

NORANDA EXPLORATION COMPANY, LIMITED

(NO PERSONAL LIABILITY)

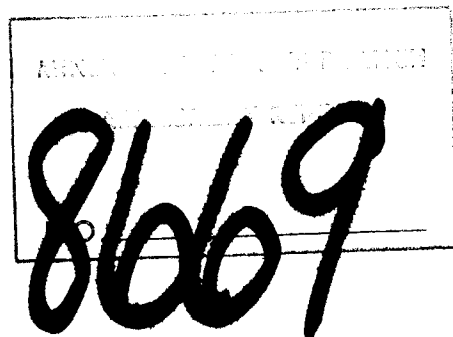
DIAMOND DRILL ASSESSMENT REPORT

"L" and "M" MINERAL CLAIMS

LUSTDUST PROPERTY

Omineca Mining District

N.T.S. 93N/11      55°30'N, 125°30'E



Owner: Zapata (Canada) Inc.  
Operator: Noranda Exploration Company, Ltd.

S.E. Prest  
November 19, 1980

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SUMMARY

Noranda Exploration Company, Limited (No Personal Liability) acquired the mineral rights to Granby Mining Corporation's Lustdust property when the latter's operations were purchased in early 1980. Granby and previous owners of the property have conducted considerable work including mapping, geophysical, trenching and diamond drilling surveys over vein type sulphide mineralization outcropping erratically over the grid area.

Noranda's work submitted in this report involved a diamond drill program to determine the potential for sulphide occurrences in areas containing conductors which had never been explored.

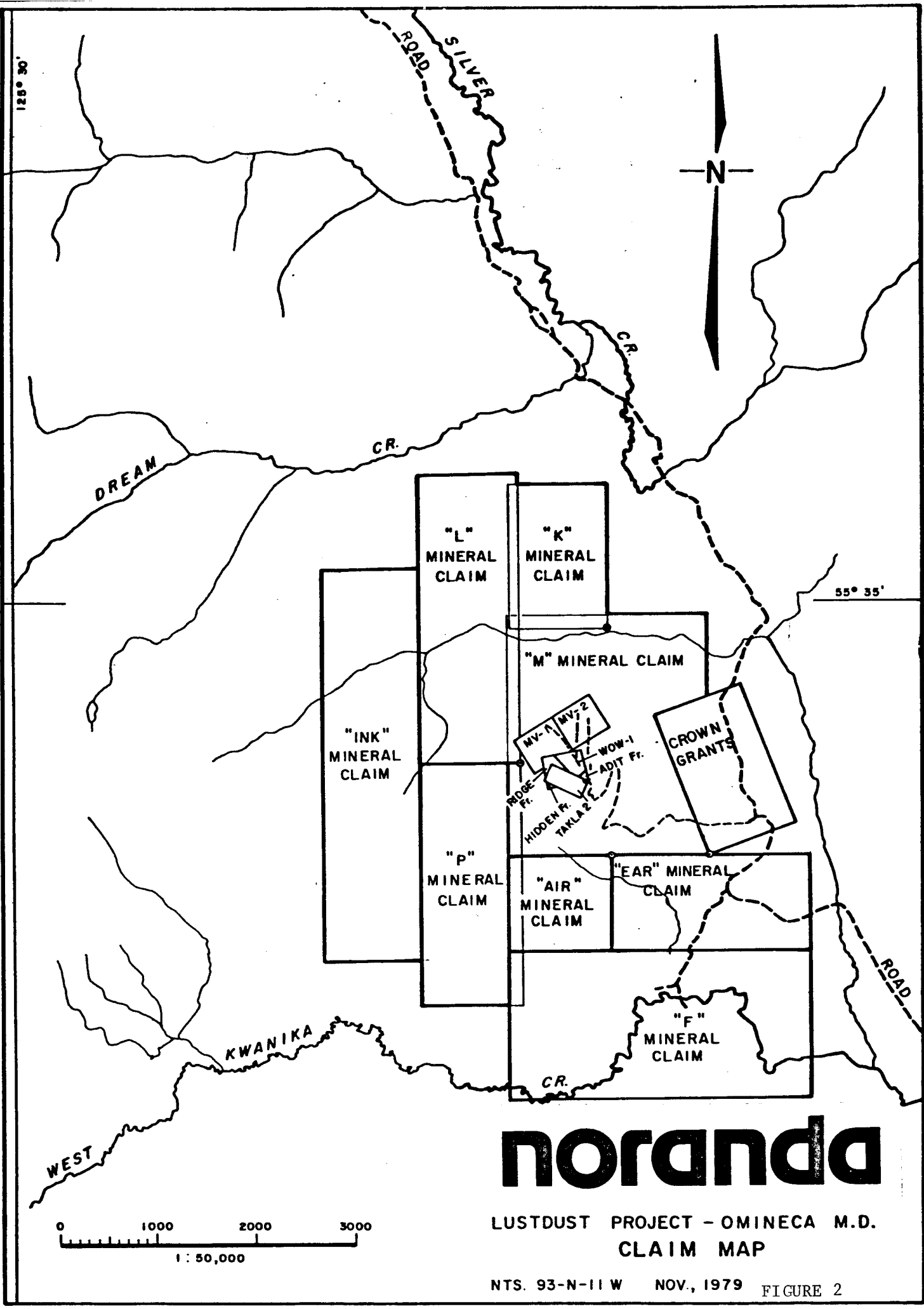
1. INTRODUCTION

This report describes drilling conducted during September and October over anomalous CEM, VLF and Pulse EM responses on the "L" and "M" claims. Currently, the property consists of the following claims:

LUSTDUST PROPERTY STATUS

November, 1980

<u>Claim Name</u>	<u>Record No.</u>	<u>No. Units</u>	<u>Owner of Record</u>	<u>Date Recorded</u>	<u>Date of Expiry</u>
K	813	6	Zapata (Canada) Ltd.	Oct. 17, 1977	Oct. 17, 1982
L	814	12	Zapata (Canada) Ltd.	Oct. 17, 1977	Oct. 17, 1989
M	815	20	Zapata (Canada) Ltd.	Oct. 17, 1977	Oct. 17, 1985
Air	1482	4	Zapata (Canada) Ltd.	Oct. 11, 1978	Oct. 11, 1986
Hidden Fr.	2128	1	Zapata (Canada) Ltd.	Oct. 4, 1979	Oct. 4, 1985
Adit Fr.	2129	1	Zapata (Canada) Ltd.	Oct. 4, 1979	Oct. 4, 1985
Ridge Fr.	2130	1	Zapata (Canada) Ltd.	Oct. 4, 1979	Oct. 4, 1985
	2167	10	Zapata (Canada) Ltd.	Oct. 25, 1979	Oct. 25, 1990
Ear	2168	8	Zapata (Canada) Ltd.	Oct. 25, 1979	Oct. 25, 1985
Ink	2169	16	Zapata (Canada) Ltd.	Oct. 25, 1979	Oct. 25, 1990
F	2170	18	Zapata (Canada) Ltd.	Oct. 25, 1979	Oct. 25, 1980
Wow 1	1514	1	Zapata (Canada) Ltd.	Oct. 20, 1978	Oct. 10, 1985
MV-1	132409	1	Zapata (Canada) Ltd.	Sep. 20, 1974	Sep. 20, 1985
MV-2	132410	1	Zapata (Canada) Ltd.	Sep. 20, 1974	Sep. 20, 1985



**noranda**

LUSTDUST PROJECT - OMINECA M.D.  
CLAIM MAP

NTS. 93-N-11 W NOV., 1979 FIGURE 2





PROPERTY LOCATION MAP



The Lustdust prospect is now held under option agreement by Zapata Canada Incorporated and Noranda Exploration Company, Limited.

The foregoing consists of eleven claims, and three fractions comprising 100 units, grouped for assessment as follows:

Mair Group, consisting of M, Air, Wow-1, MV-1, MV-2, Hidden Fr, Adit Fr, Ridge Fr, Ear and F claims.

Plink Group, consisting of the P, L, K and Ink claims.

## 2. LOCATION, TOPOGRAPHY AND ACCESS

A 1:250 000 location map and a 1:50 000 claim map included in this report indicate the general position and local claim distribution. The property is located in the Omineca Mining District 80 km west of Manson Creek and east of Takla Lake at 55°30'N, 125°30'E. Access is by gravel road from Fort St. James, 273 km to the southwest of the property, and by truck road, 45 km from the B.C. Railroad at Takla Landing. Tsayta Lake, near the Takla Landing road, is accessible by float equipped aircraft.

The property is characterized by very steep hills and heavy bush, with the highest point approximately 1400 meters above sea level. Outcrop exposure, particularly to the north, is poor.

## 3. REGIONAL GEOLOGY

The Lustdust property is situated in the Omineca Tectonic Belt of the Canadian Cordillera. The local area lies between two major fault zones, the Pinchi Fault to the east and the Takla Fault to the west. The entire area is underlain by Cache Creek Group rocks (Patterson I.A., 1974 Geol. Survey of Can. Paper 74-1, part B). These constitute the most extensive rock assemblage and comprise highly deformed chert, phyllite and argillite, with local greywacke that contains discontinuous bodies of carbonate and metavolcanic rocks. The Cache

Creek rocks are bounded on the east by the Pinchi Fault which, for the most part, separates upper Paleozoic rocks from the Jurassic Hogem Batholith. These rocks of the Cache Creek group are described as having undergone two periods of deformation followed by kink banding and faulting adjacent to the Pinchi fault. This latter deformation probably influences the local geology on the Lustdust property.

#### 4. DIAMOND DRILLING PROGRAM

##### 4.1 OBJECTIVE

The 1980 diamond drilling program was designed to test coincident CEM and VLF conductors detected near the flanks of magnetic anomalies and to determine their relationship and significance to massive sulphide mineralization occurring on surface in the northwestern grid area.

##### 4.2 RESULTS

Two inclined holes were drilled on the Lustdust property during the period October 19 to November 2, 1980 comprising a total of 299.3 meters. The program was helicopter supported and completed under contract by Drilcor Industries of Richmond, B.C., and is summarized below:

TABLE I  
DIAMOND DRILL SUMMARY, 1980

<u>Hole No:</u>	<u>Location</u>	<u>Dip</u>	<u>Direction</u>	<u>Depth</u>	<u>Accum. Depth</u>
LD-80-1	L20N - 26+10W	-60°	070°	152.7	152.7
LD-80-2	L20+05N - 18+60W	-60°	070°	146.6	299.3

Two drill logs, one drill section, and assay results form Appendices I and II of this report. Core is stored on the Lustdust property, near the drilling sites.



#### 4.2.1 DDH LD-80-1

This hole was collared at L20N, 26+10W and drilled -60° at a bearing of 070° and drilled to a total depth of 152.7 meters. The target was a strong VLF conductor coincident with a broad, deep CEM horizontal shootback anomaly in the vicinity of a large magnetic anomaly.

Drilling revealed a sequence of dolomitic marble, silicified phylitic rocks and epidote diopside skarn intruded by porphyritic felsite dykes. One half to one per cent sulphides were found as disseminations and veinlets of pyrite with traces of chalcopyrite over localized areas throughout the entire drill intersection. Up to 25-30% sulphides occur at 124.5-129.7 meters in an epidote skarn including four inches of massive chalcopyrite in occurrence with limited sphalerite. The best intersection assayed 40,000 ppm Cu, 840 ppm Zn, 720 ppm Mo, 70 ppm Ag and 5400 ppb Au. The hole was terminated in a silicified dolomitic marble containing approximately 5% pyrite and pyrrhotite.

#### 4.2.2 DDH LD-80-2

This drill hole was designed to test a broad CEM horizontal shootback anomaly and VLF conductor near the flank of a localized magnetic feature. The collar was located on L20+05N at 18+60W and inclined -60° at an azimuth of 070° and drilled to a total depth of 146.6 meters.

Geology comprised a sequence of chert, graphite-bearing argillite breccias and limestone breccias intruded by a felsic dyke from 33.8 to 35.5 meters. Only a trace of sulphides were observed in the hole and therefore it is likely that graphitic argillites occurring in several intersections is the cause of the geophysical anomalies. This hole was terminated at 146.6 meters in a grey unaltered limestone.

TABLE II

ASSAY RESULTS

<u>Sample No.</u>	<u>Hole No.</u>	<u>Interval</u>	<u>ppb Au</u>	<u>ppm Mo</u>	<u>ppm Ag</u>	<u>ppm Cu</u>	<u>ppb Hg</u>	<u>ppm W</u>	<u>ppm Pb</u>	<u>ppm Zn</u>	<u>ppm As</u>
Y6526	LD-80-1	94.3-97.3	20	8	0.4	212		18		40	
Y6527	LD-80-1	14.0-17.0	20	5	0.4	64		75		30	
Y6528	LD-80-1	125.95-126.25	5400	720	70	40,000	60	0	2	840	24
Y6529	LD-80-1	126.25-127.0	2000	400	22.5	15,000	30	0	2	104	38
Y6530	LD-80-1	125.30-125.95	200	100	3.2	1,600	20	10	2	42	24
Y6531	LD-80-1	127.0-128.4	30	30	1	620	20	25	2	36	50

5. CONCLUSIONS AND RECOMMENDATIONS

Drill core from DDH LD-80-1 has indicated an intersection of more than 150 meters of disseminated and vein type sulphide mineralization consisting of pyrite and arsenopyrite with limited amounts of chalcopyrite and sphalerite. In addition the above shows promising indications that certain anomalies detected by CEM, PEM and VLF surveys are bonafide conductors and probably represent the northern extensions of silver, zinc and arsenic mineralization observed in several restricted localities on the property.

Six drill holes comprising 1000 meters are warranted on the northern portion of the prospect to determine the cause of several prominent geophysical anomalies in areas which have received very little exploration effort.

Respectfully submitted,

S.E. Prest  
Project Geologist

APPENDIX I

DIAMOND DRILL LOGS AND SECTIONS

APPENDIX II  
STATEMENT OF COSTS

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT LUSTDUST

DATE November 1980

TYPE OF REPORT DIAMOND DRILLING

a) Wages:

No. of Days 40

Rate per Day \$ 96.351

Dates From: Sept. 13 to Oct. 25, 1980

Total Wages 40 x \$96.351 3,854.04

b) Food and Accomodation:

No of days 40

Rate per day \$ 55.0767

Dates From: Sept. 13 to Oct. 25, 1980

Total Cost 40 x \$55.0767 2,203.07

c) Transportation:

No of days 40

Rate per day \$ 294.7215

Dates From: Sept. 13 to Oct. 25, 1980

Total Cost 40 X \$ 294.7215 11,788.86

d) Instrument Rental:

Type of Instrument

No of days

Rate per day \$

Dates From:

Total Cost X \$

Type of Instrument

No of days

Rate per day \$

Dates From:

Total Cost X \$



f) Analysis  
(See attached schedule)

g) Cost of preparation of Report

Author	3 Days @ 96.351	289.05	
Drafting	2 Days @ 120.00	240.00	
Typing	1 Day @ 100.00	100.00	<u>629.05</u>

h) Other:

Drill Core Diamond Drill Contractor		26,999.87	
B.C. Tel		181.34	
Supervision: D.E. Cross P. Eng.			
G.E. Dirom P. Eng.			
2 Days @ 240.00		480.00	<u>27,661.21</u>

Total Cost

\$46,136.23

e) Unit costs for Diamond Drilling

No of days

No of units 299.31 m

Unit costs \$154.14195 / M

Total Cost 299.31 x \$154.14195

\$46,136.23

APPENDIX III  
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Steven E. Prest, of the town of Smithers, Province of British Columbia, do certify that:

1. I have been an employee of Noranda Exploration Company, Limited since April 1976, and intermittently since April 1974.
2. I am a member of the Canadian Institute of Mining and Metallurgy, Prospectors and Developers Association and the Canadian Remote Sensing Society.
3. I am a graduate of Acadia University, Wolfville, Nova Scotia with a Bachelor of Science Degree in Geology (1976).

Dated at Smithers

this 24th day of November, 1980

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Steven E. Prest

Project Geologist

Noranda Exploration Company, Limited

(No Personal Liability)

NORANDA EXPLORATION COMPANY, LIMITED

Collared Oct. 19/80		Completed Oct. 23/80		Core Size BQ		Property Lustdust			Project No 1035		NTS No. 93N/11			
FIELD COORDINATES						SURVEYED COORDINATES						Sheet 1 of 3		
Line 20N		Elev. 4500 ASL		Dip -60°		Lat.		Elev.		Dip		Hole No.		
Sta. 26+10W		Depth 152.7 m		Bearing 070°		Dep.		Depth		Bearing		LD 80-1		
metres	Rec'y	Graphic Log	Description				% Sulp.	Est. Grade	Sample No.	Lt.				
0-1.8	--		Casing (overburden to 1.4 m).											
1.8-54.3	100%		DOLOMITIC MARBLE AND SILICIFIED PHYLLITIC ROCKS. V.f.g. light grey-brown to grey black; mottled texture. Original texture is brecciated representing tectonic or collapsed fragments; remnant bedding and apparent banding 30-45° to C.A. Sulphide veinlets 50° to 30° to CA. Sulphides consist of Py with minor Cpy and occur as fine disseminations as well as veinlets of various sizes. Shearing and epidote concentrations around rims make sulphide distinction difficult. Light yellow limonite stain occurs on fracture and shear planes to 8.0 m. White unidentified powder infrequently occurs on fracture planes, especially at top of section (54.3-61.7 hornfels).											
54.3-62.5	99%		GREEN TO LIGHT GREY BROWN EPIDOTE SKARN. Disseminated sulphides 1-5% Po and Py with possible Cpy. f.g. wkly. porphyritic felsic intrusive.											
62.5-68.9			FINE GRAINED FELDSPAR PORPHYRY. Light grey-brown containing chlorite, epidote veinlets. No significant sulphide mineralization.											
68.9-88.6			DOLOMITIC MARBLE. V.f.g. silicified; varying proportions of phlogopite hornfels.											
88.6-88.9			GARNET DIOPSIDE SKARN											
88.9-92.7			LIGHT GREY FELDSPAR PORPHYRY											

NORANDA EXPLORATION COMPANY, LIMITED

Collared		Completed		Core Size		Property			Project No			NTS No.		
FIELD COORDINATES						SURVEYED COORDINATES						Sheet 2 of 3		
Lat.		Elev.		Dip		Lat.		Elev.		Dip		Hole No.		
Dep.		Depth		Bearing		Dep.		Depth		Bearing		LD 80-1		
metres	Rec'y	Graphic Log	Description					% Sulp.	Est. Grade	Sample No.	Lt.			
92.7-94.3			DOLOMITIC MARBLE. Silicified, v.f.g.											
94.3-106.1			GARNET DIOPSIDE SKARN. V.f.g. light grey brown to grey-green; epidote occurrence near top of section. Garnet is poorly developed but is probably almandite or grossularite variety; 0.5-1% sulphide concentration as disseminations and narrow veins; up to 10% near lower contact; local massive replacements; fracturing and banding 20° to C.A.											
106.1-108.1	90%		SILICIFIED MARBLE. <1% sulphides.											
108.1-109.3	<95%		EPIDOTE SKARN. Light red-brown with qtz and calcite veinlets; ~<5% sulphides.											
109.3-117.1	100%		DOLOMITIC MARBLE, SKARN, CHERT AND INTERLAYERED MIXED ROCKS. <5% sulphides, bedding ~45° to C.A.											
117.1-121.2	100%		PORPHYRITIC FELSITE DIKE. Euhedral to subhedral feldspar xls up to 0.5 cm dia., occasional subhedral hornblende xls; <0.5% sulphide; 117.6 weak fault.											
121.2-121.5			SILICIFIED EPIDOTIZED MARBLE. Trace sulphides.											
121.5-122.5			EPIDOTE DIOPSIDE SKARN. Green-red with up to 15% sulphides consisting of Py and Po.											
122.5-124.5			SILICIFIED MARBLE. Trace sulphides; bedding 45° to C.A.											
124.5-129.7			EPIDOTE DIOPSIDE SKARN. V.f.g. various color concentrations; up to 25-30% sulphides to 126.9; massive chalcopyrite over 4" at 124.9 in occurrence with 3-5% sphalerite. Po becoming more prominent with depth;											



NORANDA EXPLORATION COMPANY, LIMITED

Collared		Completed		Core Size		Property			Project No			NTS No.		
FIELD COORDINATES						SURVEYED COORDINATES						Sheet 3 of 3		
Lat.		Elev.		Dip		Lat.		Elev.		Dip		Hole No.		
Dep.		Depth		Bearing		Dep.		Depth		Bearing		LD 80-1		
metres	Rec'y	Graphic Log	Description					% Sulp.	Est. Grade	Sample No.	Lt.			
			possible v.f.g. fluorite and cinnibar at 128.5. 50% of rock is sulphides throughout most of section.											
129.7-130.5			RED-BROWN TO WHITE SILICIFIED PHYLLITE AND LIMESTONE. Bedding ~30° to C.A. Trace sulphides as veinlets throughout.											
130.5-131.3			DIOPSIDE SKARN. <1% sulphides.											
131.3-131.5			SILICIFIED MARBLE											
131.5-134.3			SKARN. Prominent Py and Po veinlets; occasional intermixed silicified phyllites and dolomitic limestone.											
134.3-135.8			SILICIFIED MARBLE with some intermixed skarn material.											
135.8-151.2			FRESH PORPHYRITIC INTRUSIVE. Qtz monzonite to diorite composition; contains up to 20% sulphides with 10% average throughout. Py and Po most prominent sulphide mineral; 145.5 prominent shear containing unidentified blue-green clay mineral.											
151.2-152.7			SILICIFIED DOLOMITIC MARBLE. Remnant bedding 45° to C.A.; <5% Py and Po.											
152.7			E.O.H.											
NOTE: Casing remains in hole and core stored on ~L17N, 21+50W.														

DATE \_\_\_\_\_

LOGGED BY \_\_\_\_\_

NORANDA EXPLORATION COMPANY, LIMITED

Collared Oct. 24/80	Completed Nov. 2/80	Core Size BQ	Property LUSTDUST	Project No 1035	NTS No. 93N/11
FIELD COORDINATES			SURVEYED COORDINATES		
Lat. L20+05N	Elev. 1300 m.	Dip -60°	Lat.	Elev.	Dip
Dep. 18+60W	Depth 146.6 m	Bearing 070°	Dep.	Depth	Bearing
					Sheet 1 of 4
					Hole No. LD 80-2

metres	Rec'y	Graphic Log	Description	% Sulp.	Est. Grade	Sample No.	Lt.						
0-4.0	---		OVERBURDEN										
4.0-21.0	>95%		CHERT-ARGILLITE BRECCIA. Matrix of chlorite and graphite. Irregular, thin calcite veining, minor pyrite veining.										
21.0-33.8	>95%		LIMESTONE BRECCIA. Matrix of chlorite and graphite. Irregular, thin calcite veining. Appearance similar to above section.										
33.8-35.5	20%		FELSIC DYKE. Coarse, porphyritic, buff to orange coloured. Very poor recovery.										
35.5-42.7	>95%		LIMESTONE BRECCIA. As from 21.0-33.8 m. Graphite more prevalent.										
42.7-46.0	>95%		LIMESTONE. Mostly grey, medium-grained, crystalline texture. Some patches of darker, finer limestone (uncrystallized?). Extensive, irregular, thin calcite veining.										
46.0-48.5	>95%		LIMESTONE. Entirely grey, medium grained and crystalline. Irregular thin calcite veining.										

DATE November, 1980 LOGGED BY M. Savell

NORANDA EXPLORATION COMPANY, LIMITED

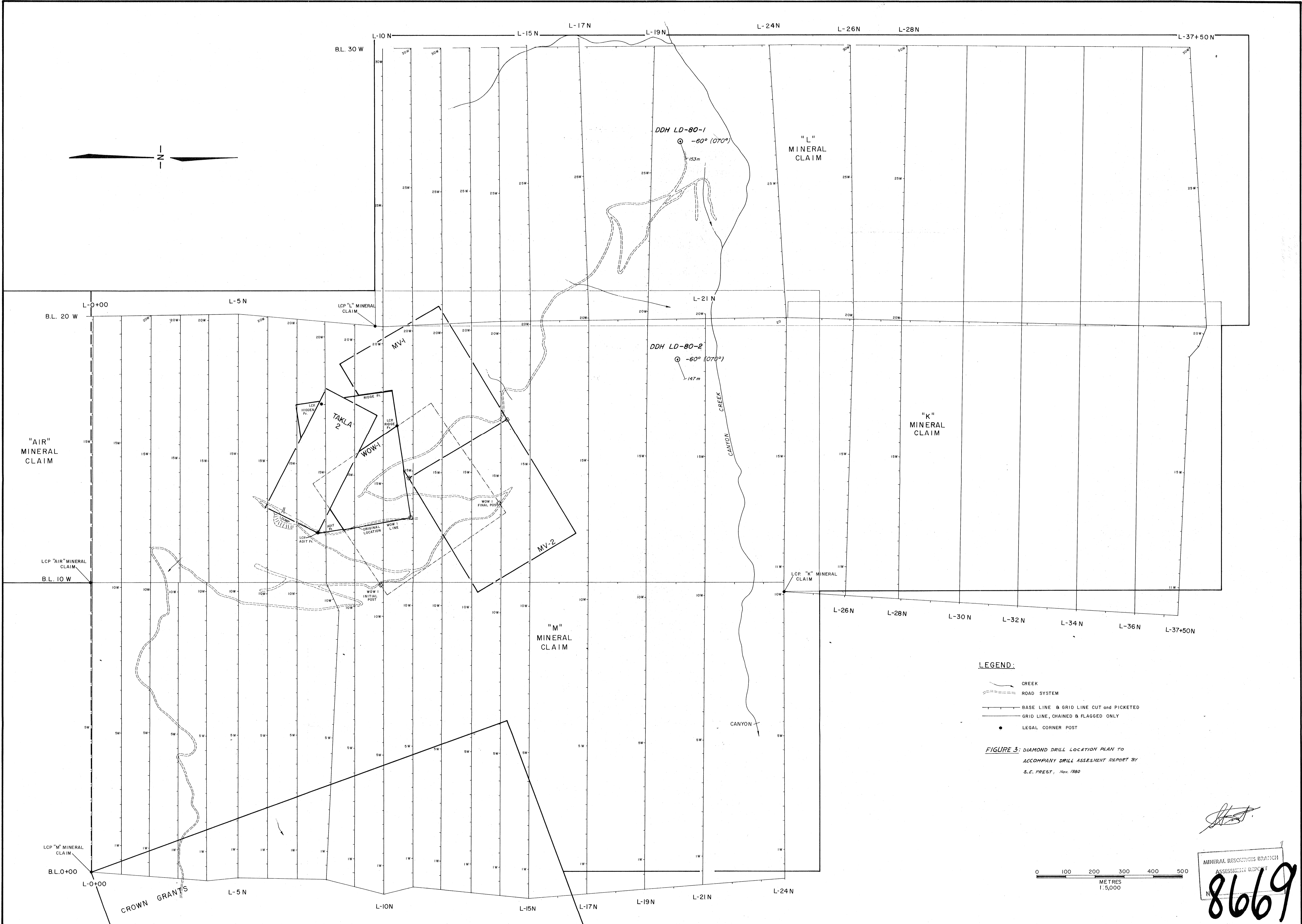
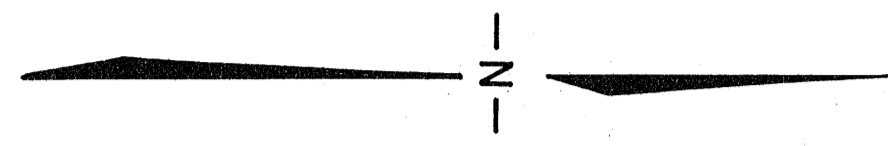
Collared		Completed		Core Size		Property LUSTDUST			Project No		NTS No.			
FIELD COORDINATES						SURVEYED COORDINATES						Sheet 2 of 4		
Lat.		Elev.		Dip		Lat.		Elev.		Dip		Hole No.		
Dep.		Depth		Bearing		Dep.		Depth		Bearing		LD 80-2		
metres	Rec'y	Graphic Log	Description					% Sulp.	Est. Grade	Sample No.	Lt.			
48.5-50.7	>95%		CONGLOMERATE(?). Stretched, aligned, rounded cherty pebbles up to 1 cm across in a fine, dark greyish-green matrix. Extensive thin, irregular quartz and calcite veining.											
50.7-83.8	>95%		LIMESTONE. As from 46.0-48.5 m.											
83.8-89.8	>95%		ARGILLITE. Dark green to black. Cherty in places. Some chloritic alteration. Thin calcite veining, mostly at about 30°-40° to core axis.											
89.8-92.7	>95%		LIMESTONE. As from 46.0-48.5 m. Faint marble like texture.											
92.7-106.0	>95%		LIMESTONE-ARGILLITE BRECCIA. Matrix of mainly chlorite. Extensive, irregular, thin calcite veining.											
106.0-108.2	>95%		LIMESTONE. As from 46.0-48.5 m. Minor thin, pyrite veining at contacts.											
108.2-108.8	>95%		LIMESTONE-ARGILLITE BRECCIA. As from 92.7-106.0 m.											

NORANDA EXPLORATION COMPANY, LIMITED

Collared		Completed		Core Size		Property LUSTDUST			Project No		NTS No.				
FIELD COORDINATES						SURVEYED COORDINATES						Sheet 3 of 4			
Lat.		Elev.		Dip		Lat.		Elev.		Dip		Hole No.			
Dep.		Depth		Bearing		Dep.		Depth		Bearing		LD 80-2			
metres	Rec'y	Graphic Log	Description					% Sulp.	Est. Grade	Sample No.	Lt.				
108.8-111.3	1.3	95%	GREYWACKE. Fine grained, greyish-green, with banded, speckled texture. Minor limestone, irregular calcite veining.												
111.3-123.9	3.9	95%	LIMESTONE. As from 46.0-48.5 m.												
123.9-127.1	7.1	95%	SILICEOUS MARBLE. Fine, greenish rock with wavy, marble-like texture. Unrecrystallized, grey limestone fragments make up 10% of rock by volume. Irregular thin calcite veining. Pyrite at bottom contact.												
127.1-132.0	2.0	95%	LIMESTONE. As from 46.0-48.5 m. Minor patches of above rock type.												
132.0-135.3	5.3	95%	SILICEOUS MARBLE. As from 123.9-127.1 m.												
135.3-135.9	5.9	95%	LIMESTONE. As from 46.0-48.5 m.												
135.9-137.8	7.8	95%	SILICEOUS MARBLE. As from 123.9-127.1 m.												
137.8-146.6	6.6	95%	LIMESTONE. As from 46.0-48.5 m. Faint marble-like texture. Minor calcite, quartz veining. Pyrite at 146.0 m.												







**LEGEND:**  
CREEK  
ROAD SYSTEM  
BASE LINE & GRID LINE CUT and PICKETED  
GRID LINE, CHAINED & FLAGGED ONLY  
LEGAL CORNER POST

**FIGURE 3: DIAMOND DRILL LOCATION PLAN TO ACCOMPANY DRILL ASSESSMENT REPORT BY S.E. PREST, Nov. 1980**

0 100 200 300 400 500  
METRES  
1:5,000

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
8669

DATE REVISED	BY	DRAWN BY:	ZAPATA GRANBY CORPORATION	TITLE:
		CHECKED	PROJECT: LUSTDUST (Nº.339)	
		APPROVED		
		DATE		