYSTAL LITHIC TUFF with contorted 7mm wide banded Qtz + feld + carb. vein // to cba	vein ~ parallel to cba	tr.		22799	109.73-111.25	0.27	0.7		
111.25	112.78	100%			tr.		22800	111.25-112.78	1.06	2.1		
112.78	114.30	100%	-20% 3-5mm lithic frags throughout -tr. Py min. throughout		tr.		22801	112.78-114.30	0.14	1.0		

DRILL LOG - 81

Date Oct. 27, 1987 Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 21, 1987		Date Completed Oct. 24, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2			
FIELD CO-ORDINATES						DEPTH 140.21		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot. 10000 N		Elev.		Dip -45°				RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 7 of 8	
Dep. 10150 E		Length 142.65		Bearing 199°										HOLE No.			
														NGC 87 - 20			

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Ac	Ag	Hg	As
114.30	115.52	100%	115.52-116.43 -highly 'vesiculated' core-possibly carbonates weathered out		tr.		22802	114.30-115.82	0.27	1.0		
115.52	117.04	100%	117.35 -30mm qtz + feld + carb vein @160° cba	160° cba	tr.		22803	115.82-117.35	0.51	2.7		
117.04	117.96	67%										
117.96	118.87	85%	117.96-120.09 -ALTERED LAPILLI TUFF				22804	117.35-118.87	0.27	1.0		
118.87	120.09	100%	-pervasively clay altered LAPILLI TUFF 65% 4-15mm size feldspar lapilli 10-15% lithic fragments				22805	118.87-120.396	1.17	1.4		
120.09	121.62	100%	120.09-121.92 -RHYOLITE TUFF - CRYSTAL TUFF -strongly broken, moderately silicified, strongly juiced up core -numerous qtz + feld + carb. veinlets -med. → strongly clay altered in places				22806	120.396-121.92	0.41	0.7		
121.62	123.14	100%	121.92-128.93 -ALT. CRYSTAL LITHIC TUFF -strongly clay altered CRYSTAL LITHIC TUFF -pervasively clay altered in places 15-20% lithic frags in places		tr.		22807	121.92-123.44	0.38	0.7		
123.14	124.97	100%	-highly broken core in places		tr.		22808	123.44-124.97	0.34	0.7		
124.97	126.49	100%			tr.		22809	124.97-126.49	0.34	1.4		
126.49	128.93	100%			tr.		22810	126.49-128.02	0.34	1.4		

DRILL LOG - 81

Date Oct. 27, 1987 Logged By Randy Singh

660660

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 21, 1987		Date Completed Oct. 24, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 8 of 8	
Lat. 10000 N		Elev.				Dip -45°		RECORDED		CORRECTED		RECORDED			
Dep. 10150 E		Length 142.65		Bearing 199°										HOLE No.	
														NGC 87 - 20	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									AL	AO	HO	MS
					tr.		22811	128.02-129.54	0.21	1.0		
128.93	130.45	100%	128.93-137.16 -ALTERED LAPILLI TUFF → ASH TUFF		tr. 1%		22812	129.54-131.06	0.21	1.7		
130.45	131.98	100%	-extensively & pervasively clay altered		"		22813	131.06-132.59	0.14	0.7		
			-v. small lapilli (1-4mm) but becomes progressively a distinct lapilli tuff towards the bottom		"		22814	132.59-134.11	0.17	0.7		
131.98	133.50	100%	-moderately to strongly broken core		"		22815	134.11-135.64	0.27	0.7		
133.50	134.72	100%	-tr. 1% Py mineralization		"							
			-significant core lost towards the bottom section									
134.72	135.33	100%					22816	135.64-137.16	0.17	0.7		
135.33	136.55	80%										
136.55	137.16	60%										
137.16	138.53	100%	137.16-137.56 -ASH TUFF				22817	137.16-138.68	0.10	0.7		
			-40cm wide ash tuff horizon ± 10-15% feldspar lapilli									
			-moderately clay altered → kaolinitic									
138.53	140.21	100%	137.56-142.65 -ALTERED CRYSTAL LITHIC TUFF				22818	138.68-140.21	0.17	0.7		
			-strongly clay altered, mod. → strongly broken core									
			-tr. 1% Py min. throughout									
			-mod. carbonitized <10% calcite xyls. throughout									
140.21	141.73	100%					22819	140.21-141.73	0.07	0.7		
141.73	142.65	100%					22820	141.73-142.65	0.45	0.7		

Drill Log #1

Date Oct. 27, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

21

Date Colored Oct. 25, 1987		Date Completed Oct. 27, 1987		Core Size 110		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot 10000N		Elev		Dip -45°		140.21		42°46'				Lot		Elev		Dip	
Dep 10100E		Length 149.66		Bearing 199°								Dep		Length		Bearing	
																HOLE No. NGC 87-21	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	(gwt) ASSAYS			
									H ₂	Fe	H ₂ O	SiO ₂
0	16.76	0%	0-17.76 - OVERBURDEN - GLACIAL TILL 16.76-17.76 - pebble to cobble sandy clay till -black, easily crumbles between fingers -very strongly carbonitized				22821	16.76-17.76	0.07	0.7		
16.76	19.81	100%	17.76-24.48 - REWORKED ANDESITIC TO DACITIC VOLCANICS -strongly broken core with some core lost		tr.		22822	17.76-19.81	0.07			
19.81	21.34	100%	- ≈ 5% 2cm long rounded volcanic glass fragments -paraconglomeratic texture		tr.		22823	19.81-	0.07			
21.34	21.79	100%	-hardness 27 with high specific gravity		tr.		22824	21.34-21.79	0.10			
21.79	23.16	0%	-extensively sheared unit with well developed slicken sides		tr.		22825	22.86-23.16	0.07	0.7		
23.16	24.38	12%						24.38				
24.38	24.99	65%	24.48-34.59 - INTERMEDIATE VOLCANICS -extensively crushed, extensively juice up numerous qtz + feld veinlets -strongly brecciated in places		1-3%		22826	24.38-24.99	0.24	1.7		
24.99	25.91	90%	-weakly carbonitized in places		1-3%		22827	25.91-27.43	0.34	4.1		
25.91	26.82	100%	-1-3% diss. Py. mineralization		"		22828	27.43-28.96	0.55	11.0		
26.82	27.43	100%			"		22829	28.96-30.48	4.20	116.2		
27.43	28.499	100%			"		22830	30.48-32.00	1.17	14.1		
28.499	30.02	100%			"		22831	32.00-33.52	0.27	7.2		
30.02	31.55	100%			"		22832	33.52-35.05	0.10	2.4		

DRILL LOG #1

Date Oct. 29, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 25, 1987		Date Completed Oct. 27, 1987		Core Size 11Q		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105 K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat 10000N		Elev		Dip -45°		140.21		42°						Sheet 2 of 8	
Dep 10100E		Length 149.66		Bearing 199°										HOLE No.	
														NGC 87-21	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
									Al	Fe	H ₂	Si	
31.55	32.92	100%											
32.92	34.14	100%											
34.14	35.51	100%											
35.51	36.27	75%	34.59-51.82 -ALTERED RHYOLITE -strongly silicified overall with strong argillic alteration in places -highly bleached zones		2-5%		22833	35.05-36.58	0.07	1.0			
36.27	37.64	95%			"		22834	36.58-	0.07	1.7			
37.65	38.10	100%	-highly broken core with some core lost -v. easily shatters		"		22835	38.10-39.62	0.07	0.7			
38.10	39.62	100%	-2-5% v.f.g. diss. Py min. with up to 7% in places		"		22836	39.62-	0.10	3.1			
39.62	40.691	100%			"		22837	41.15-42.67	0.21	4.4			
40.691	41.76	100%	40.23-46.94 -extensively clay altered v. easily weathers v. soft		1-3		22838	42.67-44.196	0.23	4.2			
41.76	42.98	100%											
42.98	44.196	100%			tr.1%		22839	44.196-45.72	0.65	4.1			
44.196	45.42	100%							0.17	3.7			
45.42	46.33	100%			1-3		22840	45.72-					
46.33	47.24	100%			"		22841	47.24-48.77	0.10	1.4			
47.24	48.77	100%											
48.77	49.68	95%			"		22842	48.77-50.29	0.14	1.7			
49.68	51.05	65%											

DRILL LOG #1

Date _____ Logged By _____

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 25, 1987		Date Completed Oct. 27, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2		
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot 10000N		Elev		Dip -45°			RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep 10100E		Length 149.66		Bearing 199°						Dep.		Length		Bearing		
HOLE No.		NGC 87-21														
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
													AL	AG	HA	HA
51.05	51.82	100%							1-3		22843	50.29-51.82	0.07	1.7		
51.82	52.73	100%	51.82-57.91 -ALTERED CRYSTAL TUFF - RHYOLITIC TO ANDESITIC TUFF						"		22844	51.82-53.34		1.4		
52.73	53.04	100%	-moderately silicified, strongly broken and crushed in places						"		22845	53.34-		1.4		
53.04	54.86	85%	-1-3% Py. mineralization occurring mostly as 5mm blebs						"		22846	54.86-56.39	0.07	1.4		
54.86	56.39	90%	54.86- 56.59 -numerous qtz + feld veinlets conformable to jointing in Rx.						"		22847	56.39-57.91	0.10	1.7		
56.39	57.91	95%	-isolated horizon with 10% Py. mostly along qtz + feld + carb. veining													
57.91	59.44	100%	57.91-73.76 -REWORKED VOLCANICS - VOLCANOCLASTICS ANDESITIC→DACITIC						tr.		22848	57.91-59.43	0.10	1.7		
59.44	60.66	100%	-dark grey, strongly silicified, strongly fragmented well developed sedimentary textures						"		22849	59.43-	0.21	4.1		
60.66	62.18	100%	-hardness ≥ 7, high specific gravity						"		22850	60.96-62.48	2.47	3.2		
62.18	63.40	100%	-limonite/jarosite rich in places & specks of specularite hematite??						"		22851	62.48-	0.45	5.1		
63.40	66.75	100%	-strongly chloritized on some slip/fracture surfaces						"		22852	64.01-65.53	0.24	4.1		
66.75	67.97	100%	-tr. Py mineralization throughout						"		22853	65.53-	0.29	5.1		
67.97	69.49	100%							"		22854	67.06-68.58	0.65	7.5		

DRILL LOG - 81

Date Oct. 29, 1987 Logged By Randy Singh

500000

NORANDA EXPLORATION COMPANY LTD.

Date Collared Oct. 25, 1987		Date Completed Oct. 27, 1987		Core Size 110		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2		
FIELD CO-ORDINATES				DEPTH 140.21		BEARING		ANGLE		SURVEYED CO-ORDINATES						
Lat 10000N		Elev				Dip -45°		RECORDED 42°	CORRECTED	RECORDED	CORRECTED	Lat		Elev		Dip
Dep 10100E		Length 149.66		Bearing 199°						Dep		Length		Bearing		HOLE No. NGC 87-21

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Fe	Al	Hg	As
69.47	70.10	90%			tr.		22855	68.58-70.10	0.38	5.5		
70.10	71.48	90%			"		22856	70.10-71.63	0.80	8.5		
71.48	72.54	100%			"		22857	71.63-73.15	5.83	8.2		
72.54	73.76	100%			"		22858	73.15-74.68	0.51	2.5		
73.76	74.37	80%	73.76-102.11 - RHYOLITIC - CRYSTAL TUFF		tr.		22859	74.68-76.20	2.41	2.4		
74.37	75.74	55%	-extensively broken & crushed core with some core lost -dk. grey to black with competent pieces of core being moderately silicified		"		22860	76.20-77.72	6.07	1.4		
75.74	77.11	100%	-strongly carbonitized on slip and fracture surfaces		"		22861	77.72-79.25	5.07	1.4		
77.11	78.64	95%	-tr. Py mineralization throughout -porphyritic in places		"		22862	79.25-80.77	0.14	1.0		
78.64	80.16	95%	77.11-85.95 -extensively crushed core becomes very choloritic → graphitic		tr.		22863	80.77-82.296	2.10	2.4		
80.16	81.38	90%	-core is literall unrecongizable -entire section stinks of H ₂ S gas		"		22864	82.296-83.82	0.14	1.0		
81.38	82.296	85%			"		22865	83.82-85.34	2.01	0.7		
82.296	83.52	100%			"		22866	85.34-86.87	2.17	1.4		

DRILL LOG #1

Date Oct. 29, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 25, 1987		Date Completed Oct. 27, 1987		Core Size 110		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat 10000N		Elev		Dip -45°		140.21		42°						Sheet 5 of 8	
Dep 10100E		Length 149.66		Bearing 199°										HOLE No.	
														NGC 87-21	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Al	Ag	Hg	As
83.52	84.89	100%			tr.		22867	86.87-88.39	0.07	1.0		
84.89	85.95				"		22868	88.39-89.92	0.10	0.7		
85.95	87.17	100%			"		22869	89.92-91.44	0.07	0.7		
87.17	87.78	100%			"		22870	91.44-92.96	0.10	1.4		
87.78	89.00	100%			"		22871	92.96-94.49	0.07	0.7		
89.00	90.37				"		22872	94.49-96.01	0.07			
90.37	91.14	100%			"		22873	96.01-97.54	0.07			
91.14	92.51	100%			"		22874	97.54-99.06	0.10	0.7		
92.51	94.34	100%			"		22875	99.06-100.58	0.10	1.0		
94.34	95.71	100%			"		22876	100.58-102.11	0.10	1.0		
95.71	96.16	75%	96.01-98.45 -extensively bleached horizon ± 20% glassy qtz eyes		"							
96.16	97.54	90%										
97.54	99.06	100%	98.45-102.11 -porphyritic rhyolitic CRYSTAL TUFF									
99.06	100.58	100%										
100.58	102.11	100%										

Drill Log 81

Date Oct. 29, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 25, 1987		Date Completed Oct. 27, 1987		Core Size 110		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2					
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lat. 10000N		Elev		Dip -45°		140.21		42°				Lat.		Elev.		Dip		HOLE No.	
Dep 10100E		Length 149.66		Bearing 199°								Dep.		Length		Bearing		NGC 87-21	
From	To	Recovery	Description					Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
													Ag	Ag	1-3	4-5			
102.11	103.48	100%	102.11-105.92 -ALTERED LAPILLI TUFF						tr.		22877	102.11-	0.07	0.7					
103.48	104.69	100%	-weakly clay altered, strongly broken core with isolated 5cm wide qtz veins						"		22878	103.63-	0.62	1.4					
			-moderately silicified																
104.69	105.92	100%	-cryptocrystalline qtz matrix?						"		22879	105.16-	0.17	1.0					
												105.16-							
												106.68							
105.92	106.68	100%	105.92-110.34 -ALTERED CRYSTAL TUFF						tr.		22880	106.68-	0.07	1.0					
			--buff cream, extensively→pervasively clay altered						"		22881	108.20-	0.27	1.4					
106.68	109.12	100%	-matrix completely clay altered																
			-v. easily weathers									109.73							
109.12	110.34	100%	109.73-110.34 -v. strongly carbonitized																
110.34	111.40	100%	110.34-112.17 -ALTERED PORPHYRITIC ASH TUFF						"		22882	109.73-	0.10	0.7					
			-extensively clay altered, strongly carbonitized						"		22883	111.25-	0.10						
111.40	112.17	100%	-pale green tinted core																
			-numerous v. soft flaky green mineral									112.78							
			⇒CHROMINIUM MICA ⇒FUSCHITE??																
			-tr. Py mineralization																
112.17	113.39	100%	112.17-149.66 - PROPHYRITIC INTERMEDIATE→BASIC TUFF						"		22884	112.78-	0.07						
			-v. strongly carbonitized, weak→strongly chloritized						"		22885	114.30-							
113.39	114.91	100%	(core becomes more chloritic towards the bottom)																
			-up to 5% green mica xyls. in places - FUSCHITE																
114.91	115.98	100%	-strongly jointed in places						"		22886	115.82-							
			-v. strongly veined with calcite + feld ± qtz through-						"		22887	115.82-							
115.98	116.74	100%	out																
			-weakly clay altered in places																

DRILL LOG #1

Date Oct. 29, 1987 — Logged By — Randy Singh —

NORANDA EXPLORATION COMPANY LTD.

Date Colliard Oct. 25, 1987		Date Completed Oct. 27, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot 10000N		Elev		Dip -45°		140.21		42°				Lot		Elev.		Dip	
Dep 10100E		Length 149.66		Bearing 199°								Dep.		Length		Bearing	
																HOLE No. NGC 87-21	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Fe	As	Hg	Pb
116.74	117.35	100%	115.28-121.31 -extensively broken core with no apparent core lost		tr.		22888	118.87-120.396	0.07	0.7		
117.35	118.87	100%										
118.87	120.396	100%										
120.396	121.31	100%			tr.		22889	120.396-121.92				
121.31	122.83	100%					22890	121.92-123.44				
122.83	124.36	100%					22891	123.44-124.97				
124.36	125.58	100%					22892	124.97-126.49				
125.58	126.34	100%					22893	126.49-128.02				
126.34	127.56	100%					22894	128.02-129.54				
127.56	128.17	100%					22895	129.54-131.06				
128.17	128.63	100%					22896	131.06-132.59				
128.63	128.93	100%					22897	132.59-134.11				
128.93	129.84	100%	-core is still v. strongly carbonitized with numerous				22898	134.11-135.64				
129.84	131.06	100%	5-10mm wide calcite + feld +qtz veinlets				22899	135.64-137.16				
131.06	132.59	100%	-numerous hairline calcite joint/fracture filling				22900	137.16-138.68				
			-core becoming v. strongly chloritized									
			-isolated 2cm vuggy qtz + feld xyls.									

DRILL LOG #1

Date _____ Logged By _____

092099

CCNOCC

DRILL LOG 01

Date Oct. 29, 1987 Logged By Randy Singh

NORANDA EX. ORATION COMPANY LTD.

Date Collected Oct. 27, 1987		Date Completed Oct. 30, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot 9920 N		Elev		Dip -45°		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 1 of 8	
Dep 10000 E		Length 143.26		Bearing 199°										HOLE No.	
														NGC 87 - 22	
From	To	Recovery	Description			Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	(gms) ASSAYS				
0	7.62	0%	0-9.14 -OVERBURDEN - GLACIAL TILL												
7.62	9.14	6%	9.04-9.14 -only gravel have been recovered -all matrix have been washed out -polymicfic. angular to rounded pebbles												
9.14	10.67	30%	9.14-10.67 -PORPHYRITIC RHYOLITE -highly broken & gossanous -extensively microfractured throughout						22909	9.14-10.67	0.93	2.1			
10.67	12.19	30%	10.67-16.76 -WEATHERED & ALTERED TUFF?						22910	10.67-12.19	0.96	2.4			
12.19	16.76	15%	-easily crumbles, extensively weathered & altered black with a light grey core -no visible mineralization						22911	12.19-16.76	0.96	4.8			
16.76	18.29	72%	16.76-24.38 -ALT. RHYOLITIC CRYSTAL TUFF						22912	16.76-18.29	0.07	0.7			
18.29	19.51	95%	-dull, medium grey highly broken, pervasively clay altered, v. easily weathers -easily crumbles						22913	18.29-	0.07	0.7			
19.51	21.03	95%							22914	19.81-21.34					
21.03	21.95	100%							22915	21.34-					
21.95	23.47	100%							22916	22.86-24.38	0.07				
23.47	24.99	35%	24.38-33.84 -ALTERED LAPILLI TUFF												
24.99	26.21	100%	-dk. grey to black highly broken core -extensively weathers & easily crumbles in places -no visible mineralization						22917	24.38-	0.10	0.7			
26.21	26.67	100%							22918	25.91-27.43	0.21	1.4			

DRILL LOG #1

Date Oct. 31, 1987 Logged By Randy Singh

NORANDA EX. LORATION COMPANY LTD.

Date Collected Oct. 27, 1987		Date Completed Oct. 30, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2	
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES			
Lot 9920 N		Elev.		Dip -45°		143.26		RECORDED		CORRECTED		RECORDED		CORRECTED	
Dep 10000 E		Length 143.26		Bearing 199°											
Lat.		Elev.		Dip								HOLE No.		Sheet 2 of 8	
Dep.		Length		Bearing								NGC 87 - 22			

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Ag	Ag	Hg	Ag
26.67	27.89	100%					22919	27.43-28.96	0.41	1.0		
27.89	29.26	100%					22920	28.96-	0.31	0.7		
29.26	29.87	100%					22921	30.48-30.48-	0.10	0.7		
29.87	31.39	100%					22922	32.00-32.00-	0.17	1.0		
31.39	32.46	100%						33.53				
32.46	33.84	90%										
33.84	34.59	100%	33.84-42.67 -ALTERED RHYOLITE		1-2		22923	33.53-35.05	0.07	0.7		
34.59	35.81	100%	-weakly→moderately carbonitized with up to 5% 4-7mm calcite xyls in places		"		22924	35.05-	0.17			
35.81	36.73	100%	-extensively bleached core - buff cream colour		"		22925	36.58-36.58-	0.07			
36.73	38.86	100%	-strongly clay & carb. altered ⇒ankeritization		"		22926	38.10-38.10-				
38.86	40.39	100%	-isolated limonite/jarosite rich horizons		"		22927	39.62-39.62-				
40.39	41.61	100%	-strongly juiced up core in places		"		22928	41.15-41.15-				
41.61	42.67	100%	-up to 10% glassy qtz. eyes in places		"			42.67				
42.67	43.89	100%	-1-2% v.f.g. diss. Py mineralization throughout		"		22929	42.67-44.196				
43.89	45.11	100%	-moderately broken core		"		22930	44.196-45.72	0.07	0.7		
			36.73-38.10 -strongly ankeritized with lots of limonite/jarosite									
			42.67-54.86 PORPHYRITIC RHYOLITIC TUFF→CRYSTAL TUFF		tr.1%							
			-dark grey, mod.→strongly silicified moderately carbonitized		"							
			-strongly bleached limonite/jarosite rich horizon		"							

DRILL LOG #1

Date Oct. 31, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 27, 1987		Date Completed Oct. 30, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105 K/2													
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES																	
Lot 9920 N		Elev		Dip -45°		143.26		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 3 of 8											
Dep 10000 E		Length 143.26		Bearing 199°												HOLE No. NGC 87 - 22											
From		To		Recovery		Description				Structure		% Sulph.		Est. Grade		SAMPLE No.		Width		ASSAYS							
																				As		As		Hb		As	
45.11		46.33		100%		-buff cream to white						tr. 1%				22931		45.72-		0.07		0.7					
46.33		46.94		100%		-tr. -1% Py mineralization in places						"				22932		47.24									
46.94		48.46		100%		44.196-50.597 -core progressively becomes more clay altered						"				22933		47.24-									
48.46		49.99		100%		50.597-51.66 -strongly silicified dk. grey porphyritic rhyolitic tuff						"				22934		48.77									
49.99		51.51		90%		51.66-54.86 -core becomes progressively clay altered & bleached						"				22935		48.77-									
51.51		52.73		100%								"				22936		50.29									
52.73		54.25		100%														50.29-									
54.25		54.86		100%														51.82									
54.86		56.08		100%		54.86-58.76 -ALTERED LAPILLI TUFF						tr.				22937		51.82-									
56.08		56.998		100%		-moderately broken core						"				22938		53.34									
56.998		57.91		100%		-strongly bleached and clay altered tuff						"				22939		53.34-									
57.91		59.44		100%		-tr. Py mineralization throughout						"						54.86									
59.44		60.96				-5-10% glassy qtz. eyes						"						54.86-									
						-isolated moderately silicified horizon						"						56.39									
						-organic rich horizons						"						56.39-									
						58.76-60.46 -ALTERED VOLCANIC BRECCIA						tr.				22940		57.91									
						-strongly altered, with two distinct fragment size						"						57.91-									
						A - 3-5cm v. angular						"						59.44-									
						B - 1-5mm rounded						"						60.96									
						-smaller rounded fragment seems to flow around large angular fragments						"															
						59.51-59.89 -interlayered altered Lapilli Tuff						"															

DRILL LOG #1

Date Oct. 31, 1987 Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collared Oct. 27, 1987		Date Completed Oct. 30, 1987		Core Size 11Q		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 4 of 8			
Lot 9920 N		Elev				Dip -45°		143.26		RECORDED		CORRECTED				RECORDED	
Dep 10000 E		Length 143.26		Bearing 199°						Lot.		Elev.		Dip		HOLE No.	
										Dep.		Length		Bearing		NGC 87 - 22	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
									Al	Fe	H ₂	Pk	
60.46	61.87	100%	60.46-64.01 -ALTERED LAPILLI TUFF		tr.		22941	60.96-					
61.87	62.48	100%	-altered and highly juiced up core		"		22942	62.48-					
			-numerous qtz + feld fluid filled joints					64.01					
62.48	64.01	100%											
64.01	65.53	100%	64.01-67.97 -ALTERED CRYSTAL LITHIC TUFF	58.76m contact	tr. 1%		22943	64.01-					
65.53	67.06	100%	-strongly clay altered & graphitic & clay horizons	@58 cba	"		22944	65.53-					
			-tr. 1% Py mineralization					67.06					
			65.07-66.45 -graphitic & clay horizon										
67.06	68.58	100%	67.97-74.37 -ALTERED LAPILLI TUFF		tr. 1%		22945	67.06-					
68.58	68.88	100%	-core becomes progressively more clay altered towards the bottom				22946	68.58-					
68.88	69.799	100%	-strongly ankeritized in places					70.10					
69.799	71.02	100%	-occasional 5mm wide calcite + feld veins (randomly oriented)				22947	71.63-					
							22948	73.15-					
71.02	73.46	100%					22949	74.68					
73.46	74.98	100%											
74.98	76.50	100%	74.37-79.25 -ALTERED CRYSTAL LITHIC TUFF		tr.		22950	74.68-					
76.50	78.03	100%	-dark grey, strong clay altered horizons		"		22951	76.20-					
			coincidental with strong ankeritization					77.72					
			-strongly juiced-up core										

DRILL LOG - 81

Date Oct. 31, 1987 Logged By Randy Singh

007000

NORANDA EXPLORATION COMPANY LTD.

Date Collgred Oct. 27, 1987		Date Completed Oct. 30, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lat 9920 N		Elev		Dip -45°		143.26		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep 10000 E		Length 143.26		Bearing 199°								Dep.		Length		Bearing	
																Sheet 5 of 8	
																HOLE No.	
																NGC 87 - 22	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									A ₁	A ₂	H ₂	A ₃
78.03	79.25	100%			tr.		22952	77.72-79.25	0.07	0.7		
79.25	80.77	100%	79.25-81.08 -BRECCIATED TUFF		tr.		22953	79.25-80.77				
80.77	82.296	100%	-brecciATED CRYSTAL LITHIC TUFF & numerous lapilli tuff fragments		"		22954	80.77-82.296				
82.296	83.82	100%	81.08-82.60 -ALTERED CRYSTAL LITHIC TUFF		tr. 1%		22955	82.296-83.82				
			-strongly clay altered tr. 1% Py min.									
83.82	85.34	100%	82.60-88.09 -ALTERED CRYSTAL LITHIC → LAPILLI TUFF		1-3%		22956	83.82-85.34				
85.34	86.87	100%	-strongly - pervasively clay altered & easily weathers		"		22957	85.34-86.87				
			-fine grained									
			*matrix is completely altered to clay									
86.87	88.39	100%	-1-3% v.f.g. diss. Py throughout		"		22958	86.87-88.39				
			-greenish tint to core									
			-extensively juiced up core									
88.39	89.92	100%	88.09-114.60 -ALTERED CRYSTAL LITHIC TUFF		1-2%		22959	88.39-89.92				
89.92	91.44	100%	-moderately to strongly silicified & clay altered		"		22960	89.92-91.44				
			-rhyolitic in places									
			-10-15% lithic frags - predominantly volc. glass									
91.44	92.66	100%	+ coal frags. up to 2cm long		"		22961	91.44-92.96				
92.66	93.73	100%	-pervasively clay altered in places		"		22962	92.96-94.49				
			-extensively bleached horizons with up to 20% glassy qtz. eyes									
93.73	95.25	100%	-core becomes progressively more clay altered towards the bottom		"		22963	94.49-96.01	0.07	0.7		
95.25	96.93	100%	-1-2% v.f.g. diss. Py throughout		"		22964	96.01-97.54				

DRILL LOG 81

Date Oct. 31, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 27, 1987		Date Completed Oct. 30, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105 K/2	
FIELD CO-ORDINATES				DEPTH 143.26		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 6 of 8 HOLE No. NGC 87 - 22	
Lat. 9920 N		Elev.				RECORDED		CORRECTED		RECORDED		CORRECTED			
Dep. 10000 E		Length 143.26		Dip -45°		Bearing 199°				Lat.		Elev.		Dip	
										Dep.		Length		Bearing	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Ag	As	Hg	Pb
96.93	98.45	100%			1-2%		22965	97.54-99.06	0.07	0.7		
98.45	99.36	100%			"		22966	99.06-100.58				
99.36	100.89	100%			"		22967	100.58-102.11				
100.89	102.26	100%			"		22968	102.11-103.63				
102.26	103.63	100%			"		22969	103.63-105.16				
103.63	105.16	100%			"		22970	105.16-106.68				
105.16	106.68	100%			"		22971	106.68-108.20				
106.68	108.20	100%			"		22972	108.20-109.73				
108.20	109.73	100%			"		22973	109.73-111.25				
109.73	111.25	100%			"		22974	111.25-112.78				
111.25	112.78	100%			"		22975	112.78-114.30				
112.78	114.30	100%			"							
114.30	115.82	100%	114.60-120.396 -ALTERED LAPILLI TUFF		tr. 1%		22976	114.30-115.82				
115.82	117.35	100%	-strongly, pervasively clay altered LAPILLI TUFF 60-65% 1-3cm lapilli ~15% volc. glass + rhyolite lithic frags.		"		22977	115.82-117.35				
117.35	118.87	100%	-strongly juiced up & easily weathers in places		"		22978	117.35-118.87				
118.87	120.396	100%	tr. - 1% Py mineralization		"		22979	118.87-120.396	0.07	0.7		

DRILL LOG #1

Date Oct. 31, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 27, 1987		Date Completed Oct. 30, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105 K/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lat 9920 N		Elev		Dip -45°		143.26		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep 10000 E		Length 143.26		Bearing 199°								Dep.		Length		Bearing	
																HOLE No. NGC 87 - 22	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									As	Ag	Hg	Pt
120.396	121.92	100%	120.396-128.32 - RHYOLITIC CRYSTAL LITHIC TUFF		1-3%		22980	120.396-	0.107	0.7		
121.92	123.44	100%	-moderately to strongly silicified		"		22981	121.92-				
			-strongly clay altered in places		"			121.92-				
			-15-20% lithic fragments throughout predominantly volc		"		22982	123.44-				
123.44	124.97	100%	+ coal frags.		"			123.44-				
124.97	126.49	100%	-strongly bleached and ankeritized 20-50 cm zones		"		22983	124.97-				
			-1-3% Py mineralization throughout		"			124.97-				
126.49	127.10	100%			"		22894	126.49-				
127.10	128.63	100%			"			126.49-				
					"			128.02				
128.63	130.15	100%	128.32-135.19 - ALTERED LAVILLI TUFF		tr.		22985	128.02-				
			-strong to pervasively clay altered tuff					129.54				
130.15	131.06	100%	-soft easily weathers		tr.		22986	129.54-				
			-tr. Py mineralization		"			131.06				
131.06	132.59	22%			"		22987	131.06-				
					"			132.59				
132.59	134.11	100%			"		22988	132.59-				
					"			134.11				
134.11	135.64	100%			"		22989	134.11-				
					"			135.64				
135.64	137.16	100%	135.19-140.21 - ALTERED RHYOLITE DYKE??		tr.		22990	135.64-				
			-greenish cream, strongly clay altered to pervasively		"			137.16				
137.16	138.68	100%	-clay altered, easily weathers, very soft in places		"		22991	137.16-				
			-contacts uncertain		"			138.68				
138.68	140.21	100%	-core is literally unrecognizable		"		22992	138.68-	0.0	0.7		
			-occasionally 5cm long unaltered rounded frag??		"			140.21				

DRILL LOG - 81

Date Oct. 31, 1987 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collared Oct. 27, 1987		Date Completed Oct. 30, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K/2	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 8 of 8		
Lat 9920 N		Elev			Dip -45°	143.26	RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.				Elev.
Dep 10000 E		Length 143.26		Bearing 199°						Dep.		Length	Bearing	HOLE No. NGC 87 - 22	
From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
140.21	141.73	100%	140.21-143.26 -ALTERED CRYSTAL - LITHIC TUFF		tr.		22993	140.21-141.73							
140.21	143.26	100%	140.21-140.31 -moderately silicified RHYOLITIC - CRYSTAL LITHIC TUFF		"		22994	141.73-143.26							
			-strongly jointed core												
			140.81-143.26 -pervasively clay altered CRYSTAL LITHIC TUFF												
			-occasional 3cm long rounded feldspar xyls.?												

DRILL LOG #1

Date Dec. 31, 1987 Logged By Randy Singh

092099

(23)

DRILL LOG 01

Date Nov. 7/87 Logged By Randy Singh

6
5
4
3
2
1

NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct. 31, 1987		Date Completed Nov. 6, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K-2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 2 of 8	
Lot. 10000N		Elev.		Dip -45°		137.16		42°		Lot.		Elev.		Dip	
Dep. 10050E		Length		Bearing 199°						Dep.		Length		Bearing	
														HOLE No. NGC 87-23	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									A ₁	A ₂	H ₂	A ₃
32.00	32.92	75%	15-20% lithic frags. predominantly volc. glass frags. -core becomes progressively silicified towards the bottom		1-3%		25287	32.00-33.53	0.17	4.1		
32.92	34.44	10%					25288	33.53-35.05	0.17	3.4		
34.44	35.66	50%					25289	35.05-36.58	1.06	3.9		
35.66	36.88	90%					25290	36.58-37.795	2.85	36.7		
36.88	37.795	90%					25291	37.795-40.23	0.27	8.6		
37.795	40.23	6%	40.23-41.45 -strongly brecciated qtz. vein rich horizon 70% of breccia frags are banded chalcodonic qtz. vein material				25292	40.23-41.15	0.21	5.8		
40.23	41.45	90%					25293	41.15-42.67	0.07	1.7		
41.45	42.67	85%										
42.67	43.89	80%	42.67-49.68 -very sandy, extensively crushed core		1-3		25294	42.67-44.196	0.07	1.7		
43.89	45.11	80%	42.67-45.11 -v. strongly silicified zone		"		25295	44.196-45.72	0.31	5.5		
45.11	46.02	75%	45.11-49.68 -core becomes very coal rich - argillaceous		"		25296	45.72-47.24	0.75	9.5		
46.02	48.77	50%					25297	47.24-48.72	0.41	4.5		
48.77	49.68	25%										

DRILL LOG #1

Date Nov. 7/87 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct. 31, 1987		Date Completed Nov. 6, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K-2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot. 10000N		Elev.		Dip -45°		137.16		42°							
Dep. 10050E		Length		Bearing 199°											
From		To		Recovery		Description				Structure		% Sulph.		Est. Grade	
49.68		51.21		90%		49.68-57.21 -v.f.g., v. weakly clay altered, weakly silicified well mineralized with up to 7% Py in places						1-3 up to 7%		25298	
51.21		53.04		95%		-strongly broken & crushed core								25299	
53.04		54.56		7%		-strong fluid brecciation								25300	
						-isolated 3-5mm qtz + feld + carb. vein/veinlets									
54.56		55.78		52%		54.56-55.78 -v. strongly silicified				60° cba		1-3% up to 7%		25301	
						-banded qtz + feld veins almost gneissic looking								25302	
55.78		56.39		50%								33%		25303	
56.39		57.61		75%								1-3%			
57.61		59.13		90%								1-3%		25304	
59.13		60.35		35%								1-3%		25305	
60.35		61.11		95%								1-3%		25306	
61.11		62.18		100%		61.72-62.18 -strongly bleached horizon									
62.18		63.70		100%		62.48-62.94 -v.f.g., strongly silicified, strongly vesiculated									
63.70		65.53		100%		63.70-64.01 -v. strongly silicified horizon						1-3%		25307	

DRILL LOG #1

Date Nov. 7/87 Logged By Randy Singh

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct 31, 1987		Date Completed Nov 6, 1987		Core Size 110		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K-2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 4 of 8	
Lot 10000N		Elev		Dip -45°		137.16		42°		Lot		Elev		Dip	
Dep 10050E		Length		Bearing 199°						Dep		Length		Bearing	
HOLE No. NGC 87-23															

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Fe	Pb	Hg	As
65.53	67.06	100%	64.92-74.22 -ALTERED VESICULATED TUFF -v.f.g. ash tuff		tr.		25308	65.53-67.06	0.07	0.7		
67.06	68.58	100%	-pervasively clay altered -mod. silicified in places		"		25309	67.06-68.58	0.07	0.7		
68.58	69.799	100%	-v. strongly vesiculated in places -thinly laminated in places		"		25310	68.58-70.10	0.07	0.7		
69.799	71.32	100%	-qtz. eyes rich horizons up to 20% glass rounded qtz. eyes		"		25311	70.10-71.32	0.27	1.4		
71.32	71.93	95%			"		25312	71.32-71.93	0.27	1.7		
71.93	72.999	100%			"		25313	71.93-72.999	0.14	1.7		
72.999	74.22	100%						74.22				
74.22	75.13		74.22-75.13 -ALTERED RHYOLITE - RHYOLITE TUFF -pervasively clay altered v.f.g. throughout -strongly broken core - brecciated cemented with chlorite		1-3		25314	74.22-75.13	0.07	0.7		
			-soft, very easily weathers in places -1-3% v.f.g. diss. Py throughout -Pyritic chlorite in places -pronounced k-spar content throughout		"		25315	75.13-76.20	0.31	2.1		
					"		25316	76.20-77.72	0.07	1.0		
75.13	76.20	100%	75.13-76.20 -100% of Rx. has been alt. to clay v. soft easily weathers									
76.20	77.72	100%	76.20-77.72 -5mm banded qtz. + feld vein @	128° cba								

DRILL LOG #1

Date Nov. 7, 1987 Logged By Randy Singh

092009

NORANDA EXPLORATION COMPANY LTD.

Date Collared Oct 31, 1987		Date Completed Nov 6, 1987		Core Size 110		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105 K-2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 5 of 8	
Lat 10000N		Elev		Dip -45°		137.16		42°		Lat.		Elev.		Dip	
Dep 10050E		Length		Bearing 199°						Dep.		Length		Bearing	
														HOLE No. NGC 87-23	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
									Al	Fe	Hg	Ag	
77.72	78.791	100%											
78.791	80.47	100%	78.33-103.02 -ALTERED v.f. CRYSTAL LITHIC TUFF		2-5		25317	79.25-	0.17	1.4			
80.47	81.69	100%	dark gray with strong pervasive clay alteration		"		25318	80.77-	0.21	1.7			
			2-5% Py mineralization throughout - occurring as					82.296					
81.69	82.296	100%	pyritic chlorite fracture filling		"		25319	82.296-	0.07	1.0			
			-1-3% Py (only) in places					83.82					
82.296	83.52	100%	-strongly broken core, crushed and easily weathers in places		1-3		25320	83.82-	0.07	1.0			
								85.34					
83.52	85.04	100%			"		25321	85.34-		1.0			
								86.87					
85.04	86.56	100%			"		25322	86.87-		1.2			
								88.39					
86.56	88.09	100%	88.09-97.84 -crushed core in places		2-5		25323	88.39-	0.07	1.4			
			-extensively broken in other					89.92					
88.09	89.00	100%	-occasional highly bleached horizons => looks like an altered rhyolite										
89.00	90.22	80%											
90.22	91.44	80%			1-3		25324	89.92-	0.10	1.0			
								91.44					
91.44	92.51	90%			"		25325	91.44-	0.86	1.7			
								92.96					
92.51	93.42	40%			"		25326	92.96-	0.17	1.4			
								94.49					
93.42	94.49	80%			"		25327	94.49-	0.27	1.4			
								96.01					
94.49	96.01	100%			"		25328	96.01-	0.10	1.7			
								97.54					

DRILL LOG #1

Date Nov. 7/87 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Colored Oct 31, 1987		Date Completed Nov 6, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K-2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat 10000N		Elev		Dip -45°		137.16		42°		Lat.		Elev.		Dip	
Dep 10050E		Length		Bearing 199°						Dep.		Length		Bearing	
														HOLE No. NGC 87-23	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									174	745		
96.01	97.54	100%			2-5		25329	97.54-99.06	0.10	1.7		
97.54	97.99	70%			"		25330	99.06-100.58	0.10	1.4		
97.99	99.06	60%			"		25331	100.58-102.11	0.07	0.7		
99.06	100.28	100%			"		25332	102.11-103.63	0.07	0.7		
100.28	100.58	95%										
100.58	101.80	90%										
101.80	103.02	85%										
103.02	104.55	100%	103.02-121.92 -dark grey dull lustre strongly vesiculated, mod. silicified TUFF CRYSTAL LITHIC → LAPILLI TUFF		1-3		25333	103.63-105.16	0.07	1.0		
104.55	106.22	100%	-v. weakly magnetic with 1-3% v.f.g. diss. Py in places		"		25334	105.16-106.68	0.10	1.4		
106.22	107.899	100%	-numerous qtz + feld veinlets ≈ 5% lithic frags throughout		"		25335	106.68-108.20	0.07	1.4		
107.899	109.12	65%	-core becomes progressively more silicified towards the bottom		"		25336	108.20-109.73	"	0.7		
109.12	110.64	100%	-becomes coarser grained & more lapilli tuff towards the bottom		"		25337	109.73-111.25	0.07	0.7		
110.64	112.47	90%	-pyrite content decreases towards the bottom		"		25338	111.25-112.78	0.17	0.7		
112.47	113.99	100%			"		25339	112.78-114.30	0.07	0.7		
113.99	115.52	100%			"		25340	114.30-115.82	0.21	1.0		

DRILL LOG 81

Date Nov. 7/87 Logged By Randy Singh

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NORANDA EXPLORATION COMPANY LTD.

Date Collected Oct 31, 1987		Date Completed Nov 6, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105 K-2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat. 10000N		Elev.		Dip -45°		137.16		42°		Lat.		Elev.		Dip	
Dep. 10050E		Length		Bearing 199°						Dep.		Length		Bearing	
HOLE No. NGC 87-23															

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Al	Ag	Hg	Fe
115.52	117.04	100%					25341	115.82-117.35	0.14	1.4		
117.04	118.57	100%					25342	117.35-118.87	0.10	1.0		
118.57	118.87	100%					25343	118.87-120.396	0.21	1.0		
118.87	120.396	100%					25344	120.396-121.92	0.07			
120.396	121.92	100%										
121.92	122.83	100%	121.92-131.67 -ALTERED CRYSTAL LITHIC TUFF		tr.		25345	121.92-123.44	0.17			
122.83	124.36	100%	strongly silicified and bleached horizons		"		25346	123.44-124.97	0.10	1.0		
124.36	126.19	100%	-moderately to strongly brecciated in places				25347	124.97-126.49	0.14	0.7		
126.19	127.71	100%	-large rhyolite dyke crosscuts unit				25348	126.49-128.02	0.07	0.7		
127.71	129.24	100%	-strongly vesiculated in places				25349	128.02-129.54		1.0		
129.24	130.76	100%	123.23-125.53 -welded ash tuff horizon, with sharp contacts => maybe a weird rhyolite dyke???				25350	129.54-131.06		0.7		
130.76	131.06	100%	-blue-grey mud/clay coating on slip surfaces				25351	131.06-132.59	0.07	0.7		
131.06	131.98	100%	123.53-125.58 -strongly bleached rhyolite dyke @ 20% glassy rounded Qtz. eyes									
			127.41-128.93 -brecciated horizon									
			130.15-130.76 -strongly brecciated horizon with brecciated frags. strong alignment this unit graded into a rhyolitic tuff - crystal tuff									

DRILL LOG #1

Date Nov. 7/87 Logged By Randy Singh

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Date Nov. 7/87 Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

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Date Colored Nov. 6, 1987		Date Completed Nov. 8, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105 K-2									
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES											
Lot 10030N		Elev		Dip -45°				RECORDED		CORRECTED		RECORDED		CORRECTED		Lat.		Elev		Dip		Sheet 1 of 7	
Dep 10050E		Length 83.82		Bearing 199°												Dep		Length		Bearing		HOLE No.	
																						NGC 87-24	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
0	12.19	0%	0-13.72 -OVERBURDEN - GLACIAL TILL										
12.19	13.72	20%	-only 35cm of pebbles & cobble size material has been recovered										
			-all matrix have been washed out										
13.72	16.46	20%	13.72-23.26 -IMMATURE SEDIMENTARY SEQUENCE		tr.1		25357	13.72-					
16.46	16.76	100%	13.72-17.61 -v.c.g. poorly lithified immature granule conglomerate with minor jasper & chert		"		25358	16.76-					
16.76	18.29	100%	-up to 30% obsidian & coal frags. throughout - angular tr.-1% v.f.g. diss. Py throughout		"		25359	18.29-					
			17.61-19.14 -v.f.g. granule - grit conglomerate unit					19.81					
18.29	19.81	100%	19.14-20.94 -c.g. polymicfic paraconglomerate →qtz. pebble conglomerate		tr.1		25360	19.81-					
19.81	21.34	100%	-mod.-well lithified					21.34					
			-rounded qtz pebbles up to 5cm										
			-numerous v. sericitized pebbles										
			-other pebbles include vol., vol. glass, coal & organic/plant remains										
			-tr. Py throughout										
			-matrix is mod. sericitized										
21.34	22.86	100%	20.94-23.26 -well lithified, v. stiff & dry		tr.1		25361	21.34-					
			LACUSTRINE SANDY - CLAY deposit					22.86					

DRILL LOG - 81

Date _____ Logged By Randy Singh

NORANDA EXPLORATION COMPANY LTD.

Date Collared Nov. 6, 1987		Date Completed Nov. 8, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		NTS No 105 K/2									
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES											
Lat 10030N		Elev		Dip -45°				RECORDED		CORRECTED		RECORDED		CORRECTED		Lot		Elev		Dip		HOLE No.	
Dep 10050E		Length 83.82		Bearing 199°												Dep		Length		Bearing		NGC 87-24	
From	To	Recovery	Description					Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS										
22.86	24.38	100%	23.26-29.77 -ALTERED PORPHYRITIC BASIC TUFF -light green moderately carbonitized with numerous calcite veining -numerous calcite coated slip & fracture surfaces -moderately broken core						tr.1		25362	22.86-24.38	0.07	0.7									
24.38	25.91	100%									25363	24.38-											
25.91	27.43	100%	28.54-29.19 -fluid brecciated horizon tourmalene rich fluid						"		25364	25.91-27.43											
27.43	28.04	100%									25365												
28.04	29.26	100%									28.96												
29.26	30.48	100%	29.77-30.48 -v. stiff, v. dry, easily crumbles LACUSTRINE CLAY DEPOSIT						tr.		25366	28.96-30.48											
30.48	31.48	100%	30.48-31.55 -v.f.g. moderately broken SANDSTONE						tr.		25367	30.48-32.004											
31.48	33.22	100%	31.55-35.25 -ALTERED TUFF -extensively, pervasively clay altered, v. easily weathers -jarosite/limonite rich in places								25368	32.004-33.53											
33.22	34.75	100%									25369	33.53-											
34.75	36.27	100%									35.05												
36.27	37.795	100%	35.25-37.795 -f.g., dark grey with v. dull lustre, poorly lithified argillite rich SANDSTONE -thinly bedded pseudo x-bedding in places					120° cba			25370	35.05-36.58											
											25371	36.58-											

DRILL LOG - 81

38.10

Date _____ Logged By _____

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 6, 1987		Date Completed Nov. 8, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		NTS No 105 K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 3 of 7	
Lat. 10030N		Elev.		Dip -45°		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No.	
Dep. 10050E		Length 83.82		Bearing 199°										NGC 87-24	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS		
37.795	39.624	90%	37.795-38.095 -v. easily crumbles COAL SEAM												
39.624	41.15	100%	38.095-41.15 -ALTERED SEDIMENTARY/TUFF SEQUENCE -extensively - pervasively clay altered core -coal & plant remains rich horizon -core unrecognizable?								25372 25373	38.10- 39.62- 41.15			
41.15	42.67	100%	41.15-42.82 -c.g. polymictic paraconglomerate -matrix is strongly clay altered =>qtz. pebble conglomerate < 20% volcanic + metamorphic pebble size clasts						tr.1		25374 25375	41.15- 42.67- 42.67-			
42.67	43.28	100%	-matrix is very sericitic -lots of marcasite staining in places -tr. -1% Py mineralization -looks like a log pebble pavement									44.196			
43.28	44.81	100%	42.82-44.43 -Muscovite rich altered SANDSTONE -v.f.g. muscovite distributed throughout unit sericitized in places -immature sandstone indistinct remnant X-bedding structures								18751	44.196- 45.72			
44.81	45.72	100%	44.43-48.46 -INTERCLATED SEDIMENTARY SEQUENCE 44.43-43.28 -lacustrine clay type deposit overlying								18752	45.72- 47.24			

Drill LOG 81

Date _____ Logged By _____

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 6, 1987		Date Completed Nov. 8, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		NTS No 105 K/2	
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES			
								RECORDED	CORRECTED	RECORDED	CORRECTED				
Lat. 10030N		Elev		Dip -45°								Lat.		Elev	
Dep. 10050E		Length 83.82		Bearing 199°								Dep.		Length	
												Dip		HOLE No.	
												Bearing		NGC 87-24	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
45.72	46.94	100%	43.28-48.46 -POLYMICITIC PARACONGLOMERATE -qtz. pebble conglomerate with minor chert & jasper pebbles (<5%)				18753	47.24-48.77				
46.94	48.46	100%	-15% volc. + metamorphic pebbles -80% qtz. pebbles ≈ 2% matrix -clay alt. -minor marcasite staining in places (*conglomerate is probably a log pebble pavement)									
48.46	49.99	100%	48.46-49.49 -muscovite rich argillite rich sandstone -dirty sandstone ≈ 1-3% v.f.g. diss. sulphides - Py AsPy		1-3		18754	48.77-50.29				
			49.49-49.99 -quartz granule - grit conglomerate -polymictic orthoconglomeratic									
49.99	51.51	100%	49.99-51.51 -strongly caly altered argillite rich SANDSTONE -dirty sandstone				18755	50.29-51.82				
51.51	52.73	100%	51.51-52.73 -above unit grades into a cleaner sandstone sericitized & muscovite rich in places 1-3% v.f.g. diss. sulphides		1-3		18756	51.82-53.34				
52.73	54.25	85%	52.73-53.34 -qtz. granule - grit polymictic paraconglomerate -minor volc. + metamorphic + chert + jasper granules				18757	53.34-54.86				
54.25	55.78	100%	53.34-55.78 -interlayered/interclated strongly clay altered argillite rich - dirty sandstone & lacustrine type clay -sandstone 'beds' vary from 20cm to 65cm				18758	54.86-56.39				

Drill Log #1

Date _____ Logged By _____

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 6, 1987		Date Completed Nov. 8, 1987		Core Size 11Q		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105 K/2	
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES			
Lat. 10030N		Elev.		Dip -45°				RECORDED		CORRECTED		RECORDED		CORRECTED	
Dep. 10050E		Length 83.82		Bearing 199°								Lat.		Elev.	
												Dep.		Length	
												Dip		HOLE No	
												Bearing		NGC 87-24	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
									Fe	Mg			
55.78	57.30	100%	55.78-58.68 -POLYMICTIC ortho → paraconglomerate unit				18759	56.39-					
57.30	58.83	100%	-distinct upward fining sequence -granule - grit & pebble conglomerate				18760	57.91- 57.91- 59.44	0.07 0.07	0.7 0.7			
			-isolated 5cm sandstone interbed -v. well bedded	115-120° cba									
58.83	59.74	100%	58.68-64.01 -above unit gradually graded into units				18761	59.44-	0.10	0.7			
59.74	60.96	100%	-immature sandstone with pebbly beds -strongly broken core				18762	60.96- 60.96-	0.10	1			
60.96	62.94	80%	-mod. - strongly clay altered				18763	62.48 62.48- 64.01	0.07				
62.94	64.01	100%											
64.01	65.53	100%	64.01-65.23 -ALTERED TUFF? -mod. - strongly silicified, mod. altered, highly broken core -somewhat brecciated in places				18764	64.01- 65.53	0.10	0.7			
65.53	67.06	100%	65.23-66.56 -ALTERED GRANULE - GRIT CONGLOMERATE -pebble rich in places -muscovite rich clay altered matrix				18765	65.53- 67.06	0.10	1.0			
67.06	68.58	100%	66.56-67.16 -muscovite rich, dirty sandstone unit -wacke texture??				18766	67.06- 68.58	0.10	1.4			

DRILL LOG 81

Date _____ logged By _____

660260

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 6, 1987		Date Completed Nov. 8, 1987		Core Size 110		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105 K/2	
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES			
Lat. 10030N		Elev.		Dip -45°		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 6 of 7	
Dep. 10050E		Length 83.82		Bearing 199°										HOLE No.	
														NGC 87-24	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Ag	Ag		
68.58	70.10	100%	67.16-69.18 -strongly broken pebble → granule conglomerate -polymictic 80% qtz + 15% volc. + meta + <5% chert & jasper				18767	68.58-70.10	0.21	2.1		
70.10	71.63	100%	69.18-71.93 -medium grey, dull lustre f.g.-m.g. mod. silicified prophyritic in places -mod. clay altered ⇒ ALT. TUFF				18768	70.10-71.63	0.10	1.7		
71.63	72.85	100%	71.93-72.85 -granule - grt conglomeratic unit -contacts are very indistinct or broken which make it unrecognizable				18769	71.63-72.85	0.10	1.4		
72.85	74.68	100%	72.85-75.895 -muscovite rich dirty sandstone -mod. silicified with tr. sulphide throughout v.f.g.				18770	72.85-74.68	0.07	1.7		
74.68	75.59	70%	diss. Py, AsPy -strongly juiced up & chlorite rich solution				18771	74.68-76.20	0.14	1.4		
75.59	76.20	85%	-vesiculated in places									
76.20	77.72	30%	75.895-77.72 -granule - grt conglomerate				18772	76.20-77.72	0.21	3.8		
77.72	78.33	70%	77.72-80.16 -mod. silicified, mod. clay altered				18773	77.72-79.25	0.10	1.7		
78.33	79.86	95%	brecciated in places ALT. TUFF				188774	79.25-80.77	0.14	1.7		

DRILL LOG #1

Date _____ Logged By _____

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 6, 1987		Date Completed Nov. 8, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105 K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot 10030N		Elev.		Dip -45°		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 7 of 7	
Dep 10050E		Length 83.82		Bearing 199°										HOLE No.	
										Lat.		Elev.		Dip	
										Dep.		Length		Bearing	
														NGC 87-24	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
									Al	Fe		
79.86	81.38	95%	80.16-81.08 -highly broken core with some core lost c.g. qtz + chert + jasper + volc. + meta pebble conglomerate -downward filling sequence??				18775	80.77- 82.296	0.17	1.7		
81.38	83.06	95%	81.08-83.82 -mod. silicified, strongly clay altered in places				18776	82.296- 83.82	0.41	3.1		
83.06	83.82	75%	ALT. TUFF -highly broken core with some core lost									
			N.B. NGC 87-24 ENDED BECAUSE OF BAD GROUND CONDITIONS HOLE NOT GROUTED - BLOCKED									

Drill LOG 81

Date _____ Logged By _____

NORANDA EXPLORATION COMPANY LTD.

25

Date Collected Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
						RECORDED		CORRECTED							
Lot 10000 N		Elev		Dip -45°						Lot		Elev		Dip	
Dep 10275 E		Length 169.77		Bearing 199°						Dep		Length		Bearing	
														HOLE No. NGC 87 - 25	

From	To	Recovery	Description HOLE NOT GROUNDED - BLOCKED	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
?	37.80	?	OVERBURDEN Subangular to subrounded pebbles and cobbles in muddy poorly sorted gravel.										
37.80	39.62	23%	OVERBURDEN As above.										
39.62	40.84	30%	OVERBURDEN Pebbles and cobbles in black sandy clay matrix; very poorly sorted.										
40.84	42.06	33%	OVERBURDEN As above.										
42.06	43.28	15%	OVERBURDEN As above.										
43.28	44.81	20%	OVERBURDEN As above.										
44.81	46.33	25%	OVERBURDEN As above.										
46.33	47.85	21%	OVERBURDEN As above.										

DRILL LOG - 81

Date Nov. 18, 1987 Logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size 11Q		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2							
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES									
								RECORDED		CORRECTED		RECORDED		CORRECTED							
Lat 10000 N		Elev		Dip -45°										Lat		Elev		Dip		HOLE No	
Dep 10275 E		Length 169.77		Bearing 199°										Dep		Length		Bearing		NGC 87 -25	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
47.85	49.38	31%	OVERBURDEN As above.										
49.38	50.60	40%	OVERBURDEN Larger blocks and pebbles in gray clay; matrix material washed out.										
50.60	52.12	25%	OVERBURDEN Pebbles and cobbles in black sandy clay matrix; much of matrix washed out.										
52.12	53.64	27%	OVERBURDEN As above.										
53.64	55.17	26%	OVERBURDEN As above.										
55.17	56.69	14%	OVERBURDEN As above.										
56.69	57.91	16%	OVERBURDEN As above.										
57.91	58.52	26%	OVERBURDEN As above.										

Date Nov. 18, 1987 Signed By: Chris Wild

6000000

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat. 10000 N		Elev		Dip -45°				RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep 10275 E		Length 169.77		Bearing 199°								Dep		Length		Bearing	
																HOLE No. NGC 87 -25	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
58.52	59.74	16%	OVERBURDEN As above.										
59.74	61.26	16%	OVERBURDEN As above.										
61.26	62.79	23%	OVERBURDEN As above.										
62.79	64.31	28%	OVERBURDEN As above.										
64.31	65.23		OVERBURDEN As above.										
65.23	65.84	94%	CRYSTAL - LITHIC TUFF Light gray, felsic, fine grained with few fragments to 5mm ø. Mainly quartz crystals and fragments; <5% dark gray to black fragments. (Fragments tend to be subangular to angular.) Strong pervasive, argillic alteration makes rock very crumbly, weakly cemented. Rare quartz eyes to 0.4cm.		-		18777						
65.84	66.75	100%	CRYSTAL - LITHIC TUFF Same as above. Increasing coarse (1cm) fragments, small pods of sulphide (mainly pyrite). Very poorly sorted pervasive argillic alteration.		<1		18777						

DRILL LOG #1

Date Nov. 18, 1987 Logged By Dennis Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size HQ	DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2			
FIELD CO-ORDINATES					DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					Sheet 4 of 5	
Lat 10000 N		Elev		Dip -45°		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip		
Dep 10275 E		Length 169.77		Bearing 199°						Dep.		Length		Bearing	HOLE No. NGC 87 -25	
From	To	Recovery	Description					Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
66.75	68.28	100%	CRYSTAL - LITHIC TUFF Same as above. A few pods and massive fragments of pyrite clay infilled partings at 0°-90° to core axis. Generally, large (1-2cm) clay altered fragments in a fine grained, crumbly matrix.						1-2		18778					
68.28	69.80	100%	CRYSTAL - LITHIC TUFF Same as above. Increasing prevalence of pale green, clay altered quartz-eye rhyolite fragments; one 5cm block noted at 68.58m. Minor coarse and poddy pyrite. Clay partings up to 5mm thick, dark gray, very plastic.						2		18779					
69.80	71.32	100%	CRYSTAL - LITHIC TUFF Same as above. Fewer pyrite pods.						1-2		18780					
71.32	72.85	93%	CRYSTAL - LITHIC TUFF Same as above.						2		18781					
72.85	74.37	95%	CRYSTAL - LITHIC TUFF Light gray, white to dark gray fragments, very poorly sorted angular to subrounded. Moderate argillic alteration, clay partings common. One quartz-carbonate veinlet ~20° to core axis, 1cm thick, around fragments, trace to minor pyrite. Also, white rhyolitic fragments are rimmed by dark gray less altered quartz.						1		18782					

Nov. 1987

Date Nov. 18, 1987 Prepared By: Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 5 of 5	
Lat. 10000 N		Elev		Dip -45°		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No.	
Dep 10275 E		Length 169.77		Bearing 199°										NGC 87 -25	
From	To	Recovery	Description			Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
74.37	75.90	100%	CRYSTAL LITHIC TUFF Same as above. Increasing frequency of filament quartz veinlets, no corresponding increase in sulphides or alteration.							18783					
75.90	76.62	100%	CRYSTAL LITHIC TUFF Same as above. Increasing argillic alteration.							18784					
76.62	77.42		LITHIC TUFF (±crystals?) Darker medium gray, larger 2cm darker gray fragments in dark fine grained, aphanitic matrix. Some fragments of massive pyrite (~5-6mm). Very irregularly shaped quartz-feldspar (rhyolitic) fragments intense argillic alteration; thin filament quartz veinlets with clay, no preferred orientation or associated sulphides. Strongly weathered.					2-3		18784					
77.42	78.94	83%	CRYSTAL - LITHIC TUFF Badly weathered clay altered but contains sand size quartz crystals, felsic volcanic fragments, and minor darker lithic fragments. Larger (2mm) dark clay infilled fracture at low angle to core axis. Very crumbly, many clay partings.					<1		18785					
78.94	80.47	100%	CRYSTAL LITHIC TUFF Same as above. Very crumbly, sand and pebble size fragments, subangular to subrounded in fine grained clay rich matrix. Overall finer grained.					<1		18786					
80.47	81.99	87%	CRYSTAL LITHIC TUFF Same as above. Mainly quartz clay altered feldspar, 1mm average grain size.					<1		18787					

DRILL LOG #1

Date Nov. 18, 1987 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		NTS No 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 1 of 5	
Lot 10000 N		Elev		Dip -45°						Lot		Elev		Dip	
Dep 10275 E		Length 169.77		Bearing 199°						Dep		Length		Bearing	
HOLE No NGC 87 -25															
From	To	Recovery	Description					Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS		
81.99	83.52	30%	CRYSTAL LITHIC TUFF Same as above. Extremely weathered, just sand and gravel some still consolidated.						<1		18788				
83.52	85.04	78%	CRYSTAL LITHIC TUFF. Same as above. Extremely crumbly, broken, loose fragments of quartz, rhyolite in fine grained clay and sand matrix. Also fragments of quartz crystal tuff.						<1		18789				
85.04	86.56	53%	CRYSTAL LITHIC TUFF Same as above. Some devitrification of vitric tuff layer. Badly broken up, mainly siliceous rhyolitic fragments in crumbly matrix.						<1		18790				
86.56	88.09	21%	CRYSTAL LITHIC TUFF Same as above. Even poorer recovery. Some quartz veinlets milky contain fragments.						<1		"				
88.09	89.61	100%	CRYSTAL LITHIC TUFF. Light gray, white to dark gray fragments, very poorly sorted, angular to subrounded felsic and intermediate volcanic fragments. Also, white to gray quartz and clay altered feldspar crystals						<1		18791				
			Moderate to strong pervasive clay alteration. Few sulphides quartz-clay veinlets increase @89.00m.												
89.61	91.14	100%	CRYSTAL LITHIC TUFF. Same as above. Quartz veinlets, 1cm wide in places (@90.08m). Weaker argillic alteration, no carbonate apparent along fractures.						<1		18792				
91.14	92.66	100%	CRYSTAL LITHIC TUFF Same as above. Coarse quartz infilling @91.34m. Same very poorly sorted tuff. Some pyritic fragments @90.74m. Weaker pervasive argillic alteration paler sections may reflect greater alteration due to quartz veinlets. Coarse qtz @92.66m.						<1		18793				

DRILL LOG #1

Date Nov. 18, 1987 Logged By: Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2									
FIELD CO-ORDINATES						DEPTH		BEARING RECORDED CORRECTED		ANGLE RECORDED CORRECTED		SURVEYED CO-ORDINATES				Sheet 7 of 5							
Lat 10000 N		Elev		Dip -45°								Lat		Elev		Dip							
Dep 10275 E		Length 169.77		Bearing 199°								Dep		Length		Bearing							
From		To		Recovery		Description				Structure		% Sulph.		Est. Grade		SAMPLE No		Width		ASSAYS			
92.66		94.18		100%		CRYSTAL LITHIC TUFF. Same as above. Minor filament quartz-clay veinlets, 1cm quartz vein @94.00m.						<1				18794							
94.18		95.71		100%		LITHIC TUFF. Same as above. Darker colour reflects higher proportion of lithic fragments. Numerous tiny quartz veinlets and associated clay alteration. Better sorting, fewer large fragments, coarser matrix quartz vein @95.53m.						<1				18795							
95.71		97.23		80%		LITHIC TUFF (crystal) Medium gray white to dark gray fragments, poorly sorted, subrounded to angular, some crystal tuff weak to moderate argillic alteration. Only trace sulphides (pyrite). Large quartz vein (2-3cm) @96.62m-96.94m; minor brecciation of quartz 4 episodes of intrusion by hydothermal solutions indicated.						<<1				18796							
97.23		98.76		100%		LITHIC TUFF (crystal) Same as above. Large quartz vein (1-5cm wide) @97.39-98.15m.						<1				18797							
98.76		100.28		100%		CRYSTAL - LITHIC TUFF. Same as above. Quartz veining @99.26m-99.70m, broken. Trace sulphides, barren quartz veining. Increasing proportion of crystal fragments to lithic fragments, results in lighter gray. Weak argillic alteration, minor carbonate with quartz veining.						<1				18798							

Nov. 10, 1987

Nov. 18, 1987 Logged by Chris Wild

002000

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2			
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 8 of 15
							RECORDED	CORRECTED	RECORDED	CORRECTED							
Lat. 10000 N		Elev		Dip -45°						Lat.		Elev		Dip		HOLE No.	
Dep 10275 E		Length 169.77		Bearing 199°						Dep		Length		Bearing		NGC 87 -25	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
100.28	101.80	56%	CRYSTAL LITHIC TUFF. Same as above. More frequent quartz-clay 'filaments' poor recovery ~100.74m.							<1		18799					
101.80	103.33	50%	(CRYSTAL) LITHIC TUFF. Medium gray, medium grained tuff, possibly reworked, subrounded to subangular fragments. Very soft (accounts for low recovery) due to clay and stronger argillic alteration. Quartz evident ~102.26m, white quartz vein, little or no carbonate.							<1		18800					
103.33	104.85	95%	CRYSTAL - LITHIC TUFF. Same as above. Increase in coarse rhyolitic fragments @104.23m. Very poorly sorted, wide variation in size and angularity of fragments. Only trace pyrite moderate argillic alt.							<1		18801					
104.85	106.35	100%	CRYSTAL LITHIC TUFF. Same as above.							<1		18802					
106.35	107.85	100%	CRYSTAL LITHIC TUFF. Same as above. Light gray caused by a marked increase in the amount of clay → increased argillic alteration. Abrupt contact in degree of alteration @107.41m to more moderate level.							<1		18803					
107.85	109.35	100%	CRYSTAL LITHIC TUFF. Light gray, medium grained, poorly sorted tuff. Angular lithic fragments. Minor quartz-clay infilled fracturing. Fresher looking, weak argillic alteration except @108.55m and 109.25m (due to clay infilled fracture)							<1		18804					

Drill Log #1

Date Nov. 18, 1987 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2									
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 9 of 15									
Lat 10000 N		Elev				Dip -45°		RECORDED		CORRECTED		RECORDED				CORRECTED							
Dep 10275 E		Length 169.77		Bearing 199°										HOLE No NGC 87 -25									
From		To		Recovery		Description				Structure		% Sulph.		Est. Grade		SAMPLE No		Width		ASSAYS			
109.35		110.85		100%		CRYSTAL LITHIC TUFF. Same as above. Little fracturing, weak alteration.						<1				18805							
110.85		112.35		100%		CRYSTAL LITHIC TUFF. Same as above. Minor fractures filled with quartz-clay.						<1				18806							
112.35		113.85		100%		CRYSTAL LITHIC TUFF. Same as above. Pyritic veinlet @113.80m up to 1cm thick dark gray quartz and pyrite, fine grained.						1				18807							
113.85		115.35		100%		CRYSTAL LITHIC TUFF. Same as above. Several quartz-clay infilled fractures between 113.90m and 114.50m; becomes crumbly below 114.50m, slight increase in argillic alteration.						1				18808							
115.35		116.85		100%		CRYSTAL LITHIC TUFF. Same as above. Very little fracture filling or veining weak pervasive argillic alteration.						<1				18809							
116.85		118.35		100%		CRYSTAL LITHIC TUFF. Same as above. No change, quartz -clay veinlets or fracture fillings @117.25m and 117.95m, alteration confined to fracture walls, no corresponding sulphides.						<1				18810							
118.35		119.85		100%		CRYSTAL LITHIC TUFF. Same as above. Quartz-clay veinlets and alteration strong @119.00m, core quite crumbly.						<1				18811							
119.85		121.35		77%		CRYSTAL LITHIC TUFF. Same as above. Increasing quartz veining to 120.15m. Sulphides (pyrite) 10-20% along parts of the vein wall. Core is highly fractured and broken. Some brecciation in vein with						2				18812							

DRILL LOG 81

Date Nov. 16, 1987 Logged by Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		NTS No 105K/2				
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 10 of 15	
							RECORDED	CORRECTED	RECORDED	CORRECTED								
Lat. 10000 N		Elev		Dip -45°						Lat.		Elev.		Dip		HOLE No.		
Dep 10275 E		Length 169.77		Bearing 199°						Dep.		Length		Bearing		NGC 87 -25		
From	To	Recovery	Description						Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
			further infilling along walls. Also, orange limonitic stain along fracture surfaces @120.85m.															
121.15	122.55	0%	LOST															
122.55	124.05	93%	CRYSTAL LITHIC TUFF. Same as above. Dramatic increase in sulphide content, fine grained and disseminated. Quartz veinlets and fracture fillings are common, pyrite is present along fracture surfaces but not much more concentrated than in wall rock. Pyrite also occurs in 1-2cm pods outside vein perhaps as fragments. A large vein of quartz and black chalcedony starts @123.60cm and continues to 123.95m. Rounded gray siliceous fragments lie within chalcedony. White and gray quartz lie outside chalcedony usually but not always present. Red hematite present with pyrite @123.60m. Pyrite is also disseminated in chalcedony. Alteration near vein is very limited.							5		18813						
124.05	125.55	100%	CRYSTAL LITHIC TUFF. Same as above. Some minor quartz-chalcedony veinlets and black clay filled fractures with 2-3% disseminated pyrite. A white and gray quartz vein parallel to the core axis @124.55m has coarser pyrite cubes along vein wall. More quartz veining ~125.0m, fractured white quartz enveloped by dark gray clay vein spreads into tuff causing brecciation and further infilling. Sulphides mainly						quartz veining	2-3		18814						

pyrite are weakly disseminated throughout & concentrated on vein walls.

Date Nov. 18, 1987 Logged by Chris Wile

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat 10000 N		Elev		Dip -45°		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet // of /5			
Dep 10275 E		Length 169.77		Bearing 199°										HOLE No NGC 87 -25			
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
125.55	127.05	100%	CRYSTAL LITHIC TUFF. Same as above, with increasing quartz stockwork and silicification especially @125.90m. Stockwork is white quartz with some black chalcedony and 10% pyrite along some fractures. Little of the original tuff remains from 125.90m-126.90m. Much pyrite along fractures @126.90m.				Quartz stockwork		5-10		18815						
127.05	128.55	100%	CRYSTAL LITHIC TUFF. Same as above. Highly brecciated large pieces of incorporated wallrock with white quartz in matrix of dark chalcedony, white quartz, and pyrite. Breccia is fragment supported. Sulphides prefer later intrusion of chalcedony. Into chalcedony from 128.25-128.55m.				Quartz stockwork.		5		18816						
128.55	130.05	100%	CRYSTAL LITHIC TUFF. Same as above. Several episodes of quartz, chalcedony, and pyrite intrusion. No wall rock to 129.29m, very crumbly, brittle, silicified. Pyrite mineralization coincident with later dark chalcedony.				Quartz stockwork		5		18817						
130.05	131.55	100%	CRYSTAL LITHIC TUFF. Very crumbly wall rock probably brecciated, pieces of white quartz vein material in wall. More quartz veining, highly fractured, @131.10m. Only minor chalcedony and pyrite.						1		18818						
131.55	133.05	100%	CRYSTAL LITHIC TUFF. Medium gray, very poorly sorted lithic to crystal tuff. High degree of fracturing, very crumbly but footwall to quartz stockwork; no quartz or chalcedonic veining. Trace sulphides, moderate pervasive argillic alteration. Minor quartz-veining @132.40m.						1		18819						

DRILL LOG #1

Date Nov. 18, 1987 Logged P. Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2				
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 12 of 15	
Lat. 10000 N		Elev.		Dip -45°			RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip		HOLE No.	
Dep 10275 E		Length 169.77		Bearing 199°						Dep.		Length		Bearing		NGC 87 -25		
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
133.05	134.55	100%	CRYSTAL LITHIC TUFF. Pale to medium gray, large proportion of quartz crystal to lithic fragments, moderately to poorly sorted tuff 1-2cm fractured white quartz vein @134.12m nearly parallel to core axis. Minor quartz-clay infilling in fractures throughout. Minor pyrite, weak to moderate pervasive argillic alteration.							1		18820						
134.55	136.05	100%	CRYSTAL LITHIC TUFF. Same as above. Fractures infilled with minor quartz and clay.							1		18821						
136.05	137.55	100%	CRYSTAL LITHIC TUFF. Same as above. Increased number of coarse lithic fragments (mainly rhyolitic). Minor quartz veining @136.25m and 137.00m, following fractures minor pyrite, weak argillic alteration.							1		18822						
137.55	139.05	75%	CRYSTAL LITHIC TUFF. Same as above. Only minor quartz veinlets @137.90m loss of core at end of run.							<1		18823						
139.05	140.55	27%	CRYSTAL LITHIC TUFF. Same as above. Minor quartz veining @139.29. 139.05-139.29 missing; end of previous run.							<1		18824						
140.55	142.05	85%	CRYSTAL LITHIC TUFF. Same as above. Quartz fracture filling esp. @141.80m.							<1		18825						
142.05	143.55	63%	CRYSTAL LITHIC TUFF. Same as above. Minor quartz veining @142.20m. Missing core from 142.27-142.86m.							<1		18826						

Drill Log #1

Date Nov. 15, 1987 Logged By Chris Wilder

662099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size 11Q	DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2	
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 13 of 15	
Lat 10000 N		Elev		Dip -45°	RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep 10275 E		Length 169.77		Bearing 199°					Dep.		Length		Bearing	
From	To	Recovery	Description		Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
143.55	145.05	100%	CRYSTAL LITHIC TUFF. Same as above. Quartz veining @144.23m; ~1cm thick, barren.				<1		18827					
145.05	146.55	100%	CRYSTAL LITHIC TUFF. Same as above. Minor quartz veining and silicification. Infilled brecciated quartz vein ~35° to core axis @145.90m.				<1		18828					
146.55	148.05	100%	CRYSTAL LITHIC TUFF. Same as above. Very poorly sorted; moderate fracturing, quartz-clay infilled (+pale chalcedony).				<1		18829					
148.05	149.55	100%	CRYSTAL LITHIC TUFF. Same as above. Larger quartz-chalcedony infilled fractures at a high angle to core axis				<1		18830					
149.55	151.05	81%	CRYSTAL LITHIC TUFF. Same as above. Chalcedonic infillings in parallel fractures @149.73m; few sulphides.				<1		18831					
151.05	152.55	100%	CRYSTAL LITHIC TUFF. Same as above. Fracture density decreasing; 1cm thick chalcedonic vein @152.09m.				<1		18832					
152.55	154.05	100%	CRYSTAL LITHIC TUFF. Same as above. Very little variation. Tan to medium gray chalcedonic veining along fractures postdates white quartz veining. A third fracturing episode offsets both chalcedonic and quartz veining and appears to contain and center minor sulphide mineralization. Sulphides also favour zones of chalcedonic veining, evident @154.00m				1		18833					

Drill Log #1

Date Nov. 16, 1987 ... by ... Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2				
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 1/1 of 15	
							RECORDED	CORRECTED	RECORDED	CORRECTED								
Lat. 10000 N		Elev		Dip -45°							Lat.		Elev		Dip		HOLE No.	
Dep 10275 E		Length 169.77		Bearing 199°							Dep.		Length		Bearing		NGC 87 -25	
From	To	Recovery	Description						Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
154.05	155.55	100%	CRYSTAL LITHIC TUFF. Same as above. Chalcedonic veining (pale) @154.10 and 154.40-154.53m. Also, quartz fracture fillings and several large clasts are rimmed by quartz; these areas contain more sulphides. Larger quartz vein (~3-4cm thick) @155.50m, mainly chalcedony.								1		18834					
155.55	157.05	100%	CRYSTAL LITHIC TUFF. Same as above. Chalcedonic veining (pale grey) surrounded by white quartz veining, minor sulphides @155.55-155.75. Minor quartz fragments in chalcedony. Moderate fracture density infilled quartz-chalcedony (usually both)								<1		18835					
157.05	158.55	100%	CRYSTAL LITHIC TUFF. Same as above. Quartz-chalcedony veining @157.65 and 157.97m. Higher fracture density ~158.10m, minor silicification. Pale gray colour.								1		18836					
158.55	160.05	100%	CRYSTAL LITHIC TUFF. Same as above. Moderate fracturing, infilled with quartz-carbonate and chalcedony. Large vein @159.0m at low angle to core axis. Fracture orientation is highly variable.								1		18837					
160.05	161.55	100%	CRYSTAL LITHIC TUFF. Same as above. Same style of quartz-chalcedony veining all < 1cm thick (mainly chalcedony). Minor very fine grained pyrite. Very competent rock.								1		18838					
161.55	163.05	100%	CRYSTAL LITHIC TUFF Same as above. Moderate fracturing thin chalcedony-quartz-carbonate veinlets. Layered buff and gray chalcedony @162.58m Chalcedony veinlet cuts quartz-carbonate veinlet (fracture) @163.05m.								<1		18839					

DRILL LOG #1

Date Nov. 18, 1987. Logged By: Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 10, 1987		Date Completed Nov. 15, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat 10000 N		Elev		Dip -45°		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 1 of 1	
Dep 10275 E		Length 169.77		Bearing 199°										HOLE No. NGC 87 -25	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS		
163.05	164.55	100%	CRYSTAL LITHIC TUFF. Same as above. Larger quartz-carbonate-chalcedony vein @164.18m. Increased fracturing and veining immediately footwall to vein decreasing @164.55m.						<1		18840				
164.55	166.05	100%	CRYSTAL LITHIC TUFF Same as above. Coarse rhyolite porphyry fragments rimmed by dark chalcedony @164.65m. Decreased fracture frequency and corresponding veining weak silicification, weakly calcareous.						<1		18841				
166.05	167.55	100%	CRYSTAL LITHIC TUFF. Same as above. Medium gray, medium grained, poorly sorted tuff with angular to subrounded fragments of widely varied rock types. Minor quartz carbonate veining along fractures. More pronounced chalcedonic veining especially @166.72m and 167.10m. Minor silicification is noted at these veins. Tuff is weakly calcareous especially the quartz-carbonate 'crystals'.						<1		18842				
167.55	169.77	77%	CRYSTAL LITHIC TUFF. Same as above. Pyritic fragment @168.38m. above large chalcedonic infilling @168.55m. Moderate fracture density and veining. Core very crumbly from 169.35-169.77m. Weakly calcareous and silicified. Argillic alteration at bottom only.						<1		18843				
			169.77m END OF HOLE												

Date Nov. 18, 1987 J. R. F. L. R. W. L.

092099

NORANDA EXPLORATION COMPANY LTD.

(26)

Date Collected Nov. 15, 1987		Date Completed Nov. 20, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2				
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet / of 12	
							RECORDED	CORRECTED	RECORDED	CORRECTED								
Lat. 10030 N		Elev.		Dip -45°		162.5			918	17	Lat.		Elev		Dip		HOLE No.	
Dep 10275 E		Length 189.54m		Bearing 199°							Dep.		Length		Bearing		NGC 87 - 26	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
0	66.82	0	OVERBURDEN															
66.82	72.54	1.64 29%	OVERBURDEN -round to subangular pebbles and cobbles in a black sandy clay matrix. Rocks represent many types of felsic and intermediate volcanics.															
72.54	74.04	1.50 100%	Rhyolite porphyry, tuff. Pale, greenish-gray, porphyritic fragments and blocks with dark gray mafic crystals and quartz eyes common. Strong pervasive argillic alteration, only minor quartz veining.							<1		18844						
			Altered potassium feldspars to pale clay and matrix is slightly carbonaceous. A few clay filled sheaths are present.															
74.04	75.54	1.50 100%	RHYOLITE PORPHYRY. Pale, greenish gray porphyritic rhyolite, minor quartz eyes, no mafic crystals. Less intense argillic alteration, still pervasive and intense along fractures. Weakly calcareous except on quartz-carbonate veinlets. Contact parting @ 74.57m of quartz (chalcedony?) -carbonate down into more solid rhyolite.							<1		18845						
75.54	76.63	1.09 100%	RHYOLITE PORPHYRY Same as above. Piece of dark gray lithic tuff from 75.64-75.94m.. Brecciated and infilled with quartz carbonate along edge of block. Much clay along fractures and partings.							1		18846						
76.63	77.04	0.41 100%	LITHIC TUFF. Dark gray with abundant white quartz-carbonate along contact and fractures. Brecciated along contact.															

DRILL LOG #1

Date Nov. 20, 1987. Logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 15, 1987		Date Completed Nov. 20, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 2 of 12	
Lat. 10030 N		Elev.				Dip -45°		RECORDED		CORRECTED		RECORDED			
Dep 10275 E		Length 189.54m		Bearing 199°										HOLE No.	
														NGC 87 - 26	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
77.04	78.08	1.04 100%	LITHIC TUFF. Same as above. Strong quartz-carbonate veining, especially 77.04-77.61m.		<1		18847						
78.08	78.54	0.46 100%	RHYOLITE PORPHYRY. Abrupt contact back to greenish gray porphyritic rhyolite. Minor quartz-carbonate veining. More argillic alteration.		<1								
78.54	80.04	1.50 100%	RHYOLITE PORPHYRY. Same as above into quartz-eye rhyolite @78.87m.. Coarse quartz phenocrysts up to 1.5cm Ø with minor epidote.		<1		18848						
80.04	80.23	0.19 100%	RHYOLITE PORPHYRY. Same as above.		<1		18849						
80.23	81.54	1.31 100%	LITHIC (crystal) TUFF. Strong quartz-carbonate breccia at contact. Veining throughout contains many fragments. → Quartz vein breccia. Host rock is black, fine grained. Lithic or crystal tuff apparently silicified.										
81.54	83.04	1.50 100%	CRYSTAL - LITHIC TUFF. Medium gray, medium grained, poorly sorted angular quartz rhyolite fragments, dark mafic and white quartz crystals. Moderately to highly fractured, infilled with quartz-carbonate. Pyrite occurs as fragments or pods in tuff and along fractures between fragments especially @82.38m and 83.0m.. Notable quartz-carbonate veining @82.92m. Carbonaceous.		2-5 (10)		18850						
83.04	84.54	1.50 100%	CRYSTAL LITHIC TUFF. Same as above. Irregular quartz-carbonate veining and pyrite pods @83.65m. (10% pyrite locally).		2		18851						

DRILL LOG #1

Date Nov. 20, 1987 Logged B, Chris. Kibb

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 15, 1987		Date Completed Nov. 20, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		NTS No 105K/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet <u>3</u> of <u>12</u>			
Lot 10030 N		Elev				Dip -45°		RECORDED		CORRECTED		Lot				Elev	
Dep 10275 E		Length 189.54m		Bearing 199°								Dep		Length		Bearing	
																HOLE No NGC 87 - 26	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
84.54	84.92	0.38 100%	CRYSTAL - LITHIC TUFF. Same as above.		1-2		18852						
84.92	85.41	.49 100%	RHYOLITE PORPHYRY. Pale gray, quartz-eye rhyolite, numerous pods of pyrite.		5								
85.41	86.04		CRYSTAL LITHIC TUFF. Uneven contact with rhyolite. Pyritic quartz-(carbonate) fracture or shear @85.64m. Quartz-carbonate veining @86.0m carb	40° to c.a.	2-5								
86.04	87.54	1.50 100%	CRYSTAL-LITHIC TUFF. Same as above. Small irregular intrusion of quartz-eye rhyolite, with 10-20% pyrite. @86.41m Quartz-carbonate veining @86.80m.. Carbonaceous chunks to 2cm ø	30° to c.a.	2-5		18853						
87.54	89.04	1.40 93%	CRYSTAL - LITHIC TUFF. Same as above. Moderate silicification (paler gray patches). Numerous pyritic pods. Minor quartz-eye rhyolite @88.90m.	irregular	5		18854						
89.04	90.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Minor rhyolitic intrusions @89.05m minor quartz-carbonate veining @89.77m and 89.90m..	45° to c.a. 75° to c.a.	2-5		18855						
90.54	90.70	.16 100%	CRYSTAL - LITHIC TUFF. Same as above.		2		18856						

Drill Log 87

Date Nov. 20, 1987 Location 87, 332, 105K/2

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 15, 1987		Date Completed Nov. 20, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2				
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES							
							RECORDED	CORRECTED	RECORDED	CORRECTED								
Lat. 10030 N		Elev		Dip -45°						Lat.		Elev		Dip		Sheet 4 of 12		
Dep 10275 E		Length 189.54m		Bearing 199°						Dep.		Length		Bearing		HOLE No. NGC 87 - 26		
From	To	Recovery	Description						Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
90.70	92.04	1.32 98%	RHYOLITE PORPHYRY. Light greenish gray, quartz eyes and pyrite, pods common argillic and minor carbonate alteration.						contact 45° to c.a.		2-5		18856					
92.04	93.54	1.29 100%	CRYSTAL - LITHIC TUFF. Mainly crystal tuff grading from rhyolite porphyry. Rhyolite present along fractures, flow from dyke or sill. Pyrite pods common.						irregular		5		18857					
93.54	95.04	1.29 86%	CRYSTAL - LITHIC TUFF. Same as above. Very small quartz-carbonate veinlets in random fracture pattern.								2-5		18858					
95.04	96.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Increasing argillic alteration.								2-3		18859					
96.54	98.04	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above.								2		18860					
98.04	99.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Poddy pyrite often associated with quartz-carbonate veining @99.18m.								2-5		18861					
99.54	101.04	1.44 96%	CRYSTAL - LITHIC TUFF. Same as above. Quartz-carb -chalcedony veinlet @99.65m parallel qtz-cb veinlets 2cm apart @101.19m -10% pyrite. Quartz-cb stockwork from 100.85m - 101.04m much associated pyrite pods.						38° to c.a. 44° to c.a. 45° to c.a.		2-5		18862					

DRILL LOG 81

Date Nov. 20, 1987 Logged By L. B. Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 15, 1987		Date Completed Nov. 20, 1987		Core Size 11Q	DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2			
FIELD CO-ORDINATES					DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					Sheet 5 of 12	
						RECORDED	CORRECTED	RECORDED	CORRECTED							
Lat. 10030 N		Elev		Dip -45°						Lat.		Elev		Dip	HOLE No.	
Dep 10275 E		Length 189.54m		Bearing 199°						Dep.		Length		Bearing	NGC 87 - 26	
From	To	Recovery	Description					Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
101.04	102.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Stockwork continues to 101.67m chalcadonic veining to 101.92 5% associated pyrite pods. Decreased hydrothermal activity below 102.0m.					45° to 60° c.c.	2-5		18863					
102.54	104.04	1.47 98%	CRYSTAL - LITHIC TUFF. Same as above. Much less fracturing and veining increased argillic alteration.						2-5		18864					
104.04	105.54	1.47 98%	CRYSTAL - LITHIC TUFF. Same as above. Quartz-carb veining @104.75m ~ 10cm of qtz.-cb alteration above vein, weak argillic alteration					35° to c.a.	2		18865					
105.54	107.04	0.89 59%	CRYSTAL - LITHIC TUFF. Same as above. Missing core from 105.80m - 106.43m. Heavy argillic alteration below 106.43m.						1		18866					
107.04	108.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Increasing quartz-carb stockwork, moderately calcareous, moderate argillic alteration.						1		18867					
108.54	110.04	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Strong argillic alteration-pervasive, minor qtz.-cb veining.						1		18868					
110.04	111.54	1.44 96%	CRYSTAL - LITHIC TUFF. Same as above. Qtz.-cb vein @110.50m. Strong argillic alteration.					35° to c.a.	1		18869					
111.54	113.04	1.40 93%	CRYSTAL - LITHIC TUFF. Same as above. Minor qtz.-cb veining @112.26m, argillic alteration.					55° to c.a.	1-2		18870					

Drill Log #1

Date Nov. 20, 1987 Logged By: John Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 15, 1987		Date Completed Nov. 20, 1987		Core Size 11Q		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		NTS No. 105K/2				
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet of 12	
Lat 10030 N		Elev		Dip -45°			RECORDED	CORRECTED	RECORDED	CORRECTED	Lot		Elev		Dip		HOLE No.	
Dep 10275 E		Length 189.54m		Bearing 199°							Dep		Length		Bearing		NGC 87 - 26	
From	To	Recovery	Description				Structure			% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
113.04	114.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Weaker argillic alteration, moderately calcareous.							1-2		18871						
114.51	116.04	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Qtz-cb-chalcedony veining @116.11m. Grades into lighter gray, finer grained tuff @115.53m.							1-2		18872						
116.04	117.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Grades coarser and into Qtz-cb-chalcedonic veining @117.39m.							1-2		18873						
117.54	119.04	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Qtz-cb-chalcedony stockwork increasing chalcedonic veining, weak argillic alteration.				irregular			2		18874						
119.04	120.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Significant veining @119.34m Qtz-cb veining @120.0m and 120.34m little alteration.				60° to c.a. 70° to c.a. 20° to c.a.			2		18875						
120.54	122.04	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Much less veining.							1-2		18876						
122.04	123.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Qtz-cb-chalcedonic veining @123.09.				50° to c.a.			1		18877						
123.54	125.04	1.44 96%	CRYSTAL - LITHIC TUFF. Same as above. Only very minor veining, quartz-carb along fractures (minor chalcedony).							<1		18878						

DRILL LOG #1

Date Nov. 20, 1987. Logged By LORIS WILD

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 15, 1987		Date Completed Nov. 20, 1987		Core Size HQ	DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2			
FIELD CO-ORDINATES					DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					Sheet 1 of 12	
Lat 10030 N		Elev		Dip -45°		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat		Elev		Dip	HOLE No.	
Dep 10275 E		Length 189.54m		Bearing 199°						Dep		Length		Bearing	NGC 87 - 26	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
125.04	126.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Qtz-(carb) vein @126.36m				45° to c.a.		<1		18879					
126.54	128.04	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Few more coarse fragments. Minor qtz-chalcedony veining esp. @ 127.10m.						<1		18880					
128.04	129.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Finer tuff @129.0 to 129.2m and 129.34 → . Qtz-carb vein @ 129.11m.				60° to c.a.		<1		18881					
129.54	131.04	1.47 97%	CRYSTAL - LITHIC TUFF. Fine grained to 130.28m, back to medium grained mixed tuff; minor fracture infilling				80° to c.a.		<1		18882					
131.04	132.54	1.50 100%	CRYSTAL - LITHIC TUFF. 6cm wide quartz-carbonate (chalcedony) highly fractured, recemented @132.54m.				40° - 50° to c.a.		<1		18883					
132.54	134.04	1.50 100%	CRYSTAL - LITHIC TUFF. Another quartz vein (>6cm thickness) @132.80m, barren. Increased veining results in increased silicification.				45° to c.a.		<1		18884					
134.04	135.54	1.47 100%	CRYSTAL - LITHIC TUFF. Light gray, coarser grained more silicified. Qtz-carb-chalcedony stockwork @ 134.8m continuing down hole.				stockwork		<1		18885					
135.54	137.04	1.50 100%	CRYSTAL - LITHIC TUFF. Variable quartz-carbonate stockwork. Qtz-cb-chalcedony vein @136.85m.				stockwork 20° to c.a		<1		18886					

DRILL LOG #1

Date Nov. 20, 1987 Logged By: SHIRAZ KHAN

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 15, 1987		Date Completed Nov. 20, 1987		Core Size HQ → NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
								RECORDED	CORRECTED	RECORDED	CORRECTED						
Lat. 10030 N		Elev		Dip -45°						Lot.		Elev		Dip		HOLE No.	
Dep 10275 E		Length 189.54m		Bearing 199°						Dep		Length		Bearing		NGC 87 - 26	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
137.04	138.54	1.50 100%	CRYSTAL - LITHIC TUFF. Stockwork in moderately silicified tuff. Increasing chalcedony. Locally brecciated @137.77m. A few pods of pyrite.					stockwork		1		18887					
138.54	140.04	1.50 100%	CRYSTAL - LITHIC TUFF. Qtz-chalcedony-carbonate stockwork causing local brecciation. Only minor associated pyrite.					stockwork		1		18888					
140.04	141.54	1.30 87%	CRYSTAL - LITHIC TUFF. Decreasing quartz-chalcedony-carb stockwork; veining much less frequent.							<1		18889	REDUCED TO NQ @ 462'	140.82m			
141.54	143.04	1.37 91%	CRYSTAL - LITHIC TUFF. Qtz-carb veinlets and fracture filling. eg. @142.34m.					50° to c.a.		<1		18890					
143.04	144.54	1.50 100%	CRYSTAL - LITHIC TUFF. Minor argillic alteration ~143.30m, increasing, clay gouge @144.4m.					10° to c.a.		1		18891					
144.54	146.04	1.50 100%	CRYSTAL - LITHIC TUFF. Clay gouge from 144.4-145.39 (in fracture). Minor quartz veining.					//el to c.a.		1		18892					
146.04	147.54	1.50 100%	CRYSTAL - LITHIC TUFF. Weak argillic alteration.							<1		18893					
147.54	149.04	1.50 100%	CRYSTAL - LITHIC TUFF. Tiny chalcedonic veining, weakly argillic.							<1		18894					

DRILL LOG #1

Date Nov. 20, 1987 Logged By: [Signature]

100.00

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 15, 1987		Date Completed Nov. 20, 1987		Core Size #Q	DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2			
FIELD CO-ORDINATES					DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					Sheet 9 of 12	
Lot. 10030 N		Elev		Dip -45°						Lot.		Elev.		Dip	HOLE No.	
Dep 10275 E		Length 189.54m		Bearing 199°						Dep.		Length		Bearing	NGC 87 - 26	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS		
149.04	150.54		CRYSTAL - LITHIC TUFF. Qtz-carb-chalcedony vein, brecciated, recemented with chalcedony @149.30m and 149.75m moderate argillic alteration @150.0m.					20° to 40° to c.a.		<1		18895				
150.54	152.04	1.50 100%	CRYSTAL - LITHIC TUFF. Argillic partings, minor qtz-chalcedony veinlets.					45°-60° to c.a.		1		18896				
152.04	153.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above.							<1		18897				
153.54	155.04	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Lighter tuff from 153.61m to 153.91m and 154.49m to 154.63m. Minor veining @154.69 and 154.83m.					1 to c.a. 75°, 45° to c.a.		<1		18898				
155.04	156.54	1.44 96%	CRYSTAL - LITHIC TUFF. Vein @155.18-155.34m veinlets in fractures @156.0m and throughout.					10°-15° to c.a.		<1		18899				
156.54	158.04	1.50 100%	CRYSTAL - LITHIC TUFF. Minor qtz-cb-chalcedony veining lighter tuff from 157.37-157.65m, silic?					20° to c.a.		<1		18900				
158.04	159.54	1.50 100%	CRYSTAL - LITHIC TUFF. Grading to lighter tuff, slightly more felsic, siliceous qtz-carb along fracture surface 159.23m.					5°-10° to c.a.		<1		18901				
159.54	161.04	1.50 100%	CRYSTAL - LITHIC TUFF. Coarsens and darkens ~159.80m. Increasing qtz-cb-chalcedony veining @160.54m, 160.8m 161.0m.					60° to c.a. 20°-23° to c.a.		<1		18902				

DRILL LOG #1

Date Nov. 20, 1987 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 15, 1987		Date Completed Nov. 20, 1987		Core Size NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2			
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 10 of 12
							RECORDED	CORRECTED	RECORDED	CORRECTED							
Lat. 10030 N		Elev.		Dip -45°						Lat.		Elev.		Dip		HOLE No.	
Dep. 10275 E		Length 189.54m		Bearing 199°						Dep.		Length		Bearing		NGC 87 - 26	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
161.04	162.54	1.50 100%	CRYSTAL - LITHIC TUFF. Increasing argillic alteration.							<1		18903					
162.54	164.04	1.50 100%	CRYSTAL - LITHIC TUFF. Moderate to strong pervasive argillic alteration. Weakly calcareous, minor quartz-carb veining @163.8m.							<1		18904					
164.04	165.54	1.50 100%	CRYSTAL - LITHIC TUFF. Qtz-carb-chal. veining @ 164.20. Clay partings, crumbly core 164.67m.					25° to c.a.		<1		18905					
165.54	167.04	1.50 100%	CRYSTAL - LITHIC TUFF. Pervasive argillic alteration. Coarsens slightly.							<1		18906					
167.04	168.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above.							<1		18907					
168.54	170.04	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Very minor stockwork 169.8m a few pyritic pods.					stockwork		1		18908					
170.04	171.54	1.44 96%	CRYSTAL - LITHIC TUFF. Coarse, mainly lithic tuff, fragments < 2cm. Minor Qtz-chal veining							<1		18909					
171.54	173.04	1.50 100%	CRYSTAL - LITHIC TUFF. Qtz-chal-(carb) vein @ 172.29m. Pervasive argillic alteration continues.					35°-40° to c.a.		<1		18910					

DRILL LOG 81

Date Nov. 20, 1987. Logged By: Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 15, 1987		Date Completed Nov. 20, 1987		Core Size NQ	DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2			
FIELD CO-ORDINATES					DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					Sheet /i of	
Lat. 10030 N		Elev		Dip -45°		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev		Dip	HOLE No.	
Dep 10275 E		Length 189.54m		Bearing 199°						Dep		Length		Bearing	NGC 87 - 26	
From	To	Recovery	Description					Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
173.04	174.54	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Chalcedonic veining @174.01m.						<1		18911					
174.54	176.04	1.50 100%	CRYSTAL - LITHIC TUFF. Same as above. Minor qtz-chal. veining @175.02m and 176.0m.						<1		18912					
176.04	177.54	1.48 99%	CRYSTAL - LITHIC TUFF. Same as above. Qtz-chal-carb vein @176.16m.					30°-40° to c.a.	<1		18913					
177.54	179.04	1.50 100%	CRYSTAL - LITHIC TUFF. Pervasive argillic alteration						<1		18914					
179.04	180.54	1.50 100%	CRYSTAL - LITHIC TUFF. Minor quartz-clay fracture infilling.					irregular	<1		18915					
180.54	182.04	1.50 100%	CRYSTAL - LITHIC TUFF. Minor quartz veining @181.56m					10° to c.a.	<1		18916					
182.04	183.54	1.50 100%	CRYSTAL - LITHIC TUFF. Chalcedony veining @183.11m. Pervasive argillic alteration.					30° to c.a.	<1		18917					
183.54	185.04	1.48 99%	CRYSTAL - LITHIC TUFF. Strong clay alteration, quartz (chalcedony) clay infilling of fractures. Becoming more competent @184.85m.						<1		18918					

DRILL LOG #1

Date Nov. 20, 1987 Logged By Chris Hill

002088

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 15, 1987		Date Completed Nov. 20, 1987		Core Size NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet / 2 of 12	
Lot 10030 N		Elev				Dip -45°		RECORDED		CORRECTED		RECORDED			
Dep 10275 E		Length 189.54m		Bearing 199°										HOLE No.	
										Dep		Length		Bearing	
														NGC 87 - 26	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
			decreased clay content to 185.04m. Chalcedony veins @184.90m.										
185.04	186.54	1.39 93%	CRYSTAL - LITHIC TUFF. Increased argillic alteration clay along fractures 185.36m.	18° to c.a.	<1		18919						
186.54	188.04	1.50 100%	CRYSTAL - LITHIC TUFF. Quartz vein @ 186.79m. Qtz-carb-chal. between 187.55m-187.86m. Significant brecciation @187.78m. Weaker argillic alteration.	10° to c.a. 25° to c.a.	<1		18920						
188.04	189.59	1.55 100%	CRYSTAL - LITHIC TUFF. Significant veining and brecciation between 188.10m-188.43m; much Qtz, carb, chalcedony no apparant increase in sulphide content Argillic alteration decreasing but pervasive. Minor veining to bottom of hole.		<1		18921						
			END OF HOLE										

DRILL LOG #1

Date Nov. 20, 1987 Logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

27

Date Colored Nov. 20, 1987		Date Completed Nov. 28, 1987		Core Size HQ	DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332	N.T.S. No 105K/2	
FIELD CO-ORDINATES					DEPTH 188.98m	BEARING		ANGLE		SURVEYED CO-ORDINATES			
						RECORDED	CORRECTED	RECORDED	CORRECTED				
Lat.	10030 N	Elev		Dip	445			56°	49.7°	Lat.		Elev	
Dep	10225 E	Length	188.98	Bearing	199					Dep.		Length	
													HOLE No. NGC 87-27

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
0	54.25	0	OVERBURDEN Tri-coned										
54.25	59.72	59%	OVERBURDEN - Round to subangular pebbles and cobbles (boulders) in a black poorly sorted sandy-clay matrix. Wide variety of volcanic rock types represented in the till.										
59.72	61.22	100%	RHYOLITE PORPHYRY Pale greenish gray quartz-eye porphyry and possible tuff at the top (black crystal fragments). Relatively unaltered, minor argillic alteration; several massive pods of pyrite to 3 cm Ø and lenses ~1 cm thick. Clays result from altered feldspars, esp. potassium feldspar. Grades to brownish @61.05m.	60° to c.a.	2-5		18922						
61.22	62.72	100%	RHYODACITE? Slightly darker brownish gray quartz-eye rhyolite with fine quartz (carbonate) stockwork esp. @61.62m. Marked decrease in sulphides. Moderate argillic alteration weakly calcareous.		1		18923						
62.72	64.22		Brownish gray, quartz-eyes 'rhyolite' stockwork, greenish gray with quartz eyes of its own. Back to greenish rhyolite porphyry, breccia contact @64.25m. fragments of rhyodacite in rhyolite		1-2		18924						
64.22	64.90	100%	RHYOLITE PORPHYRY Pale greenish gray, large 4mm Ø quartz-eyes. More brownish brecciated dacite @64.62m. Many pyrite pods along dark chalcedonic vein through felsic pyroclastic sand infilling rhyolite veins	20° to c.a.	5		18925						
64.90	65.49	100%	FELSIC PYROCLASTICS (DACITE) Brownish gray with many large pale rhyolitic fragments, quartz eyes.		1		18925						

NOV 28 1987

Date Nov. 24, 1987 Typed By Chris With

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collared Nov. 20, 1987		Date Completed Nov. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2				
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 2 of 13	
Lat. 10030 N		Elev.		Dip +45		188.98m	RECORDED	CORRECTED	56°	49.7°	Lat		Elev		Dip		HOLE No.	
Dep 10225 E		Length 188.98		Bearing 199							Dep		Length		Bearing		NGC 87-27	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS					
65.49	65.72	100%	RHYOLITE PORPHYRY Pale greenish gray quartz eye rhyolite. Pods of pyrite.						3-5		18925							
65.72	67.22	100%	As Above. Pyrite along chalcedonic vein @65.97m.						2		18926							
67.22	68.72	100%	As Above. Some dacitic and rhyolitic fragments. Fairly homogenous in section. Weak argillic alteration						2-3		18927							
68.72	70.22	100%	As Above. Increased clay alteration along fractures, esp. @69.0m; 10-20% pyrite along infilled fracture @69.56m.				20° to c.a. 50° to c.a.		2-3		18928							
70.22	71.72	100%	RHYOLITE PORPHYRY Pale green, quartz eye rhyolite. Several large rhyolite fragments and a 5-6cm block of dark brown dacite @70.52m. Pyrite very common disseminated throughout and in pods. Large clay parting @70.71m.						5-10		18929							
71.72	73.22	100%	Pyrite @72.24m Pyrite @72.78-78.95m with quartz-carb (chalcedony) veining.				40° to c.a.		5-10		18930							
73.22	74.72	96%	Increased chalcedony-pyrite veining descending to a clay altered stockwork @74.40m. Pyrite is central in vein surrounded by dark gray quartz or chalcedony. Stockwork shows brecciation of rhyolite with veining material extensively altered to clay.				10-20° to c.a.		5-10		18931							

DRILL LOG #1

Date Nov. 24, 1987 Drilled by Chris Wink

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 20, 1987		Date Completed Nov. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2				
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 3 of 13	
Lot. 10030 N		Elev		Dip +45		188.98m	RECORDED	CORRECTED	RECORDED	CORRECTED	Lot.		Elev		Dip		HOLE No.	
Dep 10225 E		Length 188.98		Bearing 199							Dep.		Length		Bearing		NGC 87-27	
From	To	Recovery	Description				Structure			% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
74.72	76.22	99%	Stockwork diminishes @ ~75.3m. Clay altered fracture fillings continue pyrite continues as pods esp. @76.8m.							5		18932						
76.22	77.72	100%	Weak stockwork in volcaniclastic rhyolite esp 77.52m; pods of pyrite near fracturing.							3-5		18933						
77.72	79.22	96%	Same as above. Clay alteration along numerous fractures weakly calcareous.							2-5		18934						
79.22	80.52	100%	RHYOLITE PORPHYRY Pale greenish gray quartz eye porphyry. Much less fracturing and clay alteration, pyrite content remains consistent although still occurs in pods. Weakly calcareous, more so along fractures.							5		18935						
			Large fracture filled with dark clay @80.38m. Contact zone from 80.38-80.52; 5-10% disseminated pyrite. Chunks of underlying lithic tuff in rhyolite at the contact															
80.52	80.72	100%	(CRYSTAL) LITHIC TUFF Dark gray, medium grained fragmental. Quartz vein stockwork at contact ~10cm width. Fragments are mainly siliceous rhyolite to dacite. Pyrite is coarser grained, few pods.							2-5		18935						
80.72	82.22	100%	Very poorly sorted lithic tuff with minor mafic and quartz crystal fragments; darker gray matrix than usual crystal-lithic tuff. Very little veining or infilling along fractures but sulphide content remains constant in pods and fragments. Weak argillic alteration, weakly calcareous.							5		18936						

DRILL LOG #1

Date Nov. 24, 1987 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 20, 1987		Date Completed Nov. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 4 of 13	
Lat. 10030 N		Elev		Dip +45		188.98m		RECORDED		CORRECTED		RECORDED		CORRECTED	
Dep 10225 E		Length 188.98		Bearing 199											
Lat.		Elev		Dip		HOLE No.		Dep.		Length		Bearing		NGC 87-27	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS	
82.22	83.72	100%	Minor chalcedonic fracture infilling from 83.22-83.48m.							2-3		18937			
83.72	85.22	100%	(CRYSTAL) LITHIC TUFF Same as above -coarse grained pyrite @83.27m -clay altered pyritic fracture filling @83.44m					40° to 50° to c.a.		2-3		18938			
85.22	86.72	100%	-clay altered pyritic fracture filling @85.82 -silicified zone, increased pyrite, clay altered fracturing @86.21m, appears to be black chalcedonic vein					20° to c.a. 5° to c.a.		3-5		18939			
86.72	88.22	100%	-altered quartz-chalcedony veining, up to 20% pyrite @87.25-87.70m -abrupt increase in carbonaceous material @87.95m					5° to 10° to c.a.		5-7		18940			
88.22	89.72	100%	-up to 15% carbonaceous material, irregular shapes in matrix -block of crystal tuff 18cm long @88.80m							2		18941			
89.72	91.22	100%	-chalcedony infilling fractures @90.22m -pyrite @89.95							2-5		18942			
91.22	92.72	100%	-crystal tuff from 91.44-91.84m, 5-10% pyrite -decreasing carbonaceous material @91.97m -clay altered zone @92.0m -calcite vein @92.44m (with clay gouge)					60° to c.a. 90° to c.a.		3-5		18943			
92.72	94.22	100%	(CRYSTAL) LITHIC TUFF Dark gray, poorly sorted matrix supported, carbonaceous lithic-crystal tuff -clay gouge @93.44m -minor qtz-carb (clay) veinlets, random orientation					60° to c.a.		3-5		18944			

Date Nov. 24, 1987. Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 20, 1987		Date Completed Nov. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		NTS No 105K/2									
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES											
Lat. 10030 N		Elev		Dip +45		188.98m		RECORDED		CORRECTED		56°		49.7°		Lat.		Elev.		Dip		HOLE No.	
Dep 10225 E		Length 188.98		Bearing 199												Dep		Length		Bearing		NGC 87-27	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS									
94.22	95.72	100%	~~clay zone from 94.69-94.92m (+clay gouge)~~ ~~possibly lighter crystal-lithic tuff~~ ~~minor fragments of rhyolite esp. @95.54m~~ ~~weakly calcareous, carbonaceous~~ ~~weak clay altered stockwork~~					60° to c.a.		.2		18945											
95.72	97.22	99%	~~stockwork with quartz and clay alteration~~ ~~stronger clay alteration @96.44m~~ ~~actual thickness of zone 15-20cm~~ ~~clay gouge and pyrite in fracture @98.40m~~ ~~rhyolite fragment, 8cm Ø @96.96.~~					40° to c.a.		2		18946											
97.22	98.72	100%	CRYSTAL LITHIC TUFF Light to medium gray gradation from darker more lithic tuff. Pyrite lens in quartz-carb infilling (to clay) @97.91m. Clay gouge in large fracture @98.32m. Moderate argillic alteration.					5-10° to c.a.		3-4		18947											
98.72	100.22	100%	CRYSTAL LITHIC TUFF. Medium gray, medium grained tuff increasing qtz-carb (clay) veining and fracture filling esp. @99.35m					45-50° to c.a.		1-2		18948											
100.22	101.72	100%	~~qtz-carb-chal (clay) veining, 10%pyrite @100.58m~~					55° to c.a. 20° to c.a.		1-2		18949											

DRILL LOG #1

Date Nov. 24, 1987 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 20, 1987		Date Completed Nov. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2					
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 6 of 3		
							RECORDED	CORRECTED	RECORDED	CORRECTED									
Lat. 10030 N		Elev.		Dip 45		188.98m			56°	49.7°	Lat.		Elev.		Dip			HOLE No.	
Dep 10225 E		Length 188.98		Bearing 199							Dep.		Length		Bearing			NGC 87-27	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS						
101.72	103.22	93%	-clay gouge, minor pyrite @101.84m, 102.11m -contact zone, qtz-chal vein above 5cm wide clay altered zone into rhyolite				35-40° to c.a.		1-2		18950								
103.22	103.75	100%	RHYOLITE PORPHYRY Light greenish gray quartz-eye porphyry, strongly clay altered 103.61-103.75 - contact veining and brecciation, 5-10% pyrite, grades back to tuff						2-3		18951								
103.75	104.72	100%	CRYSTAL LITHIC TUFF Light gray, somewhat finer grained tuff than above, many clay filled fractures and veinlets. Large pyrite pod @104.22m 16cm clay altered zone @104.4m				50-60° to c.a.		2-3		"								
104.72	106.22	100%	104.74-104.86 clay gouge and infilling strong clay alteration, gouge, fracture fillings to 105.82m; increasing chalcedony and associated pyrite; still moderate clay content.						2-5		18952								
106.22	107.72	100%	CRYSTAL LITHIC TUFF -clay altered fracture with qtz-carb-chal veining and associated pyrite @106.4m -some welding noted in tuff from 106.95 -more clay, qtz-carb-chal veining, pyrite @107.7m				55° to c.a.		2		18953								
107.72	109.22	100%	-veining and clay alteration @108.02m, 108.2m -quartz-clay stockwork from 108.45-108.75m -more qtz, clay and pyrite @109.2 -clay alteration is pervasive, core is soft, fractures have been filled with quartz, carb, and minor chalcedony with substantial sulphides						2-5		18954								

DRILL LOG 81

Date Nov. 24, 1987 Logged B. J. Smith

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 20, 1987		Date Completed Nov. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2										
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 7 of 13								
Lat. 10030 N		Elev		Dip +45		188.98m		RECORDED		CORRECTED		56°		49.7°		Lat		Elev		Dip		HOLE No.		
Dep 10225 E		Length 188.98		Bearing 199												Dep		Length		Bearing		NGC 87-27		
From	To	Recovery	Description					Structure		% Sulph	Est. Grade	SAMPLE No	Width	ASSAYS										
109.22	110.72	92%	-increasing fracturing, qtz-carb-chal veining forming a weak stockwork							2-3		18955												
110.72	112.22	88%	-core broken into itty-bitty pieces @111.25m -coarse pyrite and quartz-chalcedony pieces common; probably in stockwork							5-7		18956												
112.22	113.72	88%	-broken core, as above -lots of clay, pyrite, quartz							3-5		18957												
113.72	115.22	100%	CRYSTAL LITHIC TUFF Dark gray, broken, crushed core, weakly calcareous, carbonaceous, intense clay alteration							2-5?		18958												
115.22	116.72	75%	-core still broken and crushed -much quartz, much less pyrite							2		18959												
116.72	118.22	87%	-same as above -clay altered quartz vein in core @117.55m-117.85m -few sulphides associated with veining							1		18960												
118.22	119.72	57%	-same as above -intense argillic alteration, poor recovery							1		18961												
119.72	121.22	100%	-core becoming less crushed-looks like core! -intense argillic alteration -weak stockwork -very little sulphide							<1		18962												

Date Nov. 24, 1987 By: Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 20, 1987		Date Completed Nov. 28, 1987		Core Size HQ	DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		NTS No 105K/2		
FIELD CO-ORDINATES					DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					Sheet 5 of 3
Lat. 10030 N		Elev.		Dip +45		188.98m	RECORDED	CORRECTED	RECORDED	CORRECTED	56°	49.7°	Lot.	Elev.	
Dep 10225 E		Length 188.98		Bearing 199						Dep	Length	Bearing	NGC 87-27		
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS		
121.22	122.72	100%	~~solid core~~ -large pieces of quartz eye rhyolite (5cm Ø) from 121.8 -dissected by thin calcedonic veinlets						<1		18963				
122.72	124.22	100%	~~core still highly fractured~~ , crushed from 123.10-123.44 -thin veinlets, pervasive argillic alteration						<1		18964				
124.22	125.72	100%	~~same as above~~ -large pieces of quartz-eye rhyolite common in tuff esp. @124.66m -clay gouge common						<1		18965				
125.72	127.22	95%	CRYSTAL LITHIC TUFF Light-medium gray, strong argillic alteration, weak quartz, chalcedonic veinlets along fractures @126.42m, 126.83m						<1		18966				
127.22	128.72	100%	~~considerable veining, near~~ stockwork -much fracturing, weak rock -large fragments of quartz eye rhyolite esp. @128.70m						<1		18967				
128.72	130.22	100%	~~contact with finer grained~~ , light gray tuff @129.45 -minor veining, moderate argillic alteration						<1		18968				
130.22	131.72	97%	~~relatively fine grained~~ , light gray tuff -minor fracturing, veining -moderate argillic alteration						<1		18969				
131.72	133.23	100%	~~same as above~~ -quartz-eye rhyolite fragments @132.60m						<1		18970				

DRILL LOG 81

Date Nov. 24, 1987 Signed By Chris Wild

6602099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 20, 1987		Date Completed Nov. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2					
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
								RECORDED	CORRECTED	RECORDED	CORRECTED								
Lat. 10030 N		Elev.		Dip +45		188.98m				56° 49.7°		Lat.		Elev.		Dip		HOLE No.	
Dep 10225 E		Length 188.98		Bearing 199								Dep		Length		Bearing		NGC 87-27	
From	To	Recovery	Description						Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS				
133.22	134.72	100%	-same as above -pervasive argillic alteration								<1		18971						
134.72	136.22	100%	-thick clay seams (20cm thick) @134.8m and 135.02								<1		18972						
136.22	137.72	100%	-decreasing alteration, minor veining @136.75m (quartz-calcite, minor chalcedony)								<1		18973						
137.72	139.22	100%	CRYSTAL LITHIC TUFF Light gray, medium grained tuff; weakly calcareous; minor quartz-carbonate and chalcedony veins								<1		18974						
139.22	140.72	100%	-coarser tuff blocks @139.22 and 139.82m -gray chalcedony vein @140.58m								<1		18975						
140.72	142.22	100%	-coarse tuff block or layer from 141.42-141.71m -quartz-carb vein, clay infill @142.02						20° to c.a.		1		18976						
142.22	143.72	100%	-1-2cm quartz-carb vein @143.38m -moderate argillic alteration						15° to c.a.		<1		18977						
143.72	145.22	100%	-same as above -stringers of Qtz.-carb. vein @144.10m and @145.02m						//el to c.a. 10° to c.a.		1		18978						

DRILL LOG #1

Date Nov. 24, 1987 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 20, 1987		Date Completed Nov. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105K/2									
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES											
Lot. 10030 N		Elev.		Dip +45		188.98m		RECORDED		CORRECTED		56°		49.7°		Lot.		Elev.		Dip		HOLE No.	
Dep. 10225 E		Length 188.98		Bearing 199												Dep.		Length		Bearing		NGC 87-27	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS									
145.22	146.72	100%	-moderate argillic alteration, weakly calcareous							<1		18979											
146.72	148.22	100%	-same as above							<1		18980											
148.22	149.72	100%	-same as above							<1		18981											
149.72	151.22	100%	CRYSTAL LITHIC TUFF Light gray, medium grained mixed tuff, moderate argillic alteration, weakly calcareous minor quartz-carb fracture infilling							<1		18982											
151.22	152.72	100%	-quartz-carb-chalcedony vein; chalcedony after qtz-carb @151.25m -minor fracture infilling -chalcedony vein @152.45					10° to c.a. 7° to c.a.		<1		18983											
152.72	154.22	100%	-same as above, minor qtz-carb and chalcedony veins @153.62m							<1		18984											
154.22	155.72	100%	-highly fractured, broken up core from 155.10-155.45m -pervasive argillic alteration, strong along fracture							<1		18985											
155.72	157.22	100%	-minor fracturing, veining esp. @156.5m							<1		18986											

DRILL LOG #1

Date Nov. 24, 1987 Logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 20, 1987		Date Completed Nov. 28, 1987		Core Size HQ	DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2		
FIELD CO-ORDINATES					DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					Sheet // of //
Lat. 10030 N		Elev.		Dip +45		188.98m	RECORDED	CORRECTED	56°	49.7°	Lat.		Elev.	Dip	
Dep 10225 E		Length 188.98		Bearing 199						Dep.		Length	Bearing	HOLE No. NGC 87-27	
From	To	Recovery	Description			Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
157.22	158.72	100%	-increased veining from 158.72-159.58m -broken core from 158.04-158.37m -weakly to moderately calcareous -moderate argillic alteration, clay partings					<1		18987					
158.72	160.22	100%	-same as above, broken core -scattered minor veining -pyrite pod @160.0m					1		18988					
160.22	161.72	100%	(CRYSTAL) LITHIC TUFF Light gray, medium to coarse grained mainly lithic tuff. Larger fragments of quartz-eye rhyolite evident fining down -minor qtz-carb & chalcedony vein @161.34-161.54m			30° to c.a. 50° to c.a.		<1		18989					
161.72	163.22	90%	-finer grained crystal-lithic tuff -chalcedony veins @161.83 (1-2cm thick) and @161.45m -moderate argillic alteration -crushed, granular core from 162.73-163.98m			20° to c.a. 45° to c.a.		<1		18990					
163.22	164.72	79%	-crushed to 163.96m, granular, qtz-carb veining common esp. @163.90m -core is mixed pale and medium gray tuffs					<1		18991					
164.72	166.22	100%	-as above, moderate fracturing, infilled quartz-carb and chalcedony veining -moderate argillic alteration					<1		18992					
166.22	167.72	100%	-chalcedony @166.32m -qtz-carb (minor chal) veinlets @166.62m -additional minor veinlets in fracture					<1		18993					
167.72	169.22	100%	-same as above -broken core @168.60m					<1		18994					

DRILL LOG #1

Date Nov. 24, 1987 Logged By Chris Wild

092039

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 20, 1987		Date Completed Nov. 28, 1987		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2					
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lat 10030 N		Elev		Dip +45		188.98m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lot		Elev		Dip		Sheet 2 of 13	
Dep 10225 E		Length 188.98		Bearing 199								Dep		Length		Bearing		HOLE No. NGC 87-27	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS					
169.22	170.72	100%	CRYSTAL LITHIC TUFF Light gray, medium grained mixed tuff. Chalcedony and quartz-carb veining common in fractures, weak argillic alteration, weakly calcareous veinlets @169.88m qtz-carb					15° to c.a.		<1		18995							
			170.30m qtz-carb (chal)					40-45° to c.a.											
			170.41m qtz-carb-chal					20° to c.a.											
170.72	172.22	100%	-increasing chalcedonic veining, relative to quartz carb veining -chalcedony veinlets with brecciated wall rock @170.97m and 171.26m -quartz eye rhyolite veinlet @171.41m -clay gouge and increased argillic alteration @171.91m							<1		18996							
172.22	173.72	94%	-veining decreasing -weak to moderate argillic alteration							<1		18997							
173.72	175.22	94%	-same as above							<1		18998							
175.22	176.72	100%	-same as above -clay filled fractures esp. @176.40m					15° to c.a.		<1		18999							
176.72	178.22	100%	-same as above -clay altered 'block' @176.88-177.08m -clay gouge @178.06					20° to c.a.		<1		19000							

Date Nov. 24, 1987 Checked by: JAMES WILSON

660800

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 20, 1987		Date Completed Nov. 28, 1987		Core Size HQ	DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		NTS No 105K/2			
FIELD CO-ORDINATES					DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					Sheet 13 of 13	
Lot. 10030 N		Elev		Dip +45	188.98m	RECORDED	CORRECTED	56°	49.7°	Lot.		Elev		Dip	HOLE No	
Dep 10225 E		Length 188.98		Bearing 199						Dep.		Length		Bearing		NGC 87-27
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
178.22	179.72	93%	CRYSTAL LITHIC TUFF Light gray medium grained mixed tuff. Weak to moderate argillic alteration weakly calcareous. -crushed granular zone @178.33-178.5m -chalcedonic veining @178.94m				55° to c.a.		<1		092276					
179.72	181.22	100%	-same as above, coarse block of greenish quartz-eye porphyritic rhyolite 25cm long @180.70m -coarse grained tuff to 181.20m						<1		092277					
181.22	182.72	100%	-blocks of pale gray tuff @181.36m, 182.07m-182.64m -minor chalcedonic veinlets cut dark and light crystal-lithic tuffs						<1		092278					
182.72	184.22	100%	-same as above -minor blocks of light gray tuff @183.06m, 184.20m and quartz-eye rhyolite @183.78m						<1		092279					
184.22	185.72	92%	-same as above -coarsens markedly @185.15m 'lapilli' -quartz-carb fracture fillings, chalcedonic veinlets				40-50° to c.a.		<1		092280					
185.72	187.22	98%	LITHIC (CRYSTAL) TUFF Pale to medium, gray coarse grained, lithic and crystal tuff. Angular lithic fragments include rhyolite porphyry, crystal tuff and pale lithic-crystal tuff. Weak argillic alteration weakly calcareous.						<1		092281					
187.22	188.98	100%	-same as above						<1		092282					

DRILL LOG #1

Date Nov. 24, 1987 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

28

Date Collected Nov. 26/87		Date Completed Nov. 30/87		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 1 of 9	
Lat 10000 N		Elev		Dip -45°				RECORDED		CORRECTED		RECORDED		CORRECTED			
Dep 10225 E		Length 140.21m		Bearing 199°										Dep		Length	
														Bearing		NGC 87-28	

From	To	Recovery	Description	Structure	% Sulph.	Est Grade	SAMPLE No	Width	ASSAYS				
0	51.82	0%	OVERBURDEN Tri-coned										
51.82	53.64	31%	OVERBURDEN Glacial Till										
53.64	55.14	100%	CRYSTAL LITHIC TUFF Medium gray, fine to medium grained poor sorted lithic/ash tuff. -intense clay alteration esp @ 54.0m -pyrite occurs in pods and as coarse cubic crystals -carbonaceous, weakly calcareous -veinlets and fragments of quartz-eye rhyolite -clay alteration of veinlets, up to 10% pyrite -quartz-carbonate veinlets and fracture infills		3-5		092283						
55.14	55.36	100%	-same as above				092284						
55.36	56.64	100%	LAPILLI TUFF Light gray, mottled, coarse grained, poorly sorted crystal-lithic lapilli tuff. Angular to subrounded fragments of mafic-felsic pyroclastics and volcaniclastics. -intense clay alteration -coarse crystals and fragments? of pyrite -fragments of darker tuff at top contact -little obvious qtz-carb veining		3-5		092284						
56.64	57.29	100%	LITHIC LAPILLI TUFF Same as above, fining down becoming darker gray, and fine grained at lower contact		3-5		092285						

DRILL LOG - 81

Date Nov. 28, 1987 Logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 26/87		Date Completed Nov. 30/87		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105K/2				
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 2 of 7	
							RECORDED	CORRECTED	RECORDED	CORRECTED								
Lat 10000 N		Elev		Dip -45°						Lat		Elev		Dip		HOLE No.		
Dep 10225 E		Length 140.21m		Bearing 199°						Dep		Length		Bearing		NGC 87-28		
From	To	Recovery	Description						Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
57.29	58.14	79%	RHYOLITE PORPHYRY White to pale gray quartz eye porphyry. Intense argillic alteration, pods of pyrite, and no veining.							2		092285						
58.14	59.64	100%	-same as above -dark gray clay partings						70° to c.a.	2-5		092286						
59.64	60.82	100%	-reddish, hematite? stain @59.79 -fresh quartz-eye porphyry from 60.30-60.70m -clay altered rhyolite porphyry 60.70-60.82m -sharp contact						↓ to c.a.	2-3		092287						
60.82	61.14	100%	CRYSTAL LITHIC TUFF medium gray, medium grained, poorly sorted lithic (crystal) tuff. Strong argillic alteration							2		092287						
61.14	62.64	100%	-minor rhyolite fragments with 20% pyrite @61.40m -increasing argillic alteration -coarse cubic pyrite crystals (1cm)							2-10		092288						
62.64	61.14	100%	-blocks of less altered tuff surrounded by clay altered tuff. Pyrite occurs as pods, lenses, coarse crystals and finer disseminations -thin seams of clay gouge (pyritic @63.26)						55° to c.a.	5-10		092289						
61.14	65.45	100%	CRYSTAL LITHIC TUFF -same as above -minor quartz-carb @64.48 -dark clay parting						30° to c.a.	2-5		092290						
65.45	65.64	89%	RHYOLITE PORPHYRY Pale greenish gray intense argillic alteration						60° to c.a.	1		"						

DRILL LOG #1

Date Nov. 28, 1987 logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 26/87		Date Completed Nov. 30/87		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2			
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 3 of 9				
Lot 10000 N		Elev			Dip -45°		RECORDED	CORRECTED	RECORDED	CORRECTED	Lot		Elev		Dip		
Dep 10225 E		Length 140.21m		Bearing 199°						Dep		Length		Bearing		HOLE No NGC 87-28	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
65.64	67.14	100%	RHYOLITE PORPHYRY Pale gray and greenish gray, quartz-eye, feldspar porphyry, intense argillic alteration. Clay filled contact between greenish gray and pale gray porphyries					35° to c.a.		2-5		092291					
67.14	68.64	100%	-coarse phenocrysts (up to 1.5cm Ø) -pyrite is finely disseminated, minor pyritic pods also along clay filled fractures							2		092292					
68.64	70.14	94%	-quartz carb veinlet @69.90-70.19m					5-10° to c.a.		2		092293					
70.14	71.64	100%	70.43 FELDSPAR PORPHYRY -fragment of black pyritic argillite? @70.29m -clay parting at contact with darker gray feldspar porphyry (minor quartz eyes) @70.43m					75° to c.a.		2-3		092294					
71.64	73.14	95%	-intense argillic alteration							3-5		092295					
73.14	74.64	99%	-medium gray, grain size from 1-2cm to aphanitic groundmass							3-5		092296					
74.64	76.14	99%	FELDSPAR (RHYOLITE) PORPHYRY Broken core intense clay alteration, some fresher 'blocks' of quartz-eye and feldspar porphyry in gray sandy clay							2		092297					
76.14	77.64	99%	-quartz-carbonate stockwork and intense clay alteration broken, crushed core -fresh fine grained gray feldspar porphyry @77.14m; no stockwork; weak argillic alteration							2		092298					

DRILL LOG #1

Date Nov. 28, 1987 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 26/87		Date Completed Nov. 30/87		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 4 of 9	
Lat 10000 N		Elev		Dip -45°		RECORDED		CORRECTED		Lat		Elev		Dip	
Dep 10225 E		Length 140.21m		Bearing 199°		RECORDED		CORRECTED		Dep		Length		Bearing	
From	To	Recovery	Description			Structure			% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS		
77.64	79.14	100%	-fresh minor clay, carbonate along fractures -weakly to moderately calcareous -green mica, prob mariposite @77.83m -qtz-carb veining @78.65-78.85m			25° to c.a.			1		092299				
79.14	80.54	98%	-fresh but broken up -weakly calcareous argillic						<1		092300				
80.54	82.14	90%	-same as above -rapid increase in clay @81.50, crushed core, lower recovery						<1		092301				
82.14	83.64	90%	-same as above -recovery poor near lower contact, much clay in fractures						<1		092302				
83.64	85.14	43%	(CRYSTAL) LITHIC TUFF Dark gray, weakly carbonaceous, very poorly sorted lithic tuff. Angular to subrounded fragments of felsic and intermediate volcanics and argillite or shale, volc glass? (vitric). Weak qtz-carb veining, few sulphides, moderate argillic alteration-very crumbly. MISSING CORE 84.58-85.34m (Blocks may be incorrect)						<1		092303				
85.14	86.64	88%	-minor qtz-carb stockwork; black, crumbly, difficult to identify fragments -contact with pale green gray rhyolite @86.54m			25° to c.a.			<1		092304				
86.64	87.06	100%	RHYOLITE PORPHYRY Pale green gray, intensely argillic remanant quartz eyes, clay altered feldspar phenocrysts -intrusive						<1		092305				

DRILL LOG #1

Date Nov. 28, 1987 Logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collared Nov. 26/87		Date Completed Nov. 30/87		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot 10000 N		Elev.		Dip -45°		RECORDED		CORRECTED		RECORDED		CORRECTED		Lot.	
Dep 10225 E		Length 140.21m		Bearing 199°										Elev.	
														Dip	
														Bearing	
														HOLE No.	
														NGC 87-28	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
87.06	88.14	100%	CRYSTAL LITHIC TUFF Dark gray, highly fractured argillic crumbly core; as above		<1		092305					
88.14	89.64	100%	-become a lighter medium gray more moderate argillic alteration after 88.37m weakly calcareous		<1		092306					
89.64	91.14	100%	-same as above -weak fracturing and veining but crumbly core		<1		092307					
91.14	92.64	66%	-missing core 91.29-91.90m -pieces of qtz-carbonate @91.90m -banded qtz-carb-chal vein @92.10m -crystal-lithic tuff same as above		<1		092308					
92.64	94.14	100%	CRYSTAL LITHIC TUFF Same as above. Qtz-carb-(chalcedony) vein @92.64-92.93m -banded, continuous, no sulphides. Increasing clay @93.27m-93.38m -with qtz-carb	10-20° to c.a. 20° to c.a.	<1		092309					
			Broken up quartz-carb vein from 93.70-93.95m. -older tectonically broken, reworked vein.									
94.14	95.64	100%	-relatively fresh, weak argillic alteration -minor qtz-carb		<1		092310					
95.64	97.14	100%	-same as above		<1		092311					

DRILL LOG #1

Date Nov. 28, 1987 Logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 26/87		Date Completed Nov. 30/87		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2			
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						
							RECORDED	CORRECTED	RECORDED	CORRECTED							
Lat 10000 N		Elev		Dip -45°						Lat.		Elev		Dip		HOLE No.	
Dep 10225 E		Length 140.21m		Bearing 199°						Dep.		Length		Bearing		NGC 87-28	
From	To	Recovery	Description						Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
97.14	97.87	100%	~~-large (7cm thick) qtz vein~~ (minor carbonate, chalcedony) @97.24m ~~-brecciated quartz, clay infilled~~ ~~-banded with chalcedony~~						30° to c.a.	1		092312					
97.87	98.36	100%	LITHIC TUFF Black, carbonaceous fine grained tuff. Highly fractured, qtz-carb veining. Uneven lower contact, minor fracturing, infilling						1° to c.a. 45° to c.a.	1		"					
98.36	98.64	100%	CRYSTAL LITHIC TUFF As before. Some carbonaceous fragments							1		"					
98.64	100.14	99%	~~-large piece of carbonaceous~~ lithic tuff @98.94m ~~-increasing qtz veining, becomes very crumbly~~ 100.0m							1		092313					
100.14	101.64	100%	~~-crumbly quartz veining possible stockwork to 100.10m~~ ~~with more veining to 101.64m~~ ~~-minor carbonaceous lithic tuff @100.62~~							1		092314					
101.64	103.14	100%	CRYSTAL LITHIC TUFF Medium gray, granular weathering moderately argillic weakly calcareous mixed tuff. Weak stockwork, broken weathered core, minor chalcedonic veining @102.82m.						45° to c.a.	1		092315					
103.14	104.64	100%	~~-same as above, granular weathering, fractured~~ ~~weathered qtz vein esp. @103.90m~~							1		092316					
104.64	106.14	100%	~~-qtz vein (minor chalcedony) @104.81m~~ ~~-clay filled parting @104.85~~ ~~-much qtz, fractured very crumbly @105.36m~~						10-15° to c.a.	1		092317					

DRILL LOG #1

Date Nov. 28, 1987 Logged By Chris Wild

10000 N

NORANDA EXPLORATION COMPANY LTD.

Date Collared Nov. 26/87		Date Completed Nov. 30/87		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S No 105K/2				
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES						
								RECORDED	CORRECTED	RECORDED	CORRECTED							
Lat 10000 N		Elev		Dip -45°						Lat.		Elev		Dip		HOLE No.		
Dep 10225 E		Length 140.21m		Bearing 199°						Dep.		Length		Bearing		NGC 87-28		
From	To	Recovery	Description						Structure		% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
106.14	107.64	100%	-fractured qtz vein @106.22m -variable but pervasive argillic alteration -large qtz vein, irregular shape, some silicification below vein, @107.0m -107.35m						48° to c.a. 10-15° to c.a.		<1		092318					
107.64	109.14	100%	-increasing chalcedonic veinlets -qtz. vein @108.76m, some fracturing minor chalcedony						40° to c.a.		<1		092319					
109.14	110.64	100%	-qtz.-chalcedony veining @109.3m, some silicification -crumbly clay altered core -low angle clay filled parting from 110.19-110.99m -minor fracturing, chalcedonic infilling						5-10° to c.a.?		<1		092320					
110.64	112.14	100%	CRYSTAL LITHIC TUFF Medium gray, argillic mixed tuff. Much caly to 111.08m. Qtz veining with minor chalcedony, clay along some wall contacts@111.0-111.25m 111.48-111.77								<1		092321					
			-minor silicification															
112.14	113.64	100%	same as above -clay parting 112.79m to 113.63m						5° to c.a.		<1		092322					
113.64	115.14	59%	-core becomes increasing broken @113.90 -recovery decreases, qtz-carb stockwork in intense fracture network -overprinted pervasive argillic alteration								<1?		092323					
115.14	116.64	71%	-crumbly clay altered core, weak stockwork								1?		092324					

DRILL LOG #1

Date Nov. 28, 1987 Logged By — Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 26/87		Date Completed Nov. 30/87		Core Size H0		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 8 of 1	
Lot 10000 N		Elev		Dip -45°		RECORDED		CORRECTED		Lot		Elev		Dip	
Dep 10225 E		Length 140.21m		Bearing 199°						Dep		Length		Bearing	
														HOLE No.	
														NGC 87-28	
From	To	Recovery	Description			Structure			% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS		
116.64	118.14	67%	-71cm of sand, cored from hole @117.65m -blocky, sandy core, poor recovery -argillic alteration, minor veining 116.89m-117.40m						<1?		092325				
118.14	119.64	93%	-crushed broken core to 118.26, more sand -solid core @118.26; minor fracturing, qtz infilled						<1		092326				
119.64	121.14	95%	-same as above, crumbly argillic						<1		092327				
121.14	122.64	91%	CRYSTAL LITHIC TUFF Medium grained, poorly sorted, crumbly argillic mixed tuff -quartz-carb veining, minor stockwork @121.24-121.4m -strongly argillic, weakly calcareous						<1		092328				
122.64	124.14	40%	same as above -very crumbly, broken, poor recovery						<1		092329				
124.14	125.64	97%	-coarser fresher mixed crystal-lithic tuff -thin veinlets, minor silicification, qtz-carb and chalcedony in fractures -clay along fracture surfaces, partings						<1		092330				
125.64	127.14	100%	Same as above						<1		092331				
127.14	128.64	100%	-slightly darker gray, decreasing quartz and clay alteration -minor chalcedonic veinlets						<1		092332				

DRILL LOG #1

Date Nov. 28, 1987 logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Nov. 26/87		Date Completed Nov. 30/87		Core Size HQ		DIP TESTS				PROPERTY GREW CREEK				PROJECT No 332		N.T.S. No 105K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 9 of 9	
Lat 10000 N		Elev.		Dip -45°								Lat.		Elev.		Dip		HOLE No	
Dep 10225 E		Length 140.21m		Bearing 199°								Dep.		Length		Bearing		NGC 87-28	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS					
128.64	130.14	81%	same as above More crumbly, broken, increased qtz-carb and chalcedonic veining and moderate argillic alteration Qtz-carb-chal vein @129.23m							<1		092334							
130.14	131.64	100%	same as above, decreasing veining and alteration							<1		092334							
131.64	133.14	100%	CRYSTAL LITHIC TUFF Medium gray, medium grained poorly sorted, uniform, mixed tuff. Weak argillic alteration, slightly calcareous. Very few fractures and little veining.							<1		092335							
133.14	134.64	100%	same as above -minor veining @134.10m							<1		092336							
134.64	136.14	100%	-becomes more crumbly, minor veining clay alteration							<1		092337							
136.14	137.64	100%	same as above -qtz-carb along partings and fractures							<1		092338							
137.64	139.14	100%	-qtz-carb filled fractures @137.7m -fairly crumbly, siliceous rock -qtz-carb and chalcedony veinlets @138.8-138.94m							<1		092339							
139.14	140.21	100%	-grading toward a lithic capilli tuff -quartz vein (minor carbonate), 1cm thick @140.05m -chalcedony veinlet @140.12 qtz along wall of same fracture					20° to c.a.		<1		092340							

NORANDA EXPLORATION COMPANY LTD.

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Date Collected Nov. 30, 1987		Date Completed Dec. 5/87		Core Size HQ (NQ)		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat. 10000 N		Elev.		Dip -45°		141.73m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep. 10175 E		Length 142.65m		Bearing 109°								Dep.		Length		Bearing	
From		To		Recovery		Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	g m t ASSAYS	
																AL Ay	
0		36.58		0		OVERBURDEN No recovery-tri-coned; glacial till											
36.58		38.08		64%		RHYOLITE PORPHYRY Pale gray, fine grained quartz-eye and minor feldspar porphyry. Intense argillic alteration and highly broken up core. Appear to be tuffaceous pieces and probably agglomerate. Pyrite occurs as lenses and stringers along fractures; weakly calcareous						5		092341		0.14 0.7	
38.08		39.58		81%		CONGLOMERATIC LITHIC WACKE Polymictic, very poorly sorted paraconglomerate. Large fragments of black argillite and pale gray rhyolite in a clay to sand matrix, probably graywacke. Very soft clay rich matrix. Poor recovery between 39.32-39.62m.						1		092342		2.54 2.7	
39.58		41.08		73%		RHYOLITE PORPHYRY - FELSIC PYROCLASTICS Quartz-eye rhyolite breccia, fragments and blocks clearly visible, slightly greenish gray. Matrix is pale gray quartz eye porphyry. Later fracturing (through matrix and fragments) hosts dark chalcedony, some pyrite; also pods of pyrite. Weakly calcareous						2-3		092343		0.31 0.7	
41.08		42.58		70%		Same as above. Blocky, pieces don't fit together, sand and clay washed away.						2		092344		0.24 0.7	

DRILL LOG - 81

Date Dec. 2, 1987 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 30, 1987		Date Completed Dec. 5/87		Core Size HQ (NQ)		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2					
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lot. 10000 N		Elev.		Dip -45°		141.73m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lot.		Elev.		Dip		HOLE No.	
Dep. 10175 E		Length 142.65m		Bearing 109°								Dep.		Length		Bearing		NGC 87-29	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No	Width	g.m.t. ASSAYS					
42.58	44.08	63%	FELSIC PYROCLASTIC-RHYOLITE PORPHYRY Qtz-eye rhyolite breccia as above. -increasing argillic alteration							1		092345		0.48	0.7				
44.08	45.58	59%	-very poorly sorted felsic agglomerate mainly Qtz-eye rhyolite porphyry							2		092346		0.22	0.7				
45.58	47.08	92%	-significant pyrite pods and crystals -solid core, strong argillic alteration starts @146.33m -moderately calcareous							1-5		092347		0.10	0.7				
47.08	48.58	100%	-decreased sulphides							1		092348		0.07	0.7				
48.58	50.08	94%	-core becomes crumbly between 49.45-49.99m -increasing sulphides							1-2		092349							
50.08	50.73	100%	-concentrated sulphides @50.25m along transition to lighter medium grained felsic pyroclastics (tuff)							2-5		092350							
50.73	51.58		LITHIC - VITRIC TUFF Medium brown-gray dark spotted mixed tuff. Poorly sorted fragments of volcanic glass and siliceous volcanics, fine to medium grained. Coarse grains of pyrite esp. @51.36m.					Contact 60° to c.a.		3-5		"							
51.58	52.28	100%	CRYSTAL LITHIC TUFF Grades from mixed lithic-crystal vitric tuff to medium gray medium to coarse grained mixed lithic-crystal tuff. Clay-pyrite parting (~10-15% pyrite) @51.97m Sharp lower contact					65° to c.a. 75° to c.a.		1-10		092351		0.07	0.7				

DRILL LOG #1

Date Dec. 2, 1987 Logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colligred Nov. 30, 1987		Date Completed Dec. 5/87		Core Size HQ (NQ)		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2									
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 3 of 13							
Lot. 10000 N		Elev		Dip -45°		141.73m		RECORDED		CORRECTED		RECORDED		CORRECTED		Lot.		Elev.		Dip		HOLE No.	
Dep. 10175 E		Length 142.65m		Bearing 109°												Dep.		Length		Bearing		NGC 87-29	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS									
52.28	53.08	100%	ASH TUFF Dark gray, finer grained crystal-lithic ash tuff, many coarse grained fragments and crystals. Moderate to strong argillic alteration.							1		092351		AL	AG								
53.08	53.64	96%	-becoming coarser grained crystal lithic tuff							1		092352		0.07	0.7								
53.64	54.58	100%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted mixed tuff. Decreasing clay alteration, increasing pyrite in pods, along fractures and along fragment boundaries							2-5		"											
54.58	56.08	100%	-increasing clay @54.86m.							1-2		092353		0.10	"								
56.08	57.58	100%	-carbonaceous fragments -large feldspar block @56.85m -minor qtz-carb and chalcedony veining							2-3		092354		0.38	"								
57.58	59.08		-increasingly carbonaceous -strongly argillic -increase in pyrite @58.20m							3-4		092355		0.14	"								
59.08	60.58	94%	CRYSTAL LITHIC TUFF Medium gray, poorly sorted mixed tuff. Strong argillic alteration -becomes lighter gray @59.89m, decrease in vitric and carbonaceous fragments, more siliceous fragments, qtz eyes and feldspars							2		092356		0.14	"								

DRILL LOG 81

Date Dec. 2, 1987 Logged By Chris Wild

092093

NORANDA EXPLORATION COMPANY LTD.

Date Collared Nov. 30, 1987		Date Completed Dec. 5/87		Core Size HQ (NQ)		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 4 of 13			
Lat. 10000 N		Elev.		Dip -45°		141.73m		RECORDED		CORRECTED		RECORDED		CORRECTED		Lot	
Dep 10175 E		Length 142.65m		Bearing 189°												Elev.	
																Dip	
																Bearing	
																HOLE No.	
																NGC 87-29	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Ag	Ag		
60.58	60.81	100%	-clay altered zone @60.63m		1		092357		0.10	0.7		
60.81	62.08	96%	CRYSTAL TUFF Pale gray, felsic quartz-eye feldspar tuff; strongly clay altered. Very poorly sorted pyroclastic		1		"					
62.08	63.12	100%	Same as above -sharp lower contact	85° to c.a.	1		092358		0.07	0.7		
63.12	63.58	100%	FELSIC CRYSTAL - ASH TUFF Darker gray, fine grained with Qtz and feldspar crystals in a fine grained matrix. Small Qtz-eye rhyolite intrusions @63.35-63.50m		1		"					
63.58	64.02	100%	CRYSTAL LITHIC TUFF Tuff fragments coarsen considerably @63.60m. Some minor veining associated with rhyolite intrusions.		1		092359		0.07	0.7		
64.02	64.76	100%	RHYOLITE PORPHYRY Quartz-eye, feldspar porphyry dyke. Abrupt upper and lower contacts. Strongly argillic		2		"					
64.76	65.08	100%	CRYSTAL LITHIC (LAPILLI) TUFF Medium gray mixed tuff with increasing subangular to subrounded lapilli size fragments. Moderate argillic alteration.		1		"					
65.08	66.58	100%	LAPILLI TUFF Increasing number of lapilli size fragments. Core argillic; little veining, occasional pods of pyrite along fracture infillings.		1-2		092360		0.17	0.7		

DRILL LOG #1

Date Dec. 2, 1987 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 30, 1987		Date Completed Dec. 5/87		Core Size HQ (NQ)		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105K/2			
FIELD CO-ORDINATES				DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 5 of 13				
					RECORDED	CORRECTED	RECORDED	CORRECTED									
Lot	10000 N	Elev.		Dip	-45°	141.73m			-57°	-50°	Lat.		Elev.		Dip		HOLE No.
Dep	10175 E	Length	142.65m	Bearing	199°						Dep.		Length		Bearing		NGC 87-29
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
66.58	68.08	100%	-same as above, very hard, siliceous, unaltered						1		092361		0.34	1.4			
68.08	69.58	100%	LITHIC (CRYSTAL) TUFF Dark gray, medium grained poorly sorted Lithic (minor crystal) tuff. Some lapilli sized fragments, weak to moderate argillic alteration. Increase in quartz-carbonate veining @68.94m also, 69.32m and 69.51m.				35° to c.a.		1		092362		0.99	6.2			
69.58	70.05	100%	-increased fracture density, core broken from 70.10m -veining @70.91m								092363		2.74	11.7			
70.05	71.08	75%	FELDSPAR PORPHYRY Contact not definite. Brownish gray, very fine grained (qtz)-feldspar porphyry intruded by numerous rhyolite porphyry dykes. Quartz eyes present; weakly argillic, quite hard-siliceous.								"		58.25	618.2			
71.08	72.58	77%	Veining related to rhyolite porphyry intrusions.								092364						
72.58	74.08	100%	FELDSPAR PORPHYRY - FELSIC PYROCLASTICS Brownish gray porphyry, intruded by qtz-eye rhyolite; fracturing, qtz-carb-chalcedony common in fractures.						1		0923 65		8.26	117.3			
74.08	75.58	100%	74.68-75.35m Strong, banded qtz (carb)-chalcedony veining and brecciation; thinly banded, broken by later fracturing and fluid infill. Core is broken up.						1		092366		88.94	672.0			

DRILL LOG #1

Date Dec. 2, 1987 logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 30, 1987		Date Completed Dec. 5/87		Core Size HQ(NQ)		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2					
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lat. 10000 N		Elev.		Dip -45°		141.73m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip		HOLE No.	
Dep. 10175 E		Length 142.65m		Bearing 109°								Dep.		Length		Bearing		NGC 87-29	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS					
75.58	77.08	100%	-more qtz veining @75.60-76.95m broken core. Qtz is post rhyolite intrusion -qtz veining @76.32, 76.68, 77.08m -cuts rhyolite 'vein' @77.00m							<1		092367		AL	Ag				
77.08	78.58	100%	-more fractured broken up core -qtz veining @ 77.60, 77.95, 78.00m					5-10° to c.a.		<1		092368		16.7	54.2				
78.58	79.10	100%	-same as above -rhyolite 'vein' intrusion @78.73 -sharp contact					40° to c.a.		<1		092369		8.02	26.4				
79.10	80.08	100%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted mixed (lapilli) tuff. Minor quartz and chalcedony veining, weakly calcareous, weak argillic alteration.					5-10° to c.a.		1		"		2.30	8.9				
80.08	81.58	88%	CRYSTAL LITHIC TUFF Considerable fractured and broken with minor qtz-chalcedony stockwork. Lower contact indistinct in broken core.							<1		092370		10.42	12.3				
81.58	83.08	77%	FELDSPAR PORPHYRY (FELSIC PYROCLASTICS) Core very broken up, contact inexact. Large layered quartz (carb) chalcedony vein, esp. @82.30m. Host is fine grained, brownish gray porphyry possibly of dacite composition. Veining is ubiquitous and is the main reason the core is very crumbly. Sulphides are not common.					Stockwork				092371		98.53	467.8				
										<1									
83.08	84.58	83%	-same as above -30% qtz-feldspar phenocrysts, 5% mafic phenos -veining at random orientation but often at low angle to core axis					Weak Stockwork		<1		092372		27.84	12.7				

DRILL LOG #1

Date Dec. 2, 1987 Logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collared Nov. 30, 1987		Date Completed Dec. 5/87		Core Size HQ (NQ)		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S No. 105K/2							
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 7 of 13				
							RECORDED	CORRECTED	RECORDED	CORRECTED											
Lat. 10000 N		Elev.		Dip -45°		141.73m				-57°		-50°		Lat.		Elev.		Dip		HOLE No.	
Dep. 10175 E		Length 142.65m		Bearing 189°										Dep.		Length		Bearing		NGC 87-29	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS							
84.58	86.08	73%	~~-increasing quartz-chalcedony~~ veining and vein breccia @85.34-86.06m					Stockwork		<1		092373		96	170						
86.08	87.58	86%	~~-less veining, better recovery~~ -brownish gray feldspar porphyry, weak qtz-chalcedony stockwork, minor greenish gray rhyolite dykes esp. @ 87.50m					Weak Stockwork		<1		092374		132.55	967.2						
87.58	89.08	66%	~~-much veining brecciation~~ poor recovery between 88.0-88.85m -host becoming increasingly fragmental							<1		092375		11.07	28.5						
89.08	89.39	100%	~~-coarse lapilli size fragments~~ in brown-gray porphyry qtz-chal veining ends at lower contact							<1		18551		1.55	10.3						
89.39	90.58	100%	~~QTZ FELDSPAR PORPHYRY~~ Much as above but fresher with less veining, more quartz-eye and feldspar phenocrysts, only rare mafic phenocrysts and a lighter brown gray colour. Grades back into feldspar porphyry more obviously pyroclastic @90.60m. Maybe a dyke.							<1		"		1.17	3.8						
90.58	92.08	100%	FELDSPAR PORPHYRY TUFF (CRYSTAL-ASH TUFF) Brown gray fine grained porphyry with numerous intrusions of green-gray quartz-eye rhyolite porphyry. Rhyolite more common from 91.44-92.08m. Much quartz in broken core, substantial quartz veining @91.38m. Increasing argillic alteration.							<1		18552	91.44m (300') REDUCED TO NQ.	1.02	4.5						

DRILL LOG #1

Date Dec. 2, 1987 Logged By Chris Wild

22003

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 30, 1987		Date Completed Dec. 5/87		Core Size HQ (NQ)		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING RECORDED CORRECTED		ANGLE RECORDED CORRECTED		SURVEYED CO-ORDINATES				Sheet 8 of 13	
Lat. 10000 N		Elev.		Dip -45°		141.73m				-57°		-50°		Lot.	
Dep. 10175 E		Length 142.65m		Bearing 109°										Dep.	
														Elev.	
														Dip	
														Bearing	
														HOLE No.	
														NGC 87-29	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
92.08	93.58	75%	-same as above -qtz in broken core - veining @ 92.50m (poor recovery) -veining and large clay parting @93.26m	30° to c.a.	4		18553		4.80	6.9		
93.58	95.08	100%	-brown-gray feldspar porphyry intruded by rhyolite porphyry esp. @95.0m -moderate to strong argillic alteration				18554		0.45	1.7		
95.08	96.58	100%	CRYSTAL LITHIC (ASH) TUFF As before, a brownish gray, fine grained tuff with crystal and lithic fragments to lapilli size. Fragment size appears to be increasing downhole. Quartz-eye rhyolite intrudes @95.13m and more substantially from 95.80-96.50m. Weakly argillic				18555		0.65	1.4		
96.58	98.08	85%	CRYSTAL LITHIC (ASH) TUFF Brownish gray, fine to medium grained, very poorly sorted mixed tuff. Lithic lapilli in a crystal ash matrix. Weakly argillic qtz veining @97.13m (crushed). Clay seam (10cm recovered) @97.45m. More qtz veining to 97.78m.		1		18556		3.15	3.4		
98.08	99.58	88%	Same as above -mostly broken core qtz veining from 99.50-99.60m -banded, minor chalcedony, no carbonate	Vein or Stockwork	1		18557		2.10	3.1		

DRILL LOG #1

Date Dec. 2, 1987 logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collared Nov. 30, 1987		Date Completed Dec. 5/87		Core Size HQ (NQ)		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2										
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES												
Lat. 10000 N		Elev.		Dip -45°		141.73m						-57°		-50°		Lat.		Elev.		Dip		HOLE No.		
Dep. 10175 E		Length 142.65m		Bearing 189°												Dep.		Length		Bearing		NGC 87-29		
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS										
99.58	101.08	85%	CRYSTAL LITHIC TUFF Matrix is coarsening into more typical mixed tuff, carbonaceous qtz. veining 99.83-100.38m (poor recovery) and 100.88m (crushed)							<1		18558			2.43	4.5								
101.08	102.58	93%	-crushed and broken core to 102.11m -weak to moderate argillic alteration -quartz veining @101.40m and possible weak stockwork to 102.11m							<1		18559			0.69	2.4								
102.58	104.08	100%	-relatively unaltered-weakly argillic, very minor quartz veining (along fractures)							<1		18560			0.72	1.7								
104.08	105.58	89%	-quartz vein @104.50m (~ 2cm thick) -chalcedony veinlet with fragments @104.88m					35° to c.a.		<1		18561			0.79	1.7								
105.58	107.08	100%	-irregular chacedony veinlet 105.90-106.14m -altered rhyolite dyke 107.78-107.83m					5-10° to c.a. 1 to c.a.		<1		18562			0.41	1.4								
107.08	108.58	100%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted mixed tuff. Minor fracturing and subsequent quartz-chalcedony veining. Substantial vein (broken) @108.36m							<1		18563			1.89	3.4								
108.58	110.08	100%	-increasing frequency of chalcedonic veining, post-quartz-carb veining, newer set of fractures esp. @ 109.24m.							<1		18564			0.51	1.4								
110.08	110.79	100%	-same as above, becoming darker gray @110.39m -core becomes broken at contact							<1		18565			0.31	1.0								

DRILL LOG #1

Date Dec. 2, 1987 logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 30, 1987		Date Completed Dec. 5/87		Core Size HQ (NQ)		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2						
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES						Sheet 10 of 13			
Lat. 10000 N		Elev.		Dip -45°		141.73m	RECORDED	CORRECTED	RECORDED	CORRECTED	-57° -50°		Lat.		Elev.		Dip		HOLE No.	
Dep. 10175 E		Length 142.65m		Bearing 109°								Dep.		Length		Bearing		NGC 87-29		
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	AL ASSAYS							
110.79	111.20	100%	LITHIC TUFF Dark gray to black, fine to medium grained lithic (mixed) tuff. Core is broken and crushed, moderately calcareous due to small qtz-carb and minor chalcedonic veinlets						<1		18565	}	0.31	1.0						
111.20	111.58	100%	CRYSTAL LITHIC (ASH) TUFF Brownish-gray, fine to medium grained mixed tuff. Broken core as above.						<1		18565	}	0.31	1.0						
111.58	112.19	100%	-lapilli size fragments in ash size matrix -matrix grain size increases at lower contact becomes much lighter gray						<1		18566		0.89	1.7						
112.19	113.08	53%	CRYSTAL LITHIC TUFF Missing core at contact? Medium gray, medium grained, mixed (lapilli) tuff. Qtz-carb, chalcedony veins esp. from 112.78-113.08m, minor vein brecciation. Qtz-carb and chalcedony in layered veins						<1		"									
113.08	114.58	94%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted mixed tuff. Lapilli tuff from 113.08-113.16m. Qtz-carb-chal veins 1-3cm thick 113.08-113.31m and 113.59-113.77m. Many other smaller fracture fillings. Several episodes of veining from quartz-carb to qtz and finally chalcedony; also, considerable overlap in veining episodes; silicified						<1		18567		0.65	1.7						
114.58	116.08	99%	-large quartz vein, white, massive from 114.60-114.80m more quartz veining @115.30m-115.40m, and to 115.82m. Core is broken up.						<1		18568		0.72	3.4						

Drill LOG - 81

Date Dec. 2, 1987 Logged By Chris Wild

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NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 30, 1987		Date Completed Dec. 5/87		Core Size HQ (NQ)		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2	
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 11 of 13	
Lat. 10000 N		Elev.		Dip -45°		141.73m		RECORDED		CORRECTED		RECORDED		CORRECTED	
Dep. 10175 E		Length 142.65m		Bearing 109°											
Dep. 10175 E		Length 142.65m		Bearing 109°											
From	To	Recovery	Description			Structure			% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS		
116.08	117.58	85%	-more fine chalcedony veinlets @116.20m -qtz veining between 116.59-116.91m -minor silicification associated with large veins						<1		18569		0.75	2.1	
117.58	119.08	90%	-quartz vein @118.57m -small qtz-carb and chalcedony veinlets and fracture fillings throughout			45° to c.a.			<1		18570		0.98	1.7	
119.08	120.58	94%	-minor qtz vein @119.08m -becoming very blocky; fractured core -substantial qtz vein @119.34m -much quartz in broken core						<1		18571		0.75	1.0	
120.58	122.08	67%	-becoming moderately argillitic, broken core -chalcedony veins @121.80m -qtz veins @122.0m						<1		18572		0.27	1.0	
122.08	123.58	100%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted mixed tuff qtz-chalcedony veinlet @ 122.20m Less blocky to 123.58m. Minor fracturing and veining.						<1		18573		0.27	1.0	
123.58	125.08	61%	-1-2cm quartz 'pebbles' @123.58m crushed core, poor recovery -chalcedony vein 124.56-124.76m			10° to c.a.			<1		18574		0.62	2.1	
125.08	125.50	48%	-pieces of mixed gray tuff give way to pieces of brown muddy? tuff @ ~125.5m.						<1		18575		0.31	0.7	
125.50	126.58	68%	FELDSPAR PORPHYRY - FELSIC PYROCLASTIC Brown gray feldspar (qtz-eye) dacite? pyroclastic. Fine grained porphyry mainly feldspar phenocrysts occasional qtz-eyes, 1% mafics. Core is crushed into small pieces						<1		"				

Drill Log #1

veining has decreased markedly.

Date Dec. 2, 1987. Logged By Chris Wild

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NORANDA EXPLORATION COMPANY LTD.

Date Collared Nov. 30, 1987		Date Completed Dec. 5/87		Core Size HQ (NQ)		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot. 10000 N		Elev.		Dip -45°		141.73m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep. 10175 E		Length 142.65m		Bearing 109°								Dep.		Length		Bearing	
																HOLE No.	
																NGC 87-29	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
126.58	128.08	16%	-same as above, very blocky almost no recovery between 126.64m and 128.02m						<1		18576		AL	Ag			
													0.51	1.0			
128.08	129.58	100%	-much fracturing, infilling of qtz and chalcedony, form a weak stockwork -quartz veining @129.18m				5-10° to c.a.		<1		18577		0.34	0.7			
129.58	130.05	85%	FELDSPAR PORPHYRY - FELSIC PYROCLASTIC Brown gray dacitic; pyroclastic, fine grained, porphyritic. Crushed core except at contact.						<1		18578		0.31	1.0			
130.05	131.08	100%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted, mixed tuff. Fragments and veinlets of quartz-eye rhyolite common, clay parting @130.79m.				20-35° to c.a.		<1		"						
131.08	132.58	100%	-rhyolite intrusions @131.28; 131.68m 132.10m; small vein like, also fragments -minor quartz veining @132.28m						<1		18579		0.17	0.7			
132.58	134.08	95%	-core is crushed -qtz veining 132.58-133.08m -weakly argillic but very crumbly				Possible Stockwork		<1		18580		0.48	0.7			
134.08	135.58	61%	-crumbly quartz-clay alteration						<1		18581		0.21	0.7			
135.58	137.08	98%	-strong argillic alteration-pervasive, clay parting @ 135.79m				5-10° to c.a.		<1		18582		0.10	0.7			

DRILL LOG #1

Date Dec. 2, 1987. Logged By Chris Wild

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NORANDA EXPLORATION COMPANY LTD.

Date Collected Nov. 30, 1987		Date Completed Dec. 5/87		Core Size HQ (NQ)		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lat. 10000 N		Elev.				Dip -45°		141.73m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.	
Dep 10175 E		Length 142.65m		Bearing 189°										Dep		Length	
														Dip		HOLE No.	
														Bearing		NGC 87-29	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Ag	Ag		
137.08	138.58	100%	-same as above		<1		18583		0.31	1.0		
138.58	140.08	98%	-qtz veining @138.68m and 139.15-139.58m crushed where quartz predominates -moderately to strongly argillic	Weak Stockwork	<1		18584		0.79	1.4		
140.08	141.58	100%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted tuff. Strong argillic alteration decreases toward end of hole. Minor quartz, chalcedony veinlets. Several low angle (to core axis) clay partings		<1		18585		0.21	1.0		
141.58	142.65	100%	-moderately argillic -minor quartz, chalcedony veinlets -qtz vein @147.35m	25° to c.a.	<1		18586		0.34	1.0		

DRILL LOG #1

Date Dec. 2, 1987. Logged By Chris Wild

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NORANDA EXPLORATION COMPANY LTD.

(30)

Date Collared Dec. 6/87		Date Completed Dec. 10/87		Core Size HQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2									
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 1 of 14							
Lat 10030 N		Elev		Dip -45°		188.98m						-57°		-50°		Lat.		Elev.		Dip		HOLE No.	
Dep 10175 E		Length 188.98m		Bearing 199°												Dep.		Length		Bearing		NGC 87-30	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS									
0	36.88	0%	OVERBURDEN No recovery; tri-coned																				
36.88	53.64	17%	OVERBURDEN Glacial till; poorly sorted, from boulder to pebble size in a black sand to clay matrix. Polymictic																				
53.64	55.14	100%	VOLCANICLASTIC LITHIC SANDSTONE Reworked, medium grained crystal lithic tuff. Medium gray, bedded with numerous slumps and large boulders of coarser grained (reworked) tuff. Bedding is very discontinuous and broken up. Strongly clay altered carbonaceous.							1		18587		0.07	0.7								
55.14	55.36	100%	Same as above. -moderately well sorted becomes darker and harder close to contact, 'baked' by dyke; uneven, broken contact							1		18588											
55.36	55.84	100%	RHYOLITE PORPHYRY DYKE Light, greenish gray, fine grained, weakly porphyritic rhyolite dyke. Strong argillic alteration esp. at upper contact. Lower chill margin, very even contact							1		"											
55.84	56.64	70%	VOLCANICLASTIC LITHIC SANDSTONE Poorly to moderately well sorted reworked crystal lithic tuff. Soft, clay altered. Peice of rhyolite dyke @56.60m -small dyke? carbonaceous							1		"											
56.64	57.98	90%	VOLCANICLASTIC LITHIC SANDSTONE Fine to medium grained, well sorted sandstone, coarsens considerably @57.18m. Reworked crystal lithic tuff, many angular fragments							1		18589		0.07	0.7								

DRILL LOG - 81

Date Dec. 8/87 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Colored Dec 6/87		Date Completed Dec 10/87		Core Size HQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lot. 10030 N		Elev.		Dip -45°		188.98m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lot.		Elev.		Dip	
Dep 10175 E		Length 188.98m		Bearing 199°								Dep.		Length		Bearing	
																HOLE No.	
																NGC 87-30	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Al	Ag		
57.98	58.14	100%	VOLCANICLASTIC MUDSTONE abrupt, fractured contact with very fine grained, black mudstone, containing some coarse felsic fragments; probably reworked ash tuff.		1		18589		0.07	0.7		
58.14	58.22	100%	Same as above, much clay but fairly well indurated (or volcaniclastic)		1		18590					
58.22	59.64	94%	LAPILLI TUFF Medium-dark gray very poorly sorted lithic lapilli tuff. Subangular fragments of rhyolite, argillite up to 3cm Ø in a fine grained crystal-lithic ash matrix		1		"					
59.64	61.14	100%	-very poorly sorted, 15-20% lapilli -weakly argillic		1		18591					
61.14	62.64	100%	As above		1		18592		61.26m (301') REDUCED TO NG			
62.64	63.84	53%	-fining down, gradational lower contact -possibly reworked tuff -increasingly argillic		1		18593					
63.84	64.14	100%	VOLCANICLASTIC LITHIC SANDSTONE Light to medium gray, poorly sorted reworked crystal lithic tuff.		1		"					
64.14	65.64	51%	VOLCANICLASTIC LITHIC SANDSTONE Medium gray, fine grained, moderately well sorted, reworked crystal-lithic tuff. Intense argillic alteration		1		18594		0.07	0.7		

DRILL LOG - 81

Date Dec. 8/87 Logged By Chris Wild

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NORANDA EXPLORATION COMPANY LTD.

Date Colored Dec. 6/87		Date Completed Dec. 10/87		Core Size HQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105K/2					
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lot. 10030 N		Elev.		Dip -45°		188.98m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip		HOLE No.	
Dep. 10175 E		Length 188.98m		Bearing 199°								Dep.		Length		Bearing		NGC 87-30	
From	To	Recovery	Description					Structure			% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
65.64	67.14	96%	~~-coarsening downhole from~~ fine to medium-coarse grained								1		18595		Au	Ag			
															0.07	0.7			
67.14	68.25	100%	~~-grades to a felsic breccia~~ from 67.57-67.83m quartz-eye rhyolite fragments in sandy volcanoclastics, back to dark fine grained sandstone								1-2		18596						
68.25	68.64	100%	~~FELSIC PYROCLASTICS~~ Brecciated fragmental pale greenish gray rhyolitic matirix. Minor pods of pyrite								1-2		"						
68.84	70.14	88%	~~-becoming broken up @69.44~~ , very siliceous some quartz veining								1-2		18597						
															0.07	0.7			
70.14	71.64	43%	~~RHYOLITE PORPHYRY PYROCLASTICS~~ Brecciated quartz-eye porphyry. Blocks of felsic pyroclastics, feldspar and quartz-eye porphyries in swirled rhyolitic matrix								2-3		18598						
															2.13	1.4			
71.64	73.14	100%	~~-quartz-eye porphyry, breccia~~ ~~-much disseminated and poddy pyrite~~								5		18599						
															0.07	0.7			
73.14	74.64	100%	~~-pyritic quartz-eye porphyry~~ ~~-moderate argillic alteration~~								5-7		18600						
															0.07	0.7			
74.64	76.14	100%	~~RHYOLITE PORPHYRY~~ White to pale gray, hard, siliceous quartz-eye porphyry, probably blocky felsic pyroclastic. Minor clay along fractures								5-7		18601						
															0.07	0.7			

DRILL LOG #1

Date Dec. 8/87 _____ logged By Chris Wild _____

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NORANDA EXPLORATION COMPANY LTD.

Date Collared Dec. 6/87		Date Completed Dec. 10/87		Core Size HQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2	
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES			
Lat. 10030 N		Elev.		Dip -45°		188.98m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.	
Dep 10175 E		Length 188.98m		Bearing 199°								Dep.		Length	
												Dip		HOLE No.	
												Bearing		NGC 87-30	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Au	Ag		
76.14	77.64	73%	-more obviously brecciated (pyroclastic) -weakly calcareous, minor qtz-carb stringers -some clay, appears granular @77.50m		1		18602		0.07	0.7		
77.64	79.14	39%	-strongly weathered - poor recovery -quartz-eye porphyry		1		18603		1.37	0.7		
79.14	80.64	62%	-same as above		1		18604		0.17	0.7		
80.64	82.14	25%	-mismatch - no recovery between 81.08-82.30m -same as above		2		18605		0.14	0.7		
82.14	83.64	70%	-fresher qtz-eye rhyolite -more breccia @83.06-84.12m		1-2		18606		0.10	0.7		
83.64	85.14	96%	-rhyolite porphyry breccia -greenish gray		3-5		18607		0.24	0.7		
85.14	86.64	95%	-same as above		2-3		18608		0.21	0.7		
86.64	87.32	100%	RHYOLITE PORPHYRY BRECCIA Pale greenish-gray quartz-eye porphyry. 8cm contact zone, mixing of breccia fragments in underlying tuff		3-5		18609		0.27	0.7		

DRILL LOG 81

Date Dec. 8/87 Logged By Chris Wild

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NORANDA EXPLORATION COMPANY LTD.

Date Collected Dec. 6/87		Date Completed Dec. 10/87		Core Size WQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2			
FIELD CO-ORDINATES				DEPTH 188.98m		BEARING		ANGLE		SURVEYED CO-ORDINATES							
Lat. 10030 N		Elev.				Dip -45°		RECORDED		CORRECTED		RECORDED		CORRECTED		Sheet 5 of 14	
Dep. 10175 E		Length 188.98m		Bearing 199°						-57°		-50°		Lat.		Elev.	
														Dip		HOLE No.	
														Dep.		Length	
														Bearing		NGC 87-30	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
									Al	Ag			
87.32	88.14	100%	VOLCANICLASTIC TUFF Medium-dark gray, reworked, moderately well sorted tuff or volcaniclastic. Fragments becoming coarser, more irregularly shaped		2-3		18609			Al	Ag		
88.14	89.64	100%	RHYOLITE VOLCANICLASTIC Large rhyolite porphyry (qtz-eye) fragments, subrounded to subangular in a brownish gray, finer grained matrix. Becoming polymictic @89.40m.		1		18610			0.10	0.7		
89.64	89.98	100%	FELSIC PYROCLASTIC Brownish gray feldspar porphyry blocks in greenish gray quartz-eye porphyry matrix.		1		18611			0.07	0.7		
89.98	91.14	100%	CRYSTAL LITHIC TUFF Medium gray, medium grained poorly sorted mixed tuff. Quartz-feldspar and mafic crystals, and felsic (and minor shale) fragments. Poddy pyrite		2-3		"						
			-moderately calcareous -pervasive, tiny quartz-carbonate veinlets -weakly to moderately argillic										
91.14	92.64	92%	-same as above -clay parting @91.22m	5-10° to c.a.	5-7		18612						
92.64	94.14	100%	-mixed tuff and felsic pyroclastic fragments -highly fractured, clay alteration		5		18613						
94.14	95.64	100%	CRYSTAL LITHIC TUFF Medium gray, medium grained poorly sorted mixed tuff. Fractured, clay alteration along fractures, several larger fragments or blocks of rhyolite porphyry		5		18614			0.07	0.7		

DRILL LOG #1

Date Dec. 8/87 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Collected Dec 6/87		Date Completed Dec 10/87		Core Size HQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105K/2	
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES			
Lot. 10030 N		Elev		Dip -45°		188.98m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.	
Dep 10175 E		Length 188.98m		Bearing 199°								Dep.		Length	
												Dip		HOLE No.	
														NGC 87-30	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS		
													Au	Au	
95.64	97.14	93%	-blocks of dacite-rhyolite in weathered tuff (@95.86-96.05m) -much clay along fractures; pods of pyrite						5		18615		0.07	0.7	
97.14	98.64	100%	-pyritic parting, tuff becomes paler @98.00m -pyritic parting, tuff darkens again @98.22m -rhyolite porphyry (qtz-eyes) dyke @98.44m				60° to c.a. 50-55° to c.a. 10° to c.a.		5		18616				
98.64	100.14	71%	-broken core @98.64m -only minor fracturing veining minor chalcedony with quartz						3-4		18617				
100.14	101.64	100%	-fine grained tuff from 100.31-101.36m -weakly argillic, clay along fractures -decreasing pyrite, increasing chalcedony						1-2		18618		0.07	0.7	
101.64	103.14	100%	-minor chalcedonic veinlets @102.48m -quartz veining (flooding) @102.96m				35° to c.a.		1		18619		0.10	0.7	
103.14	104.64	96%	-qtz-chal stringers @103.14 -chalcedony and clay + pyrite veinlet @103.54m -chalcedony rimming 1cm pyrite pod @104.50m				0-10° to c.a. 70° to c.a.		1-2		18620		0.27	1.0	
104.64	106.14	96%	-quartz-eye rhyolite intrusions and fragments common, irregular shapes -little other veining						1		18621		0.10	0.7	
106.14	107.64	100%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted mixed tuff. Predominantly unaltered; irregularly shaped fragments (and/or intrusions) of rhyolite porphyry (qtz-eye)						1		18622		0.07	1.0	

Drill Log #1

Date Dec. 8/87 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Colored Dec. 6/87		Date Completed Dec. 10/87		Core Size HQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2	
FIELD CO-ORDINATES				DEPTH 188.98m		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 7 of 14	
Lat. 10030 N		Elev.				Dip -45°		RECORDED		CORRECTED		RECORDED			
Dep. 10175 E		Length 188.98m		Bearing 199°										HOLE No.	
										Dep.		Length		Bearing	
														NGC 87-30	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
									Au	Ag			
			-quartz veinlet @106.27m -minor buff chalcedony veinlets crosscutting -increasing presence of rhyolite	0-10° to c.a.									
107.64	109.14	95%	-finer grained from 107.60-108.24m possibly reworked tuff -increased argillic alteration-crumbly core -darker, less argillic from 108.80-108.91 distinct contacts	70-75° to c.a.	<1		18623		0.38	4.8			
109.14	110.64	88%	-clay parting @109.65m -core highly fractured and broken up esp. @109.95 to 110.44 -qtz-chal veinlets, fracture filling with clay	20° to c.a.	<1		18624		0.17	1.7			
110.64	112.14	100%	-qtz-chal vein @110.70m, 1-2cm thick -veining associated with rhyolite porphyry intrusions (small irregular dykes) @110.86m and 112.81-112.96m		<1		18625		1.13	3.1			
112.14	113.64	100%	-much rhyolite porphyry dyking, 0.5 - 2cm thick irregular; @112.94 and 113.08m -minor pale chalcedony stringers -rhyolitic stringers common		<1		18626		0.31	2.1			
113.64	115.14	100%	CRYSTAL LITHIC TUFF Medium gray, fine-medium grained poorly sorted mixed tuff. Minor argillic alteration and silicification, the latter associated with irregular, small rhyolite porphyry intrusions. Tuff is generally finer grained and browner than usual. Minor quartz and chalcedony veinlets.		<1		18627		0.65	2.7			

Drill LOG 81

Date Dec. 8/87 Logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Dec. 6/87		Date Completed Dec. 10/87		Core Size HQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105K/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 8 of 14			
Lat. 10030 N		Elev.		Dip -45°		188.98m		RECORDED		CORRECTED		RECORDED		CORRECTED		HOLE No.	
Dep. 10175 E		Length 188.98m		Bearing 199°												NGC 87-30	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Ag	Ag		
115.14	116.64	74%	-quartz-chalcedony veinlet @115.63m -large brecciated quartz vein (minor carb) recemented with chalcedony-look like quartz pebbles 115.82-116.75m		<1		18628		22.01	107.3		
116.64	118.14	92%	-rhyolite porphyry intrusion and veining @117.06m and 117.82m -becoming crumbly 117.93m		<1		18629		4.53	22.3		
118.14	119.64	92%	-becoming more competent, only weakly argillic -veining related to rhyolite porphyry		<1		18630		2.02	6.2		
119.64	121.14	100%	-pale chalcedony vein @120.04m -veining, related to rhyolite porphyry -black filaments of chalcedony		<1		18631		0.51	3.4		
121.14	122.64	100%	-same as above, sl. increased veining -stockwork, minor brecciation @121.29-121.77m -large piece of rhyolite porphyry @122.05m	Stockwork	<1		18632		3.67	4.1		
122.64	124.14	71%	-missing core @123.44m		<1		18633		0.27	1.4		
124.14	125.64	96%	CRYSTAL LITHIC TUFF Medium gray, fine to medium grained, poorly sorted mixed tuff. Increasing silicification; broken up quartz vein @124.28-124.39m Becomes fine grained tuff or volcaniclastic between 124.24-125.20m -minor chalcedonic veining; slightly calcareous		<1		18634		0.34	1.4		

DRILL LOG #1

Date Dec. 8/87 Logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Collared Dec. 6/87		Date Completed Dec. 10/87		Core Size HQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2	
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES			
Lot. 10030 N		Elev.		Dip -45°		188.98m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.	
Dep. 10175 E		Length 188.98m		Bearing 199°						-57°	-50°	Dep.		Length	
												Dip		HOLE No.	
												Bearing		NGC 87-30	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Au	Ag		
125.64	127.14	61%	-mainly quartz vein stockwork, breccia starts @125.68m -second phase, quartz-chalcedony infilling -highly fractured, broken core	Stockwork	<1		18635		16.34	17.1		
127.14	128.64	61%	-same as above	Stockwork	<1		18636		41.52	43.2		
128.64	130.14	35%	-predominantly quartz, in altered tuff -increasing clay	Stockwork	<1		18637		28.22	27.4		
130.14	131.64	48%	-out of qtz veining, into highly weathered, argillic, crushed tuff		<1		18638		0.89	3.4		
131.46	133.14	45%	-extr eme argillic alteration		<1		18639		0.21	1.0		
133.14	134.64	57%	-same as above		<1		18640		0.41	1.4		
134.64	136.14	95%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted mixed tuff. Moderately argillic, decreasing slowly. Competent core begins @135.49m. Light and dark gray chalcedony vein @135.98m, dark enveloping light.	25-30° to c.a.	<1		18641		0.41	2.1		
136.14	137.64	100%	-minor fracturing, quartz-chalcedony infilling also, clay along most fractures -weak to moderate argillic alteration		<1		18642		1.23	3.4		

DRILL LOG #1

Date Dec. 8/87 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Colored Dec 6/87		Date Completed Dec 10/87		Core Size HQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105K/2		
FIELD CO-ORDINATES						DEPTH	BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat. 10030 N		Elev		Dip -45°			RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep 10175 E		Length 188.98m		Bearing 199°						Dep.		Length		Bearing		
														HOLE No. NGC 87-30		
From	To	Recovery	Description					Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
137.64	139.14	92%	-decreasing veining						<1		18643		0.07	0.7		
139.14	140.64	91%	-core is broken up @139.51-140.82m -chalcedony stringers -moderately argillic						<1		18644		0.10	0.7		
140.64	142.14	98%	-slightly finer grained -increased chalcedony, clay filled fractures -crumbly from 141.59-142.14m						<1		18645		0.10	0.7		
142.14	143.64	98%	-coarsening to almost lapilli tuff -quartz-chalcedony veinlets @142.36, 142.80m - <1cm qtz-chal vein @143.60m					25° to c.a.	<1		18646		0.14	0.7		
143.64	145.14	100%	-very little alteration, minor quartz and chalcedony along fractures, stringers. e.g. @144.85m						<1		18647		0.24	0.7		
145.14	146.64	99%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted mixed tuff. Minor stringers of quartz and chalcedony, minor clay. Qtz-chal vein @145.67m. Minor rhyolite porphyry intrusion @146.21m. -buff chalcedony source in rhyolite ie. may be qtz-feldspar veins					55-60° to c.a.	<1		18648		0.10	0.7		
146.64	148.14	92%	-buff chalcedony veinlets in fractures @142.86m cuts quartz vein @147.00m -quartz vein 147.17-147.47m (<1cm thick) -quartz and chalcedony vein @147.88m					60° to c.a. 0-10° to c.a. 10-20° to c.a.	<1		18649		0.21	0.7		

DRILL LOG 81

Date Dec. 8/87 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Colored Dec 6/87		Date Completed Dec 10/87		Core Size HQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES					
Lat. 10030 N		Elev		Dip -45°		188.98m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.		Dip	
Dep 10175 E		Length 188.98m		Bearing 199°								Dep.		Length		Bearing	
																HOLE No. NGC 87-30	
From	To	Recovery	Description				Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS				
148.14	149.64	84%	-chalcedony veining @148.80-149.15m -crushed core @148.33m						<1		18650			Au	Ag		
													0.10	0.7			
149.64	151.14	100%	-minor chalcedony veining -minor clay along fracture surfaces						<1		18651			0.17	0.7		
151.14	152.64	100%	-quartz-chal vein @151.64m (1cm thick) -chalcedony veinlets @151.21, 151.82m -minor stringers, fracture fillings				55° to c.a. 45° to c.a.		<1		18652			0.24	0.7		
152.64	154.14	100%	-darker brown-gray chalcedony vein @153.14m -unaltered				40° to c.a.		<1		18653			0.07	0.7		
154.14	155.64	100%	-chalcedony vein @154.40m (1cm thick), 154.90 (darker, <1cm thick) -weakly calcareous				25-30° to c.a. 20°? to c.a.		<1		18654			0.10	0.7		
155.64	157.14	100%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted mixed (minor lapilli) tuff. Weak to moderate argillic alteration. Minor calcite veining, moderately calcareous throughout. Broken and crushed core from 156.46-157.14m.						<1		18655			0.10	0.7		
157.14	158.64	96%	-same as above -broken up from 158.24-158.44m minor quartz-carb veining -variable clay alteration						<1		18656			0.14	0.7		

DRILL LOG 81

Date Dec. 8/87 Logged By Chris Wild

NORANDA EXPLORATION COMPANY LTD.

Date Colored Dec. 6/87		Date Completed Dec. 10/87		Core Size HQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No. 332		N.T.S. No. 105K/2	
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES			
Lat. 10030 N		Elev.		Dip -45°		188.98m		RECORDED	CORRECTED	RECORDED	CORRECTED	Lat.		Elev.	
Dep 10175 E		Length 188.98m		Bearing 199°								Dep.		Length	
												Bearing		HOLE No. NGC 87-30	
From	To	Recovery	Description					Structure		% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS	
														Au	Ag
158.64	160.14	100%	-chalcedony infilling @158.77m -minor stringers of qtz-carb and chalcedony							<1		18657		0.07	0.7
160.14	161.64	100%	-qtz-carb veinlets @160.24m, 160.73m -qtz vein (1cm thick) @160.87,					30° to c.a.		<1		18658		0.31	0.7
161.64	163.14	100%	-small qtz-carb veinlets and stringers 161.89m -qtz-carb, chal vein @163.01 (< 1cm thick) -weakly calcareous (qtz-calcite stringers)					45° to c.a.		<1		18659		0.24	0.7
163.14	164.64	100%	-qtz-carb, chal veinlet @163.43m -qtz veinlet cut by calcite stringers @163.73m -weakly argillic					60° to c.a. 55° to c.a.		<1		18660		0.10	0.7
164.64	166.14	76%	-chalcedony veinlet @164.67m (< 1cm thick) -qtz (min. carb) veinlet @164.84m, 165.30m -1cm thick, calcite along fractures in qtz					35-40° to c.a. 25-30° to c.a.		<1		18661		0.55	1.4
166.14	167.64	100%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted, mixed tuff. Little alteration, minor chalcedony and quartz infilling along fractures.							<1		18662		0.10	0.7
167.64	169.14	97%	-same as above -minor veining, predominately chalcedony esp. @168.75-168.95m							<1		18663		0.17	1.4
169.14	170.64	100%	-decreasing veining -clay along most fractures							<1		18664		0.10	0.7

DRILL LOG 81

Date Dec. 8/87 Logged By Chris Wild

092099

NORANDA EXPLORATION COMPANY LTD.

Date Colored Dec 6/87		Date Completed Dec 10/87		Core Size HQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No. 105K/2			
FIELD CO-ORDINATES						DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 2 of 17	
Lat. 10030 N		Elev.		Dip -45°		188.98m		RECORDED		CORRECTED		RECORDED		CORRECTED		Lat.	
Dep 10175 E		Length 188.98m		Bearing 199°												Elev.	
																Dip	
																Bearing	
																NGC 87-30	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No	Width	ASSAYS			
170.64	172.14	100%	~~same as above~~ -weakly argillic		<1		18665		0.10	1.4		
172.14	173.64	95%	~~core becomes crumbly @172.63m~~ strongly argillic, increased fracture density		<1		18666		0.07	1.0		
173.64	175.14	78%	~~broken, argillic core to 175.11m~~ -some veining present		<1		18667		0.24	1.0		
175.14	176.64	98%	~~weakly argillic~~ -chalcedony veinlets, tan and dark gray throughout mainly stringers, fracture fillings		<1		18668		0.14	1.0		
176.64	178.14	100%	~~minor veining, fracturing~~ -little alteration		<1		18669		0.07	0.7		
178.14	179.64	97%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted mixed tuff. Fresh, weakly argillic, clay along fractures, minor chalcedonic veining. Abrupt colour change from medium to light gray @179.46m, slight change in alteration, quickly grades back to medium gray. WEakly calcareous	75° to c.a.	<1		18670					
179.64	181.14	95%	~~same as above~~ -dark chalcedony veinlet @179.80m (< 1cm thick)	45° to c.a.	<1		18671		0.07	0.7		

DRILL LOG 81

Date Dec. 8/87 Logged By Chris Wild

092039

NORANDA EXPLORATION COMPANY LTD.

Date Collected Dec 6/87		Date Completed Dec 10/87		Core Size HQ-NQ		DIP TESTS				PROPERTY GREW CREEK		PROJECT No 332		N.T.S. No 105K/2			
FIELD CO-ORDINATES				DEPTH		BEARING		ANGLE		SURVEYED CO-ORDINATES				Sheet 1/ of 14			
Lat. 10030 N		Elev		Dip -45°		188.98m		RECORDED		CORRECTED		RECORDED		CORRECTED		Lat.	
Dep 10175 E		Length 188.98m		Bearing 199°												Elev.	
																Dip	
																Bearing	
																HOLE No.	
																NGC 87-30	

From	To	Recovery	Description	Structure	% Sulph.	Est. Grade	SAMPLE No.	Width	ASSAYS			
									Ag	As		
181.14	181.62	100%	-same as above		<1		18672		0.07	0.7		
181.62	182.42	100%	CRYSTAL TUFF Pale, greenish gray, fine to medium grained, poorly sorted, mainly quartz-feldspar crystals and dark fragments of volcanic glass(?). Coarse quartz crystals in the middle (@182.0m). Very abrupt contacts, pale gray clay along both contacts. Weakly argillic, calcareous.		<1		"					
182.42	182.64	100%	CRYSTAL LITHIC TUFF As above		<1		"					
182.64	184.14	100%	-increasing fracture density, clay infill @183.65-184.12m		<1		18673					
184.14	185.64	98%	CRYSTAL LITHIC TUFF Medium gray, medium grained, poorly sorted, mixed tuff. Fresh, weakly argillic, minor chal vining. Clay partings ~184.98m (light gray) & ~185.37m (dark gray) Pyrite along chalcedony filled fractures @185.59-185.62m	10-15° to c.a. 15-20° to c.a. 40-45° to c.a.	1-2		18674					
185.64	187.14	100%	-minor clay altered fractures -relatively fresh		<1		18675					
187.14	188.98	97%	-very fresh looking		<1		18676		0.07	0.7		

DRILL LOG 61

-minor chal veinlets, clay filled fractures

Date Dec. 8/87 Logged By Chris Wild

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APPENDIX 2

Results

14

** BORSURV **

Page 1 of 5

ASSAY LOG

PROPERTY: GREW CREEK

HOLE No.: NGC-14

=====							
FROM	TO	WIDTH	Au gpt	Ag gpt	Au opt	Hg ppb	As ppm
58.20	58.70	0.50	0.006	0.100	0.000	50.000	14.000
58.70	59.20	0.50	0.011	0.100	0.000	60.000	14.000
59.20	59.70	0.50	0.007	0.100	0.000	70.000	18.000
59.70	60.10	0.40	1.460	0.100	0.044	40.000	22.000
60.10	61.07	0.97	2.480	1.400	0.108	120.000	34.000
61.07	61.30	0.23	0.172	0.200	0.000	110.000	23.000
61.30	61.75	0.45	0.064	0.200	0.000	160.000	34.000
61.75	62.45	0.70	0.067	0.100	0.000	620.000	39.000
62.45	62.80	0.35	0.032	0.100	0.000	550.000	27.000
62.80	63.30	0.50	0.044	0.100	0.000	430.000	16.000
63.30	63.80	0.50	0.046	0.100	0.000	400.000	17.000
63.80	64.30	0.50	0.031	0.100	0.000	370.000	22.000
64.30	64.80	0.50	0.016	0.100	0.000	490.000	17.000
64.80	65.30	0.50	0.037	0.100	0.000	480.000	31.000
65.30	65.80	0.50	0.048	0.100	0.000	460.000	29.000
65.80	66.30	0.50	0.062	0.100	0.000	470.000	47.000
66.30	66.80	0.50	0.107	0.300	0.000	500.000	53.000
66.80	67.40	0.60	0.038	0.200	0.000	760.000	27.000
67.40	67.90	0.50	0.079	0.300	0.000	690.000	58.000
67.90	68.40	0.50	0.138	0.300	0.000	450.000	92.000
68.40	68.90	0.50	0.097	0.300	0.000	580.000	74.000
68.90	69.40	0.50	0.065	0.200	0.000	620.000	66.000
69.40	69.95	0.55	0.032	0.100	0.000	350.000	26.000
69.95	70.40	0.45	0.034	0.300	0.000	300.000	22.000
70.40	70.90	0.50	0.021	0.200	0.000	320.000	20.000
70.90	71.40	0.50	0.057	0.100	0.000	280.000	34.000
71.40	71.90	0.50	0.039	0.100	0.000	300.000	25.000
71.90	72.40	0.50	0.025	0.200	0.000	290.000	16.000
72.40	72.90	0.50	0.046	0.100	0.000	320.000	25.000
72.90	73.45	0.55	0.035	0.100	0.000	380.000	26.000
73.45	73.95	0.50	0.019	0.100	0.000	360.000	17.000
73.95	74.45	0.50	0.023	0.100	0.000	370.000	23.000
74.45	75.00	0.55	0.035	0.100	0.000	290.000	30.000
75.00	75.20	0.20	0.012	0.100	0.000	500.000	10.000
75.20	75.70	0.50	0.001	0.100	0.000	2000.000	25.000
75.70	76.20	0.50	0.001	0.100	0.000	1800.000	9.000
76.20	76.70	0.50	0.006	0.100	0.000	1300.000	12.000
76.70	77.20	0.50	0.003	0.100	0.000	1200.000	29.000
77.20	77.70	0.50	0.003	0.100	0.000	1600.000	31.000
77.70	78.20	0.50	0.006	0.100	0.000	1400.000	24.000
78.20	78.70	0.50	0.001	0.100	0.000	1200.000	16.000
78.70	79.10	0.40	0.002	0.100	0.000	1000.000	16.000
79.10	79.55	0.45	0.001	0.300	0.000	1100.000	47.000
79.55	80.05	0.50	0.003	0.200	0.000	830.000	20.000
80.05	80.55	0.50	0.005	0.100	0.000	560.000	14.000
80.55	81.10	0.55	0.001	0.100	0.000	1400.000	13.000
81.10	81.60	0.50	0.001	0.100	0.000	4600.000	13.000
81.60	82.10	0.50	0.002	0.100	0.000	920.000	14.000
82.10	82.60	0.50	0.003	0.100	0.000	1200.000	11.000
82.60	83.10	0.50	0.023	0.100	0.000	2100.000	11.000

092099

ASSAY LOG

PROPERTY: GREW CREEK

HOLE No. : NGC-14

=====							
FROM	TO	WIDTH	Au gpt	Ag gpt	Au opt	Hg ppb	As ppm
83.10	83.60	0.50	0.001	0.100	0.000	1500.000	10.000
83.60	84.10	0.50	0.001	0.100	0.000	1050.000	10.000
84.10	84.85	0.75	0.004	0.100	0.000	1300.000	22.000
84.85	85.35	0.50	0.097	0.100	0.000	560.000	28.000
85.35	85.85	0.50	0.123	0.100	0.000	500.000	15.000
85.85	86.35	0.50	0.033	0.200	0.000	1200.000	14.000
86.35	86.85	0.50	0.001	0.100	0.000	210.000	20.000
86.85	87.35	0.50	0.029	0.200	0.000	110.000	13.000
87.35	87.85	0.50	0.022	0.100	0.000	340.000	23.000
87.85	88.35	0.50	0.031	0.200	0.000	520.000	25.000
88.35	88.85	0.50	0.038	0.200	0.000	450.000	10.000
88.85	89.35	0.50	0.051	0.700	0.000	960.000	60.000
89.35	89.85	0.50	5.700	7.100	0.175	1300.000	120.000
89.85	90.20	0.35	21.500	18.200	0.577	2500.000	63.000
90.20	90.30	0.10	10.330	14.700	0.337	2200.000	90.000
90.30	90.80	0.50	0.450	3.500	0.000	900.000	89.000
90.80	91.30	0.50	2.050	9.400	0.106	1800.000	120.000
91.30	91.75	0.45	11.850	10.000	0.357	1300.000	92.000
91.75	92.25	0.50	13.200	13.600	0.452	1700.000	123.000
92.25	92.75	0.50	25.800	33.800	0.781	3600.000	34.000
92.75	93.30	0.55	6.470	5.800	0.185	1000.000	65.000
93.30	93.80	0.50	2.130	2.100	0.065	660.000	62.000
93.80	94.30	0.50	7.330	11.600	0.205	1600.000	49.000
94.30	94.80	0.50	0.410	2.300	0.000	680.000	40.000
94.80	95.30	0.50	0.480	2.200	0.000	710.000	89.000
95.30	95.80	0.50	0.370	0.900	0.000	410.000	61.000
95.80	96.30	0.50	0.205	0.200	0.000	280.000	42.000
96.30	96.80	0.50	0.270	0.300	0.000	240.000	53.000
96.80	97.20	0.40	0.420	0.500	0.000	320.000	77.000
97.20	97.80	0.60	0.275	0.700	0.000	630.000	106.000
97.80	98.30	0.50	0.385	0.400	0.000	190.000	74.000
98.30	98.80	0.50	0.165	0.400	0.000	290.000	48.000
98.80	99.40	0.60	0.335	0.800	0.000	200.000	38.000
99.40	99.90	0.50	1.880	2.100	0.056	400.000	82.000
99.90	100.40	0.50	0.250	0.500	0.000	180.000	61.000
100.40	100.90	0.50	0.360	0.800	0.000	650.000	96.000
100.90	101.40	0.50	1.720	1.400	0.054	370.000	118.000
101.40	101.90	0.50	1.050	1.400	0.031	220.000	76.000
101.90	102.40	0.50	0.750	1.000	0.000	190.000	68.000
102.40	102.90	0.50	12.260	10.100	0.332	860.000	98.000
102.90	103.40	0.50	0.625	0.500	0.000	130.000	72.000
103.40	103.90	0.50	1.330	1.100	0.036	150.000	75.000
103.90	104.40	0.50	0.540	0.700	0.000	220.000	97.000
104.40	104.90	0.50	13.950	16.300	0.332	1400.000	93.000
104.90	105.50	0.60	1.820	1.400	0.045	320.000	96.000
105.50	106.00	0.50	6.110	7.700	0.158	950.000	127.000
106.00	106.50	0.50	11.750	18.800	0.285	2300.000	151.000
106.50	107.00	0.50	9.160	11.700	0.236	1200.000	168.000
107.00	107.50	0.50	6.170	10.000	0.182	1100.000	219.000
107.50	108.00	0.50	3.660	5.200	0.106	750.000	140.000

ASSAY LOG

PROPERTY: GREW CREEK

HOLE No.: NGC-14

FROM	TO	WIDTH	Au gpt	Ag gpt	Au opt	Hg ppb	As ppm
108.00	108.50	0.50	5.230	6.900	0.176	1200.000	263.000
108.50	109.00	0.50	30.600	5.000	0.886	400.000	242.000
109.00	110.00	1.00	4.640	3.300	0.133	610.000	184.000
110.00	110.50	0.50	12.940	8.400	0.132	960.000	139.000
110.50	111.00	0.50	5.820	19.200	0.212	1000.000	132.000
111.00	111.60	0.60	3.150	2.400	0.099	380.000	84.000
111.60	112.10	0.50	0.250	0.400	0.000	120.000	61.000
112.10	112.60	0.50	4.720	2.600	0.151	230.000	130.000
112.60	113.10	0.50	2.210	1.400	0.077	200.000	175.000
113.10	113.60	0.50	2.320	2.800	0.066	310.000	212.000
113.60	114.10	0.50	2.180	1.100	0.054	150.000	217.000
114.10	114.60	0.50	1.010	2.000	0.027	170.000	170.000
114.60	115.10	0.50	1.990	1.000	0.049	140.000	71.000
115.10	115.60	0.50	3.210	1.700	0.083	150.000	267.000
115.60	116.10	0.50	0.240	0.300	0.000	80.000	128.000
116.10	116.60	0.50	2.640	2.300	0.080	160.000	135.000
116.60	117.10	0.50	2.580	1.900	0.072	250.000	154.000
117.10	117.60	0.50	11.900	10.700	0.352	960.000	96.000
117.60	118.10	0.50	9.380	7.400	0.301	500.000	121.000
118.10	118.60	0.50	9.860	7.400	0.282	490.000	245.000
118.60	119.20	0.60	0.280	0.300	0.000	100.000	71.000
119.20	119.70	0.50	0.195	0.200	0.000	110.000	50.000
119.70	120.20	0.50	0.380	0.300	0.000	100.000	125.000
120.20	120.70	0.50	0.530	0.800	0.000	180.000	162.000
120.70	121.20	0.50	0.405	0.900	0.000	140.000	139.000
121.20	121.70	0.50	0.860	1.200	0.000	130.000	118.000
121.70	122.20	0.50	0.540	0.900	0.000	90.000	149.000
122.20	122.70	0.50	1.100	1.200	0.028	140.000	235.000
122.70	123.20	0.50	0.350	0.300	0.000	60.000	73.000
123.20	123.75	0.55	0.620	0.600	0.000	70.000	270.000
123.75	124.25	0.50	1.250	1.100	0.023	150.000	163.000
124.25	124.75	0.50	0.210	0.200	0.000	60.000	101.000
124.75	125.30	0.55	0.290	4.000	0.000	320.000	185.000
125.30	125.80	0.50	0.041	0.100	0.000	40.000	27.000
125.80	126.30	0.50	0.185	0.300	0.000	50.000	136.000
126.30	126.80	0.50	0.185	0.200	0.000	40.000	116.000
126.80	127.30	0.50	0.175	0.400	0.000	60.000	181.000
127.30	127.90	0.60	0.420	0.900	0.000	130.000	228.000
127.90	128.30	0.40	2.490	5.100	0.067	640.000	129.000
128.30	128.80	0.50	0.290	0.600	0.000	50.000	116.000
128.80	129.30	0.50	0.310	0.900	0.000	80.000	122.000
129.30	129.80	0.50	0.200	0.400	0.000	50.000	88.000
129.80	130.30	0.50	3.780	0.900	0.141	100.000	79.000
130.30	130.80	0.50	3.960	1.500	0.102	130.000	119.000
130.80	131.40	0.60	1.690	0.600	0.035	70.000	157.000
131.40	132.00	0.60	0.920	0.400	0.000	60.000	189.000
132.00	132.50	0.50	0.610	0.500	0.000	70.000	121.000
132.50	133.00	0.50	3.080	1.800	0.094	120.000	107.000
133.00	133.50	0.50	0.630	0.400	0.000	60.000	171.000
133.50	134.00	0.50	0.320	0.400	0.000	40.000	155.000

ASSAY LOG

PROPERTY: GREW CREEK

HOLE No. : NGC-14

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FROM	TO	WIDTH	Au gpt	Ag gpt	Au opt	Hg ppb	As ppm
134.00	134.40	0.40	0.405	0.400	0.000	50.000	148.000
134.40	134.90	0.50	0.560	0.500	0.000	60.000	169.000
134.90	135.40	0.50	0.250	0.200	0.000	50.000	65.000
135.40	135.90	0.50	0.790	1.000	0.000	100.000	189.000
135.90	136.40	0.50	0.185	0.400	0.000	60.000	99.000
136.40	136.90	0.50	0.530	0.300	0.000	50.000	37.000
136.90	137.50	0.60	0.570	0.200	0.000	60.000	64.000
137.50	138.00	0.50	0.290	0.200	0.000	60.000	78.000
138.00	138.50	0.50	1.260	1.600	0.032	110.000	140.000
138.50	139.00	0.50	0.310	0.300	0.000	60.000	63.000
139.00	139.25	0.25	0.043	0.100	0.000	40.000	22.000
139.25	139.75	0.50	0.068	0.100	0.000	50.000	26.000
139.75	140.25	0.50	0.041	0.100	0.000	40.000	22.000
140.25	140.50	0.25	0.230	0.100	0.000	50.000	27.000
140.50	141.00	0.50	0.350	0.400	0.000	80.000	96.000
141.00	141.50	0.50	0.172	0.100	0.000	70.000	70.000
141.50	142.00	0.50	0.076	0.200	0.000	60.000	68.000
142.00	142.50	0.50	0.230	0.200	0.000	70.000	88.000
142.50	143.00	0.50	0.128	0.200	0.000	60.000	78.000
3.00	143.60	0.60	0.027	0.100	0.000	50.000	23.000
143.60	144.10	0.50	0.058	0.100	0.000	50.000	82.000
144.10	144.60	0.50	0.113	0.200	0.000	70.000	100.000
144.60	145.10	0.50	0.032	0.100	0.000	60.000	42.000
145.10	145.60	0.50	0.059	0.100	0.000	50.000	108.000
145.60	146.10	0.50	0.096	0.100	0.000	60.000	191.000
146.10	146.60	0.50	0.134	0.200	0.000	70.000	140.000
146.60	147.10	0.50	0.118	0.200	0.000	60.000	109.000
147.10	147.60	0.50	0.280	2.700	0.000	160.000	194.000
147.60	148.10	0.50	0.174	0.200	0.000	60.000	149.000
148.10	148.60	0.50	0.220	0.400	0.000	700.000	141.000
148.60	149.10	0.50	0.131	0.400	0.000	40.000	162.000
149.10	149.65	0.55	0.097	0.400	0.000	60.000	149.000
149.65	150.15	0.50	0.275	0.600	0.000	60.000	185.000
150.15	150.65	0.50	0.090	0.300	0.000	70.000	269.000
150.65	151.20	0.55	0.112	0.200	0.000	120.000	211.000
151.20	152.20	1.00	0.080	0.100	0.000	60.000	216.000
152.20	152.70	0.50	0.085	0.300	0.000	130.000	247.000
152.70	153.20	0.50	0.110	0.300	0.000	110.000	228.000
153.20	153.70	0.50	0.230	0.200	0.000	100.000	156.000
153.70	154.30	0.60	0.134	0.200	0.000	110.000	176.000
154.30	154.80	0.50	0.082	0.100	0.000	90.000	56.000
154.80	155.30	0.50	0.400	0.400	0.000	110.000	179.000
155.30	155.75	0.45	0.200	0.100	0.000	70.000	58.000
155.75	156.25	0.50	2.960	1.600	0.099	160.000	27.000
156.25	156.75	0.50	0.144	0.200	0.000	80.000	145.000
156.75	157.30	0.55	0.220	0.300	0.000	70.000	163.000
157.30	157.80	0.50	0.820	0.500	0.000	90.000	266.000
157.80	158.30	0.50	0.260	0.200	0.000	80.000	209.000
158.30	158.80	0.50	0.210	0.200	0.000	80.000	164.000
158.80	159.30	0.50	0.121	0.200	0.000	90.000	210.000

092099

ASSAY LOG

PROPERTY: GREW CREEK

HOLE No.: NGC-14

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FROM	TO	WIDTH	Au gpt	Ag gpt	Au opt	Hg ppb	As ppm
159.30	159.80	0.50	0.129	0.200	0.000	110.000	224.000
159.80	160.30	0.50	0.127	0.200	0.000	90.000	155.000
160.30	160.80	0.50	0.124	0.100	0.000	90.000	206.000
160.80	161.30	0.50	0.053	0.100	0.000	80.000	91.000
161.30	161.80	0.50	0.056	0.100	0.000	70.000	128.000
161.80	162.30	0.50	0.062	0.100	0.000	80.000	89.000
162.30	162.80	0.50	0.118	0.200	0.000	100.000	181.000
162.80	163.40	0.60	0.390	0.900	0.000	130.000	301.000
163.40	163.90	0.50	1.750	1.100	0.036	140.000	189.000
163.90	164.40	0.50	0.550	1.100	0.000	130.000	182.000
164.40	164.90	0.50	0.124	0.300	0.000	80.000	209.000

15

** BORSURV **

ASSAY LOG

Page 1 of 3

PROPERTY: GREW CREEK

HOLE No. : GRCK15

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FROM	TO	WIDTH	Au gpt	Ag gpt	Au opt	Hg ppb	As ppm
55.20	55.70	0.50	0.052	0.100	0.000	90.000	38.000
55.70	56.40	0.70	0.070	0.100	0.000	100.000	39.000
56.40	56.90	0.50	0.033	0.100	0.000	110.000	21.000
56.90	57.30	0.40	0.042	0.100	0.000	80.000	34.000
57.30	57.80	0.50	0.110	0.100	0.000	90.000	29.000
57.80	58.20	0.40	0.112	0.100	0.000	80.000	54.000
58.20	58.70	0.50	0.011	0.100	0.000	160.000	16.000
58.70	59.20	0.50	0.133	1.300	0.000	100.000	28.000
59.20	59.65	0.45	0.175	0.100	0.000	70.000	41.000
59.65	59.75	0.10	0.003	0.100	0.000	10.000	2.000
59.75	60.00	0.25	0.071	0.100	0.000	560.000	28.000
60.00	60.50	0.50	0.006	0.100	0.000	1050.000	9.000
60.50	61.00	0.50	0.001	0.100	0.000	1100.000	9.000
61.00	61.30	0.30	0.001	0.100	0.000	1200.000	5.000
61.30	61.80	0.50	0.001	0.100	0.000	1700.000	4.000
61.80	62.30	0.50	0.001	0.100	0.000	1300.000	6.000
62.30	62.80	0.50	0.001	0.100	0.000	2100.000	4.000
62.80	63.40	0.60	0.001	0.100	0.000	1500.000	12.000
63.40	63.90	0.50	0.005	0.100	0.000	420.000	22.000
63.90	64.50	0.60	0.004	0.100	0.000	480.000	19.000
64.50	65.00	0.50	0.016	0.100	0.000	380.000	26.000
65.00	65.50	0.50	0.028	0.100	0.000	540.000	40.000
65.50	66.10	0.60	0.064	0.500	0.000	130.000	43.000
66.10	66.60	0.50	0.072	1.000	0.000	300.000	118.000
66.60	67.10	0.50	0.095	0.500	0.000	230.000	88.000
67.10	67.40	0.30	0.159	0.300	0.000	130.000	34.000
67.40	67.90	0.50	0.030	0.400	0.000	340.000	46.000
67.90	68.40	0.50	0.046	0.600	0.000	470.000	65.000
68.40	68.90	0.50	0.096	0.300	0.000	100.000	55.000
68.90	69.40	0.50	0.127	0.700	0.000	260.000	67.000
69.40	69.90	0.50	2.200	2.100	0.052	280.000	48.000
69.90	70.40	0.50	0.390	0.400	0.000	80.000	27.000
70.40	70.90	0.50	7.880	4.500	0.209	390.000	67.000
70.90	71.40	0.50	1.220	1.700	0.036	170.000	80.000
71.40	71.90	0.50	1.620	2.300	0.054	150.000	88.000
71.90	72.40	0.50	0.260	0.400	0.000	90.000	53.000
72.40	72.90	0.50	0.750	0.800	0.000	80.000	96.000
72.90	73.45	0.55	2.160	2.700	0.045	110.000	87.000
73.45	73.95	0.50	0.490	0.600	0.000	30.000	114.000
73.95	74.45	0.50	3.720	4.000	0.091	240.000	135.000
74.45	75.00	0.55	4.780	4.000	0.133	190.000	90.000
75.00	75.60	0.60	23.550	125.200	0.686	8100.000	75.000
75.60	76.10	0.50	3.620	8.500	0.094	680.000	60.000
76.10	76.50	0.40	2.610	16.900	0.094	1200.000	49.000
76.50	77.00	0.50	0.480	1.100	0.000	110.000	62.000
77.00	77.50	0.50	0.260	1.500	0.000	160.000	70.000
77.50	78.00	0.50	0.750	1.400	0.000	130.000	87.000
78.00	78.50	0.50	0.830	2.100	0.000	170.000	76.000
78.50	79.00	0.50	3.030	5.200	0.085	240.000	102.000
79.00	79.55	0.55	0.910	2.300	0.000	120.000	60.000

332000

ASSAY LOG

PROPERTY: GREW CREEK
HOLE No.: GRCK15

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FROM	TO	WIDTH	Au gpt	Ag gpt	Au opt	Hg ppb	As ppm
79.55	80.05	0.50	1.360	3.200	0.040	150.000	183.000
80.05	80.55	0.50	2.810	4.700	0.077	210.000	108.000
80.55	81.10	0.55	0.430	1.800	0.000	360.000	99.000
81.10	81.60	0.50	1.670	4.000	0.035	540.000	271.000
81.60	82.10	0.50	2.420	6.800	0.082	550.000	213.000
82.10	82.60	0.50	3.210	9.200	0.103	680.000	127.000
82.60	83.10	0.50	1.630	4.900	0.043	400.000	94.000
83.10	83.60	0.50	28.710	43.400	0.778	3100.000	85.000
83.60	84.10	0.50	5.960	17.000	0.191	1200.000	74.000
84.10	84.60	0.50	0.390	0.900	0.000	160.000	49.000
84.60	85.10	0.50	3.460	6.100	0.094	630.000	150.000
85.10	85.65	0.55	7.820	18.800	0.339	1800.000	118.000
85.65	86.15	0.50	11.660	7.600	0.426	420.000	134.000
86.15	86.65	0.50	2.080	3.900	0.067	340.000	115.000
86.65	87.17	0.52	3.210	3.700	0.099	290.000	86.000
87.17	87.67	0.50	2.310	3.600	0.061	280.000	65.000
87.67	88.17	0.50	0.950	2.700	0.000	230.000	72.000
88.17	88.70	0.53	2.660	8.000	0.077	1050.000	85.000
88.70	89.20	0.50	22.310	150.400	0.598	12400.000	142.000
89.20	89.70	0.50	14.640	171.500	0.438	12800.000	116.000
89.70	90.20	0.50	10.510	116.100	0.352	7600.000	156.000
90.20	90.70	0.50	0.600	116.100	0.000	680.000	53.000
90.70	91.20	0.50	0.350	1.200	0.000	360.000	55.000
91.20	91.70	0.50	1.350	1.700	0.028	680.000	109.000
91.70	92.20	0.50	0.300	0.700	0.000	960.000	47.000
92.20	92.70	0.50	0.210	1.200	0.000	730.000	42.000
92.70	93.30	0.60	0.760	3.100	0.000	640.000	60.000
93.30	93.80	0.50	0.090	0.700	0.000	200.000	48.000
93.80	94.30	0.50	0.072	0.100	0.000	120.000	43.000
94.30	94.80	0.50	0.320	1.700	0.000	150.000	87.000
94.80	95.30	0.50	0.138	0.300	0.000	80.000	42.000
95.30	95.80	0.50	0.135	0.300	0.000	90.000	30.000
95.80	96.30	0.50	0.050	0.200	0.000	80.000	39.000
96.30	96.80	0.50	0.076	0.100	0.000	40.000	30.000
96.80	97.30	0.50	0.036	0.100	0.000	50.000	26.000
97.30	97.85	0.55	0.110	0.200	0.000	60.000	40.000
97.85	98.35	0.50	0.640	1.400	0.000	150.000	53.000
98.35	98.85	0.50	0.430	0.800	0.000	90.000	76.000
98.85	99.40	0.55	0.970	2.700	0.000	260.000	52.000
99.40	99.90	0.50	0.500	0.900	0.000	100.000	49.000
99.90	100.40	0.50	1.650	3.400	0.054	260.000	83.000
100.40	100.90	0.50	0.770	1.300	0.000	110.000	56.000
100.90	101.40	0.50	0.700	1.100	0.000	100.000	44.000
101.40	101.90	0.50	0.760	1.200	0.000	120.000	93.000
101.90	102.40	0.50	0.450	0.500	0.000	130.000	72.000
102.40	102.90	0.50	0.520	0.800	0.000	100.000	127.000
102.90	103.40	0.50	0.055	0.200	0.000	60.000	44.000
103.40	103.90	0.50	0.260	0.500	0.000	90.000	55.000
103.90	104.15	0.25	0.610	1.500	0.000	80.000	125.000
104.15	104.30	0.15	2.510	2.400	0.083	200.000	139.000

ASSAY LOG

PROPERTY: GREW CREEK

HOLE No. : GRCK15

FROM	TO	WIDTH	Au gpt	Ag gpt	Au opt	Hg ppb	As ppm
104.30	104.60	0.30	1.530	2.100	0.044	90.000	90.000
104.60	105.10	0.50	0.300	0.100	0.000	60.000	55.000
105.10	105.50	0.40	0.097	0.300	0.000	60.000	44.000
105.50	106.00	0.50	0.470	0.500	0.000	70.000	76.000
106.00	106.50	0.50	0.670	0.300	0.000	60.000	79.000
106.50	107.00	0.50	0.162	0.100	0.000	70.000	44.000
107.00	107.50	0.50	1.260	1.500	0.040	110.000	117.000
107.50	108.00	0.50	1.690	1.000	0.039	100.000	117.000
108.00	108.50	0.50	3.190	4.300	0.085	230.000	133.000
108.50	109.00	0.50	0.540	0.500	0.000	50.000	86.000
109.00	109.50	0.50	1.150	1.700	0.033	110.000	145.000
109.50	110.00	0.50	1.390	2.300	0.028	100.000	213.000
110.00	110.50	0.50	1.540	4.200	0.049	260.000	214.000
110.50	111.00	0.50	3.720	13.900	0.103	1300.000	89.000
111.00	111.60	0.60	2.680	10.400	0.078	1050.000	164.000
111.60	112.10	0.50	3.100	5.400	0.064	390.000	87.000
112.10	112.60	0.50	5.420	17.700	0.149	1600.000	126.000
112.60	113.10	0.50	1.090	6.400	0.038	410.000	84.000
113.10	113.60	0.50	1.110	2.600	0.031	210.000	206.000
113.60	113.90	0.30	1.670	5.100	0.052	420.000	98.000
113.90	114.40	0.50	0.265	1.000	0.000	110.000	112.000
114.40	114.90	0.50	1.150	1.300	0.029	140.000	171.000
114.90	115.40	0.50	0.495	1.700	0.000	160.000	141.000
115.40	115.90	0.50	0.750	2.300	0.000	210.000	99.000
115.90	116.40	0.50	0.350	1.000	0.000	150.000	56.000
116.40	116.90	0.50	0.350	0.600	0.000	120.000	92.000
116.90	117.40	0.50	0.225	0.600	0.000	90.000	99.000
117.40	117.90	0.50	0.650	1.600	0.000	220.000	98.000
117.90	118.40	0.50	0.450	0.500	0.000	80.000	129.000
118.40	118.90	0.50	0.825	1.600	0.000	150.000	155.000
118.90	119.20	0.30	1.010	0.600	0.028	80.000	206.000
119.20	119.70	0.50	0.985	0.900	0.000	140.000	191.000
119.70	120.20	0.50	0.315	1.100	0.000	330.000	118.000
120.20	120.70	0.50	0.010	0.100	0.000	670.000	20.000
120.70	121.20	0.50	0.205	0.200	0.000	570.000	25.000
121.20	121.70	0.50	0.265	0.100	0.000	220.000	47.000
121.70	122.20	0.50	0.295	0.300	0.000	120.000	61.000
122.20	122.80	0.60	0.335	0.700	0.000	140.000	112.000
122.80	123.15	0.35	0.350	0.600	0.000	120.000	143.000
123.15	123.40	0.25	0.245	0.700	0.000	130.000	149.000
123.40	123.90	0.50	0.570	1.000	0.000	150.000	78.000
123.90	124.40	0.50	0.335	0.200	0.000	110.000	38.000
124.40	125.00	0.60	0.064	0.200	0.000	80.000	41.000
125.00	125.60	0.60	0.095	0.200	0.000	90.000	90.000

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: OCT 20 1987

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

PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Oct 26/87..

GEOCHEMICAL/ASSAY CERTIFICATE

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

- SAMPLE TYPE: Core AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

Gross & NAC 87-16 (RS) 8710-061

ASSAYER: ... *D. Toye* ... DEAN TOYE, CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION (VAN) PROJECT-332 8710-061 File # 87-5061 Page 1

87-16
68.58 ~

SAMPLE#	AG PPM	AS PPM	HG PPB	AU OZ/T
12851	.2	37	200	.001
12852	.1	42	140	.001
12853	.1	45	190	.001
12854	.1	42	150	.002
12855	.1	21	160	.002
12856	.1	33	170	.001
12857	.1	23	130	.001
12858	.1	35	120	.001
12859	.1	23	110	.001
12860	.1	16	80	.001
12861	.1	28	100	.001
12862	.1	23	70	.001
12863	.1	23	80	.001
12864	.1	65	120	.001
12865	.6	98	90	.004
12866	2.1	220	230	.068
12867	1.3	217	140	.029
12868	1.3	91	190	.063
12869	1.3	140	130	.065
12870	.8	135	110	.035
12871	.7	79	120	.015
12872	30.8	181	1800	.436
12873	2.1	91	150	.028
12874	.9	44	120	.096
12875	1.0	61	140	.006
12876	.6	101	130	.006
12877	1.5	148	260	.015
12878	5.8	187	600	.211
12879	1.0	123	240	.015
12880	2.2	396	210	.026
12881	1.5	75	160	.018
12882	2.3	132	220	.027
12883	.6	103	130	.005
12884	.5	83	100	.003
12885	.5	79	120	.010
12886	3.5	136	100	.029
STD C/AU-R	7.2	38	1300	-

092099

SAMPLE#	AG PPM	AS PPM	HG PPB	AU OZ/T
12887	.1	59	70	.002
12888	.5	98	80	.002
12889	.4	98	60	.004
12890	1.6	116	260	.045
12891	.5	79	110	.009
12892	.1	56	50	.003
12893	.3	88	60	.006
12894	.6	107	70	.014
12895	.3	108	90	.004
12896	.1	74	50	.002
12897	.1	78	40	.001
12898	.1	83	50	.001
12899	.4	106	40	.005
12900	.3	107	40	.005
12901	1.0	66	100	.002
12902	.2	82	50	.003
12903	.7	76	180	.010
12904	.4	116	80	.005
12905	.1	118	50	.005
12906	1.3	90	110	.123
12907	.2	71	40	.003
12908	.3	110	60	.013
12909	.5	179	50	.020
12910	.4	224	50	.009
12911	.3	122	40	.004
12912	.4	177	40	.005
12913	.2	110	30	.003
12914	.3	126	40	.005
12915	.4	151	50	.003
12916	.7	158	90	.012
12917	.9	79	60	.016
12918	.8	103	80	.009
12919	.4	136	50	.009
12920	.3	112	60	.003
12921	.2	131	40	.003
12922	.3	146	50	.003
STD C	7.4	42	1300	-

SAMPLE#	AG PPM	AS PPM	HG PPB	AU OZ/T
12923	.4	166	50	.003
12924	.2	209	50	.002
12925	.1	166	30	.001
12926	.1	149	40	.001
12927	.1	153	30	.001
12928	.3	143	20	.002
12929	.1	93	30	.001
12930	.7	172	60	.008
12931	1.1	164	100	.010
12932	.5	181	50	.005
12933	.3	137	40	.006
12934	.2	149	30	.004
12935	.1	138	60	.004
12936	.2	119	30	.001
12937	.2	115	20	.001
12938	.1	105	30	.001
12939	.1	83	30	.001
12940	.1	112	40	.001
12941	.1	100	30	.001
12942	.2	97	20	.001
12943	.1	73	30	.002
12944	.1	83	30	.003
12945	.3	99	20	.002
12946	.1	95	20	.001
12947	.2	71	30	.002
12948	.1	89	40	.001
12949	.1	136	30	.003
12985	.1	12	270	.001
12986	.1	8	240	.001
12987	.1	30	230	.001
12988	.1	61	280	.001
STD C	7.4	42	1400	-
12989	.1	59	230	.002
12990	.1	72	240	.002
12991	.2	14	220	.001
12992	.2	11	230	.001
12993	.1	9	190	.001

171.4 EOH 16
85.95m 17

092099

SAMPLE#	AG PPM	AS PPM	HG PPB	AU OZ/T
12994	.1	14	200	.001
12995	.1	18	220	.001
12996	.1	18	210	.001
12997	.1	12	180	.001
12998	.1	8	280	.001
12999	.1	24	260	.001
13000	.1	17	230	.001
14501	.1	14	200	.001
14502	.2	30	230	.002
14503	.1	41	200	.002
14504	.1	21	170	.023
14505	.1	15	190	.001
14506	.1	16	210	.001
14507	.1	16	200	.001
14508	.1	23	180	.002
14509	.1	55	160	.002
14510	.1	57	190	.001
14511	.1	61	250	.001
14512	.1	72	220	.002
14513	.1	42	130	.001
14514	.1	39	160	.001
14515	.1	27	130	.001
14516	.1	50	100	.001
14517	.1	47	110	.001
14518	.3	118	120	.002
14519	.1	61	100	.002
14520	.2	47	130	.002
14521	.2	90	190	.001
14522	.4	50	180	.001
14523	.8	111	210	.002
14524	1.0	115	150	.002
14525	.9	134	120	.005
14526	.9	139	130	.010
14527	1.1	89	100	.017
14528	1.2	99	110	.012
14529	.7	89	100	.013
STD C	7.5	41	1300	-

092099

SAMPLE#	AG PPM	AS PPM	HG PPB	AU OZ/T
14530	4.3	108	400	.176
14531	18.2	91	1700	.720
14532	56.0	119	4300	1.830
14533	.9	193	50	.023

144 ~

NGC 87-17 Gross Gr (RS)

8710-039

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: OCT 13 1987

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

PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED:

Oct 19/87

GEOCHEMICAL/ASSAY CERTIFICATE

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

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

ASSAYER: *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION (VAN) PROJECT-8710-039 332 File # 87-4829

87-17

57.0 m →

SAMPLE#	AG PPM	AS PPM	HG PPB	AU** OZ/T
12950	.2	14	130	.001
12951	.2	55	840	.003
12952	.1	46	880	.002
12953	.1	12	840	.001
12954	.2	32	1050	.001
12955	.1	21	1100	.001
12956	.1	48	1000	.001
12957	.1	78	920	.001
12958	.4	213	830	.003
12959	.1	11	600	.001
12960	.2	77	650	.002
12961	.2	70	850	.003
12962	.1	44	870	.002
12963	.2	60	920	.003
12964	.1	15	890	.001
12965	.2	19	620	.001
12966	.2	42	510	.001
12967	.2	33	1050	.001
12968	.1	23	480	.001
12969	.1	34	880	.001
12970	.1	18	850	.001
12971	.2	22	870	.001
12972	.1	27	730	.001
12973	.2	34	860	.001
12974	.3	126	1200	.002
12975	.1	9	480	.001
12976	.1	12	450	.001
12977	.1	36	470	.001
12978	.2	41	420	.001
12979	.1	46	400	.001
12980	.1	27	410	.001
12981	.1	26	380	.001
12982	.1	2	340	.001
12983	.1	34	360	.001
12984	.1	96	470	.003

85.95 m →

STD C 7.4 42 1300 -

SAMPLE#	AG PPM	AS PPM	HG PPB	AU OZ/T

12923	.4	166	50	.003
12924	.2	209	50	.002
12925	.1	166	30	.001
12926	.1	149	40	.001
12927	.1	153	30	.001

16

12928	.3	143	20	.002
12929	.1	93	30	.001
12930	.7	172	60	.008
12931	1.1	164	100	.010
12932	.5	181	50	.005

12933	.3	137	40	.006
12934	.2	149	30	.004
12935	.1	138	60	.004
12936	.2	119	30	.001
12937	.2	115	20	.001

12938	.1	105	30	.001
12939	.1	83	30	.001
12940	.1	112	40	.001
12941	.1	100	30	.001
12942	.2	97	20	.001

12943	.1	73	30	.002
12944	.1	83	30	.003
12945	.3	99	20	.002
12946	.1	95	20	.001
12947	.2	71	30	.002

12948	.1	89	40	.001
12949	.1	136	30	.003
12985	.1	12	270	.001
12986	.1	8	240	.001
12987	.1	30	230	.001

12988	.1	61	280	.001
STD C	7.4	42	1400	-
12989	.1	59	230	.002
12990	.1	72	240	.002
12991	.2	14	220	.001

12992	.2	11	230	.001
12993	.1	9	190	.001

16
↑
17

SAMPLE#	AG PPM	AS PPM	HG PPB	AU OZ/T
12994	.1	14	200	.001
12995	.1	18	220	.001
12996	.1	18	210	.001
12997	.1	12	180	.001
12998	.1	8	280	.001
12999	.1	24	260	.001
13000	.1	17	230	.001
14501	.1	14	200	.001
14502	.2	30	230	.002
14503	.1	41	200	.002
14504	.1	21	170	.023
14505	.1	15	190	.001
14506	.1	16	210	.001
14507	.1	16	200	.001
14508	.1	23	180	.002
14509	.1	55	160	.002
14510	.1	57	190	.001
14511	.1	61	250	.001
14512	.1	72	220	.002
14513	.1	42	130	.001
14514	.1	39	160	.001
14515	.1	27	130	.001
14516	.1	50	100	.001
14517	.1	47	110	.001
14518	.3	118	120	.002
14519	.1	61	100	.002
14520	.2	47	130	.002
14521	.2	90	190	.001
14522	.4	50	180	.001
14523	.8	111	210	.002
14524	1.0	115	150	.002
14525	.9	134	120	.005
14526	.9	139	130	.010
14527	1.1	89	100	.017
14528	1.2	99	110	.012
14529	.7	89	100	.013
~~STD C~~	~~7.5~~	~~41~~	~~1300~~	

092009

SAMPLE#	AG PPM	AS PPM	HG PPB	AU OZ/T
14530	4.3	108	400	.176
14531	18.2	91	1700	.720
14532	56.0	119	4300	1.830
14533	.9	193	50	.023

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: OCT 27 1987 (17)

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

PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Nov. 10/87

GEOCHEMICAL/ASSAY CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEC.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR NB BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

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

ASSAYER: *Dean Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION (VAN) PROJECT-8711-010 332 File # 87-5273 Page 1

SAMPLE#	AS PPM	HG PPB	AG** OZ/T	AU** OZ/T
14534	181	60	.01	.013
14535	134	50	.01	.004
14536	173	90	.04	.012
14537	108	80	.02	.004
14538	137	100	.01	.008
14539	31	90	.01	.096
14540	142	80	.02	.006
14541	87	120	.01	.028
14542	70	110	.01	.004
14543	105	90	.04	.007
14544	137	100	.01	.005
14545	135	70	.01	.004
14546	188	110	.01	.003
14547	162	160	.05	.004
14548	119	90	.01	.002
14549	160	150	.02	.002
14550	119	110	.01	.003
14551	153	100	.01	.009
14552	115	90	.01	.003
14553	98	80	.01	.004
14554	124	90	.02	.003
14555	129	70	.04	.003
14556	125	100	.01	.002
14557	331	120	.01	.003
14558	197	110	.01	.002
14559	171	210	.01	.007
14560	25	1050	.01	.001
14561	4	720	.01	.001
14562	19	960	.01	.001
14563	41	820	.01	.001
14564	34	750	.01	.001
14565	32	1400	.01	.001
14566	148	360	.01	.002
14567	142	340	.01	.001
14568	150	440	.01	.003
14569	204	420	.01	.002
STD C	40	1400	-	-

202099

SAMPLE#	AS PPM	HG PPB	AG** OZ/T	AU** OZ/T
14570	96	210	.02	.003
14571	102	560	.01	.002
14572	86	200	.01	.002
14573	175	180	.03	.003
14574	192	60	.01	.004
14575	217	80	.01	.006
14576	213	60	.02	.008
14577	173	50	.01	.007
14578	104	50	.04	.003
14579	124	70	.01	.003
14580	120	60	.01	.005
14581	157	50	.02	.007
14582	102	30	.01	.002
14583	217	40	.01	.004
14584	157	30	.01	.005
14585	194	40	.01	.008
14586	162	50	.01	.005
14587	224	30	.01	.008
14588	257	40	.01	.090
14589	200	40	.01	.007
14590	209	30	.03	.005
14591	248	50	.01	.006
14592	307	30	.02	.007
14593	176	40	.01	.007
14594	252	40	.01	.005
14595	301	30	.01	.006
14596	155	30	.02	.022
14597	260	20	.01	.005
14598	330	30	.01	.010
14599	319	30	.01	.008
14600	145	40	.01	.003
14601	116	30	.01	.003
14602	90	40	.01	.001
14603	161	40	.01	.003
14604	135	30	.01	.003
14605	89	50	.01	.003
STD C	38	1400	-	-

SAMPLE#	AS PPM	HG PPB	AG** OZ/T	AU** OZ/T
14606	83	40	.03	.003
14607	78	60	.01	.002
14608	101	50	.01	.002
14609	128	50	.01	.002
14610	106	60	.02	.005
14611	117	40	.01	.002
14612	127	50	.01	.003
14613	112	60	.01	.002
14614	94	60	.01	.003
14615	380	50	.01	.005
14616	349	70	.01	.004
14617	267	30	.01	.003
14618	878	80	.03	.011
14619	50	60	.01	.001
14620	61	50	.02	.002
14621	141	70	.02	.003
14622	46	60	.03	.001
14623	59	70	.02	.001
14624	29	60	.01	.001
14625	104	80	.01	.003
14626	122	70	.01	.002
14627	186	90	.01	.003
14628	114	70	.05	.002
14629	139	80	.03	.003
14630	741	50	.02	.009
14631	186	60	.03	.004
14632	116	80	.01	.003
14633	167	50	.03	.006
14634	88	50	.01	.003
14635	32	60	.03	.001
14636	23	80	.01	.001
14637	18	110	.01	.005
14638	39	130	.04	.001
14639	81	160	.01	.002
14640	1313	140	.05	.015
14641	494	150	.03	.005
STD C	42	1300	-	-

092099

SAMPLE#	AS PPM	HG PPB	AG** OZ/T	AU** OZ/T
14642	562	160	.02	.013
14643	268	200	.02	.003
14644	115	180	.01	.001
14645	39	280	.01	.001
14646	187	180	.01	.001
14647	71	210	.01	.001
14648	80	190	.01	.001
14649	38	100	.01	.001
14650	227	90	.03	.002
14651	11	80	.01	.027
14652	13	400	.01	.001
14653	16	150	.01	.001
14654	12	580	.01	.001
14655	10	380	.01	.001
14656	27	140	.01	.001
14657	16	260	.02	.001
14658	9	120	.01	.001
14659	18	80	.01	.001
14660	117	260	.02	.001
14661	9	30	.01	.001
14662	14	50	.01	.001
14663	11	40	.01	.001
14664	9	30	.01	.001
14665	10	40	.01	.001
14666	18	270	.01	.001
14667	17	30	.01	.001
14668	9	40	.01	.001
14669	6	50	.02	.001
14670	6	120	.01	.001
14671	7	650	.01	.001
14672	12	640	.01	.001
14673	7	560	.01	.001
14674	15	250	.01	.001
14675	17	360	.01	.001
14676	9	340	.01	.001
14677	13	180	.01	.001
STD C	44	1400	-	-

SAMPLE#	AS PPM	HG PPB	AG** OZ/T	AU** OZ/T
14678	7	110	.01	.001
14679	9	90	.01	.001
14680	22	120	.01	.001
14681	13	140	.01	.001
14682	23	40	.01	.001
14683	23	50	.01	.001
14684	51	40	.01	.001
14685	117	60	.01	.001
14686	14	40	.01	.001
14687	22	50	.01	.001
14688	27	50	.01	.001
14689	71	70	.02	.001
14690	63	60	.01	.001
14691	224	80	.01	.002
14692	151	70	.01	.003
14693	260	120	.01	.004
14694	119	130	.01	.001
14695	80	80	.01	.002
14696	38	60	.01	.003
14697	33	70	.01	.002
14698	71	60	.01	.002
14699	18	50	.01	.001
14700	20	60	.01	.001
14701	9	70	.01	.001
14702	20	70	.01	.001
14703	13	80	.04	.001
14704	14	80	.01	.001
14705	14	70	.02	.001
14706	9	60	.01	.001
14707	10	50	.01	.001
14708	10	90	.01	.001
14709	11	50	.01	.001
14710	21	80	.01	.001
14711	14	90	.03	.001
14712	18	60	.01	.001
14713	15	90	.01	.001
STD C	41	1400	-	-

SAMPLE#	AS PPM	HG PPB	AG** OZ/T	AU** OZ/T
14714	35	90	.01	.001
14715	18	60	.01	.001
14716	16	50	.01	.001
14717	35	150	.01	.001
14718	78	460	.02	.001
14719	76	70	.01	.001
14720	15	70	.01	.001
14721	36	70	.02	.001
14722	45	80	.02	.002
STD C	37	1300	-	-

092099

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: OCT 29 1987 (18)
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Nov. 10/87

GEOCHEMICAL / ASSAY CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEC.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR HG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: P1-2 CORE P3-TILLS/ROCK AG** + AU** BY FIRE ASSAY FROM 1/2 A.T.

ASSAYER: *Res. In* DEAN TOYE, CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION PROJECT-332 8711-024 File # 87-5286 Page 1

SAMPLE#	AS PPM	HG PPB	AG** OZ/T	AU** OZ/T
14728	41	1700	.01	.001
14729	149	1600	.01	.002
14730	75	1200	.01	.002
14731	44	1100	.01	.001
14732	19	1800	.01	.001
14733	33	1900	.01	.001
14734	26	2000	.01	.001
14735	17	1300	.01	.001
14736	33	1400	.01	.001
14737	18	1000	.01	.001
14738	43	1100	.01	.001
14739	33	630	.02	.001
14740	18	480	.01	.001
14741	36	320	.01	.002
14742	9	340	.01	.001
14743	21	780	.01	.001
14744	45	1050	.01	.001
14745	8	420	.01	.001
14746	16	400	.02	.001
14747	9	380	.01	.001
14748	12	440	.01	.001
14749	12	340	.01	.001
14750	9	430	.03	.001
STD C	42	1300	-	-

092099

SAMPLE#	AS PPM	HG PPB	AG** OZ/T	AU** OZ/T
22226	6	230	.02	.001
22227	24	250	.02	.001
22228	8	240	.01	.001
22229	13	220	.01	.001
22230	17	250	.02	.001
22231	26	250	.01	.001
22232	13	200	.02	.001
22233	22	220	.02	.001
22234	15	200	.01	.001
22235	24	210	.01	.001
22236	20	200	.01	.001
22237	43	230	.02	.001
22238	36	260	.01	.001
22239	63	230	.02	.001
22240	70	200	.01	.001
22241	116	180	.04	.001
22242	77	160	.02	.001
22243	72	170	.01	.001
22244	69	160	.01	.001
22245	66	130	.01	.001
22246	60	150	.01	.001
22247	45	140	.01	.001
22248	25	120	.01	.001
22249	16	100	.01	.001
22250	24	110	.01	.001
22251	18	130	.01	.001
22252	37	120	.01	.001
22253	44	160	.01	.001
22254	38	120	.01	.001
22255	35	130	.01	.001
22256	31	180	.01	.001
22257	27	150	.01	.001
22258	40	130	.01	.001
22259	37	110	.01	.001
22260	13	90	.01	.001
STD C	39	1400	-	-

SAMPLE#	AS PPM	HG PPB	AG** OZ/T	AU** OZ/T
14723	12	.70	.01	.001
14724	7	60	.01	.001
14725	5	80	.01	.001
14726	24	230	.01	.001
14727	53	1200	.02	.001

(18)

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: NOV 2 1987
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Nov. 6/87.

GEOCHEMICAL/ASSAY CERTIFICATE

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

ASSAYER: *Dean Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION PROJECT-332 8711-026 File # 87-5323 Page 1

SAMPLE#	AS PPM	HG PPB	AG** OZ/T	AU** OZ/T
22261	12	140	.01	.001
22262	33	160	.01	.001
22263	70	130	.01	.003
22264	95	120	.03	.002
22265	92	100	.03	.005
22266	158	110	.03	.016
22267	253	70	.03	.017
22268	76	60	.04	.002
22269	70	50	.04	.002
22270	63	60	.02	.002
22271	67	80	.02	.002
22272	97	60	.05	.005
22273	102	70	.04	.003
22274	89	60	.03	.003
22275	112	50	.03	.067
22276	167	80	.03	.014
22277	146	50	.03	.004
22278	107	60	.03	.002
22279	100	100	.04	.011
22280	64	70	.02	.004
22281	124	80	.01	.006
22282	92	70	.03	.002
22283	127	60	.01	.002
22284	107	70	.02	.002
22285	136	50	.03	.005
22286	133	60	.04	.003
22287	84	70	.04	.004
22288	82	80	.05	.021
22289	105	50	.05	.010
22290	115	60	.04	.005
22291	323	50	.07	.021
22292	304	130	.03	.014
22293	119	70	.02	.021
22294	216	120	.05	.111
22295	167	80	.03	.014
22296	84	50	.06	.004
STD C	40	1400	-	-

SAMPLE#	AS PPM	HG PPB	AG** OZ/T	AU** OZ/T
22297	283	230	.45	.022
22298	258	200	.34	.015
22299	311	370	.06	.014
22300	220	120	.05	.016
22301	221	90	.01	.009
22302	297	80	.05	.016
22303	289	60	.01	.010
22304	287	50	.01	.013
22305	279	40	.01	.011
22306	203	60	.01	.012
22307	128	40	.01	.004
22308	169	30	.01	.003
22309	175	50	.03	.006
22310	277	50	.01	.016
22311	123	40	.01	.002
22312	148	50	.02	.003
22313	106	80	.01	.006
22314	170	120	.03	.012
22315	174	40	.01	.029
22316	158	30	.01	.003
22317	230	50	.02	.009
22318	319	40	.01	.007
22319	224	80	.03	.018
22320	184	60	.01	.008
22321	143	40	.01	.001
22322	171	30	.01	.002
22323	106	50	.01	.002
22324	221	80	.01	.014
22325	180	20	.01	.004
22326	201	30	.01	.002
22327	290	30	.01	.001
22328	347	40	.05	.001
22329	364	20	.01	.002
22330	466	40	.02	.001
22331	442	30	.02	.001
22332	300	30	.02	.001
STD C	40	1300	-	-

SAMPLE#	AS PPM	HG PPB	AG** OZ/T	AU** OZ/T
22333	361	60	.01	.002
22334	289	50	.01	.003
22335	318	60	.01	.003
22336	330	40	.01	.004
22337	198	50	.01	.003
22338	187	60	.01	.005
22339	201	80	.01	.005
22340	221	70	.02	.004
22341	279	60	.01	.006
22342	237	50	.01	.005
22343	213	60	.01	.005
22344	165	50	.01	.004
22345	147	70	.01	.003
22346	107	60	.01	.002
22347	97	80	.01	.003
22348	248	100	.02	.004
22349	20	90	.01	.002
22350	106	120	.01	.003
22376	179	70	.01	.006
22377	385	130	.02	.010
22378	98	90	.01	.003
22379	21	80	.01	.002
22380	25	40	.01	.002
22381	25	110	.01	.002
22382	23	80	.01	.001
22383	52	90	.01	.002
22384	11	70	.01	.001
22385	19	80	.01	.001
22386	44	60	.01	.002
22387	27	60	.01	.001
22388	21	70	.01	.001
22389	12	200	.01	.001
22390	13	90	.01	.001
22391	12	480	.01	.001
22392	77	110	.02	.003
22393	50	70	.01	.003
STD C	40	1300	-	-

092099

SAMPLE#	AS PPM	HG PPB	AG** OZ/T	AU** OZ/T
22394	59	70	.02	.002
22395	31	80	.01	.001
22396	45	60	.01	.001
22397	14	50	.01	.001
22398	24	50	.01	.003
22399	8	40	.01	.001
22400	15	60	.01	.001
22401	121	80	.01	.002
22402	34	100	.01	.009
22403	12	130	.01	.001
22404	18	110	.01	.001
22405	9	300	.02	.001
22406	19	160	.01	.001
22407	10	180	.01	.001
22408	9	110	.01	.002
22409	10	100	.01	.001
22410	11	120	.01	.001
22411	7	160	.01	.001
22412	14	130	.01	.001
22413	49	140	.01	.002
22414	64	150	.01	.001
22415	101	120	.01	.001
22416	11	90	.01	.001
22417	7	80	.01	.001
22418	10	120	.01	.001
22419	9	110	.01	.001
22420	11	100	.01	.001
STD C	42	1300	-	-

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: NOV 4 1987

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

PHONE (604) 253-3158 FAX (604) 253-1716 DATE REPORT MAILED: Nov 10/87.

GEOCHEMICAL/ASSAY CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEC.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

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

ASSAYER: D. Toye. DEAN TOYE, CERTIFIED B.C. ASSAYER

NORANDA EXPLORATION (VAN) PROJECT-8711-032 332 File # 87-5387 Page 1

SAMPLE#	AG PPM	AS PPM	HG PPB	AU** OZ/T
22421	.1	8	90	.001
22422	.2	6	120	.001
22423	.1	11	130	.001
22424	.1	8	700	.001
22425	.1	74	1050	.001
22426	.1	30	660	.001
22427	.1	33	350	.001
22428	.1	23	340	.001
22429	.1	35	360	.001
22430	.1	10	280	.001
22431	.1	25	180	.001
22432	.1	29	170	.001
22433	.1	47	200	.001
22434	.1	64	210	.001
22435	.1	48	220	.001
22436	.1	29	190	.001
22437	.1	22	180	.001
22438	.1	9	130	.001
22439	.1	39	100	.001
22440	.1	39	90	.001
22441	.2	54	120	.001
22442	.9	117	100	.007
22443	.9	88	110	.023
22444	1.3	73	90	.056
22445	51.3	107	6800	2.480
22446	4.8	146	270	.180
22447	6.9	130	380	.274
22448	8.3	163	400	.252
22449	13.6	324	620	.327
22450	5.7	198	230	.116
22451	1.9	148	120	.054
22452	9.2	255	400	.233
22453	2.5	168	150	.053
22454	1.0	238	70	.010
22455	.6	69	80	.004
22456	.8	176	90	.019
STD C	7.4	39	1300	-

SAMPLE#	AG PPM	AS PPM	HG PPB	AU** OZ/T
22457	2.4	110	260	.072
22458	.7	84	160	.010
22459	.1	65	550	.001
22460	.3	73	450	.007
22461	.6	59	80	.008
22462	1.0	178	100	.011
22463	.9	104	90	.016
22464	.9	61	70	.036
22465	.3	97	50	.008
22466	.8	163	70	.009
22467	.9	107	130	.009
22468	.6	142	60	.013
22469	1.1	151	110	.018
22470	.2	72	50	.001
22471	.4	62	60	.004
22472	.5	88	70	.006
22473	.5	144	80	.008
22474	.3	116	70	.012
22475	.2	110	60	.003
22476	.3	145	70	.005
22477	1.5	81	190	.032
22478	.8	86	90	.015
22479	.4	185	40	.004
22480	.2	115	50	.003
22481	.1	82	40	.002
22482	.2	64	50	.003
22483	.2	114	40	.002
22484	.3	113	60	.003
22485	.2	132	50	.004
22486	.1	87	40	.001
22487	.2	241	50	.003
22488	.1	116	60	.002
22489	.4	192	50	.003
22490	.1	391	360	.005
22491	.3	155	150	.006
22492	.2	106	70	.002
STD C	7.5	41	1300	-

092099

SAMPLE#	AG PPM	AS PPM	HG PPB	AU** OZ/T
22493	.2	102	40	.003
22494	.1	88	50	.002
22495	.1	135	40	.002
22496	.1	35	60	.001
22497	.1	20	50	.001
22498	.1	82	40	.001
22499	.1	113	60	.002
22500	.4	161	50	.004
STD C	7.1	38	1400	-

Pioneer-Clegg & Company Ltd.
 130 Pemberton Ave.
 North Vancouver, B.C.
 Canada V7P 2A3
 Phone: (604) 983-0681
 Telex: 04-352667



Certificate of Analysis

GRW Cr 16087-19,20,21 Requested by P.O.H. 20 Nov. 87

REPORT: 427-9815 (COMPLETE) Total Metallic Analysis REFERENCE INFO: LAB CODE: 11-32-1-48

CLIENT: NORANDA EXPLORATION CO. LTD.
 PROJECT: 332

SUBMITTED BY: UNKNOWN
 DATE PRINTED: 30-NOV-87

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	WT Test Weight	9	0.01 G		
2	WT-150 -150 Pulp Weight	9	0.1 G		
3	WT+150 +150 Pulp Weight	9	0.01 G		
4	Au-150 Avg Gold in -150	9	0.07 GMT		
5	Au+150 Gold in +150 mesh.	9	0.3 GMT		
6	Au+150 Gold in +150 mesh.	9	0.001 MG		
7	Au TOT Au in total sample.	9	0.07 GMT		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	9	2 -150	9	ASSAY PREP	9

REPORT COPIES TO: NORANDA EXPLORATION
 NORANDA EXPLORATION

INVOICE TO: NORANDA EXPLORATION

20-11-87



REPORT: 427-9815

PROJECT: 332

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	WT G	WT-150 G	WT+150 G	AU-150 GMT	AU+150 GMT	AU+150 MG	AU TOT GMT
D2 22445		29.17	261.1	34.31	40.25	45.5	1.562	40.86
D2 22446		29.17	226.0	27.85	6.17	5.2	0.146	6.07
D2 22447		29.17	224.7	44.60	11.21	6.2	0.277	10.38
D2 22448		29.17	243.7	27.45	14.47	9.0	0.246	13.91
D2 22449		29.17	215.4	28.35	17.55	11.1	0.314	16.80
D2 22450		29.17	227.6	36.63	3.22	2.1	0.078	3.07
D2 22451		29.17	237.1	22.26	2.06	0.7	0.015	1.94
D2 22452		29.17	208.2	35.56	9.12	8.1	0.287	8.97
D2 22453		29.17	236.9	26.06	2.33	1.6	0.041	2.26

Q. T. Ford



REPORT: 427-9443

NGC 87-20, 21
Grew Ck. (R.S.)

PROJECT: 332

PAGE 1

87 11-048

SAMPLE NUMBER	ELEMENT UNITS	Au GNT	Ag GNT	SAMPLE NUMBER	ELEMENT UNITS	Au GNT	Ag GNT
D2 22751		1.10	1.0	D2 22791		0.27	1.4
D2 22752		2.78	2.4	D2 22792		0.27	2.1
D2 22753		0.41	1.7	D2 22793		0.24	1.7
D2 22754		0.07	<0.7	D2 22794		0.10	1.4
D2 22755		<0.07	<0.7	D2 22795		0.14	1.0
D2 22756		<0.07	<0.7	D2 22796		0.34	1.0
D2 22757		<0.07	<0.7	D2 22797		0.14	0.7
D2 22758		<0.07	<0.7	D2 22798		0.21	1.0
D2 22759		<0.07	<0.7	D2 22799		0.27	0.7
D2 22760		<0.07	<0.7	D2 22800		1.06	2.1
D2 22761		0.07	<0.7	D2 22801		0.34	1.0
D2 22762		<0.07	<0.7	D2 22802		0.27	1.0
D2 22763		<0.07	<0.7	D2 22803		0.51	2.7
D2 22764		<0.07	<0.7	D2 22804		0.27	1.0
D2 22765		0.14	<0.7	D2 22805		1.17	1.4
D2 22766		<0.07	<0.7	D2 22806		0.41	0.7
D2 22767		<0.07	<0.7	D2 22807		0.38	0.7
D2 22768		<0.07	<0.7	D2 22808		0.34	0.7
D2 22769		<0.07	1.0	D2 22809		0.34	1.4
D2 22770		<0.07	1.7	D2 22810		0.34	1.4
D2 22771		0.24	4.8	D2 22811		0.21	1.0
D2 22772		0.38	3.4	D2 22812		0.21	1.7
D2 22773		0.10	2.1	D2 22813		0.14	0.7
D2 22774		0.07	2.1	D2 22814		0.17	0.7
D2 22775		0.31	5.5	D2 22815		0.27	0.7
D2 22776		<0.07	1.7	D2 22816		0.17	0.7
D2 22777		0.34	2.1	D2 22817		0.10	0.7
D2 22778		0.69	4.1	D2 22818		0.17	0.7
D2 22779		1.03	5.1	D2 22819		0.07	<0.7
D2 22780		3.94	12.0	D2 22820		0.45	0.7
D2 22781		0.34	1.7	D2 22821		<0.07	<0.7
D2 22782		2.19	7.9	D2 22822		0.07	0.7
D2 22783		0.48	2.7	D2 22823		0.07	0.7
D2 22784		1.51	8.6	D2 22824		0.10	0.7
D2 22785		0.86	4.8	D2 22825		0.07	<0.7
D2 22786		0.31	1.7	D2 22826		0.24	1.7
D2 22787		0.89	1.7	D2 22827		0.34	4.1
D2 22788		1.82	3.8	D2 22828		0.55	11.0
D2 22789		0.45	2.1	D2 22829		4.70	116.9
D2 22790		0.14	1.0	D2 22830		1.17	14.1

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SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT
D2 22831		0.27	7.2	D2 22871		0.07	0.7
D2 22832		0.10	2.4	D2 22872		0.07	0.7
D2 22833		0.07	1.0	D2 22873		0.07	0.7
D2 22834		0.07	1.7	D2 22874		0.10	0.7
D2 22835		<0.07	0.7	D2 22875		0.10	1.0
D2 22836		0.10	3.1	D2 22876		0.17	1.0
D2 22837		0.21	4.8	D2 22877		0.07	0.7
D2 22838		3.29	32.2	D2 22878		0.62	1.4
D2 22839		0.65	4.1	D2 22879		0.17	1.0
D2 22840		0.17	2.7	D2 22880		0.07	1.0
D2 22841		0.10	1.4	D2 22881		0.27	1.4
D2 22842		0.14	1.7	D2 22882		0.10	0.7
D2 22843		0.07	1.7	D2 22883		0.10	<0.7
D2 22844		<0.07	1.4	D2 22884		<0.07	<0.7
D2 22845		<0.07	1.4	D2 22885		<0.07	<0.7
D2 22846		0.07	1.4	D2 22886		<0.07	<0.7
D2 22847		0.10	1.7	D2 22887		<0.07	<0.7
D2 22848		0.10	1.7	D2 22888		<0.07	<0.7
D2 22849		0.21	4.1	D2 22889		<0.07	<0.7
D2 22850		2.47	32.2	D2 22890		<0.07	<0.7
D2 22851		0.45	5.1	D2 22891		<0.07	<0.7
D2 22852		0.24	4.1	D2 22892		<0.07	<0.7
D2 22853		0.24	5.1	D2 22893		<0.07	<0.7
D2 22854		0.69	7.9	D2 22894		<0.07	<0.7
D2 22855		0.38	5.5	D2 22895		<0.07	<0.7
D2 22856		0.86	8.9	D2 22896		<0.07	<0.7
D2 22857		5.83	8.2	D2 22897		<0.07	<0.7
D2 22858		0.51	7.9	D2 22898		<0.07	<0.7
D2 22859		0.41	2.4	D2 22899		<0.07	<0.7
D2 22860		0.07	1.4	D2 22900		0.07	<0.7
D2 22861		0.07	1.4	D2 22901		<0.07	<0.7
D2 22862		0.14	1.0	D2 22902		<0.07	<0.7
D2 22863		0.10	2.4	D2 22903		<0.07	<0.7
D2 22864		0.14	1.0	D2 22904		<0.07	<0.7
D2 22865		0.14	0.7	D2 22905		<0.07	<0.7
D2 22866		0.17	1.4	D2 22906		<0.07	<0.7
D2 22867		0.07	1.0	D2 22907		<0.07	<0.7
D2 22868		0.10	0.7	D2 22908		<0.07	<0.7
D2 22869		0.07	0.7				
D2 22870		0.10	1.4				

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Green CC (RS)

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SAMPLE NUMBER	ELEMENT UNITS	As PPM	Hg PPB	SAMPLE NUMBER	ELEMENT UNITS	As PPM	Hg PPB
02 22751		489	>5000	02 22791		91	100
02 22752		387	>5000	02 22792		182	90
02 22753		175	>5000	02 22793		171	130
02 22754		79	>5000	02 22794		132	80
02 22755		104	2500	02 22795		70	70
02 22756		112	2000	02 22796		140	80
02 22757		93	600	02 22797		38	40
02 22758		176	800	02 22798		63	100
02 22759		135	300	02 22799		130	80
02 22760		101	800	02 22800		145	105
02 22761		49	900	02 22801		98	70
02 22762		50	590	02 22802		130	70
02 22763		78	350	02 22803		170	240
02 22764		84	280	02 22804		113	115
02 22765		313	310	02 22805		102	145
02 22766		184	360	02 22806		42	70
02 22767		604	190	02 22807		100	65
02 22768		42	60	02 22808		93	70
02 22769		29	90	02 22809		123	80
02 22770		52	100	02 22810		289	75
02 22771		182	165	02 22811		209	85
02 22772		137	95	02 22812		147	175
02 22773		82	105	02 22813		221	80
02 22774		59	210	02 22814		261	65
02 22775		39	125	02 22815		291	85
02 22776		26	105	02 22816		249	115
02 22777		97	240	02 22817		125	395
02 22778		289	235	02 22818		348	65
02 22779		171	850	02 22819		147	70
02 22780		130	490	02 22820		208	70
02 22781		109	470	02 22821		30	540
02 22782		176	575	02 22822		222	3400
02 22783		125	250	02 22823		255	>5000
02 22784		78	650	02 22824		232	2350
02 22785		51	370	02 22825		280	1500
02 22786		98	105	02 22826		199	2500
02 22787		71	75	02 22827		102	1600
02 22788		97	220	02 22828		159	>5000
02 22789		80	115	02 22829		251	>5000
02 22790		108	60	02 22830		179	2900

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SAMPLE NUMBER	ELEMENT UNITS	As PPM	Hg PPB	SAMPLE NUMBER	ELEMENT UNITS	As PPM	Hg PPB
02 22831		164	900	02 22871		131	90
02 22832		213	3600	02 22872		62	70
02 22833		45	2300	02 22873		67	60
02 22834		342	900	02 22874		85	85
02 22835		414	600	02 22875		86	110
02 22836		702	1000	02 22876		95	110
02 22837		256	600	02 22877		55	70
02 22838		310	2800	02 22878		86	90
02 22839		230	900	02 22879		44	80
02 22840		155	650	02 22880		48	70
02 22841		89	355	02 22881		81	125
02 22842		138	330	02 22882		31	225
02 22843		92	350	02 22883		11	160
02 22844		106	85	02 22884		6	190
02 22845		91	60	02 22885		6	280
02 22846		77	85	02 22886		3	450
02 22847		62	135	02 22887		6	450
02 22848		73	165	02 22888		6	550
02 22849		131	360	02 22889		4	540
02 22850		203	900	02 22890		8	510
02 22851		365	350	02 22891		6	360
02 22852		309	210	02 22892		3	395
02 22853		369	350	02 22893		4	410
02 22854		414	335	02 22894		5	475
02 22855		630	345	02 22895		6	545
02 22856		463	440	02 22896		4	570
02 22857		570	485	02 22897		3	505
02 22858		512	470	02 22898		4	525
02 22859		225	105	02 22899		6	375
02 22860		174	115	02 22900		8	385
02 22861		158	120	02 22901		4	425
02 22862		38	110	02 22902		5	310
02 22863		64	95	02 22903		8	345
02 22864		25	55	02 22904		6	325
02 22865		55	65	02 22905		3	350
22866		110	95	02 22906		6	400
22867		81	90	02 22907		4	345
02 22868		74	70	02 22908		5	340
02 22869		147	80				
02 22870		123	60				



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SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT
R2 22909		0.73	2.1	R2 22949		<0.07	<0.7
R2 22910		0.5	2.4	R2 22950		0.31	0.7
R2 22911		0.5	1.8	R2 22951		0.10	1.4
R2 22912		0.07	0.7	R2 22952		0.07	0.7
R2 22913		<0.07	<0.7	R2 22953		0.14	1.0
R2 22914		<0.07	<0.7	R2 22954		0.07	1.0
R2 22915		<0.07	<0.7	R2 22955		<0.07	<0.7
R2 22916		<0.07	<0.7	R2 22956		<0.07	<0.7
R2 22917		0.10	0.7	R2 22957		<0.07	<0.7
R2 22918		0.21	1.4	R2 22958		<0.07	<0.7
R2 22919		0.41	1.0	R2 22959		<0.07	<0.7
R2 22920		0.31	0.7	R2 22960		<0.07	<0.7
R2 22921		0.10	0.7	R2 22961		<0.07	<0.7
R2 22922		0.17	1.0	R2 22962		0.07	<0.7
R2 22923		<0.07	0.7	R2 22963		<0.07	<0.7
R2 22924		0.17	<0.7	R2 22964		<0.07	<0.7
R2 22925		<0.07	0.7	R2 22965		<0.07	<0.7
R2 22926		<0.07	<0.7	R2 22966		<0.07	<0.7
R2 22927		<0.07	0.7	R2 22967		<0.07	<0.7
R2 22928		<0.07	<0.7	R2 22968		<0.07	<0.7
R2 22929		<0.07	<0.7	R2 22969		<0.07	0.7
R2 22930		<0.07	<0.7	R2 22970		<0.07	<0.7
R2 22931		<0.07	0.7	R2 22971		<0.07	<0.7
R2 22932		<0.07	<0.7	R2 22972		<0.07	<0.7
R2 22933		<0.07	<0.7	R2 22973		<0.07	<0.7
R2 22934		0.07	<0.7	R2 22974		<0.07	<0.7
R2 22935		<0.07	<0.7	R2 22975		<0.07	<0.7
R2 22936		<0.07	<0.7	R2 22976		<0.07	<0.7
R2 22937		<0.07	<0.7	R2 22977		<0.07	<0.7
R2 22938		<0.07	<0.7	R2 22978		<0.07	<0.7
R2 22939		<0.07	<0.7	R2 22979		<0.07	<0.7
R2 22940		0.07	0.7	R2 22980		<0.07	<0.7
R2 22941		<0.07	<0.7	R2 22981		<0.07	<0.7
R2 22942		<0.07	<0.7	R2 22982		<0.07	<0.7
R2 22943		<0.07	<0.7	R2 22983		<0.07	<0.7
R2 22944		<0.07	<0.7	R2 22984		<0.07	<0.7
R2 22945		<0.07	<0.7	R2 22985		<0.07	<0.7
R2 22946		<0.07	<0.7	R2 22986		<0.07	<0.7
R2 22947		<0.07	<0.7	R2 22987		<0.07	<0.7
R2 22948		<0.07	<0.7	R2 22988		<0.07	<0.7

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SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT
R2 22989		<0.07	<0.7				
R2 22990		<0.07	<0.7				
R2 22991		<0.07	<0.7				
R2 22992		<0.07	<0.7				
R2 22993		<0.07	<0.7				
R2 22994		0.07	<0.7				

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NGC 87-22

Gravel (RS)

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SAMPLE NUMBER	ELEMENT UNITS	As PPM	Hg PPB	SAMPLE NUMBER	ELEMENT UNITS	As PPM	Hg PPB
R2 22909		105	70	R2 22949		80	260
R2 22910		242	120	R2 22950		224	135
R2 22911		276	220	R2 22951		230	220
R2 22912		72	100	R2 22952		109	130
R2 22913		44	130	R2 22953		164	140
R2 22914		64	155	R2 22954		115	135
R2 22915		44	160	R2 22955		62	140
R2 22916		42	160	R2 22956		73	85
R2 22917		88	90	R2 22957		20	205
R2 22918		163	305	R2 22958		27	125
R2 22919		197	120	R2 22959		29	60
R2 22920		60	90	R2 22960		18	45
R2 22921		141	70	R2 22961		32	75
R2 22922		131	190	R2 22962		29	70
R2 22923		105	295	R2 22963		30	70
R2 22924		66	530	R2 22964		5	55
R2 22925		58	380	R2 22965		10	60
R2 22926		54	360	R2 22966		12	60
R2 22927		35	395	R2 22967		18	50
R2 22928		19	340	R2 22968		13	55
R2 22929		13	1200	R2 22969		19	60
R2 22930		22	1050	R2 22970		13	65
R2 22931		45	750	R2 22971		16	60
R2 22932		30	250	R2 22972		30	65
R2 22933		16	180	R2 22973		21	60
R2 22934		8	650	R2 22974		8	55
R2 22935		13	300	R2 22975		18	40
R2 22936		36	1000	R2 22976		9	45
R2 22937		29	260	R2 22977		15	55
R2 22938		26	650	R2 22978		8	65
R2 22939		44	265	R2 22979		7	55
R2 22940		42	560	R2 22980		6	45
R2 22941		43	550	R2 22981		15	40
R2 22942		18	320	R2 22982		25	50
R2 22943		50	170	R2 22983		32	60
R2 22944		41	145	R2 22984		8	50
R2 22945		34	200	R2 22985		11	55
R2 22946		8	800	R2 22986		10	325
R2 22947		8	590	R2 22987		12	385
R2 22948		43	180	R2 22988		16	140

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4-332667



Geochemical
Lab Report

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SAMPLE NUMBER	ELEMENT UNITS	As PPH	Hg PPB	SAMPLE NUMBER	ELEMENT UNITS	As PPH	Hg PPB
R2 22989		6	90				
R2 22990		4	120				
R2 22991		5	275				
R2 22992		9	220				
R2 22993		9	55				
R2 22994		8	55				



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SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT
D2 25276		<0.07	<0.7	D2 25316		0.07	1.0
D2 25277		0.17	3.8	D2 25317		0.17	1.4
D2 25278		0.34	6.9	D2 25318		0.21	1.7
D2 25279		0.34	5.5	D2 25319		0.07	1.0
D2 25280		0.14	0.7	D2 25320		<0.07	1.0
D2 25281		0.17	1.4	D2 25321		<0.07	1.0
D2 25282		0.14	1.0	D2 25322		<0.07	1.0
D2 25283		0.10	1.0	D2 25323		0.07	1.4
D2 25284		0.14	5.8	D2 25324		0.10	1.0
D2 25285		0.10	5.8	D2 25325		0.86	1.7
D2 25286		0.17	7.2	D2 25326		0.17	1.4
D2 25287		0.17	4.1	D2 25327		0.27	1.4
D2 25288		0.17	3.4	D2 25328		0.10	1.7
D2 25289		1.06	9.9	D2 25329		0.10	1.7
D2 25290		2.85	36.7	D2 25330		0.10	1.4
D2 25291		0.27	8.6	D2 25331		0.07	0.7
D2 25292		0.21	5.8	D2 25332		0.07	0.7
D2 25293		0.07	1.7	D2 25333		0.07	1.0
D2 25294		0.07	1.7	D2 25334		0.10	1.4
D2 25295		0.31	5.5	D2 25335		0.07	1.4
D2 25296		0.75	9.9	D2 25336		0.07	0.7
D2 25297		0.41	4.5	D2 25337		0.07	0.7
D2 25298		1.61	17.5	D2 25338		0.17	0.7
D2 25299		0.24	5.5	D2 25339		0.07	0.7
D2 25300		0.24	6.2	D2 25340		0.21	1.0
D2 25301		1.30	18.9	D2 25341		0.14	1.4
D2 25302		0.27	3.4	D2 25342		0.10	1.0
D2 25303		<0.07	2.4	D2 25343		0.21	1.0
D2 25304		<0.07	2.4	D2 25344		0.07	1.0
D2 25305		0.10	5.1	D2 25345		0.17	1.0
D2 25306		0.14	1.7	D2 25346		0.10	1.0
D2 25307		<0.07	1.0	D2 25347		0.14	0.7
D2 25308		<0.07	<0.7	D2 25348		0.07	0.7
D2 25309		<0.07	0.7	D2 25349		0.07	1.0
D2 25310		0.07	0.7	D2 25350		<0.07	0.7
D2 25311		0.27	1.4	D2 25351		<0.07	<0.7
D2 25312		0.27	1.7	D2 25352		<0.07	<0.7
D2 25313		0.14	1.7	D2 25353		<0.07	<0.7
D2 25314		0.07	0.7	D2 25354		<0.07	<0.7
D2 25315		0.31	2.1	D2 25355		<0.07	<0.7

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SAMPLE NUMBER	ELEMENT UNITS	Au GHT	Ag GHT	SAMPLE NUMBER	ELEMENT UNITS	Au GHT	Ag GHT

42-25356		0.07	0.7				

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87/2-007

Grus Cr (RS)

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SAMPLE NUMBER	ELEMENT UNITS	PPM	PPB	SAMPLE NUMBER	ELEMENT UNITS	PPM	PPB
02 25276		182	850	02 25316		164	60
02 25277		172	1000	02 25317		152	70
02 25278		303	1450	02 25318		1050	110
02 25279		317	1600	02 25319		507	60
02 25280		387	2900	02 25320		201	65
02 25281		211	1550	02 25321		412	65
02 25282		403	1950	02 25322		648	75
02 25283		381	1950	02 25323		448	95
02 25284		187	2350	02 25324		205	70
02 25285		164	3500	02 25325		399	70
02 25286		318	3700	02 25326		260	60
02 25287		421	600	02 25327		283	210
02 25288		145	300	02 25328		239	50
02 25289		236	1100	02 25329		85	60
5290		271	3300	02 25330		163	55
02 25291		265	800	02 25331		80	50
02 25292		143	750	02 25332		165	60
02 25293		46	200	02 25333		860	70
02 25294		29	100	02 25334		669	70
02 25295		160	1050	02 25335		1200	90
02 25296		456	1200	02 25336		40	70
02 25297		122	850	02 25337		20	50
02 25298		230	1500	02 25338		21	55
02 25299		264	800	02 25339		36	55
02 25300		163	950	02 25340		86	65
02 25301		117	1450	02 25341		38	65
02 25302		190	220	02 25342		20	90
02 25303		105	125	02 25343		19	90
02 25304		109	70	02 25344		9	210
02 25305		95	90	02 25345		16	250
02 25306		67	80	02 25346		31	210
02 25307		42	45	02 25347		10	90
02 25308		30	25	02 25348		16	90
02 25309		70	40	02 25349		9	110
02 25310		112	40	02 25350		19	130
02 25311		208	50	02 25351		20	230
02 25312		847	115	02 25352		11	130
02 25313		945	155	02 25353		13	130
02 25314		392	340	02 25354		13	150
02 25315		393	75	02 25355		10	180

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Geochemical
Lab Report

REPORT: 127-9650

PROJECT: 102

PAGE: 2

SAMPLE NUMBER	ELEMENT	As PPM	Hg PPB	SAMPLE NUMBER	ELEMENT	As PPM	Hg PPB

02-2535		25	300				

092039



87-29

REPORT: 427-9660

PROJECT: 332

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au GHT	Ag GHT	SAMPLE NUMBER	ELEMENT UNITS	Au GHT	Ag GHT
D2 18751		<0.07	<0.7	D2 25371		<0.07	<0.7
D2 18752		<0.07	<0.7	D2 25372		<0.07	<0.7
D2 18753		<0.07	<0.7	D2 25373		<0.07	<0.7
D2 18754		<0.07	<0.7	D2 25374		<0.07	<0.7
D2 18755		<0.07	<0.7	D2 25375		<0.07	<0.7
D2 18756		<0.07	<0.7				
D2 18757		<0.07	<0.7				
D2 18758		<0.07	<0.7				
D2 18759		<0.07	<0.7				
D2 18760		0.07	<0.7				
D2 18761		0.10	<0.7				
D2 18762		0.10	<0.7				
D2 18763		0.07	<0.7				
D2 18764		0.10	0.7				
18765		0.14	1.0				
D2 18766		0.10	1.4				
D2 18767		0.27	2.1				
D2 18768		0.10	1.7				
D2 18769		0.10	1.4				
D2 18770		0.07	1.7				
D2 18771		0.14	1.4				
D2 18772		0.21	3.8				
D2 18773		0.10	1.7				
D2 18774		0.14	0.7				
D2 18775		0.17	1.7				
D2 18776		0.41	2.1				
D2 25357		<0.07	<0.7				
D2 25358		<0.07	<0.7				
D2 25359		<0.07	<0.7				
D2 25360		<0.07	<0.7				
D2 25361		<0.07	<0.7				
D2 25362		<0.07	<0.7				
D2 25363		<0.07	<0.7				
D2 25364		<0.07	<0.7				
D2 25365		<0.07	<0.7				
1 366		<0.07	<0.7				
D2 25367		<0.07	<0.7				
D2 25368		<0.07	<0.7				
D2 25369		<0.07	<0.7				
D2 25370		<0.07	<0.7				

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[Signature]

Bondar-Cheng & Company Ltd.
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Geochemical
 Lab Report

87/2-009

REPORT: 127-9660 (COMPLETE)

NGC 87-24

REFERENCE INFO:

CLIENT: NORANDA EXPLORATION CO. LTD.
 PROJECT: 1332

SUBMITTED BY: R. SINGH
 DATE PRINTED: 11-DEC-87

ORDER ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1 Hg Mercury	45	5 PPB	HN03-HCL HOT EXTR	Cold Vapour AA
2 As Arsenic	45	2 PPM		INST. NEUTRON ACTIV.

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
0 DRILL CORE	45	2 -150	45	ASSAY PREP	45
				OVERWEIGHT SAMPLE/LB	365

REPORT COPIES TO: NORANDA EXPLORATION
 NORANDA EXPLORATION

INVOICE TO: NORANDA EXPLORATION

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REPORT: 127-9660

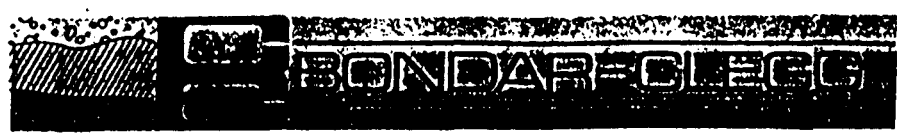
PROJECT: 332

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM	SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM
02 18751		130	85	02 25371		40	13
02 18752		100	3	02 25372		55	20
02 18753		120	11	02 25373		20	2
02 18754		170	8	02 25374		85	<2
02 18755		90	7	02 25375		65	2
02 18756		75	10				
02 18757		440	5				
02 18758		530	53				
02 18759		4100	367				
02 18760		4000	500				
02 18761		700	167				
02 18762		650	178				
02 18763		1000	213				
02 18764		850	180				
02 18765		650	164				
02 18766		1350	159				
02 18767		1250	178				
02 18768		1250	213				
02 18769		1200	165				
02 18770		1400	215				
02 18771		1050	203				
02 18772		2800	201				
02 18773		2600	100				
02 18774		3600	206				
02 18775		3800	211				
02 18776		4400	278				
02 25357		165	14				
02 25358		55	8				
02 25359		65	6				
02 25360		65	7				
02 25361		65	6				
02 25362		150	7				
02 25363		270	<2				
02 25364		265	<2				
02 25365		220	8				
02 366		125	14				
02 25367		85	8				
02 25368		240	6				
02 25369		10	<2				
02 25370		40	5				

WYCB

Bondar-Clay & Company Ltd.
130 Pemberton Ave.
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Phone (604) 461-1991
Telex 552667



Certificate
of Analysis

8712 - 18

REPORT: 427-9668

NGC-87-25,26

PROJECT: 332

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT
R2 18777		<0.07	<0.7	R2 18817		1.75	1.7
R2 18778		<0.07	<0.7	R2 18818		0.55	1.4
R2 18779		<0.07	<0.7	R2 18819		0.21	0.7
R2 18780		<0.07	<0.7	R2 18820		0.34	1.4
R2 18781		<0.07	<0.7	R2 18821		0.21	0.7
R2 18782		<0.07	<0.7	R2 18822		0.34	<0.7
R2 18783		<0.07	<0.7	R2 18823		0.27	0.7
R2 18784		0.07	0.7	R2 18824		0.21	0.7
R2 18785		0.34	1.7	R2 18825		0.14	0.7
R2 18786		7.61	6.9	R2 18826		0.10	0.7
R2 18787		0.58	2.4	R2 18827		0.14	1.0
R2 18788		2.02	3.4	R2 18828		0.10	0.7
R2 18789		19.89	8.9	R2 18829		0.10	0.7
R2 18790		25.54	94.6	R2 18830		0.14	<0.7
R2 18791		2.81	6.2	R2 18831		0.10	<0.7
R2 18792		14.09	73.4	R2 18832		0.07	<0.7
R2 18793		2.54	6.9	R2 18833		0.14	0.7
R2 18794		0.55	1.7	R2 18834		0.10	<0.7
R2 18795		0.82	2.7	R2 18835		0.07	<0.7
R2 18796		5.35	6.2	R2 18836		0.10	<0.7
R2 18797		6.27	6.9	R2 18837		0.10	1.0
R2 18798		3.05	3.4	R2 18838		0.07	0.7
R2 18799		1.58	2.4	R2 18839		0.10	<0.7
R2 18800		4.01	4.8	R2 18840		0.10	<0.7
R2 18801		0.07	<0.7	R2 18841		0.07	<0.7
R2 18802		0.45	1.0	R2 18842		0.10	0.7
R2 18803		<0.07	<0.7	R2 18843		0.14	0.7
R2 18804		0.31	0.7	R2 18844		<0.07	<0.7
R2 18805		0.75	1.4	R2 18845		<0.07	<0.7
R2 18806		0.31	0.7	R2 18846		<0.07	<0.7
R2 18807		0.41	1.4	R2 18847		<0.07	<0.7
R2 18808		0.51	1.0	R2 18848		<0.07	<0.7
R2 18809		0.17	0.7	R2 18849		<0.07	<0.7
R2 18810		0.51	1.0	R2 18850		<0.07	<0.7
R2 18811		0.45	0.7	R2 18851		<0.07	<0.7
R2 18812		1.65	1.7	R2 18852		<0.07	<0.7
R2 18813		2.43	2.7	R2 18853		<0.07	<0.7
R2 18814		2.33	2.7	R2 18854		<0.07	<0.7
R2 18815		2.85	3.4	R2 18855		<0.07	<0.7
R2 18816		3.12	6.2	R2 18856		0.07	<0.7

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For all samples



REPORT: 427-9668

PROJECT: 332

PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Au GHT	Ag GHT	SAMPLE NUMBER	ELEMENT UNITS	Au GHT	Ag GHT
R2 18857		<0.07	<0.7	R2 18897		0.21	1.0
R2 18858		<0.07	<0.7	R2 18898		0.21	1.0
R2 18859		<0.07	<0.7	R2 18899		1.71	1.7
R2 18860		0.07	0.7	R2 18900		1.47	2.4
R2 18861		0.31	0.7	R2 18901		1.03	1.7
R2 18862		0.31	0.7	R2 18902		1.10	1.7
R2 18863		0.55	<0.7	R2 18903		1.03	1.4
R2 18864		<0.07	<0.7	R2 18904		1.82	1.7
R2 18865		<0.07	<0.7	R2 18905		0.27	0.7
R2 18866		<0.07	<0.7	R2 18906		0.10	<0.7
R2 18867		<0.07	<0.7	R2 18907		0.27	0.7
R2 18868		<0.07	<0.7	R2 18908		0.17	0.7
R2 18869		0.07	<0.7	R2 18909		0.07	<0.7
R2 18870		<0.07	<0.7	R2 18910		0.07	<0.7
R2 18871		<0.07	<0.7	R2 18911		0.10	<0.7
R2 18872		<0.07	<0.7	R2 18912		0.14	0.7
R2 18873		<0.07	<0.7	R2 18913		0.07	<0.7
R2 18874		0.14	2.1	R2 18914		0.17	0.7
R2 18875		1.92	6.9	R2 18915		0.14	<0.7
R2 18876		0.86	2.1	R2 18916		0.07	<0.7
R2 18877		0.96	4.1	R2 18917		0.10	0.7
R2 18878		3.57	18.2	R2 18918		0.07	0.7
R2 18879		0.38	1.0	R2 18919		0.10	<0.7
R2 18880		1.06	1.7	R2 18920		0.10	<0.7
R2 18881		1.58	1.7	R2 18921		0.17	0.7
R2 18882		0.51	1.4				
R2 18883		10.90	6.9				
R2 18884		11.66	7.2				
R2 18885		1.61	5.1				
R2 18886		0.89	1.4				
R2 18887		1.99	1.7				
R2 18888		0.99	1.4				
R2 18889		0.21	0.7				
R2 18890		1.61	2.7				
R2 18891		0.21	0.7				
R2 18892		0.41	1.0				
R2 18893		0.07	<0.7				
R2 18894		0.10	<0.7				
R2 18895		0.51	1.7				
R2 18896		0.31	0.7				

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Geochemical
 Lab Report

REPORT: 127-9668 (COMPLETE)

Gren Cc NGC 89-25,26

REFERENCE INFO:

87/2-018

CLIENT: NORANDA EXPLORATION CO. LTD.
 PROJECT: 332

SUBMITTED BY: H. COPELAND
 DATE PRINTED: 11-DEC-87

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Hg Mercury	145	5 PPB	HN03-HCL HOT EXTR	Cold Vapour AA
2	As Arsenic	145	2 PPM		INST. NEUTRON ACTIV.

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK OR BED ROCK	145	2 -150	145	ASSAY PREP	145
				OVERWEIGHT SAMPLE/LB	950

REPORT COPIES TO: NORANDA EXPLORATION
 MR. EVERT VAN LEEUWAN

INVOICE TO: MR. EVERT VAN LEEUWAN

342000

OK Korse



REPORT: 127-9668

PROJECT: 332

PAGE: 1

SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM	SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM
R2 18777		25		R2 18817		210	38
R2 18778		48		R2 18818		310	129
R2 18779		15		R2 18819		140	127
R2 18780		26		R2 18820		55	200
R2 18781		26		R2 18821		50	117
R2 18782		27		R2 18822		80	139
R2 18783		38		R2 18823		50	166
R2 18784		23		R2 18824		35	184
R2 18785		104		R2 18825		40	120
R2 18786		93		R2 18826		50	101
R2 18787		117		R2 18827		70	107
R2 18788		219		R2 18828		55	111
R2 18789		119		R2 18829		40	132
R2 18790		148		R2 18830		60	182
R 3791		102		R2 18831		100	118
R2 18792		129		R2 18832		80	108
R2 18793		91		R2 18833		80	106
R2 18794		103		R2 18834		55	155
R2 18795		80		R2 18835		55	139
R2 18796		64		R2 18836		50	160
R2 18797		107		R2 18837		80	194
R2 18798		86		R2 18838		50	127
R2 18799		127		R2 18839		50	158
R2 18800		110		R2 18840		60	164
R2 18801		68		R2 18841		55	135
R2 18802		98		R2 18842		50	110
R2 18803		85		R2 18843		80	179
R2 18804		51		R2 18844		900	10
R2 18805		99		R2 18845		1400	26
R2 18806		101		R2 18846		1100	24
R2 18807		211		R2 18847		1000	15
R2 18808		100		R2 18848		1250	14
R2 18809		107		R2 18849		650	16
R2 18810		161		R2 18850		330	31
R2 18811		170		R2 18851		290	29
R2 18812		174		R2 18852		280	27
R2 18813		179		R2 18853		250	14
R2 18814		182		R2 18854		280	28
R2 18815		90		R2 18855		250	25
R2 18816		119		R2 18856		340	53

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REPORT: 127-9668

PROJECT: 332

PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM	SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM
R2 18857		220	54	R2 18897		60	86
R2 18858		200	72	R2 18898		40	102
R2 18859		250	63	R2 18899		80	189
R2 18860		230	70	R2 18900		60	209
R2 18861		320	305	R2 18901		60	345
R2 18862		280	161	R2 18902		140	207
R2 18863		230	188	R2 18903		110	202
R2 18864		330	31	R2 18904		70	241
R2 18865		200	24	R2 18905		70	143
R2 18866		200	42	R2 18906		50	92
R2 18867		180	46	R2 18907		50	144
R2 18868		180	38	R2 18908		50	149
R2 18869		100	70	R2 18909		60	66
R2 18870		120	37	R2 18910		50	130
R2 18871		150	33	R2 18911		45	128
R2 18872		150	44	R2 18912		50	129
R2 18873		170	44	R2 18913		65	93
R2 18874		280	104	R2 18914		50	152
R2 18875		520	166	R2 18915		80	121
R2 18876		210	88	R2 18916		50	130
R2 18877		350	73	R2 18917		45	156
R2 18878		1250	109	R2 18918		40	172
R2 18879		120	52	R2 18919		50	140
R2 18880		120	94	R2 18920		40	71
R2 18881		120	63	R2 18921		50	114
R2 18882		80	84				
R2 18883		600	98				
R2 18884		540	58				
R2 18885		250	141				
R2 18886		150	152				
R2 18887		300	122				
R2 18888		230	110				
R2 18889		130	105				
R2 18890		100	116				
R2 18891		120	63				
R2 18892		70	107				
R2 18893		70	68				
R2 18894		110	58				
R2 18895		110	173				
R2 18896		40	110				

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87/2-034

REPORT: 127-9672

Grew Co. N6C 87-27

PROJECT: 332

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM	SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM
02 18922	2500	207		02 18962		90	40
02 18923	1250	267		02 18963		70	48
02 18924	2150	73		02 18964		60	92
02 18925	5000	15		02 18965		125	90
02 18926	5000	27		02 18966		95	64
02 18927	3300	151		02 18967		75	138
02 18928	1550	214		02 18968		70	81
02 18929	2200	132		02 18969		75	80
02 18930	700	54		02 18970		50	52
02 18931	850	83		02 18971		35	49
02 18932	750	49		02 18972		45	60
02 18933	600	29		02 18973		65	60
02 18934	700	28		02 18974		75	90
02 18935	950	82		02 18975		90	89
02 18936	450	60		02 18976		75	159
02 18937	400	39		02 18977		45	200
02 18938	390	44		02 18978		55	266
02 18939	330	35		02 18979		40	153
02 18940	310	87		02 18980		45	144
02 18941	255	10		02 18981		60	340
02 18942	240	27		02 18982		50	297
02 18943	265	40		02 18983		60	217
02 18944	275	22		02 18984		55	184
02 18945	220	21		02 18985		55	259
02 18946	185	34		02 18986		45	165
02 18947	340	92		02 18987		65	129
02 18948	180	38		02 18988		60	144
02 18949	190	44		02 18989		70	114
02 18950	185	54		02 18990		120	216
02 18951	180	23		02 18991		75	142
02 18952	100	13		02 18992		40	146
02 18953	120	11		02 18993		40	172
02 18954	145	22		02 18994		85	110
02 18955	280	83		02 18995		65	171
02 18956	85	36		02 18996		40	159
02 18957	85	91		02 18997		65	156
02 18958	105	61		02 18998		65	104
02 18959	220	83		02 18999		40	103
02 18960	275	125		02 19000		35	111
02 18961	165	99		02 092276		40	120

22095



REPORT: 427-9672

PROJECT: 332

PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	AU GMT	Ag GMT	SAMPLE NUMBER	ELEMENT UNITS	AU GMT	Ag GMT

D2 092277							
D2 092278							
D2 092279							
D2 092280							
D2 092281							

D2 092282							



8712-034

REPORT: 127-2672

Grew Cr NSC 87-27

PROJECT: 332

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM	SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM
02 18922	2500	1207		02 18962	90	40	
02 18923	1250	367		02 18963	70	48	
02 18924	2500	1207		02 18964	60	92	
02 18925	5000	115		02 18965	125	90	
02 18926	5000	367		02 18966	95	64	
02 18927	3300	151		02 18967	75	138	
02 18928	1550	214		02 18968	70	81	
02 18929	2200	132		02 18969	75	80	
02 18930	700	54		02 18970	50	52	
02 18931	850	83		02 18971	35	49	
02 18932	750	49		02 18972	45	60	
02 18933	600	29		02 18973	65	60	
02 18934	700	28		02 18974	75	90	
02 18935	950	82		02 18975	90	89	
02 18936	450	60		02 18976	75	159	
02 18937	400	39		02 18977	45	200	
02 18938	390	44		02 18978	55	266	
02 18939	330	35		02 18979	40	153	
02 18940	310	87		02 18980	45	144	
02 18941	255	10		02 18981	60	340	
02 18942	240	27		02 18982	50	297	
02 18943	265	40		02 18983	60	217	
02 18944	275	22		02 18984	55	184	
02 18945	220	21		02 18985	55	259	
02 18946	185	34		02 18986	45	165	
02 18947	340	92		02 18987	65	129	
02 18948	180	38		02 18988	60	144	
02 18949	190	44		02 18989	70	114	
02 18950	185	54		02 18990	120	216	
02 18951	180	23		02 18991	75	142	
02 18952	100	13		02 18992	40	146	
02 18953	120	11		02 18993	40	172	
02 18954	145	22		02 18994	85	110	
02 18955	280	83		02 18995	65	171	
02 18956	85	36		02 18996	40	159	
02 18957	85	91		02 18997	65	156	
02 18958	105	61		02 18998	65	104	
02 18959	220	83		02 18999	40	103	
02 18960	275	125		02 19000	35	111	
02 18961	165	99		02 092276	40	120	

092039

Bondar & Company Ltd.
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North Vancouver, B.C.
Canada V7P 2R5
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Geochemical Lab Report

REPORT: 127-9672

PROJECT: 332

PAGE: 12

SAMPLE NUMBER	ELEMENT UNITS	NO PPB	AS PPH	SAMPLE NUMBER	ELEMENT UNITS	NO PPB	AS PPH
D2 092277		0	125				
D2 092278		0	139				
D2 092279		0	104				
D2 092280		50	192				
D2 092281		50	146				
D2 092282		30	121				

092099

Braden-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R3
Phone: (604) 983-0881
Telex: 12667



Certificate
of Analysis

REPORT: 427-10176 COMPLETE

GRW & NGC 87-28

REFERENCE INFO: 18712-045

CLIENT: NORANDA EXPLORATION CO. LTD.
PROJECT: 332

SUBMITTED BY: COPLAND
DATE PRINTED: 22-DEC-87

ORDER ELEMENT NUMBER ELEMENT LIMIT EXTRACTION METHOD

1. AuF and AgF ASSAY

2. AgF and AuF ASSAY

SAMPLE TYPES	NUMBER	SIZE	FRAC TONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D- DRILL CORE	58	150	4	58	ASSAY PREP	58
					OVERWEIGHT SAMPLE/LB	305

NOTES: # indicates ERRATIC RESULTS

REPORT COPIES TO: NORANDA EXPLORATION
MR. EVERT VAN LEEUWAN

INVOICE TO: MR. EVERT VAN LEEUWAN

*Goodman to
Hag to follow*

092099



REPORT: 427-10176

PROJECT: 332

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au GHT	Ag GHT	SAMPLE NUMBER	ELEMENT UNITS	Au GHT	Ag GHT
D2 NGC-87-28 092283	<0.07	<0.7		D2 NGC-87-28 092323	0.69	1.0	
D2 NGC-87-28 092284	<0.07	<0.7		D2 NGC-87-28 092324	0.58	1.0	
D2 NGC-87-28 092285	<0.07	<0.7		D2 NGC-87-28 092325	0.27	0.7	
D2 NGC-87-28 092286	<0.07	<0.7		D2 NGC-87-28 092326	0.27	0.7	
D2 NGC-87-28 092287	<0.07	<0.7		D2 NGC-87-28 092327	0.72	1.0	
D2 NGC-87-28 092288	<0.07	<0.7		D2 NGC-87-28 092328	0.14	<0.7	
D2 NGC-87-28 092289	<0.07	<0.7		D2 NGC-87-28 092329	0.14	<0.7	
D2 NGC-87-28 092290	<0.07	<0.7		D2 NGC-87-28 092330	0.17	<0.7	
D2 NGC-87-28 092291	<0.07	<0.7		D2 NGC-87-28 092331	0.10	<0.7	
D2 NGC-87-28 092292	<0.07	<0.7		D2 NGC-87-28 092332	0.17	<0.7	
D2 NGC-87-28 092293	<0.07	<0.7		D2 NGC-87-28 092333	0.17	<0.7	
D2 NGC-87-28 092294	<0.07	<0.7		D2 NGC-87-28 092334	0.14	<0.7	
D2 NGC-87-28 092295	<0.07	<0.7		D2 NGC-87-28 092335	0.10	<0.7	
D2 NGC-87-28 092296	<0.07	<0.7		D2 NGC-87-28 092336	0.17	<0.7	
D2 NGC-87-28 092297	<0.07	0.7		D2 NGC-87-28 092337	0.14	<0.7	
D2 NGC-87-28 092298	<0.07	0.7		D2 NGC-87-28 092338	0.31	0.7	
D2 NGC-87-28 092299	<0.07	<0.7		D2 NGC-87-28 092339	0.07	<0.7	
D2 NGC-87-28 092300	<0.07	<0.7		D2 NGC-87-28 092340	0.17	<0.7	
D2 NGC-87-28 092301	<0.07	<0.7					
D2 NGC-87-28 092302	0.41	0.7					
D2 NGC-87-28 092303	5.42	5.5					
D2 NGC-87-28 092304	1.41	3.1					
D2 NGC-87-28 092305	0.51	1.4					
D2 NGC-87-28 092306	0.27	1.0					
D2 NGC-87-28 092307	2.02	2.4					
D2 NGC-87-28 092308	22.56	188.2					
D2 NGC-87-28 092309	20.81	174.5					
D2 NGC-87-28 092310	0.48	3.4					
D2 NGC-87-28 092311	1.34	1.7					
D2 NGC-87-28 092312	7.03	4.8					
D2 NGC-87-28 092313	0.89	1.4					
D2 NGC-87-28 092314	1.17	1.7					
D2 NGC-87-28 092315	0.93	1.7					
D2 NGC-87-28 092316	0.86	1.4					
D2 NGC-87-28 092317	1.13	1.7					
D2 NGC-87-28 092318	0.38	1.0					
D2 NGC-87-28 092319	0.45	1.0					
D2 NGC-87-28 092320	0.69	1.4					
D2 NGC-87-28 092321	0.58	1.0					
D2 NGC-87-28 092322	0.96	1.7					

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Co. Ltd.



8712-045

REPORT: 127-10176

Grow & NGC 87-28

PROJECT: 332

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	As PPM	Hg PPB	SAMPLE NUMBER	ELEMENT UNITS	As PPM	Hg PPB
D2 NGC-87-28 092283		32	360	D2 NGC-87-28 092323		160	75
D2 NGC-87-28 092284		30	450	D2 NGC-87-28 092324		80	90
D2 NGC-87-28 092285		39	450	D2 NGC-87-28 092325		100	60
D2 NGC-87-28 092286		50	750	D2 NGC-87-28 092326		95	80
D2 NGC-87-28 092287		41	550	D2 NGC-87-28 092327		60	230
D2 NGC-87-28 092288		20	285	D2 NGC-87-28 092328		62	55
D2 NGC-87-28 092289		25	150	D2 NGC-87-28 092329		80	40
D2 NGC-87-28 092290		22	140	D2 NGC-87-28 092330		150	75
D2 NGC-87-28 092291		20	260	D2 NGC-87-28 092331		43	50
D2 NGC-87-28 092292		32	420	D2 NGC-87-28 092332		115	40
D2 NGC-87-28 092293		16	300	D2 NGC-87-28 092333		85	60
D2 NGC-87-28 092294		21	160	D2 NGC-87-28 092334		95	60
D2 NGC-87-28 092295		21	175	D2 NGC-87-28 092335		80	50
D2 NGC-87-28 092296		40	375	D2 NGC-87-28 092336		150	55
D2 NGC-87-28 092297		28	200	D2 NGC-87-28 092337		90	70
D2 NGC-87-28 092298		40	1100	D2 NGC-87-28 092338		100	90
D2 NGC-87-28 092299		50	1500	D2 NGC-87-28 092339		50	60
D2 NGC-87-28 092300		30	1900	D2 NGC-87-28 092340		58	60
D2 NGC-87-28 092301		20	1100				
D2 NGC-87-28 092302		40	1200				
D2 NGC-87-28 092303		24	850				
D2 NGC-87-28 092304		18	300				
D2 NGC-87-28 092305		50	520				
D2 NGC-87-28 092306		30	150				
D2 NGC-87-28 092307		78	235				
D2 NGC-87-28 092308		63	>5000				
D2 NGC-87-28 092309		50	>5000				
D2 NGC-87-28 092310		100	170				
D2 NGC-87-28 092311		160	120				
D2 NGC-87-28 092312		90	170				
D2 NGC-87-28 092313		150	120				
D2 NGC-87-28 092314		150	80				
D2 NGC-87-28 092315		80	90				
D2 NGC-87-28 092316		44	75				
D2 NGC-87-28 092317		80	130				
D2 NGC-87-28 092318		150	130				
D2 NGC-87-28 092319		60	110				
D2 NGC-87-28 092320		100	75				
D2 NGC-87-28 092321		180	80				
D2 NGC-87-28 092322		210	80				

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Canada V7P 2R5
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4-352667



Certificate
of Analysis

REPORT: 427-10179 - COMPLETE

Gravel NGC 87-29

REFERENCE INFO: 8712-043

CLIENT: NORANDA EXPLORATION CO. LTD.

SUBMITTED BY: H. COPLAND

PROJECT: 332

DATE PRINTED: 21-DEC-87

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	COBALT	71	0.03 GMT		
2	SILVER	71	0.3 GMT		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	71	2 - 150	71	ASSAY PREP.	71
				OVERWEIGHT SAMPLE/LB	260

NOTES: # indicates ERRATIC RESULTS

REPORT COPIES TO: MR. EVERT VAN LEEUWAN

INVOICE TO: MR. EVERT VAN LEEUWAN

Hg, As, Ge, Cu
to follow

092099



REPORT: 427-10129

PROJECT: 332

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SAMPLE NUMBER	ELEMENT UNITS	AG GNT	SAMPLE NUMBER	ELEMENT UNITS	AG GNT
D2 NGC-87-29 092341	0.14	<0.7	D2 NGC-87-29 18556	0.15	3.4
D2 NGC-87-29 092342	0.54	<0.7	D2 NGC-87-29 18557	0.19	3.1
D2 NGC-87-29 092343	0.31	<0.7	D2 NGC-87-29 18558	0.43	4.5
D2 NGC-87-29 092344	0.24	<0.7	D2 NGC-87-29 18559	0.69	2.4
D2 NGC-87-29 092345	0.48	<0.7	D2 NGC-87-29 18560	0.72	1.7
D2 NGC-87-29 092346	0.27	<0.7	D2 NGC-87-29 18561	0.79	1.7
D2 NGC-87-29 092347	0.10	<0.7	D2 NGC-87-29 18562	0.41	1.4
D2 NGC-87-29 092348	<0.07	<0.7	D2 NGC-87-29 18563	1.89	3.4
D2 NGC-87-29 092349	0.07	<0.7	D2 NGC-87-29 18564	0.51	1.4
D2 NGC-87-29 092350	0.07	<0.7	D2 NGC-87-29 18565	0.31	1.0
D2 NGC-87-29 092351	<0.07	<0.7	D2 NGC-87-29 18566	0.89	1.7
D2 NGC-87-29 092352	0.07	<0.7	D2 NGC-87-29 18567	0.65	1.7
D2 NGC-87-29 092353	0.10	<0.7	D2 NGC-87-29 18568	0.72	3.4
D2 NGC-87-29 092354	0.38	<0.7	D2 NGC-87-29 18569	0.79	2.1
D2 NGC-87-29 092355	0.14	<0.7	D2 NGC-87-29 18570	0.48	1.7
D2 NGC-87-29 092356	0.14	<0.7	D2 NGC-87-29 18571	0.79	1.0
D2 NGC-87-29 092357	0.10	<0.7	D2 NGC-87-29 18572	0.27	1.0
D2 NGC-87-29 092358	0.07	<0.7	D2 NGC-87-29 18573	0.27	1.0
D2 NGC-87-29 092359	0.07	<0.7	D2 NGC-87-29 18574	0.62	2.1
D2 NGC-87-29 092360	0.17	<0.7	D2 NGC-87-29 18575	0.31	0.7
D2 NGC-87-29 092361	0.34	1.4	D2 NGC-87-29 18576	0.51	1.0
D2 NGC-87-29 092362	0.99	6.2	D2 NGC-87-29 18577	0.34	0.7
D2 NGC-87-29 092363	2.74	11.7	D2 NGC-87-29 18578	0.31	1.0
D2 NGC-87-29 092364	58.25	618.2	D2 NGC-87-29 18579	0.17	<0.7
D2 NGC-87-29 092365	8.26	117.3	D2 NGC-87-29 18580	0.48	0.7
D2 NGC-87-29 092366	89.94	672.0	D2 NGC-87-29 18581	0.21	0.7
D2 NGC-87-29 092367	16.70	54.2	D2 NGC-87-29 18582	0.10	0.7
D2 NGC-87-29 092368	8.62	26.4	D2 NGC-87-29 18583	0.31	1.0
D2 NGC-87-29 092369	2.39	8.9	D2 NGC-87-29 18584	0.79	1.4
D2 NGC-87-29 092370	10.42	12.3	D2 NGC-87-29 18585	0.21	1.0
D2 NGC-87-29 092371	98.33	497.8	D2 NGC-87-29 18586	0.38	1.0
D2 NGC-87-29 092372	27.84	182.7			
D2 NGC-87-29 092373	132.93	907.2			
D2 NGC-87-29 092374	11.07	28.5			
D2 NGC-87-29 092375	1.95	10.3			
NGC-87-29 18551	1.17	3.8			
NGC-87-29 18552	1.92	4.5			
NGC-87-29 18553	4.80	6.9			
NGC-87-29 18554	0.45	1.7			
NGC-87-29 18555	0.65	1.4			

082081

[Signature]



REPORT: 127-10179

Gross Cr 87-29

PROJECT: 332

PAGE 1

8712-043

SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM	SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM
D2 NGC-87-29 092341		5000	61	D2 NGC-87-29 18556		150	115
D2 NGC-87-29 092342		3800	215	D2 NGC-87-29 18557		105	107
D2 NGC-87-29 092343		900	65	D2 NGC-87-29 18558		150	217
D2 NGC-87-29 092344		650	52	D2 NGC-87-29 18559		125	239
D2 NGC-87-29 092345		750	32	D2 NGC-87-29 18560		120	144
D2 NGC-87-29 092346		900	41	D2 NGC-87-29 18561		80	120
D2 NGC-87-29 092347		850	87	D2 NGC-87-29 18562		40	147
D2 NGC-87-29 092348		750	23	D2 NGC-87-29 18563		65	113
D2 NGC-87-29 092349		800	77	D2 NGC-87-29 18564		60	144
D2 NGC-87-29 092350		800	60	D2 NGC-87-29 18565		90	114
D2 NGC-87-29 092351		245	44	D2 NGC-87-29 18566		90	77
D2 NGC-87-29 092352		280	49	D2 NGC-87-29 18567		135	91
D2 NGC-87-29 092353		210	52	D2 NGC-87-29 18568		265	76
D2 NGC-87-29 092354		180	46	D2 NGC-87-29 18569		160	70
D2 NGC-87-29 092355		120	52	D2 NGC-87-29 18570		110	66
D2 NGC-87-29 092356		190	56	D2 NGC-87-29 18571		60	79
D2 NGC-87-29 092357		250	26	D2 NGC-87-29 18572		55	98
D2 NGC-87-29 092358		290	30	D2 NGC-87-29 18573		50	126
D2 NGC-87-29 092359		80	37	D2 NGC-87-29 18574		120	139
D2 NGC-87-29 092360		90	81	D2 NGC-87-29 18575		30	70
D2 NGC-87-29 092361		105	178	D2 NGC-87-29 18576		50	156
D2 NGC-87-29 092362		225	195	D2 NGC-87-29 18577		40	101
D2 NGC-87-29 092363		560	182	D2 NGC-87-29 18578		70	120
D2 NGC-87-29 092364		>5000	118	D2 NGC-87-29 18579		40	66
D2 NGC-87-29 092365		3500	43	D2 NGC-87-29 18580		60	60
D2 NGC-87-29 092366		>5000	67	D2 NGC-87-29 18581		40	85
D2 NGC-87-29 092367		1200	41	D2 NGC-87-29 18582		400	91
D2 NGC-87-29 092368		1050	81	D2 NGC-87-29 18583		140	327
D2 NGC-87-29 092369		260	81	D2 NGC-87-29 18584		60	159
D2 NGC-87-29 092370		440	105	D2 NGC-87-29 18585		75	123
D2 NGC-87-29 092371		>5000	109	D2 NGC-87-29 18586		45	146
D2 NGC-87-29 092372		>5000	170				
D2 NGC-87-29 092373		>5000	104				
D2 NGC-87-29 092374		1650	94				
D2 NGC-87-29 092375		850	127				
D2 NGC-87-29 18551		190	81				
D2 NGC-87-29 18552		210	67				
D2 NGC-87-29 18553		270	78				
D2 NGC-87-29 18554		90	133				
D2 NGC-87-29 18555		65	150				

092099



REPORT: 427-10185

PROJECT: 332

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT	SAMPLE NUMBER	ELEMENT UNITS	Au GMT	Ag GMT
D2 18587	<0.07	<0.7		D2 18627		0.65	2.7
D2 18588	<0.07	<0.7		D2 18628		22.01	107.3
D2 18589	<0.07	<0.7		D2 18629		4.53	22.3
D2 18590	<0.07	<0.7		D2 18630		2.02	6.2
D2 18591	<0.07	<0.7		D2 18631		0.51	3.4
D2 18592	<0.07	<0.7		D2 18632		3.67	4.1
D2 18593	<0.07	<0.7		D2 18633		0.27	1.4
D2 18594	<0.07	<0.7		D2 18634		0.34	1.4
D2 18595	<0.07	<0.7		D2 18635		16.94	17.1
D2 18596	<0.07	<0.7		D2 18636		41.52	43.2
D2 18597	<0.07	<0.7		D2 18637		28.22	27.4
D2 18598	2.13	1.4		D2 18638		0.89	3.4
D2 18599	<0.07	<0.7		D2 18639		0.21	1.0
D2 18600	<0.07	<0.7		D2 18640		0.41	1.4
D2 18601	<0.07	<0.7		D2 18641		0.41	2.1
D2 18602	<0.07	<0.7		D2 18642		1.23	3.4
D2 18603	1.37	0.7		D2 18643		<0.07	0.7
D2 18604	0.17	<0.7		D2 18644		0.10	0.7
D2 18605	0.14	<0.7		D2 18645		0.10	0.7
D2 18606	0.10	<0.7		D2 18646		0.14	0.7
D2 18607	0.24	<0.7		D2 18647		0.24	0.7
D2 18608	0.21	<0.7		D2 18648		0.10	0.7
D2 18609	0.27	<0.7		D2 18649		0.21	0.7
D2 18610	0.10	<0.7		D2 18650		0.10	0.7
D2 18611	<0.07	<0.7		D2 18651		0.17	0.7
D2 18612	<0.07	<0.7		D2 18652		0.24	0.7
D2 18613	<0.07	<0.7		D2 18653		0.07	0.7
D2 18614	<0.07	<0.7		D2 18654		0.10	0.7
D2 18615	0.07	<0.7		D2 18655		0.10	0.7
D2 18616	0.07	<0.7		D2 18656		0.14	0.7
D2 18617	0.07	<0.7		D2 18657		0.07	0.7
D2 18618	0.07	<0.7		D2 18658		0.31	0.7
D2 18619	0.10	0.7		D2 18659		0.24	0.7
D2 18620	0.27	1.0		D2 18660		0.10	0.7
D2 18621	0.10	0.7		D2 18661		0.55	1.4
D2 18622	0.07	1.0		D2 18662		0.10	0.7
D2 18623	0.38	4.8		D2 18663		0.17	1.4
D2 18624	0.17	0.7		D2 18664		0.10	0.7
D2 18625	0.13	3.1		D2 18665		0.10	1.4
D2 18626	0.15	2.1		D2 18666		0.07	1.0

Rev. 54/91 092089



REPORT: 427-10185

PROJECT: 332

PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	AU GHT	Ag GHT	SAMPLE NUMBER	ELEMENT UNITS	AU GHT	Ag GHT
D2 18667		0.24	1.0				
D2 18668		0.14	1.0				
D2 18669		0.07	<0.7				
D2 18670		0.07	<0.7				
D2 18671		0.07	<0.7				
D2 18672		<0.07	<0.7				
D2 18673		<0.07	<0.7				
D2 18674		<0.07	<0.7				
D2 18675		<0.07	<0.7				
D2 18676		<0.07	<0.7				

Robert Clegg



REPORT: 127-10185

Gross & NGC 87-20

PROJECT: 332

87-12-049

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM	SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM
02 18587		1900	47	02 18627		340	43
02 18588		>5000	47	02 18628		>5000	39
02 18589		>5000	79	02 18629		1450	117
02 18590		>5000	104	02 18630		380	163
02 18591		>5000	96	02 18631		200	115
02 18592		>5000	88	02 18632		200	112
02 18593		4100	42	02 18633		75	106
02 18594		5000	62	02 18634		140	81
02 18595		>5000	425	02 18635		1050	56
02 18596		>5000	137	02 18636		1750	50
02 18597		3200	50	02 18637		1450	56
02 18598		>5000	51	02 18638		145	89
02 18599		>5000	22	02 18639		100	41
02 18600		3500	49	02 18640		100	36
02 18601		>5000	28	02 18641		140	55
02 18602		1400	28	02 18642		75	46
02 18603		1350	51	02 18643		35	34
02 18604		1000	129	02 18644		55	52
02 18605		540	30	02 18645		65	110
02 18606		700	79	02 18646		100	58
02 18607		450	93	02 18647		45	60
02 18608		370	116	02 18648		60	114
02 18609		800	101	02 18649		85	71
02 18610		300	102	02 18650		35	61
02 18611		165	36	02 18651		45	61
02 18612		175	22	02 18652		50	65
02 18613		195	9	02 18653		35	85
02 18614		375	21	02 18654		60	92
02 18615		205	34	02 18655		55	54
02 18616		390	112	02 18656		75	101
02 18617		155	62	02 18657		40	54
02 18618		120	65	02 18658		60	84
02 18619		110	104	02 18659		100	51
02 18620		135	92	02 18660		90	75
02 18621		80	52	02 18661		180	61
02 18622		60	44	02 18662		60	120
02 18623		280	61	02 18663		140	108
02 18624		130	99	02 18664		70	84
02 18625		225	71	02 18665		70	84
02 18626		275	110	02 18666		65	114

092099

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SAMPLE NUMBER	ELEMENT UNITS	Hg PPB	As PPM
02 18667		90	153
02 18668		90	154
02 18669		50	152
02 18670		45	143
02 18671		50	214

02 18672		440	114
02 18673		45	69
02 18674		50	87
02 18675		30	48
02 18676		30	48

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Hole	Location	Azimuth	Angle	Depth (m)
87-14	10250E, 10000N	199	-50	165
15	10250E, 9995N	"	-45	140
16	10300E, 10000N	"	-45	171
17	10300E, 10000N	"	-70	253
18	10250E, 10000N	"	-70	292
19	10000E, 10000N	"	-55	173
20	10150E, 10000N	"	"	143
21	10100E, 10000N	"	"	150
22	10100E, 9990N	"	"	143
23	10050E, 10000N	"	"	140
24	10050E, 10030N	"	"	84
25	10275E, 10000N	"	"	170
26	10275E, 10030N	"	"	190
27	10225N, 10030N	"	"	189
28	10225E, 10000N	"	"	140
29	10175E, 10000N	"	"	143
87-30	10175E, 10030N	"	"	189

REVISED	GREW CREEK	
	092099	
	DRILL PLAN	
PROJ. No.	SURVEY BY:	DATE: Feb. 88
N.T.S.	DRAWN BY: HC	SCALE: 1:500
DWG. No.	NORANDA EXPLORATION	
3	Office: Whitehorse	