

ASSESSMENT REPORT ON DIAMOND DRILLING  
ON THE M 18, 20, 25 MINERAL CLAIMS

(Quartz Lake Property)

95 D-5/12

60°31'N

127°56'W

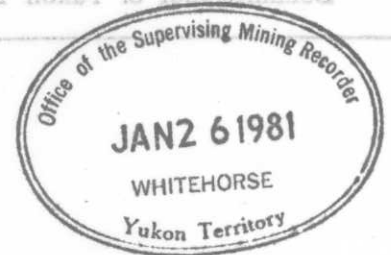
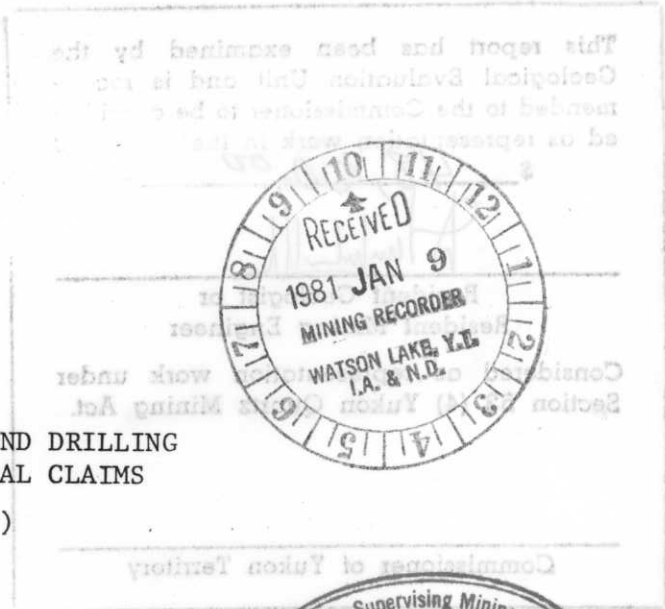
NORANDA EXPLORATION COMPANY LIMITED

(No Personal Liability)

090710

G. Macdonald

December 16, 1980



This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$ 48,800.00

Resident Geologist or  
Resident Mining Engineer

Considered as representation work under  
Section 53 (4) Yukon Quartz Mining Act.

Commissioner of Yukon Territory



ASSESSMENT REPORT ON DIAMOND DRILLING  
ON THE N 18, 20, 22 MINERAL CLAIMS  
(Quartz Lake Property)

92 D-2/12

127°26'W

60°31'N

NOBANDA EXPLORATION COMPANY LIMITED  
(No Personal Liability)

020710

December 16, 1980

G. Macdonald

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DRILL HOLE LOCATION

Introduction:

The claims referred to in this report are registered as indicated in the Appendix.

Diamond Drilling was done on the following claims:

<u>Claim</u>	<u>Number</u>
M 18	70365
M 20	70367
M 25	70459

The M 18, 20, and 25 Mineral Claims are part of the South Nahanni, Dorothy, M, QTZ, STRAT, WH1 3Fr and PIC 1-3 Fr claim block known as the McMillan or Quartz Lake Property. The property is located 45 miles N.E. of Watson Lake on Claim Sheet 95 D 5/12.

Access in 1980 was by helicopter and/or fixed wing aircraft from Watson Lake, Yukon.

The 1980 Diamond Drill Program was designed to test geological and geophysical targets in the "South Zone" area. The program comprised of 5 holes (#138, #139, #141, #143, #144) for a total of 1,719 feet.

Drilling equipment (a gasoline-powered BQ Hydra-Wink drill) was supplied by Drillcor Industries of Richmond, B.C. as contractor to Noranda.

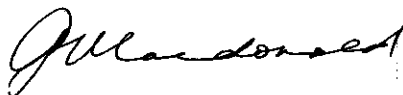
Core is stored on the property on lease claim SN 5.

The drill program was conducted from May 11, 1980 to May 28, 1980 under the supervision of R. Rogers, R. McIntyre, G. Macdonald and G. Dirom. All are employees of Noranda.

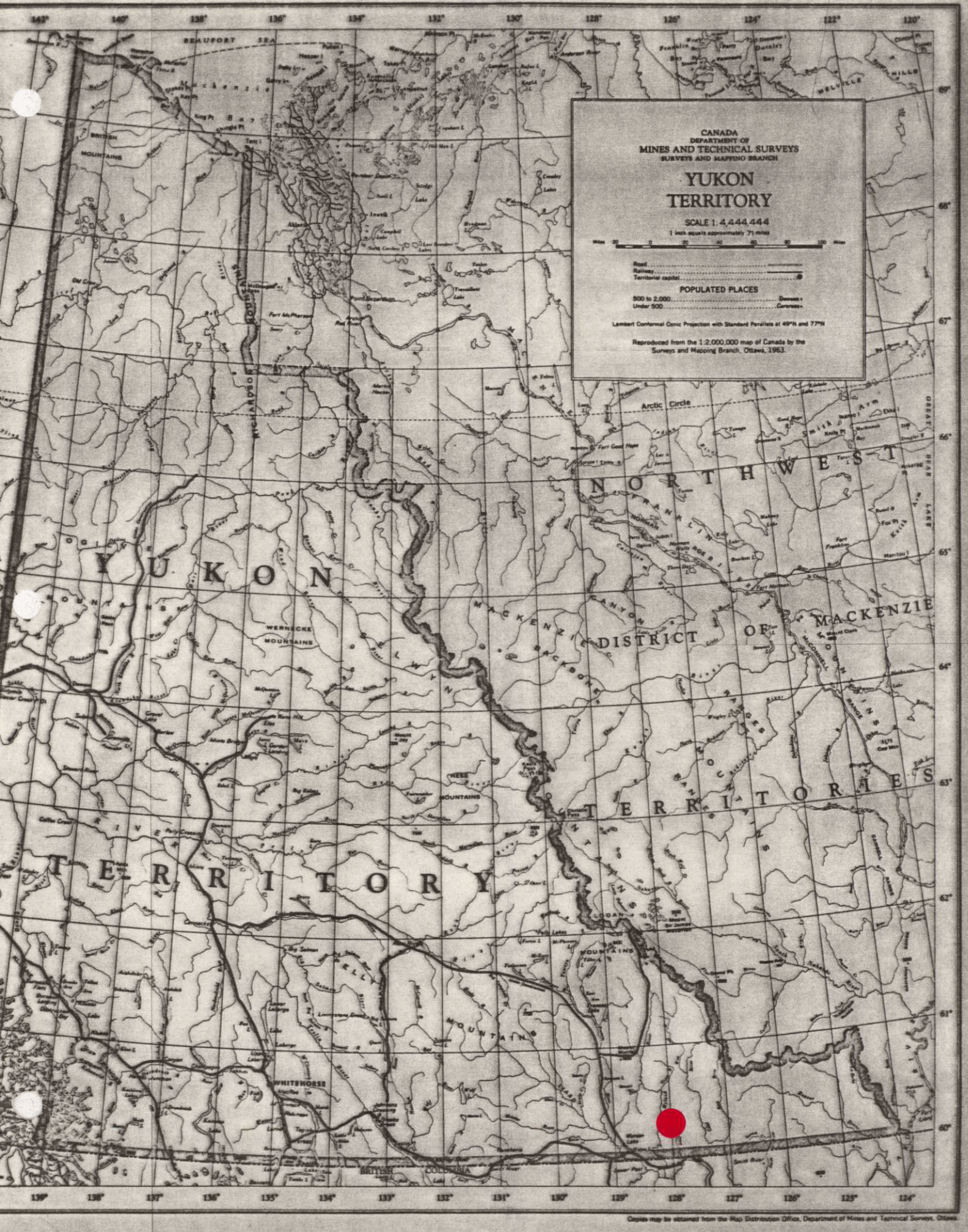
Drill Logs:

The following drill logs summarize the program.

Submitted by:



G. Macdonald  
District Geologist  
December 16, 1980



CANADA  
DEPARTMENT OF  
MINES AND TECHNICAL SURVEYS  
SURVEYS AND MAPPING BRANCH

# YUKON TERRITORY

SCALE 1:4,444,444

1 inch equals approximately 71 miles



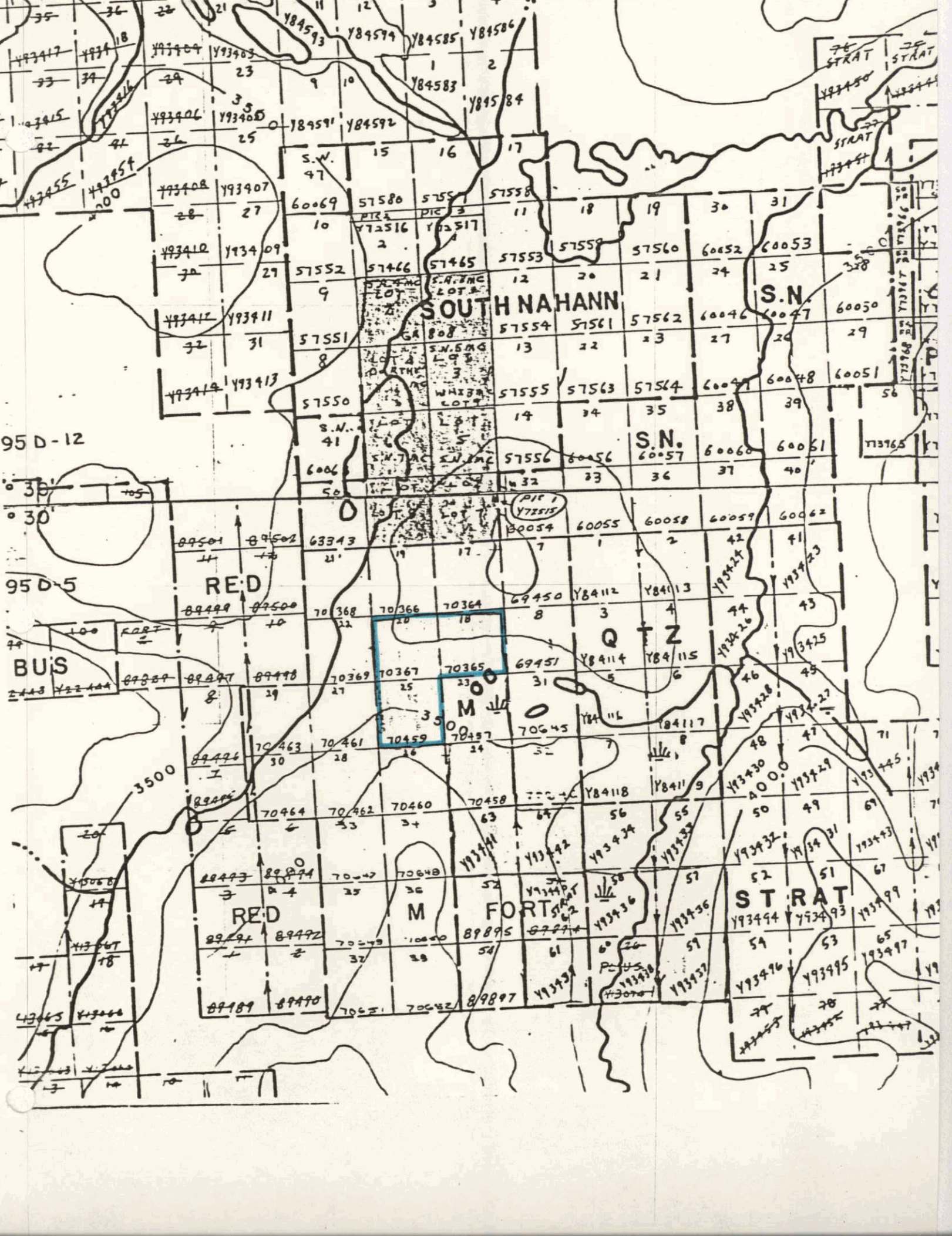
Road .....  
Railway .....  
Territorial capital .....

### POPULATED PLACES

500 to 2,000 .....  
Under 500 .....

Lambert Conformal Conic Projection with Standard Parallels at 69°N and 77°N

Reproduced from the 1:2,000,000 map of Canada by the  
Surveys and Mapping Branch, Ottawa, 1963.



**SOUTH NAHANN**

S.N.

S.N.

RED

M

Q

Z

RED

M

FORT

STRAT

95 D - 12

95 D - 5

BUS

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PIE  
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A.O.O.

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NORANDA EXPLORATION COMPANY, LIMITED

Collared 12/5/80	Completed 14/5/80	Core Size B.Q.	Property QUARTZ LAKE, Y.T.	Project No 942	NTS No. 95D
FIELD COORDINATES			SURVEYED COORDINATES		
Lat. 36+00S	Elev. 3860	Dip -90	Lat. 93,577 N	Elev. 3832.9	Dip
Dep. 3+00W	Depth 347	Bearing -	Dep. 99,682 E	Depth	Bearing
					Sheet 1 of 3
					Hole No. 138

Footage	Rec'y	Graphic Log	Description	% Sulph.	Est. Grade	Sample No.	Lt.			
16.0			Overburden, largely glacial debris, some locustrine loonshit			P6105		117-122		
31.0	90		<u>limestone</u> : dark grey, bedding not visible, stockwork of calcite fractures, 1/8 to 1/2" thick throughout. Rusty	T		06		122-127		
			jarosite-goethite patches throughout, probably after pyrite			07		127-132		
36.0	85		<u>limestone</u> as above, but slightly more sheared, calcite bands in excess of 1" thick			08		132-137		
42.2	90		limestone as above, sheared and brecciated, graphitic partings, mylonitic, no rusty spots, no visible sulphide			09		137-142		
47.3	90		<u>argillite</u> , dark grey, graphitic partings, some clasts of <u>limestone</u> , calcite fractures 1/2" at 46.0			10		282-287		
47.4	90		<u>limestone</u> brecciated as above			11		287-292		
48.5	85		<u>argillite</u> , dark grey as above. Bands at 65° to core axis			12		292-297		
49.2	90		<u>limestone</u> brecciation, particles angular to 1/2" diameter, some bands of unbrecciated limestone 1 1/2" thick			13		297-302		
51.5	95		<u>limestone</u> brecciation as above			14		302-307		
51.9	90		<u>limestone</u> , massive, bedding trace at 90° to core axis appears to be unconformity to underlying fractures							
65.8	90		interbanded limestone brecciation, limestone and dark grey argillite as above							
66.5	90		mottled white-grey limestone, 1/8" annerite fracture at 45° to core axis, sharp contact with underlying fracture							
			̄: pyrite	T						
73.5	90		interbanded grey argillite limestone pods of 1-2", partings are graphitic with green secondary alteration							

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NORANDA EXPLORATION COMPANY, LIMITED

Placed		Completed		Core Size		Property				Project No.			NTS No.		
FIELD COORDINATES						SURVEYED COORDINATES						Sheet 2 of 3			
Elev.		Dip		Lat.		Elev.		Dip		Hole No.					
Depth		Bearing		Dep.		Depth		Bearing		138					
Footage	Rec'y	Graphic Log	Description				% Sulp.	Est. Grade	Sample No.	Lt.					
33.5			interbanded limestone & argillite continues, some pyritic laminae in the argillite				T								
34.5	90		medium grey pisolitic limestone, some calcite fracture filling. Sense of bedding at 45° to core axis, grades into:												
37.0	90		<u>argillite</u> , dark grey with graphitic partings, graphite almost a coal grade, with slickensides // banding 40° to core axis												
39.0	90		<u>argillite</u> : grey to green, some calcite fractures 1/8" banded 70 to 90° to core axis												
42.0	80		<u>argillite</u> , green as above, slightly more graphitic												
46.5	90		<u>argillite</u> , black to dark grey, some pods of pyrite, quartz clasts to 1" diameter with pyrite rims, some veinlets of quartz to 1/2" thick, sense of microfoliation increases to base				5								
51.8	90		coarse dark grey siltstone, pyrite increases to base				10								
54.5	40		<u>grey argillite</u> , heavily pyritized, chips & pebbles only				20								
58.5	90		<u>bull quartz</u> , heavily pyritic, pyrite coarse euhedral masses				50								
67.0	90		<u>argillite</u> , banded grey - green at $\bar{x}$ 45° to core axis, pyrite disseminated throughout, some folding $\perp$ to core axis				30								
85.0	90		<u>argillite</u> , banded pasty green & grey-green, some quartz bands, moderate disseminated pyrite. Grades into:				5								

NORANDA EXPLORATION COMPANY, LIMITED

Drilled	Completed	Core Size	Property	Project No.	NTS No.
FIELD COORDINATES			SURVEYED COORDINATES		
Sheet 3 of 3			Hole No. 138		
Elev.	Dip	Lat.	Elev.	Dip	Hole No.
Depth	Bearing	Dep.	Depth	Bearing	

Stage	Rec'y	Graphic Log	Description	% Sulp.	Est. Grade	Sample No.	Lt.				
18.5	90		argillite banded grey green and dark grey, 65° to core axis, pyrite + quartz filled fractures 1/8" throughout ~ // to core axis, graphitic partings throughout.								
27.0	80		brecciation of pasty green argillite, some quartz clasts								
57.0	90		banded argillite, pasty green and light pink, pyrite disseminated throughout, and in 1/8" bands; sheared at base	5							
81.0	90		argillite, grey and green bands, pyritic disseminations and fractures as above, 70° to core axis	5							
229.5	90		argillite black interbanded with grey quartzite: sheared and mylonitic, Black Thrust quartz veinlets throughout	5							
303.2	95		massive pyrite, vuggy in places, minor graphite	95							
308.0	95		black argillite + grey quartzite as above	5							
310.5	95		massive pyrite, black argillite matrix	95							
321.5	95		black argillite + quartzite as above, pyritic dissemination	10							
324.2	95		massive pyrite, argillite + quartzite matrix	95							
339.8	95		Black Thrust argillite + quartzite as above	10							
343.6	95		massive pyrite	95							
E.O.H.			grey quartzite, speckled with black argillite + pyrite, still parts of Thrust	10							

Recovery: cored 347-16 = 331

DATE \_\_\_\_\_

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NORANDA EXPLORATION COMPANY, LIMITED

Collared 14/5/80	Completed 16/5/80	Core Size B.Q.	Property QUARTZ LAKE, Y.T.	Project No 942	NTS No. 95D
FIELD COORDINATES			SURVEYED COORDINATES		
Lat. 28+00S	Elev. 3760	Dip -90	Lat 94,329 N	Elev. 3776.3	Dip
Dep. 3+00W	Depth 349	Bearing	Dep. 99,688E	Depth	Bearing
					Sheet 1 of 3
					Hole No. 139

Footage	Rec'y	Graphic Log	Description	% Sulp.	Est. Grade	Sample No.	Lt.				
0-38.9			Overburden			P6115	5	110-115			
49.5	90		<u>argillite</u> , pasty pink green, banded 35° to core axis, pyrite in veinlets to 1/8", grades into purple argillite	5		16	2.5	115-117.5			
			of next interval Note: transition from pink - purple is non-conformable,			17	1.0	117.5-118.5			
			i.e. bedding at 35° to core axis, transition at 90° to that bedding, and, at 125° to core axis suggests that			18	2.0	118.5-120.5			
			rocks have tilted 125 - 90 = 35° since alteration of purple argillite			19	4.5	120.5-125.0			
49.9	90		<u>purple argillite</u> , green partings	T		20	5	125-130			
50.5	90		sheared green and pink argillite	T		21	5	208.5-213.5			
64.0	90		green/pink argillite as in first interval, pyrite disseminated and elongate // bedding. Cleavales at // beds			22	3	213.5-216.5			
			at 120° to core axis								
71.5	90		banded purple > + green argillite at 30° to core axis			23	5	216.5-221.5			
87.0	90		sheared green + pink argillite, graphitic + pyritic to base, some T; galena + sphalerite in fractures with quartz + pyrite			25		130-135			
88.5	90		<u>purple argillite</u> , 30° to core axis bands of metallic green argillite								
93.5	90		<u>argillite</u> , pasty green with 1/4" fracture of galena at 91.8	5							
104.5	90		banded pink, purple + green argillite, pyrite and trace of galena, sphalerite in fractures	10							

NORANDA EXPLORATION COMPANY, LIMITED

Borehole		Completed	Core Size	Property			Project No	NTS No.					
FIELD COORDINATES				SURVEYED COORDINATES				Sheet 2 of 3					
Lat.		Elev.	Dip	Lat.		Elev.	Dip		Hole No. 139				
Dep.		Depth	Bearing	Dep.		Depth	Bearing						
Footage	Rec'y	Graphic Log	Description			% Sulp.	Est. Grade	Sample No.	Lt.				
115	95		<u>argillite</u> , green - grey banded with disseminated galena pyrite sphalerite // beds and in fractures			20							
115-117.5	95		massive galena > sphalerite, pyrite in green argillite matrix. Some quartzite pods, banding 45° to core axis			90							
			some graphite at base of massive section										
120.5	95		1 foot of pyritic argillite brecciation, then massive galena > sphalerite, pyrite			90							
121.0	95		<u>massive pyrite</u>			90							
125.0	90		<u>massive galena</u> > pyrite sphalerite, grade decreases to base of interval			90							
127.5	90		<u>argillite</u> grey + green with ¼" fracture of sphalerite + galena			10							
132.2	90		<u>argillite</u> , green, pasty. Some disseminated pyrite			5							
133.5	95		<u>quartz</u> , white and pyritic, graphitic partings			20							
169.9	95		<u>argillite</u> , green and dark grey banded, at 45° to core axis, scattered quartz pods in top 20 ft. of section,			5							
			quartz filled fracture increases to base of section some pods of pyrite										
180.0	95		banded pink and pasty green argillite, show soft rock slump features, grades into:										
187.0	95		<u>argillite</u> , dominantly pasty green, disseminated pyrite			5							
192.0	95		<u>argillite</u> , as above, but increasingly pyritic			10							
192.6	50		brecciation of green + grey argillite, highly sheared no visible sulphides										

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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		139				
Footage	Rec'y	Graphic Log	Description			% Sulp.	Est. Grade	Sample No.	Lt.				
199.9	95		<u>argillite</u> , pasty green, 75° to core axis, scattered pods of quartz, no major sulphides										
206.0	95		<u>argillite</u> , as above, more pyritic, quartz pods are grey			T							
213.5	95		<u>argillite</u> , dominantly pasty green with graphitic partings conformable disseminated pyrite, possibly very fine			5							
			grained galena										
216.5	95		massive pyrite in quartzite matrix. Some ½" of galena graphite throughout. Looks like brecciation for top 2 ft of section										
226.0	90		<u>argillite</u> , pasty green, pyritic throughout, graphite partings, microfoliation			15							
234.5	90		<u>argillite</u> , as above, more pyritic, some trace of galena + sphalerite dissemination			20							
239.0	90		<u>argillite</u> , interbanded with quartz, both heavily pyritic bands 45° to core axis										
267.0	90		<u>Black Thrust</u> , sheared and brecciation of grey quartzite, black <u>argillite</u> , minor green <u>argillite</u> , pyrite banded all through section, disseminated galena + sphalerite (minor)			25							
289.0	90		<u>Black Thrust</u> as above, more quartz, less pyrite			10							
294.0	90		5 ft. of dominantly white pyritic quartz			10							
E.O.H.	90		<u>Black Thrust</u> continues, graphitic pyritic black to grey <u>argillite</u> with some pods of white quartz. Massive pyrite 329 - 331.0 & 324.0 - 326.2			10							

349 - 39 = 310 foot cored  
265/310 = 85% Rec.

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NORANDA EXPLORATION COMPANY, LIMITED

Drilled 16/5/80	Completed 20/5/80	Core Size B.Q.	Property QUARTZ LAKE, Y.T.	Project No 942	NTS No. 95D
FIELD COORDINATES			SURVEYED COORDINATES		
26+00S	Elev. 3825	Dip -90	Lat. 94,592 N	Elev. 3821.2	Dip -90
3+00E	Depth 427	Bearing	Dep. 100,289E	Depth 427	Bearing
					Hole No. 141

Shotage	Rec'y	Graphic Log	Description	% Sulp.	Est. Grade	Sample No.	Lt.				
154		OVB				P6133		217-222			
198.	90		<u>argillite</u> banded pasty green and light grey, some pyritic laminae, quartz stockwork veinlets throughout, bands 45° to core axis	T		34		222-227			
199	90		<u>argillite</u> , grey green, sheared with ½" normal fault off-set at 10° to core axis			35		227-332			
202	95		<u>quartzite</u> , grey, with green argillite partings			36		232-237			
214.5	90		<u>argillite</u> , banded grey and green, pyritic laminae at 45° to core axis			37		267-272			
222.8	90		<u>argillite</u> , as above, but slightly convoluted, pods of white quartz with trace of galena filling fractures, conformable to bands	5		38		272-277			
226.0	95		<u>quartz</u> vein, white with green argillite clasts, pyrite blebby throughout, some galena associated with pyrite	15		39		277-282			
230.5	95		<u>argillite</u> , grey-green as before, laminae 60° to core axis some trace disseminated galena			40		282-287			
231.9	95		<u>massive pyrite</u> with galena + sphalerite in green argillite matrix, sphalerite seems to fill tension gashes in matrix, quartz veinlets with galena selvage	80							
259.5	95		green argillite continues, minor pyrite in fractures, some graphitic partings	T							
260.2	95		<u>quartzite</u> , grey, heavily pyritic, not conformable to argillite	20							
268.5	95		<u>argillite</u> , green as above, no visible sulphides								

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NORANDA EXPLORATION COMPANY, LIMITED

Diameter		Completed	Core Size	Property			Project No		NTS No.	
FIELD COORDINATES				SURVEYED COORDINATES				Sheet 2 of 2		
Elev.		Dip	Lat.	Elev.	Dip	Hole No.				
Depth		Bearing	Dep.	Depth	Bearing	141				
Footage	Rec'y	Graphic Log	Description	% Sulp.	Est. Grade	Sample No.	Lt.			
268.8	95		<u>quartzite</u> , heavily pyritized as above, pyrite fracture extends into basal argillite	20+						
272.0	95		<u>argillite</u> , grey green, quartz+siderite fracture filling with slightly foliate appearance							
292	95		<u>argillite</u> , green and pasty, with pyrite laminae and occasional galena filling fractures. No visible sphal- erite, bands at 60° to core axis, offset fracture filled with quartz + galena suggest post mineralization de- formity	20						
316.5	95		<u>argillite</u> , as above, but barren, except for some calcite + quartz veinlets							
317.2	90		<u>quartzite</u> , grey, slightly pyritic, sheared contact with adjoining argillite	T						
343.0	90		dominantly barren pasty green argillite, some minor graphite slips on fracture surfaces							
365.2	90		<u>argillite</u> , banded green and some minor grey, dominantly at 45° to core axis, becoming convolute and slightly sheared working to base of interval							
397.0	90		<u>Black Thrust</u> , banded grey and green and black argillite, with scattered quartzite pods, slightly pyritic sheared, with quartz veinlets throughout. Graphitic partings	5						
413.0	90		<u>Black Thrust</u> continues, now dominantly grey and black sheared argillite. Quartz veinlets persist	T						
427.0			continues, grey black argillite, minor pyrite	T						
			427 -154							

273 cored

250 Rec.

250/273 = %

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NORANDA EXPLORATION COMPANY, LIMITED

Collared		Completed	Core Size	Property			Project No	NTS No.				
FIELD COORDINATES				SURVEYED COORDINATES				Sheet 2 of 2				
Lat.		Elev.	Dip	Lat.		Elev.		Dip		Hole No.		
Dep.		Depth	Bearing	Dep.		Depth		Bearing		143		
Footage	Rec'y	Graphic Log	Description			% Sulp.	Est. Grade	Sample No.	Lt.			
37.0	90		argillite, pasty grey green 1/8" with grey argillite, has a slightly sheared look, convoluted in places									
37-38.0	95		oolitic quartzite, no apparent bedding, grey, no visible sulphides, suggests active environment, marine									
62.0	95		argillite, banded grey and dusty green, graphitic partings, possibly start of Black Thrust; disseminated pyrite, fine grained			5						
74.0	95		argillite, dominantly grey with graphitic partings, some disseminated pyrite			5						
80.0	90		argillite as above, here with intricate stockwork of quartz veinlets, some selvage + disseminated pyrite. No sphalerite or galena			5						
			Rec: 90%									

DATE \_\_\_\_\_

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

*[Handwritten Signature]*

NORANDA EXPLORATION COMPANY, LIMITED

Drilled 25/5/80	Completed 28/5/80	Core Size B.Q.	Property QUARTZ LAKE, Y.T.	Project No 942	NTS No. 95D
FIELD COORDINATES			SURVEYED COORDINATES		
St. 30+00S	Elev.	Dip -90	Lat. 94,132 N	Elev. 3780.5	Dip -90
Sp. 0+00E	Depth 297	Bearing	Dep. 99,887 E	Depth	Bearing
					Sheet 1 of 2
					Hole No. 144

Footage	Rec'y	Graphic Log	Description	% Sulp.	Est. Grade	Sample No.	Lt.				
-40.0		OVB	organics and chips of grey quartzite, green argillite								
65.4	90		<u>argillite</u> , banded grey and pasty green, some sections of heavy pyrite, 2" thick in places, bands 60° to core axis with fracture offset up to ½", pyrite in fractures transgresses bedding	15							
76.8	90		interbanded green argillite and pink argillite with minor grey quartzite laminae, some pyrite in fractures green serpentine partings	5							
85.6	90		<u>argillite</u> , purple with occasional green argillite bands at 70° to core axis, grading into:	5							
107.5	90		finely laminar interbanded pink and green argillite with minor grey quartzite, fine grained disseminated pyrite (conformable)	5							
120.5	90		as above, less pyritic	T							
125.5	90		<u>argillite</u> , pink + purple with stockwork of quartz veinlets, bands 40° to core axis, convolute	T							
130.5	90		<u>argillite</u> , pink interbanded with grey argillite banded 45° to core axis	-							
132.0	60		shearzone of white and green argillaceous clay, disseminated pyrite	T							
135.0	40		<u>quartzite</u> , grey: pebbles, subrounded, some pyrite + boxwork jarosite	T							
167.0	90		<u>argillite</u> , grey slightly sheared with green argillite partings, pyritic laminae throughout	5							
177.2	90		<u>argillite</u> , dark grey with quartz stockwork, no visible sulphides	-							

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



NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 95D

PROPERTY QUARTZ LAKE

DATE May 1980

D. DRILL HOLE 138

SAMPLE REPORT

ALL MEASUREMENTS IN FEET

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	%			oz/T	ASSAYS				SAMPLED BY
				Pb	Zn	Ag						
P 6105	117 - 122	B.Q.	5.0	0.02	0.02	0.04						
06	122 - 127		5.0	0.02	0.02	0.04						
07	127 - 132		5.0	0.04	0.02	0.08						
08	132 - 137		5.0	0.02	0.02	0.04						
09	137 - 142		5.0	0.02	0.02	0.16						
45	142 - 147		5.0	<0.02	<0.02	0.14						
46	147 - 152		5.0	<0.02	<0.02	0.06						
47	152 - 157		5.0	<0.02	<0.02	0.04						
48	157 - 162		5.0	<0.02	<0.02	0.04						
49	162 - 167		5.0	<0.02	<0.02	0.04						
50	167 - 172		5.0	<0.02	<0.02	0.04						
51	172 - 177		5.0	<0.02	<0.02	0.02						
52	177 - 182		5.0	<0.02	<0.02	0.02						
11	287 - 292		5.0	0.02	0.02	0.06						
12	292 - 297		5.0	0.02	0.02	0.04						
13	297 - 302		5.0	0.02	0.02	0.08						
14	302 - 307		5.0	0.02	0.02	0.04						
86	307 - 312		5.0	<0.02	<0.02	0.06						
87	319 - 324		5.0	<0.02	<0.02	0.08						
88	339 - 344		5.0	<0.02	<0.02	0.12						

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 95D

PROPERTY QUARTZ LAKE

DATE May 1980

D. DRILL HOLE 139

SAMPLE REPORT

ALL MEASUREMENTS IN FEET

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	%	%	oz/T	ASSAYS		oz/T	%	%	SAMPLED BY
				Pb	Zn	Ag	Cu	Au	As	Sb		
P 6115	110 - 115	B.Q	5.0	1.20	0.02	0.62	150	0.001	0.79	0.02		
16	115 - 117.5		2.5	25.8	0.98	14.8	500	0.001	0.22	0.03		
17	117.5 - 118.5		1.0	10.4	17.4	7.48	550	0.001	0.27	0.03		
18	118.5 - 120.5		2.0	22.8	4.80	14.2	400	0.001	0.69	0.05		
19	120.5 - 125		4.5	24.8	1.20	16.2	100	0.001	0.40	0.04	Spec	Also
20	125 - 130		5.0	1.80	3.28	1.28	100	0.001	0.08	0.02		
25	130 - 135		5.0	3.96	0.02	2.44	50	0.001	0.29	0.02		
26	135 - 140		5.0	2.66	<0.02	1.60						
21	208.5 - 213.5		5.0	1.28	0.14	0.38						
22	213.5 - 216.5		3.0	0.42	0.02	0.10						
23	216.5 - 221.5		5.0	0.06	0.02	0.04						
89	322 - 327		5.0	<0.02	<0.02	0.10						
90	327 - 332		5.0	0.02	<0.02	0.10						
	<u>INTERSECTION</u>											
	110.0 - 140.0		30.0	9.34	1.72	5.85						







NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 95D

PROPERTY QUARTZ LAKE

DATE May 1980

D. DRILL HOLE 138

SAMPLE REPORT

ALL MEASUREMENTS IN FEET

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	%			ASSAYS				SAMPLED BY
				Pb	Zn	Ag					
P 6105	117 - 122	B.Q.	5.0	0.02	0.02	0.04					
06	122 - 127		5.0	0.02	0.02	0.04					
07	127 - 132		5.0	0.04	0.02	0.08					
08	132 - 137		5.0	0.02	0.02	0.04					
09	137 - 142		5.0	0.02	0.02	0.16					
45	142 - 147		5.0	<0.02	<0.02	0.14					
46	147 - 152		5.0	<0.02	<0.02	0.06					
47	152 - 157		5.0	<0.02	<0.02	0.04					
48	157 - 162		5.0	<0.02	<0.02	0.04					
49	162 - 167		5.0	<0.02	<0.02	0.04					
50	167 - 172		5.0	<0.02	<0.02	0.04					
51	172 - 177		5.0	<0.02	<0.02	0.02					
52	177 - 182		5.0	<0.02	<0.02	0.02					
11	287 - 292		5.0	0.02	0.02	0.06					
12	292 - 297		5.0	0.02	0.02	0.04					
13	297 - 302		5.0	0.02	0.02	0.08					
14	302 - 307		5.0	0.02	0.02	0.04					
86	307 - 312		5.0	<0.02	<0.02	0.06					
87	319 - 324		5.0	<0.02	<0.02	0.08					
88	320 - 326		5.0	<0.02	<0.02	0.12					

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 95D

PROPERTY QUARTZ LAKE

DATE May 1980

D. DRILL HOLE 139

SAMPLE REPORT

ALL MEASUREMENTS IN FEET

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS							SAMPLED BY
				% Pb	% Zn	oz/T Ag	PPM Cu	oz/T Au	% As	% Sb	
P 6115	110 - 115	B.Q	5.0	1.20	0.02	0.62	150	0.001	0.79	0.02	
16	115 - 117.5		2.5	25.8	0.98	14.8	500	0.001	0.22	0.03	
17	117.5 - 118.5		1.0	10.4	17.4	7.48	550	0.001	0.27	0.03	
18	118.5 - 120.5		2.0	22.8	4.80	14.2	400	0.001	0.69	0.05	
19	120.5 - 125		4.5	24.8	1.20	16.2	100	0.001	0.40	0.04	Spec Als
20	125 - 130		5.0	1.80	3.28	1.28	100	0.001	0.08	0.02	
25	130 - 135		5.0	3.96	0.02	2.44	50	0.001	0.29	0.02	
26	135 - 140		5.0	2.66	<0.02	1.60					
21	208.5 - 213.5		5.0	1.28	0.14	0.38					
22	213.5 - 216.5		3.0	0.42	0.02	0.10					
23	216.5 - 221.5		5.0	0.06	0.02	0.04					
89	322 - 327		5.0	<0.02	<0.02	0.10					
90	327 - 332		5.0	0.02	<0.02	0.10					
	<u>INTERSECTION</u>										
	110.0 - 140.0		30.0	9.34	1.72	5.85					







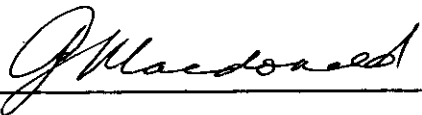
A P P E N D I X

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STATEMENT OF QUALIFICATIONS

I, GLEN MACDONALD, of the City of Whitehorse, in the Yukon Territory,  
DO HEREBY CERTIFY that:

1. I have been employed as a Geologist by Noranda Exploration Company Limited (No Personal Liability) since May 1976.
2. I am a graduate of the University of British Columbia, with a Bachelor of Science degree in Geology.
3. I am a member of the Canadian Institute of Mining and Metallurgy.

  
\_\_\_\_\_  
G. Macdonald, Geologist,  
Noranda Exploration Company Limited  
(N.P.L.).

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT QUARTZ LAKE J.V.

DATE November 25, 1980

TYPE OF REPORT DRILLING

a) Wages:

No. of Days 274  
Rate per Day \$45.5746  
Dates From: March, April, May, June 1980  
Total Wages 274 x \$ 45.574635 12,487.45

b) Food and Accomodation:

No of days 274  
Rate per day \$23.09832  
Dates From: March, April, May, June 1980  
Total Cost 274 x \$ 23.09832 6,328.94

c) Transportation:

No of days 274  
Rate per day \$151.057  
Dates From: March, April, May, June 1980  
Total Cost 274 X \$ 151.057 41,389.62

d) Instrument Rental: CAT

Type of Instrument Tractor & Winch  
No of days 122  
Rate per day \$76.681885  
Dates From: March, April, May, June 1980  
Total Cost 122 X \$ 76.681885 9,355.19

Type of Instrument

No of days

Rate per day \$

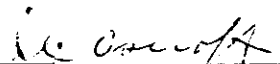
Dates From:

Total Cost X \$

f) Analysis (See attached schedule)	<u>3,151.00</u>
g) Cost of preparation of Report	
Author	455.75
Drafting	1,145.31
Typing	455.75
h) Other:	
Property & Recording Fees	190.00
Telecommunications	950.85
Contractors	187,351.17
Camp & Field Supplies	5,301.13
 Total Cost	 <u>268,562.16</u>

e) Unit costs for	
No of days	
No of units	1,875.33 meters
Unit costs	\$143.2079471 / meters
 Total Cost	 1,875.33 x 143.207947 <u>268,562.16</u>

I certify that the  
total cost of \$268,562.16  
is correct

  
\_\_\_\_\_  
J.E. Oscroft - Br. Accountant

NORANDA EXPLORATION COMPANY, LIMITED  
(WESTERN DIVISION)

DETAILS OF ANALYSES COSTS

PROJECT: QUARTZ LAKE J.V.

<u>ELEMENT</u>	<u>NO. OF DETERMINATIONS</u>	<u>COST PER DETERMINATION</u>	<u>TOTAL</u>
Ag	205	4.50	922.50
Pb	205	5.00	1,025.00
Zn	205	5.00	1,025.00
As	7	9.25	64.75
Sb	7	9.25	64.75
Au	7	5.50	38.50
Cu	7 Geochem Analysis	1.50	10.50

\$3,151.00

CLAIM REGISTRATION FOR FORM " D "

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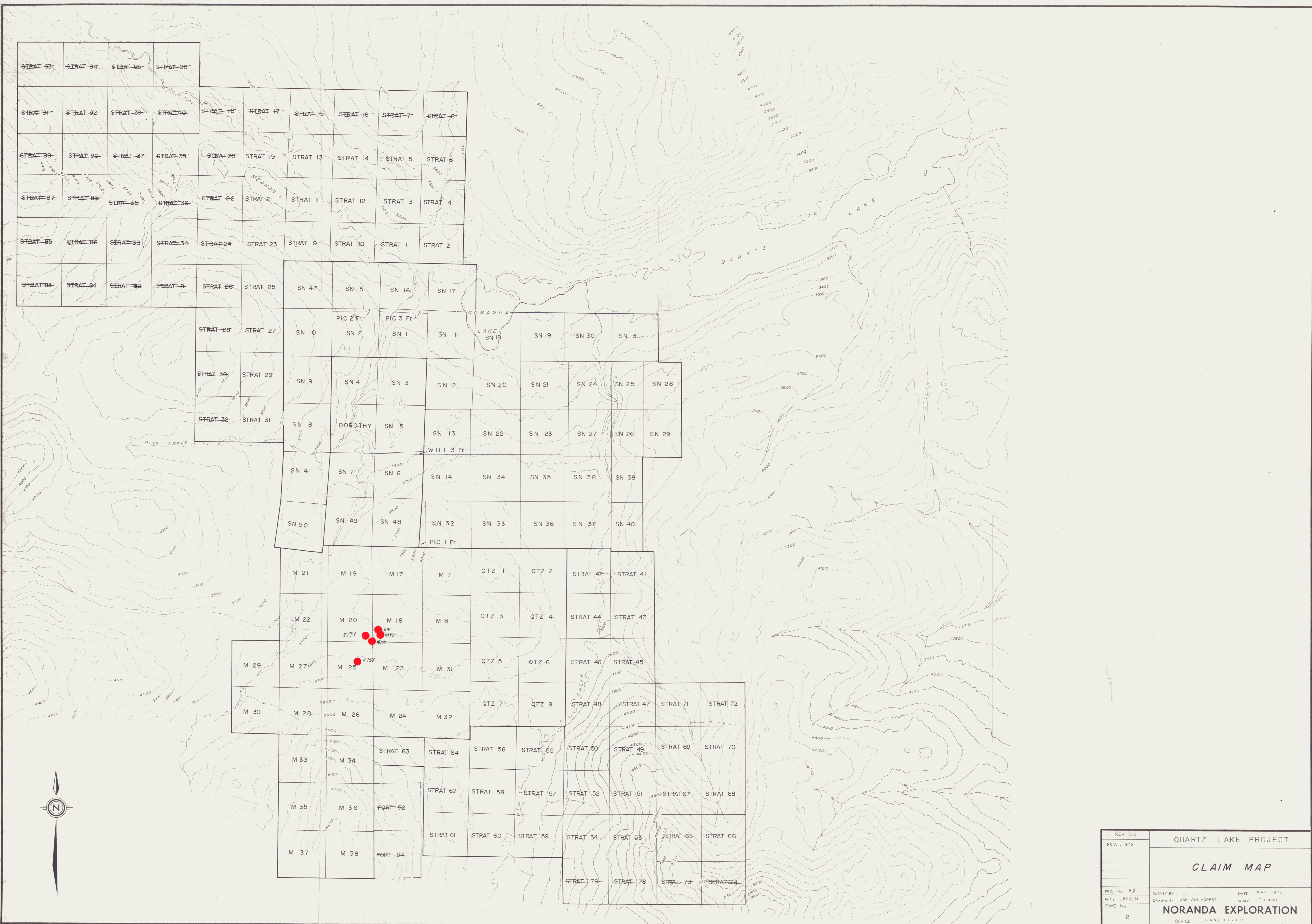
STRAT 1-6	Noranda Exploration Company Limited (NPL)
STRAT 9-14	"
STRAT 19	"
STRAT 21	"
STRAT 23	"
STRAT 25	"
STRAT 27	"
STRAT 29	"
STRAT 31	"
STRAT 41-72	"

SOUTH NAHANNI (SN) 1-2	Liard River Mining Company Ltd.
SOUTH NAHANNI (SN) 8-29	"
SOUTH NAHANNI (SN) 32-41	"
SOUTH NAHANNI (SN) 47	"
SOUTH NAHANNI (SN) 50	"

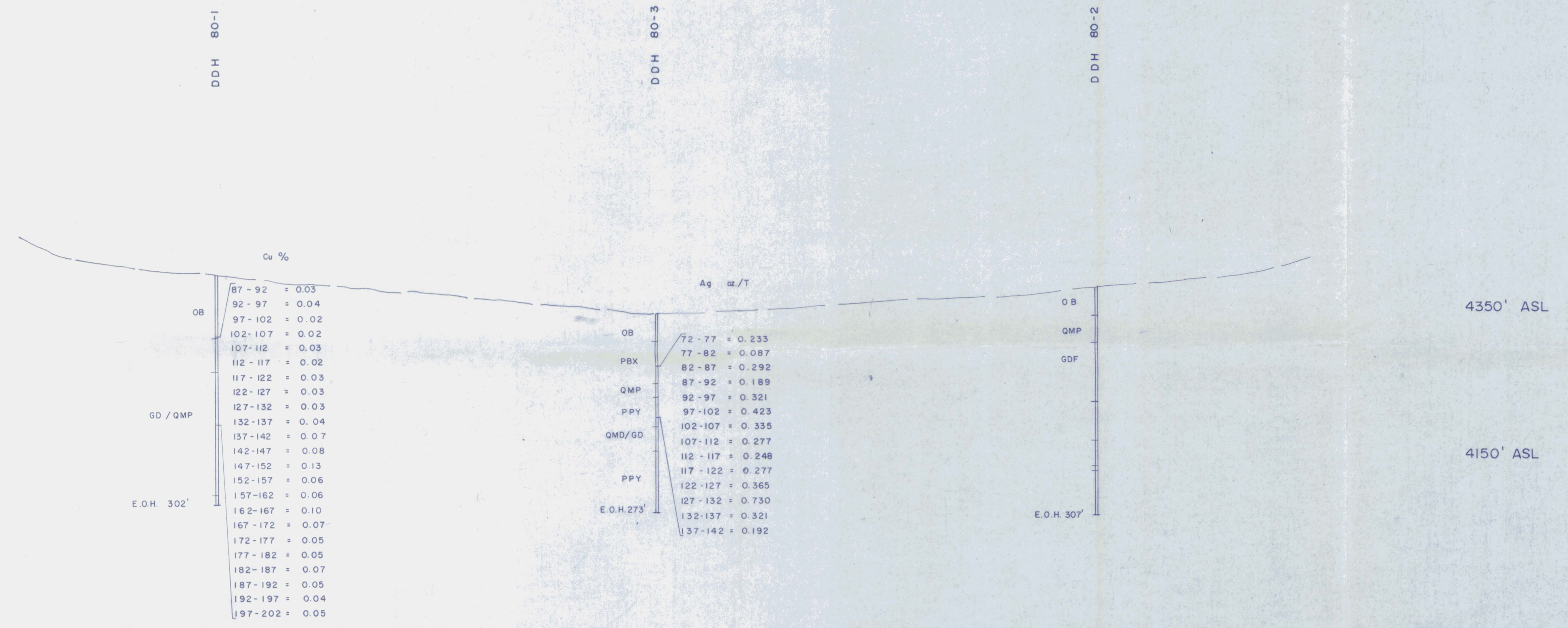
QTZ 1-8	Noranda Exploration Company Limited (NPL)
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M 7,8	American Smelting and Refining Company
M 17-38	"

PIC 1Fr, 2Fr, 3Fr	"
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REVISED	QUARTZ LAKE PROJECT		
NOV., 1975			
	<b>CLAIM MAP</b>		
PROJ. No. 912	SURVEY BY	DATE	MAY 1975
N.T.S. 95 D/12	DRAWN BY JAN VAN VOORST	SCALE	1" = 1000'
DWG. No.	<b>NORANDA EXPLORATION</b>		
2	OFFICE VANCOUVER		



NOTE: TO ACCOMPANY ASSESMENT REPORT  
OCTOBER 1980 BY G. MACDONALD

ASSAYS: Cu %  
Ag Oz./T

99+00E  
100+00E  
106+00E

REVISED	TAHTE CREEK PROPERTY PROJECT 931	
	SECTION 175+00 N	
PROJ. No. ....	SURVEY BY: G. MACDONALD	DATE: SEPT. 18, 1980
N.T.S. ....	DRAWN BY: SINCLAIR DRAFTING SERVICE SCALE: 1"=100'	
DWG. No.	<b>NORANDA EXPLORATION</b>	
	OFFICE: .....	