

84-#567 - 12742

7/85

PHYSICAL AND GEOCHEMICAL ASSESSMENT REPORT

ON THE

MOUSE MOUNTAIN

MML

MINERAL CLAIM

CARIBOU MINING DIVISION

NTS LOCATION 93G/1W

AT. LATITUDE 53°02'N, LONGITUDE 122°20'E

OWNED AND OPERATED BY

FIRST NUCLEAR CORPORATION LTD.

BY: JAMES P. STEWART B.Sc. (Hons)

JULY 15th, 1984

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,742

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1. INTRODUCTION

1.1 LOCATION AND ACCESS

The Mouse Mountain claims are located on NTS Map Sheet 93G/1 and are situated 12 kilometers from the town of Quesnel, B.C. along the Barkerville Highway. The property is easily accessible off the highway via farming and logging roads and trails which can be utilized by four wheel drive vehicles during the summer months. The old Barkerville road also crosses the property.

1.2 TOPOGRAPHY AND VEGETATION

The property is situated within the extensive interior physiographic plateau known as the Fraser Basin. The topography of the claim area is a glaciated and stream eroded plateau which displays a gentle relief, situated between the Cottonwood and Quesnel Rivers. The steepest slopes are encountered along deeply incised stream valleys. Maximum relief is about 900 ft (274 m), from the highest to lowest points on the property. The average elevation on the Mouse Mountain claims is about 3000 ft (914 m).

Vegetation consists of a mixture of coniferous and deciduous trees as well as cleared agricultural land. The coniferous stands are dominated by spruce, fir and cedar trees while birch and poplar trees dominate the lower lying wetter areas.

1.3 HISTORY OF THE PROPERTY

The history of the property is sketchy and incomplete as few records were kept and little assessment work has been recorded.

YUKON TERRITORY

WATSON LAKE

FORT NELSON

FORT ST. JOHN

PRINCE RUPERT

BRITISH COLUMBIA

PRINCE GEORGE

ALBERTA

Mouse Mountain Claims

GOLDEN

KAMLOOPS

VANCOUVER

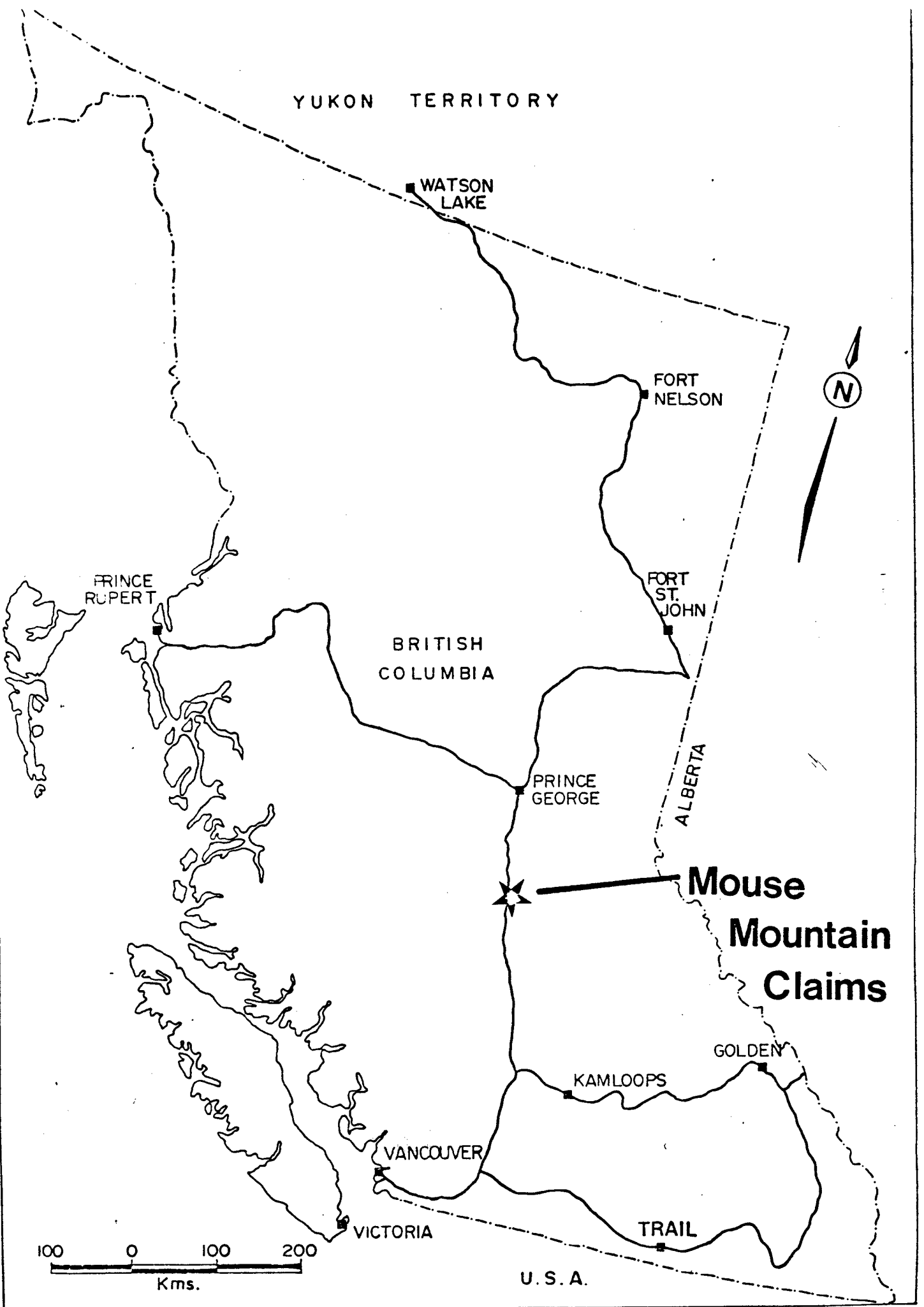
VICTORIA

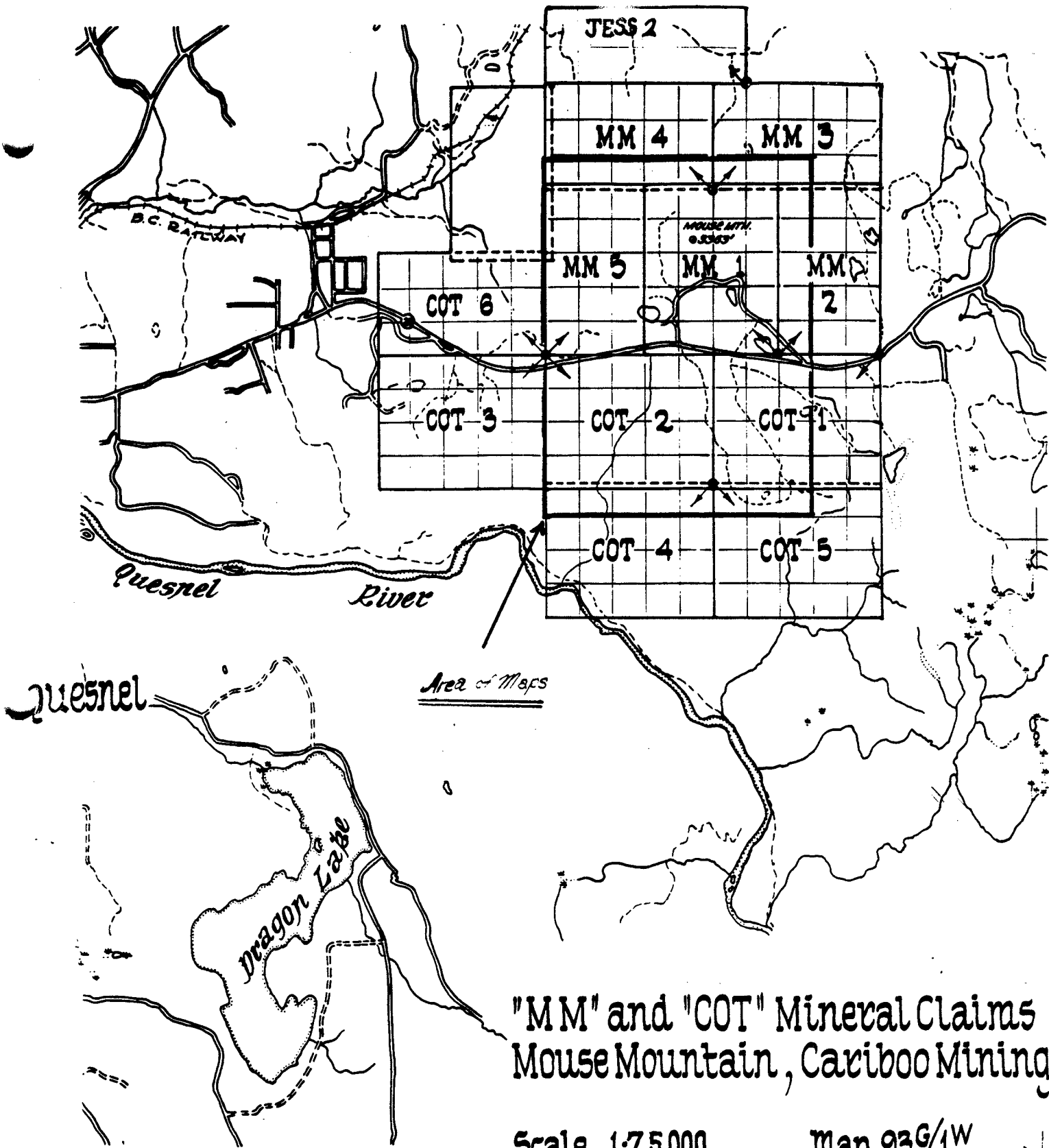
TRAIL

U. S. A.

N

100 0 100 200
Kms.





"MM" and "COT" Mineral Claims
 Mouse Mountain, Cariboo Mining

Scale 1:75,000

Map 93G/1W.

1229/51

Interest in the area probably started in the early 1950's when copper minerals were noted in outcrop along the edge of the old Barkerville Highway, marking the location of a significant surface showing. There is evidence of some hand pits and prospector shafts near this showing. The exact age of this work is unknown.

The property has been staked by numerous companies and individuals over the last thirty years (personal communications with Mr. Corbit who has homesteaded in the area since 1958).

In 1955 - 1956 a carload of hand-sorted ore averaging 5.5% Cu was produced from the property and shipped to the Tacoma smelter.

In 1967, Euclid Mining Corporation from Vancouver planned to heap leach the main showing and some preparatory work was undertaken, including the testing of a pilot leach process, before the operation closed down later that year due to lack of funding. No records are available regarding this work.

In 1970, Bethlehem Copper drilled 14 percussion drill holes and the data from this program have been obtained and are summarized on the Drilling Data Map attached to this report (Dwg. 10)

In 1975, Dupont of Canada drilled 5 percussion holes on the northwestern end of the property and the results of this program are also shown on the Drilling Data Map.

Diamond drilling was also carried out on the property, however, information regarding the location of holes and results is not available.

Geochemical surveys have been conducted on the property and some of the data has been filed for assessment reports.

Geophysical surveys have been conducted on the property. An I.P. survey was run by Canadian Superior, however only two lines were completed and the geophysicist considered the data erroneous and uninterpretable.

The Mouse Mountain property was acquired by First Nuclear Corporation Ltd. in July of 1981 and includes MM 1-6 Cot 1-4 and the Jess 2 claims which form a contiguous group.

Previous work by First Nuclear, the current owner and operator of the property, consisted of a reconnaissance geochemical survey carried out during 1981. the summary of which is contained within a previously submitted assessment report.

1.4 GRID ESTABLISHMENT

The physical work undertaken consisted exclusively of establishment of 18.0 kilometers of reconnaissance grid.

1.5 MINERAL CLAIMS (Caribou Mining Division, B.C.)

The mineral claim on which work was actively performed, subject of this report is the MM1 claim, record No. 1775.

2. PHYSICAL WORK (see diagram 2)

2.1 GENERAL

The physical work undertaken over the MML claim consisted of the establishment of a reconnaissance grid in preparation for extensive geological, geochemical and geophysical surveys. Previous work by First Nuclear and others in the vicinity has demonstrated the effectiveness of reconnaissance geochemical sampling and magnetic surveys despite the considerable glacial till overburden thickness (10-30 meters?). The specification of the grid established is as follows:

2.2 GRID SPECIFICATIONS

ORIENTATION.....090° TRUE
TRAVERSE LINE SPACING.....250 METERS
STATION SPACING..... 50 METERS
MARKING.....BLUE FLAGGING TAPE/BLAZING
BASE LINE.....WEST CLAIM BOUNDARY
CONTROL.....TAPE & COMPASS
LINE KILOMETERS ESTABLISHED.....18 KILOMETERS

CONTRACTOR: AMEX EXPLORATION SERVICES LTD.
KAMLOOPS, BRITISH COLUMBIA

3. ROCK GEOCHEMICAL SURVEY

3.1 GENERAL SPECIFICATIONS

Seventeen sample sites (see diagram 3) were selected in the vicinity of, and remote from known copper mineralization for the purpose of defining trace element geochemical trends and for thin section examination (the latter of which is in progress at the time of writing). The study was undertaken for the purpose

of establishing geochemical parameters and rock types for more extensive future mapping projects over the MML and adjacent claims. The rock samples were analysed by Loring Laboratories of Calgary (see Appendix A) for copper, lead, zinc, silver, molybdenum by A.A.S. and for gold by Fire Assay/A.A.S. Copper values in excess of 1000ppm were assayed by conventional methods. The samples were labeled MR-84-1 to MR-84-17. Tentative field rock types were attributed to the samples (see diagram 1) subject to future modification based upon current thin section identification.

3.2 PRESENTATION AND INTERPRETATION OF DATA

The analytical results are attached as Appendix A to this report. Also the results of individual elements have been plotted at a scale of 1:25000 or 1 cm = 250m upon diagrams 1 to 7. Due to the limited number of samples collected no statistical treatment or contouring of results has been attempted.

COPPER (diagram 4)

Copper values range from 12ppm up to 0.15%. Those specimens returning values in excess of 250ppm copper exhibited visible disseminated chalcopyrite and/or malochite staining. The following samples coincide with the previously known zones of epigenetic copper mineralization.

Samples MR-84 - 2 to 4	Dupont Drilling Area
Samples MR-84 - 10 to 15	Bethlehem Drilling Area
Samples MR-84 - 6 and 17	Road Showing

The values of copper returned from samples containing abundant disseminated chalcopyrite returned values of copper (.12 - .15%) consistent with previous results.

LEAD (diagram 5)

Lead values range from 9ppm to 34ppm. The values are considered to be background. However, it is notable that the higher values of 20 to 34ppm appear to be related to the Dupont Drilling area on line 12,250m N.

ZINC (diagram 6)

Zinc values range from 25ppm up to 220ppm and generally fall into the range 40 to 100 ppm. The values are probably not above background for the hydrothermally altered, felsic and mafic agglomeratic and volcanic rocks comprising the bulk of the specimens collected.

SILVER (diagram 7)

Silver values range from 0.3ppm up to 2.1ppm. The values appear to confirm previously indicated (Tilsely's Report) anomalous silver levels (over normal 0.1-0.2ppm) in the bed rock but not as high as selected grab samples returned (10-20ppm) previously. Note that the highest silver value (2.1ppm) coincides with the 34ppm lead value returned from sample MR-84-4, from the Dupont Drilling area, and also the values greater than 1ppm are associated with the known copper mineralization.

MOLYBDENUM (diagram 8)

Molybdenum values range 1 to 3 . There appear to be no anomalous values.

GOLD (diagram 9)

Gold values range from below-detection-limit up to 200ppm. Those values in excess of 60ppm are considered anomalous indicators of gold mineralizing processes which generally speaking appear to be related to the copper mineralization.

3.4 CONCLUSIONS AND RECOMMENDATIONS

The preliminary rock sampling project appears to have demonstrated a clear relationship between the known weak copper mineralization and the anomalous geochemical gold and silver values. Based upon the foregoing it is recommended that an extensive detailed geological mapping and rock sampling, soil geochemical and geophysical (ground magnetic survey and I.P. survey) exploration program orientated towards identification of favourable host rock types and/or structures for gold and silver mineralization should be carried out, particularly as there has been limited previous exploration for these elements on the property.

4. ITEMIZED COST STATEMENT

4.1	<u>WAGES</u> (J.P. Stewart) 5 days at \$211.50/day	\$1057.50
4.2	<u>ACCOMMODATION & FOOD</u> 5 days, June 5 - June 9	267.38
4.3	<u>VEHICLE GAS & EXPENSES</u>	149.30
4.4	<u>GRID CONSTRUCTION</u> Contractor - Amex Exploration Services Ltd. Time Period - 15 May - 2nd June, 1984 Cost per Line Kilometer - \$131.75/Kilometer Total Kilometers Established - 18 Km Total cost	2312.13
4.5	<u>ANALYSES</u> 17 Rock Samples, CuPbZnMoAgAu @ \$15.70/Sample Total cost	266.90
4.6	<u>REPORT PREPARATION</u> One day (J.P. Stewart)	211.50
4.7	<u>OTHER DOCUMENTED COSTS</u>	36.26
	TOTAL EXPENDITURE	<u><u>\$4300.97</u></u>

6. AUTHOR'S QUALIFICATIONS

Statement of Qualifications of James P. Stewart, Author.

6.1 EDUCATION B.Sc. Honours (Geology), conveyed 1970
by University of Canterbury
Christchurch, New Zealand

6.2 PROFESSIONAL EXPERIENCE

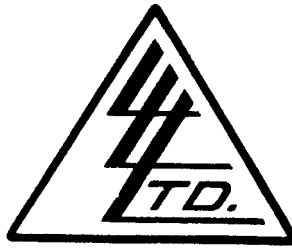
1970 - 1974 - Noranda Australia Ltd. (Australia)
Geologist, mineral exploration, property
evaluation, mine evaluation.

1975 - 1976 Noranda Exploration Company (Canada)
Geologist, mineral exploration, property
evaluation, project supervision and
consultation.

1976 - 1979 - Pan Ocean Oil/Marathon Oil (Africa)
Geologist, manager of overseas uranium
development projects.

1979 - 1984 - First Nuclear Corporation Ltd. (Canada)
President, mineral and oil and gas
exploration and development company.

To: FIRST NUCLEAR CORPORATION LTD
#900, 9707 - 110 Street
Edmonton, Alberta T5K 2L9
Attn: J. Stewart



File No. 26429
 Date July 5, 1984
 Samples Rock Chip

Certificate of
ASSAY OF
LORING LABORATORIES LTD.

Page # 1

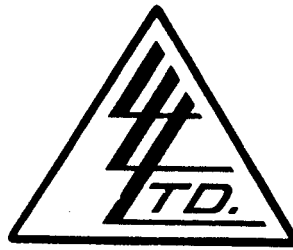
SAMPLE No.	% Cu
<p><u>"Rock Samples"</u></p> <p><u>"Assay Analysis"</u></p>	
MR-84- 6	.12
MR-84-13	.15
MR-84-14	.13
<p>I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES</p>	

Rejects Retained one month.
 Pulp Retained one month
 unless specific arrangements
 made in advance.

Assayer

To: FIRST NUCLEAR CORPORATION
#900, 9707 - -10 Street
Edmonton, Alberta T5K 2L9
Attn: J. Stewart

File No. 26429
Date July 5, 1984
Samples Rock Samples



Certificate of
ASSAY OF
LORING LABORATORIES LTD.

Page # 2

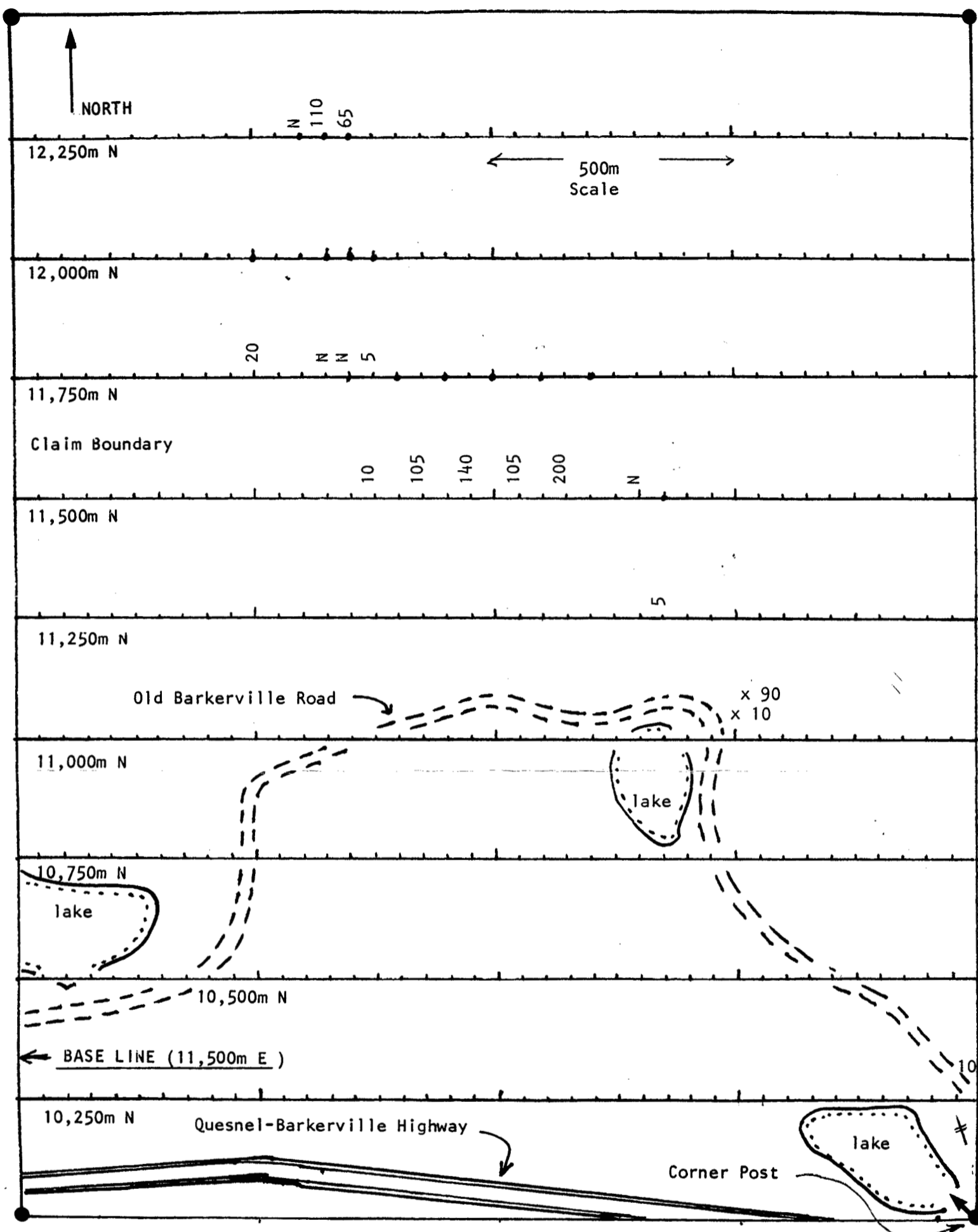
SAMPLE No.	PPM Cu	PPM Pb	PPM Zn	PPM Ag	PPM Mo	PPB Au
<u>"Geochemical Analysis"</u>						
<u>Rock Samples</u>						
MR-84- 1	20	16	220	.8	2	10
- 2	92	23	73	.7	1	Nil
- 3	16	20	64	.8	1	65
- 4	294	34	130	2.1	3	110
- 5	50	19	78	.6	1	20
- 6	+1000	15	33	.5	5	90
- 7	100	10	115	.3	2	Nil
- 8	35	15	51	.3	2	Nil
- 9	64	18	39	.4	2	5
-10	12	12	35	.3	1	10
-11	162	12	35	.5	5	105
-12	341	25	88	1.1	3	140
-13	+1000	10	41	.4	2	105
-14	+1000	10	41	.8	2	200
-15	98	18	49	.6	1	Nil
-16	120	13	25	1.0	5	5
MR-84-17	271	9	26	1.0	4	10

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Rejects Retained one month.
Pulps Retained one month
unless specific arrangements
made in advance.

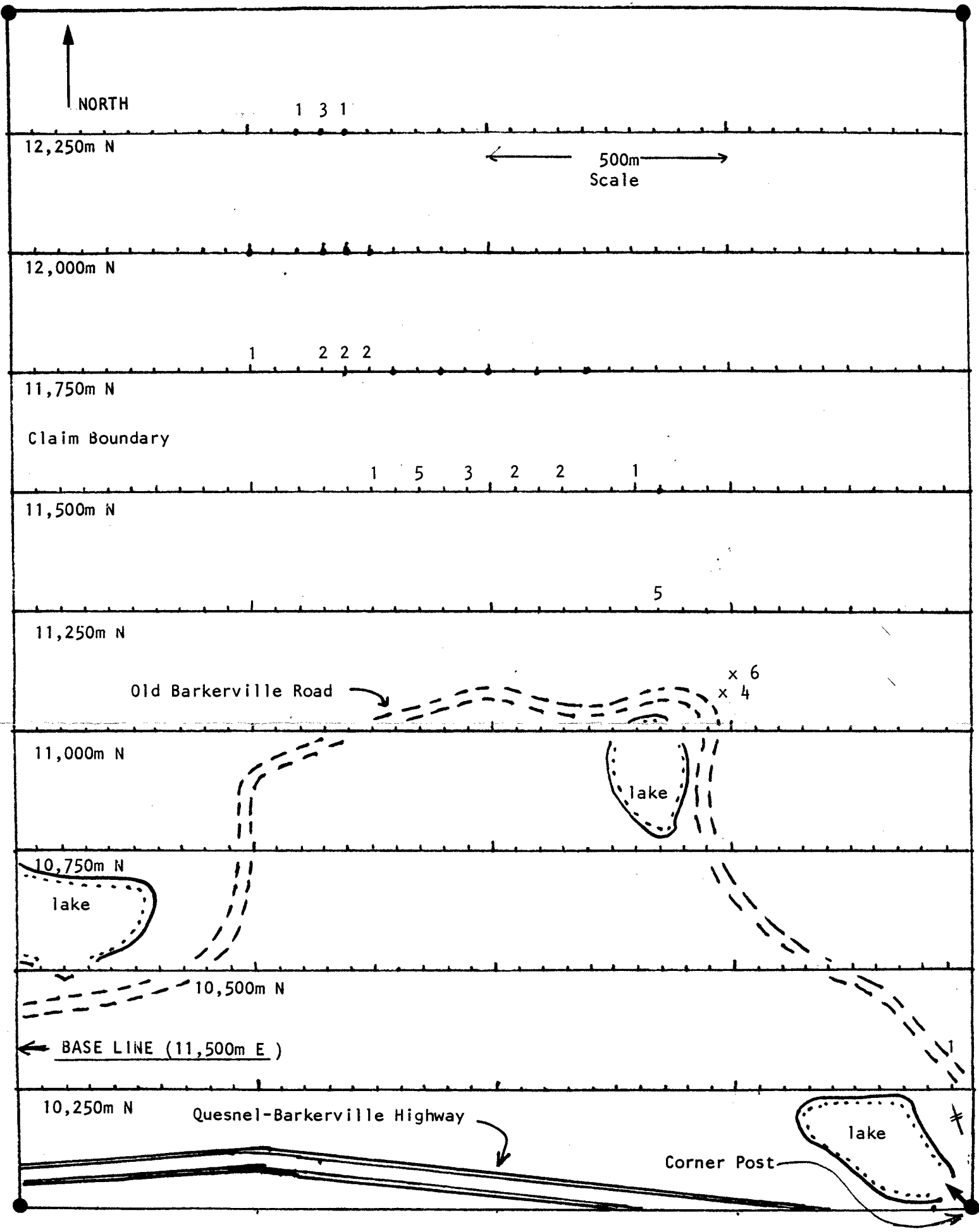
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Assayer



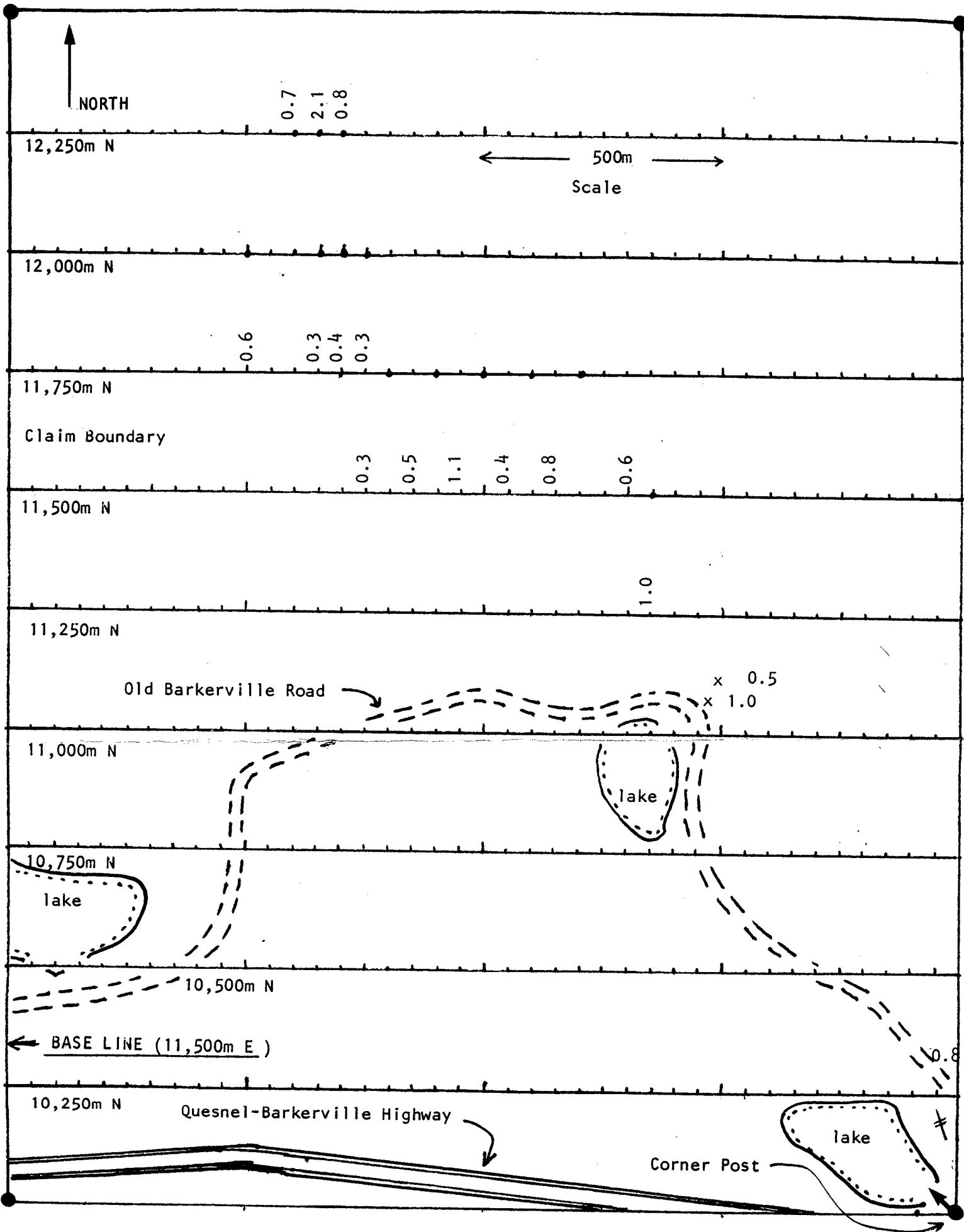
GOLD VALUE IN PARTS PER BILLION

FIRST NUCLEAR CORPORATION		
PROJECT: MOUSE MOUNTAIN		
GOLD GEOCHEMISTRY		
Dwg. No. 9	Scale: 1:10 000	Drawn By:
N.T.S. 93G1	Date:	Checked By:



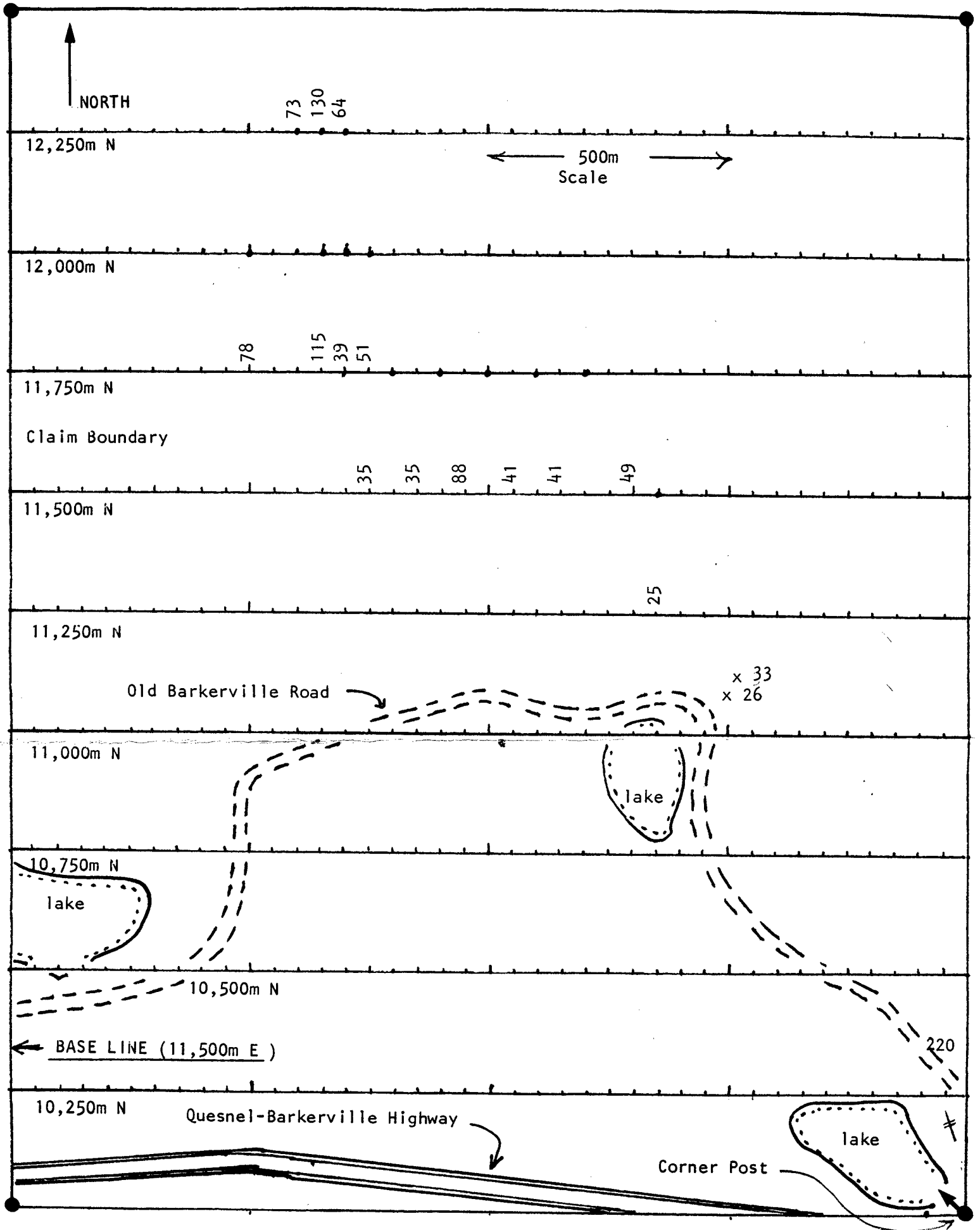
MOLYBDENUM VALUES IN PARTS PER MILLION

FIRST NUCLEAR CORPORATION			
PROJECT: MOUSE MOUNTAIN			
MOLYBDENUM GEOCHEMISTRY			
Dwg. No. 8	Scale: 1: 10 000	Drawn By:	
N.T.S. 93G1	Date:	Checked By:	



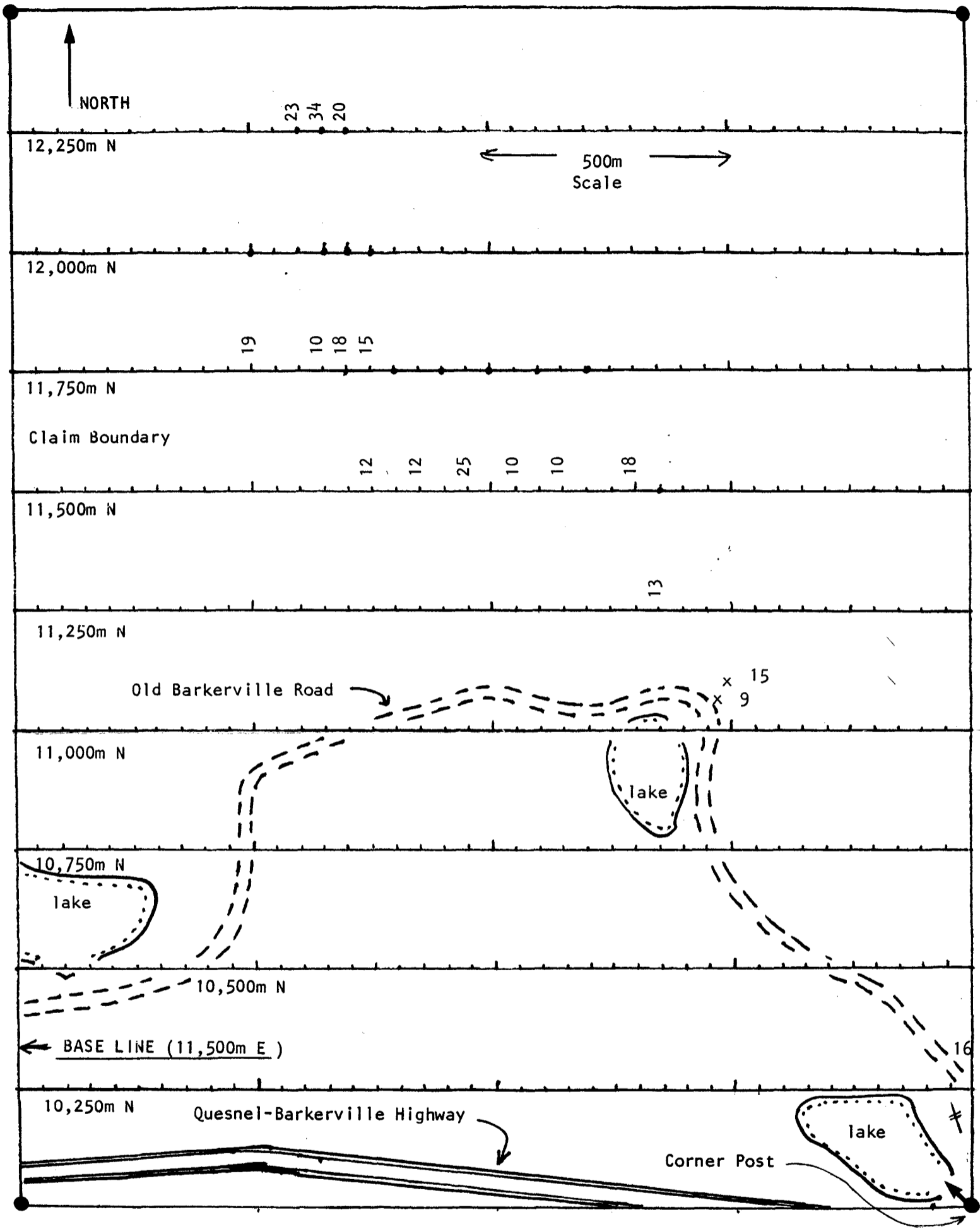
SILVER VALUES IN PARTS PER MILLION

FIRST NUCLEAR CORPORATION		
PROJECT: MOUSE MOUNTAIN		
SILVER GEOCHEMISTRY		
Dwg. No. 7	Scale: 1:10 000	Drawn By:
N.T.S. 93G1	Date:	Checked By:



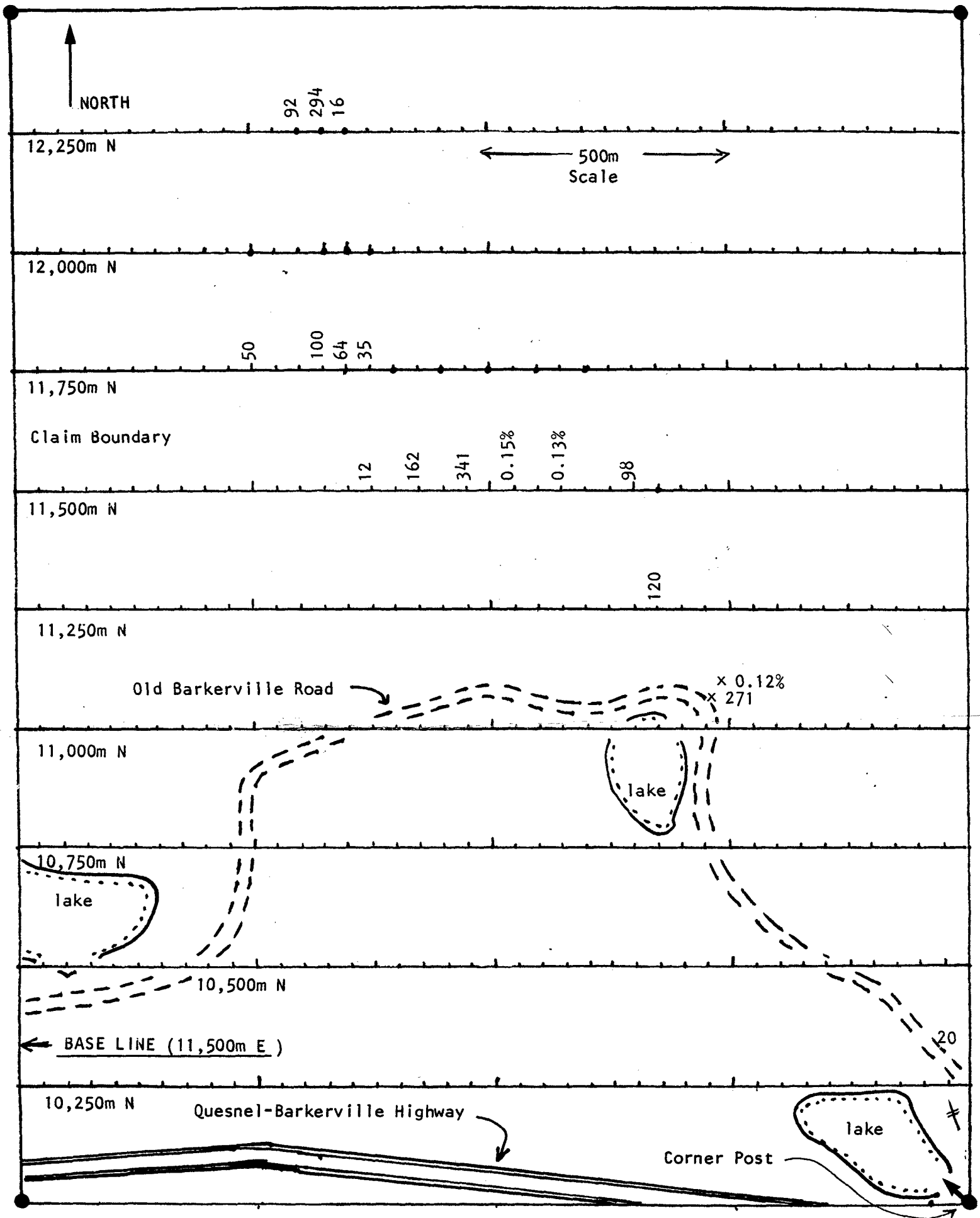
ZINC VALUES IN PARTS PER MILLION

FIRST NUCLEAR CORPORATION			
PROJECT: MOUSE MOUNTAIN ZINC GEOCHEMISTRY			
Dwg. No.	6	Scale: 1: 10 000	Drawn By:
N.T.S. 93G1		Date:	Checked By:



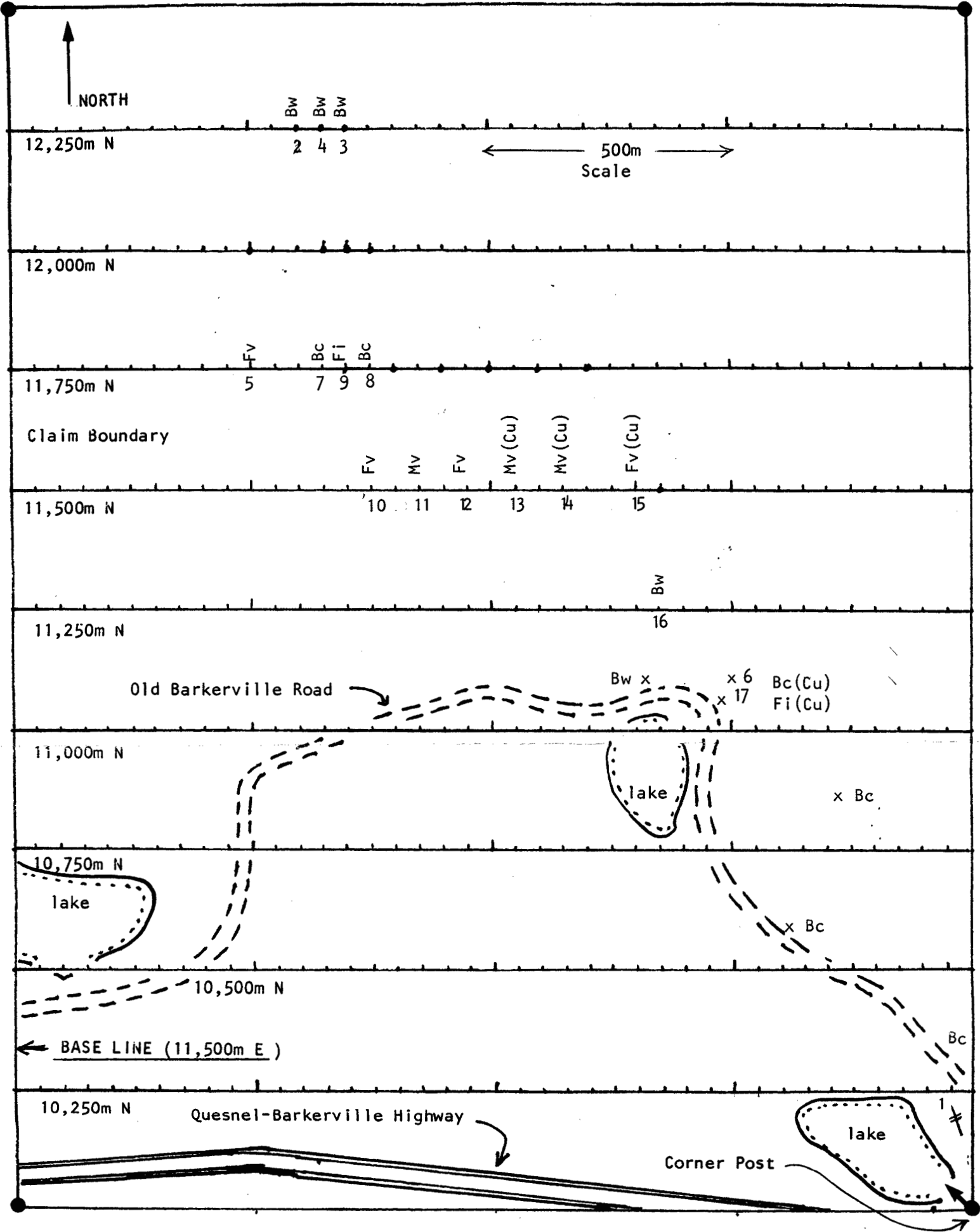
LEAD VALUES IN PARTS PER MILLION OF

FIRST NUCLEAR CORPORATION			
PROJECT: MOUSE MOUNTAIN			
LEAD GEOCHEMISTRY			
Dwg. No. 5	Scale: 1: 10,000	Drawn By:	
N.T.S. 93G1	Date:	Checked By:	



COPPER VALUES IN PARTS PER MILLION OR PERCENT(0.15%)

FIRST NUCLEAR CORPORATION			
PROJECT: MOUSE MOUNTAIN			
COPPER GEOCHEMISTRY			
Dwg. No.	4	Scale: 1:10000	Drawn By:
N.T.S. 93G1		Date:	Checked By:



LEGEND

- | | |
|-----------------------|----|
| Felsic Intrusive | Fi |
| Mafic Volcanic | Mv |
| Felsic Volcanic | Fv |
| Breccia(Fi/Mv/Fv) | Bc |
| Weathered/Altered(Bc) | Bw |
-
- | | |
|----------------------------|----|
| Sample Site | |
| (14 = Sample No. MR-84-14) | 10 |

FIRST NUCLEAR CORPORATION PROJECT: MOUSE MOUNTAIN SAMPLE LOCATION AND ROCK TYPES		
Dwg. No. 3	Scale: 1:10 000	Drawn By:
N.T.S. 93G1	Date:	Checked By:

MOUSE MOUNTAIN DRILL DATA

Hole No.	Interval in Feet		Intersection width in feet	Cu Average Grade		Au ppm oz/ton		Total Depth	Remarks
	From	To							
<u>Du Pont Drilling 1975</u>									
WP-75-1	110	280	170	.102	.12	.003		350	
WP-75-2	20	340	320	.006	< .01	-		340	
WP-75-3	10	320	310	.017	.03	.0009		320	
WP-75-4	10	310	300	.012	.02	.0006		310	
WP-75-5	140	320	180	.070%	.08	.002		320	Hole ends in .09% Cu
<u>Bethlehem Cooper Drilling 1970</u>									
WPC-1	80	200	120	.114	-	-		200	Last 30' of hole ave. .07% Cu
WPC-2	4	200	196	< .012	-	-		200	
WPC-3	20	200	180	.145	-	-		200	Hole ends in .33% Cu mineralization
WPC-4	4	200	196	< .016	-	-		200	
WPC-5	0	200	200	.050	-	-		200	
WPC-6	0	140	140	.150	-	-		200	
WPC-7	0	200	200	< .015	-	-		200	
WPC-8	30	130	100	.011	-	-		130	
WPC-9	30	110	80	.108	-	-		295	
WPC-10	10	350	340	.016	-	-		350	
WPC-11	3	330	327	< .013	-	-		330	
WPC-12	4	360	356	.023	-	-		360	
WPC-13	30	110	80	.120	-	-		350	
WPC-14	20	300	300	.018	-	-		320	