

2.1073
Hanna Twp

N.T.S. #42-A-14/NE



42A14NE0078 2.1073 HANNA

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PROJECTS
SECTION

Report on
Geochemical Soil Sampling Program
Conducted on

Mann 1-71 (Tesluk Option) Property

Mann and Hanna Townships,
Porcupine Mining Division
Timmins Area, Ontario

October 16, 1972
Timmins, Ontario

E. A. Gallo
Noranda Exploration Co., Ltd.

This report on the Geochemical soil sampling program is submitted under the Special Provision dated October 16, 1967, for credit of 20 assessment work days per claim. The person in charge of the linecutting and sampling was E. A. Gallo.

Mann 1-71 (Tesluk Option)

Location - The Mann 1-71 (Tesluk Option) Property consists of 14 contiguous unpatented mining claims in the northwest part of Mann Township, and the southwest part of Hanna Township. The group lies about 30 miles northeast of the town of Timmins, Ontario.

The claims are numbered P.235730-33, P.307674-76, P.308275-77, P.308280-81, and P.308419-20. The claims cover the north halves of Lots 9, 10, and 11 in Concession VI, Mann Township, and, if Hanna Township was also subdivided, the SE $\frac{1}{4}$ of the S $\frac{1}{2}$ of Lot 10, and the SW $\frac{1}{4}$ of the S $\frac{1}{2}$ of Lot 9, Concession I, Hanna Township.

Access - The property is easily reached by boat up the Frederickhouse River, south from Cochrane. The river passes through the west part of the property. Alternately, the ground may be reached by foot or muskeg tractor along a winter road off of Highway #11 from Newmarket Township.

Topography - The property is flat, with a maximum relief of about 10' along the banks of the Frederickhouse River.

Linecutting - Two parallel Base Lines were cut on the property, at a bearing of N60°W, and 3000' apart. Cross lines were cut at 400' intervals at right angles to the Base Lines. All the lines were chained and picketed at 100' intervals. About 13.1 miles of lines were cut in all.

Geochemical Survey - The soil sampling program was conducted on June 14-22 and 24, 1971, and October 16, 1972.

Samples were collected along the cut lines at 100' intervals using drain spades. The bottom of the B horizon and the top of the C horizon were sampled. Usually the sample was collected from a depth of 9"-12". Occassionally the humus extended to excessive depths (+6') and in such an area was not possible to collect a soil sample with the equipment used.

After collecting, the samples were dried and shipped to a

company lab. Here they were pulverized if necessary, and seived through <8, >80 mesh. The coarse fraction was fused in potassium bisulphate and then dissolved in hydrochloric acid. The reagent was diquinolyl and the method was colormetric. Total Cu, total Zn, and total Ni were all run.

The results of this geochemical sampling program are shown on the attached prints.

Background values of total Cu were found to be around 20 ppm. Threshold values range between 21-30 ppm. No anomalous zones were found to occur, although spot Cu highs of 66 ppm were located at 40+00S on Line 32W, 42 ppm Cu at 20+00S on Line 16E, and 40 ppm Cu at 28+00S on Line 16E.

Background values of total Zn were found to be about 60 ppm. Threshold values range from 61-90 ppm. Several spot values in excess of 90 ppm were located, the highest of which is 180 ppm Zn at 36+00S on Line 16W. This value falls in a zone of slightly anomalous values which extends from 34+00S on Line 12W to 42+00S on Line 20W, and may cross the river to 39+00S on Line 28W.

Background values of total Ni were found to range up to 40 ppm. Threshold values range between 41 and 50 ppm. The highest Ni value obtained is 54 ppm, at 24+00S on Line 20W.

Conclusions - No anomalous zones of Cu or Ni were found by the soil sampling program. One small zone of weakly anomalous Zn was found near the river, however this is known to be an area underlain by peridotites. Because of this, and because Zn is known to be an exceptionally volatile metal, the zone is thought to represent a concentration of this metal in transported overburden rather than in the bedrock.



E. A. Gallo

Noranda Exploration Co., Ltd.

NORANDA EXPLORATION CO. LTD.

10/18

LOCATION Tessling Option

MANN

PROJECT 1-71

7-33

SHEET

2

OntarioMATERIAL S O I C

SAMPLE Nos.

COLLECTOR

DATE

ANALYST

DATE

Field 1/23/71

REMARKS

T.T. No.	SAMPLE No.	1	2	3	4	5	6	7	8	G.C.I. NUMBER
14	36W - 345			16		60		32		16275
5	33			18		62		36		
6	32			16		56		28		
7	31			16		62		32		
8	30			24		56		32		
9	29			20		58		34		
10	27			12		30		20		
1	26			6		30		18		
2	24			16		54		34		
3	23			16		64		38		
4	22			22		30		40		
5	21			16		30		36		
6	20			16		38		40		
7	145			16		76		38		
8	32W - 175			28		66		42		
9	18			16		58		36		
10	19			16		56		38		
1	20			20-10		44		22		
2	21			20-10		66		34		
3	22			8		52		20		
4	23			20		62		40		
5	24			20		58		40		
6	25			18		64		40		
7	26			18		62		40		
8	27			16		66		40		
9	28			18		62		36		
10	29			16		58		30		
1	30			14		78		32		
2	31			24		62		32		

NORANDA EXPLORATION CO. LTD.

LOCATION Tesluk Option
OntarioMATERIAL S O L

MANN

PROJECT 1-71

7-33

SHEET 3

SAMPLE Nos.

COLLECTOR

DATE / /

ANALYST

DATE

REMARKS

T.T. No.	SAMPLE No.	1	2	3	4	5	6	7	8	G.C.I. NUMBER
43	32W - 32S			20		62		44		
4	33			16		60		40		
5	34			20		76		40		
6	35			20		60		42		
7	36			18		62		42		
8	37			18		54		40		
9	38			20		64		42		
50	39			20		70		42		
1	40			16		70		42		
2	41			24		82		50		
3	42			14		62		54		
4	43S			16		84		46		
5	28W - 41S			16		46		26		
6	40			24		86		42		
7	39			22		98		78		
8	38			22		96		78		
9	37			12		74		26		
60	36			18		100		56		
1	35			16		70		58		
2	34			16		70		38		
3	33			22		56		40		
4	32			18		82		40		
5	31			22		64		44		
6	30			16		60		40		
7	29			24		76		44		
8	28			24		64		48		
9	27			16		62		36		
10	26			18		90		38		
1	28W - 35S			14		76C		36		

NORANDA EXPLORATION CO. LTD.

LOCATION Tenikhi Option
Ontario
MATERIAL Sed.

MANN
PROJECT 1-71 7-33 SHEET 4
SAMPLE Nos.
COLLECTOR _____ DATE 1/1
ANALYST _____ DATE July 1/23/71

REMARKS

T.T. No.	SAMPLE No.	1	2	3	4	5	6	7	8	G.C.I. NUMBER
72	2810 - 245			14		130		36		
3	23			14		90		36		
4	225			16		40		30		
5	2400 - 255			14		42		28		
6	26			22		96		52	<u>fifty-two</u>	
7	27			20		86		44		
8	28			10		72		24		
9	29			18		70		36		
10	30			24		92		40		
1	31			14	14	58		38		
2	32			8		60		28		
3	33			14		64		52		
4	34			12		96		34		
5	35			10		90		32		
6	36			16		80		42		
7	37			16		62		40		
8	38			14		42		26		
9	15-5			16		42		26		
10	16			14		36		24		
1	17			4		26		10		
2	18			8	8	48		24		
3	19			24		76		50		
4	20			12		52		26		
5	215			14		34		22		
6	2000 - 125			14		36		24		
7	13			26		84		44		
8	14			16		86		50		
9	2000 - 155			20		100		40		
100	check			56		58		22		

NORANDA EXPLORATION CO. LTD.

LOCATION Teslin Creek
Ontario
MATERIAL Soil

PROJECT 1-71 1-33 SHEET 5
SAMPLE Nos.
COLLECTOR _____ DATE 1/1
ANALYST Jelly DATE 1/23/71

REMARKS

T.T. No.	SAMPLE No.	1	2	3	4	5	6	7 ppm	8	G.C.I. NUMBER
		Cu			Zn					
101	20W-165			11		110		34		
1	17			18		90		44		
3	18			14		86		34		
4	19			26		74		32		
5	20			22		96		36		
1	21			20		64		40		
7	22			20		70		42		
8	23			24		64		52		
9	24			24		68		54		
110	25			14		96		36		
1	26			6		22		12		
2	34			18		64		38		
3	40			12		44		24		
4	41			28		96		46		
5	42			14		94		36		
6	43			16		70		42		
7	44			16		70		38		
8	45			16		66		36		
9	20W-465			14		54		32		
120	16W-455			30		86		34		
1	44			16		70		36		
2	43			18		62		24		
3	42			18		140		32		
4	41			22		78		50		
5	40			22		130		38		
6	39			16		110		28		
7	38			24		130		42		
8	37			24		96		42		
9	36			28		180		46		

NORANDA EXPLORATION CO. LTD.

LOCATION Tealuk Option

Ontario

MATERIAL SOIL

MAN

PROJECT 1-71

7-33

SHEET

6

SAMPLE Nos.

COLLECTOR

DATE

ANALYST

DATE

July 123/71

REMARKS

T.T. No.	SAMPLE No.	1	2	3	4	5	6	7	8	G.C.I. NUMBER
130	16W - 355			Cu		211		Ni		
1	34			22		74		46		
2	33			10		86		26		
3	32			10		88		28		
4	31			12		70		28		
5	30			8		54		28		
6	29			12		88		28		
7	28			10		62		24		
8	27			14		90		36		
9	26			20		74		42		
140	255			20		70		42		
1	245-16W			12		66		36		
2	16W-235			10		86		34		
3	22			18		60		34		
4	21			18		72		58		
5	20			22		84		40		
6	19			20		62		44		
7	18			12		52		24		
8	17			18		60		34		
9	16			16		78		36		
150	15			10		120		26		
1	14			26		70		38		
2	135			10		60		32		
3	12W - 85			24		90		40		
4	9			20		76		42		
5	10			20		76		44		
6	11			16		68		36		
7	12			12		70		36		
8	13			12		68		36		

NORANDA EXPLORATION CO. LTD.

LOCATION Testub option

MAN

PROJECT 1-217-33SHEET 2Ontario

SAMPLE Nos.

MATERIAL SOIL

COLLECTOR

DATE / /

ANALYST

DATE

July 123/71

REMARKS

T.T. No.	SAMPLE No.	1	2	3	4	5	6	7	8	G.C.I. NUMBER
				Cu		Zn		Ni		
159	12W - 14.5			20		68		38		
160	155			16		68		38		
1	Chel #246			50		54		22		
2	27W - 16.5			16		64		90		
3	7			24		72		46		
4	8			34		70		48		
5	9			16		70		40		
6	20			20		66		44		
7	1			16		82		36		
8	2			18		72		36		
9	3			16		66		36		
10	4			18		60		34		
11	5			14		54		28		
12	6			14		78		34		
13	7			18		64		46		
14	8			18		60		42		
15	9			22		56		44		
16	12W - 30			18		68		38		
17	1			20		70		44		
18	2			16		66		36		
19	3			16		80		38		
20	4			16		180		36		
21	5			12		62		38		
22	6			24		100		42		
23	7			14		74		36		
24	8			12		74	60	40		
25	9			24		76		54		
26	12W - 40.5			20		66		44		

NORANDA EXPLORATION CO. LTD.

LOCATION MANN - 171

PROJECT JESLICK OPTION

SHEET 8

42-A-14 Ontario

MATERIAL Soil

SAMPLE Nos.

COLLECTOR

DATE / /

ANALYST

DATE July 123/71

REMARKS

T.T. No.	SAMPLE No.	1	2	3 <u>Cu</u>	4	5 <u>Zn</u>	6	7 <u>Ni</u>	8	G.C.I. NUMBER
✓ 27	21W - 415			24		74		40		
✓ 8	21W - 425			16		66		52		
✓ 5	L.O - 335			18		52		36		
✓ 30	2			24		60		38		
	315			10		52		24		
✓ 2	L.O - 8L #2			6		44		22		
✓ 3	295			12		84		38		
✓ 4	8			24		71		50		
✓ 5	7			18		76		34		
✓ 6	6			16		62		36		
✓ 7	5			12		32		22		
✓ 8	4			16		40		30		
✓ 9	3			16		52		32		
✓ 10	1			18		64		40		
✓ 1	20			18		64		40		
✓ 2	9			16		58		38		
✓ 3	8			20		60		44		
✓ 4	7			20		64		50		
✓ 5	6			18		90		42		
✓ 6	5			18		62		42		
✓ 7	4			16		38		34		
✓ 8	3			28		66		34		
✓ 1	2			14		54		32		
✓ 10	1			20		56		40		
✓ 11	10			24		58		38		
✓ 12	9			14		52		36		
✓ 13	8			16		60		42		
✓ 14	7			18		60		44		
✓ 15	LO - 68			18		50		30		

NORANDA EXPLORATION CO. LTD.

LOCATION MANN 1-71

PROJECT TESLUK ORE

SHEET 9

42-A-14 Ontario

MATERIAL Soil

SAMPLE Nos.

COLLECTOR

DATE / /

ANALYST

DATE July 123/71

REMARKS

T.T. No.	SAMPLE No.	1	2	3 Cm	4	5 Lm	6	7 Ni	8	G.C.I. NUMBER
56	LO - 55			18		50		36		
7	7			20		52		36		
8	3			12		70		32		
9	2			16		38		26		
60	18			12		62		34		
1	LO - BL #1			16		76		34		
2	LO - 1N.			18		62		42		
3	2			14		50		34		
4	3			18		66		38		
5	4			10		50		26		
6	5			8		40		24		
7	6			14		50		28		
8	7			8		40		26		
9	8			26		80		48		
10	9			22		50		32		
1	10			24		76		46		
2	1			10		14		30		
3	2			16		68		34		
4	3			18		60		40		
5	4			16		66		30		
6	5			8		36		24		
7	LO - 16N.			6		38		20		
8	SE - 18N			14		60		38		
9	7			14		58		34		
80	6			12		36		28		
1	5			16		60		38		
2	4			22		64		44		
3	3			12		64		34		
84	SE - 12N			16		72		40		

NORANDA EXPLORATION CO. LTD.

LOCATION Main - 1-21
12-A-14 Ontario
MATERIAL Sands

PROJECT Tesluk Opt.

SHEET 10

SAMPLE Nos.

COLLECTOR

DATE

ANALYST

DATE

July 23/71

REMARKS

T.T. No.	SAMPLE No.	1	2	3 Pn	4	5 Lm	6	7 Nc	8	G.C.I. NUMBER
85	4E-11N			18		64		44		
6	10			20		62		46		
7	9			14		60		36		
8	8			18		50		32		
9	7			18		68		38		
90	6			18		58		42		
1	5			14		70		38		
2	9			14		72		32		
3	3			18		44		26		
4	2			16		62		38		
5	1N			16		58		40		
6	4E-8L			18		64		36		
7	4E-1S			18		56		36		
8	2			14		48		30		
9	4E-3S			16		46		32		
100	Cheek			52		56		22		
1	4E-4S			14		56		34		
2	5			16		58		34		
3	6			14		58		28		
4	5			18		52		32		
5	7			22		56		40		
6	10			16		38		26		
7	12			18		60		40		
8	3			20		44		38		
9	4			22		64		42		
10	5			16		36		28		
1	6			16		56		36		
2	7			16		50		34		
113	4E-18S			24		60		44		

NORANDA EXPLORATION CO. LTD.

LOCATION Plan 1-71

PROJECT Testsite Opt

SHEET 11

42-A-14 Ontario

MATERIAL Soil

SAMPLE NOS.

COLLECTOR E. Gallo

DATE / /

ANALYST

DATE

July 123/71

REMARKS

T.T. No.	SAMPLE No.	1	2	3	4	5	6	7	8	G.C.I. NUMBER
114	4E - 19S			20		66		44		
5	20			20		58		44		
6	1			20		44		40		
7	2			22		54		46		
8	3			16		52		30		
9	4			18		44		38		
120	5			16		60		42		
1	6			14		54		38		
2	7			18		52		38		
3	8			10		30		24		
4	9			16		58		36		
5	30			20		60		44		
6	1			18		56		38		
7	2			18		56		40		
8	4E - 33S			16		52		34		
9	8E - 17N			16		70		38		
130	6			16		42		36		
1	5			22		66		40		
2	4			14		76		36		
3	3			14		78		38		
4	2			10		96		30		
5	1			14		78		40		
6	10			20		56		42		
7	9			24		60		46		
8	8			12		80		36		
9	7			12		64		30		
140	6			8		58		24		
1	5			10		60		28		
142	8E - 4N			22		70		42		

NORANDA EXPLORATION CO. LTD.

LOCATION Mann 1-71
42-A-14 Citrus
MATERIAL Soil

PROJECT	Testuk Opt.	SHEET	12
SAMPLE NOS.			
COLLECTOR		DATE	/ /
ANALYST		DATE	July 23/71

REMARKS

NORANDA EXPLORATION CO. LTD.

LOCATION Tessink Creek
Ontario

PROJECT MNN 1-71 7-33 SHEET

MATERIAL Soil

SAMPLE Nos.

COLLECTOR _____ DATE / /

ANALYST Judy DATE 12/3/71

REMARKS _____

T.T. No.	SAMPLE No.	1	2	3 Cu	4	5 Zn	6	7 Ni	8	G.C.I. NUMBER
1	Check			52		58		22		
2	910-173			16		70		38		
3	18			18		54		34		
4	19			12		66		30		
5	20			16		62		36		
6	22			24		50		30		
7	23			20		80		36		
8	24			26		64		34		
9	25			18		22		34		
10	26			18		52		38		
1	27			18		50		38		
2	28			14		56		30		
3	31			22		54		40		
4	29			14		60		34		
5	30 S			20		58		38		
6	8W- 405			8		36		28		
7	39			24		60		36		
8	38			12		58		34		
9	37			6		50		18		
20	36			8		58		20		
1	35			14		54		30		
2	34			18		60		38		
3	33			18		66		36		
4	32			14		58		32		
5	31			12		60		38		
6	30			16		52		28		
7	29			18		54		40		
8	28			16		62		32		
9	27 S (coray)			16		52		18		

NORANDA EXPLORATION CO. LTD.

LOCATION Testake Option

PROJECT N.W. 1-71

7-33

SHEET

Centimetre

MATERIAL SOIL

SAMPLE Nos.

COLLECTOR

DATE

ANALYST

DATE

REMARKS

July 123/71

T.T. No.	SAMPLE No.	1	2	3	4	5	6	7	8	G.C.I. NUMBER
30	SW-265			Cu	Zn		Ni			
1	25			12	36		28			
2	24			20	54		38			
3	23			16	56		38			
4	22			14	46		32			
5	21			16	76		38			
6	20			16	62		36			
7	19			12	52		40			
8	18			24	76		42			
9	17			22	100		40			
10	16			16	68		34			
11	15			18	76		42			
12	14			16	62		42			
13	13			12	64		50			
14	12			18	50		36			
15	11			20	68		44			
16	10			18	60		42			
17	9			18	42		36			
18	8			14	60		42			
19	7			16	42		24			
20	6			16	70		36			
21	5			16	58		36			
22	4			16	66		36			
23	3			18	72		40			
24	2			18	66		24			
25	15			14	58		32			
26	16			20	92		48			
27	1N			12	64		38			
28	2N			14	44		36			

NORANDA EXPLORATION CO. LTD.

LOCATION Tesluk Option

Ontario

PROJECT M4N1-71 7-33 SHEET

MATERIAL S01C

SAMPLE Nos.

COLLECTOR

DATE

ANALYST

DATE

July 123/71

REMARKS

T.T. No.	SAMPLE No.	1	2	3	4	5	6	7	8	G.C.I. NUMBER
				Cu	Zn			Ni		
59	8W-3N			6	30	-		22		
60	5			8	38	-		26		
1	6			8	48	-		28		
2	7			14	40	-		28		
3	8 N			12	36	-		28		
4	4W-35S			16	74	-		34		
5	82			16	40	-		50		
6	11			4	28	-		20		
7	10			6	36	-		24		
8	9			2	16	-		12		
9	8			8	38	-		24		
70	7			12	54	/		32		
1	6			12	40	-		28		
2	5			12	38	-		28		
3	4			14	42	-		28		
4	3			8	46	-		24		
5	2			10	28	-		22		
6	1 N			22	54	/		38		
7	BL			26	58	/		46		
8	15			18	62	-		44		
9	2			14	56	/		42		
80	3			10	46	/		28		
1	4			14	54	-		38		
2	5			14	34	-		36		
3	6			20	60	-		44		
4	7			18	56	-		42		
5	8			22	64	-		48		
6	9			14	60	/		40		
7	105			16	58	/		40		

NORANDA EXPLORATION CO. LTD.

LOCATION Tesslin Opts.
42-A-14 Ontario

MATERIAL Soil

PROJECT MANV 1-21 7-33 SHEET

SAMPLE Nos. _____

COLLECTOR _____

DATE / /

ANALYST _____

DATE July 12 1971

REMARKS _____

T.T. No.	SAMPLE No.	1	2	3	4	5	6	7	8	G.C.I. NUMBER
88	4W-115			14		48		32		
9	12			16		62		40		
40	13			16		40		38		
1	14			18		60		42		
2	15			16		48		36		
3	16			12		36		30		
4	18			16		50		44		
5	19			18		50		40		
6	21			18		60		38		
7	22			54		32		30		
8	23			18		40		30		
9	245			16		50		34		
100	Check					58		22		
1	4W-255			22		64		36		
2	26			16		70		34		
3	27			22		50		38		
4	28			14		54		34		
5	29			22		46		38		
6	30			20		70		42		
7	31			26		56		40		
8	33			18		68		36		
9	34			16		60		38		
10	36			16		64		40		
1	375			22		62		44		
2	125-305			20		54		34		
3	29			16		70		36		
4	28			18		66		38		
5	27			14		62		36		
6	265			16		60		34		

NORANDA EXPLORATION CO. LTD.

LOCATION Tesluk option
Ontario

PROJECT MANN 1-21 7-33 SHEET

MATERIAL SOIL

SAMPLE Nos. _____

COLLECTOR _____ DATE / /

ANALYST _____ DATE July 13 1971

REMARKS _____

T.T. NO.	SAMPLE No.	1	2	3	Cu	4	5	6	7	8	G.C.I. NUMBER
117	12E - 255				20		42		38		
8	24				20		40		36		
9	23				16		34		30		
120	22				20		48		40		
1	21				16		34		30		
2	20				18		40		34		
3	18				18		46		36		
4	17				18		54		40		
5	16				16		34		34		
6	15				14		52		32		
7	14				16		52		36		
8	13				18		56		32		
9	125				22		54		38		
130	11				16		52		40		
1	10				16		58		42		
2	9				20		56		42		
3	8				30		54		38		
4	7				24		50		30		
5	6				24		60		42		
6	5				12		50		38		
7	4				14		50		44		
8	3				14		40		32		
9	2				18		34		34		
140	15				10		26		24		
1	BL				16		52		34		
2	IN				16		58		44		
3	2				22		58		46		
4	3				14		50		38		
5	4				22		60		50		

NORANDA EXPLORATION CO. LTD.

LOCATION Teslak Option
Curtain

PROJECT M4N1-71 7-33 SHEET

MATERIAL SOIL

SAMPLE Nos. _____
COLLECTOR _____ DATE / /
ANALYST _____ DATE July 123/71

REMARKS _____

T.T. No.	SAMPLE No.	1	2	3 <i>Cu</i>	4	5	6	7 <i>Ni</i>	8	G.C.I. NUMBER
✓ 146	12E - 5 N			22		58		46		
✓ 7	6			16		58		42		
✓ 8	7 N			18		60		40		
✓ 9	16E - 8 N			14		44		38		
150	7			14		50		40		
1	6			10		32		24		
2	5			18		60		46		
3	4			20		62		50		
4	3			18		54		44		
5	2			14		60		42		
6	1 N			10		50		38		
7	BL			22		54		38		
8	15			20		46		34		
9	3			22		64		46		
✓ 160	4 S			22		50		30		
1	Check			50		60		22		
2	16E - 5 S			16		42		22		
3	6			16		46		32		
4	7			20		48		36		
5	8			18		48		32		
6	9			16		62		36		
7	10			20		56		18		
8	11			18		66		38		
9	12			12		56		28		
10	13			18		62		34		
11	14			18		56		38		
12	15			24		70		44		
13	16			30		74		48		

NORANDA EXPLORATION CO. LTD.

LOCATION Tie Lake Ontario
Ontario

PROJECT M144N1-71 7-33 SHEET

SAMPLE Nos.

COLLECTOR

DATE

ANALYST

DATE

REMARKS

T.T. No.	SAMPLE NO.	1	2	3	4	5	6	7	8	G.C.I. NUMBER
				Cu		Zn		Ni		
✓ 14	166 - 175			30		84		42		
5	18			22		84		42		
6	14			42		86		44		
7	20			24		72		44		
8	21			22		76		40		
9	22			24		74		38		
20	23			20		66		38		
1	24			24		72		42		
2	25			32		60		36		
3	26			26		76		40		
4	27			40		76		50		
5	285			30		62		38		
6	206 - 255			22		50		34		
7	34			24		70		38		
8	23			26		56		38		
9	22			20		68		36		
30	21			26		62		38		
1	13			26		58		38		
2	12			20		64		38		
3	11			22		64		40		
4	10			30		62		42		
5	8			22		76		38		
6	7			22		44		34		
7	6			22		56		36		
8	55			22		74		32		
9	1N			18		46		28		
40	2			22		44		36		
1	3			18		72		38		
✓ 2	4N			22		76		36		

NORANDA EXPLORATION CO. LTD.

LOCATION Testline option

PROJECT MARNI-71 7-33

SHEET _____

MATERIAL Soil

SAMPLE Nos. _____

COLLECTOR _____ DATE / /

ANALYST _____ DATE July 123/71

REMARKS _____

T.T. No.	SAMPLE No.	1	2	3	4	5	6	7	8	G.C.I. NUMBER
✓ 43	20E - 5N			Cu		Zn		Ni		
✓ 4	6			24		78	0	44		
✓ 5	7			22		68	0	42		
✓ 6	8			30		62	0	40		
✓ 7	9			22		82		38		
✓ 8	10N			24		38		22		
✓ 9	265			18		62		36		
✓ 10	11N			26		64		34		
✓ 1	24E - 9			30		72		40		
✓ 2	7			20		74		36		
✓ 3	6			24		86		38		
✓ 4	5			28		76	0	42		
✓ 5	4			30		76	0	38		
✓ 6	3			26		76	0	36		
✓ 7	2N			22		64	0	38		
✓ 8	24E - 19S			22		46	0	34		
✓ 9	20			22		82		42		
✓ 10	21			22		100		34		
✓ 1	22			24		78	0	36		
✓ 2	23			20		44	0	30		
✓ 3	24E - 24S			26		80	0	40		
✓ 4	28E - 21S			30		62	0	40		
✓ 5	20			30		80	0	46		
✓ 6	19			24		76	0	40		
✓ 7	28E - 18S			28		92	0	34		
✓ 8	00 - 10S									
✓ 9	04									
✓ 10	08									
✓ 1	06									

Plotted 6/11/71

Show instrument technical data in each space for
type of survey submitted or indicate "not applicable"

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 625 Number of Readings Not Applicable
Station interval 100'
Line spacing 400'
Profile scale or Contour intervals Not Applicable
(specify for each type of survey)

MAGNETIC

Instrument _____
Accuracy - Scale constant _____
Diurnal correction method _____
Base station location _____

ELECTROMAGNETIC

Instrument _____
Coil configuration _____
Coil separation _____
Accuracy _____
Method: Fixed transmitter Shoot back In line Parallel line
Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____
Scale constant _____
Corrections made _____

Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION – RESISTIVITY

Instrument _____
Time domain _____ Frequency domain _____
Frequency _____ Range _____
Power _____
Electrode array _____
Electrode spacing _____
Type of electrode _____

SELF POTENTIAL

Instrument _____ Range _____
Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____
Values measured _____
Energy windows (levels) _____
Height of instrument _____ Background Count _____
Size of detector _____
Overburden _____
(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____
Instrument _____
Accuracy _____
Parameters measured _____

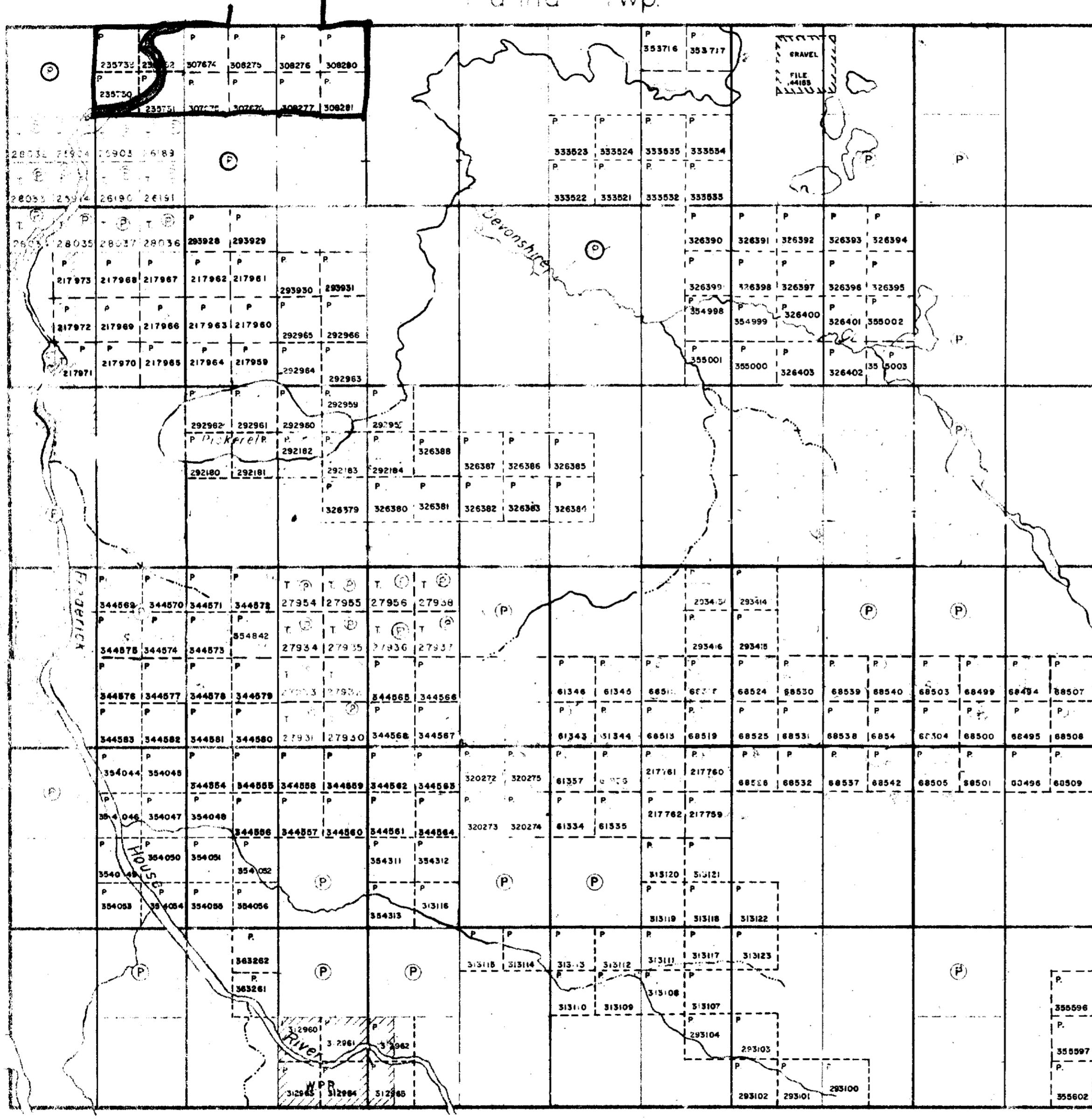
Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____
Instrument(s) _____
(specify for each type of survey)
Accuracy _____
(specify for each type of survey)
Aircraft used _____
Sensor altitude _____
Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____
Miles flown over total area _____ Over claims only _____

M.54

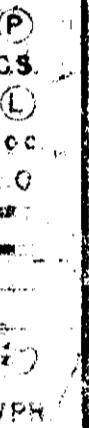


THE TOWNSHIP
OF
MANN
DISTRICT OF
COCHRANE
PORCUPINE
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

- PATENTED LAND
- CROWN LAND SALE
- LEASES
- LOCATED LAND
- LICENSE OF OCCUPATION
- ROADS
- IMPROVED ROADS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG
- WATER POWER RESERVE



NOTES

400' Surface Rights Reservation shown
all Lakes and Rivers.

Water Power Reserve shown thus:

DATE OF ISSUE
NOV 27 1972
ONT. DEPT. OF MINES
AND NORTHERN AFFAIRS

2.1073

PLAN NO. - M 54

ONTARIO
DEPARTMENT OF MINES
AND NORTHERN AFFAIRS



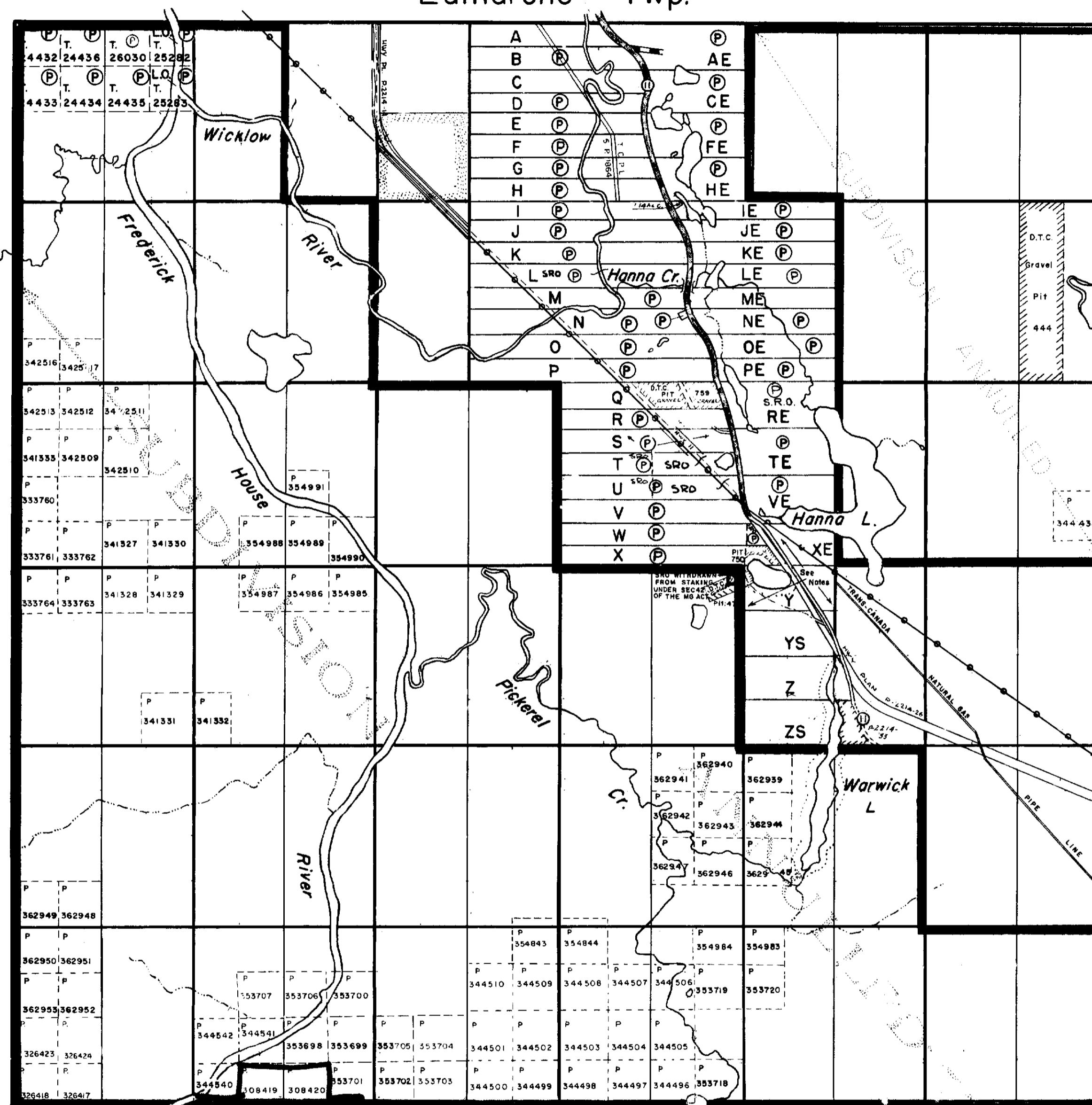
M.54

MAN TWP

M.54

M-490

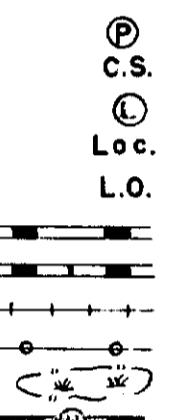
Reaume Twp.



THE TOWNSHIP
OF
HANNA
DISTRICT OF
COCHRANE
PORCUPINE
MINING DIVISION
SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND
CROWN LAND SALE
LEASES
LOCATED LAND
LICENSE OF OCCUPATION
ROADS
IMPROVED ROADS
RAILWAYS
POWER LINES
MARSH OR MUSKEG
KING's HIGHWAY

NOTES

400' Surface rights reservation around all lakes & rivers.

REG. PLAN NO.-M. 57 COVERS LOTS "A" TO Z-S.
IN CON. 3 TO CON. 6

Surface Rights Only reserved to Dept of
Lands & Forests
shown thus: File 88767

See L.B.F. File 96605-122598 Re Grave On
Loc. XE & Loc. Y

Area shown thus withdrawn from staking Section 42 Mining
Act File 88769 & 88772

DATE OF ISSUE
NOV 27 1972
DNT. DEPT. OF MINES AND NORTHERN AFFAIRS

PLAN NO. - M 490

ONTARIO
DEPARTMENT OF MINES
AND NORTHERN AFFAIRS

M-490

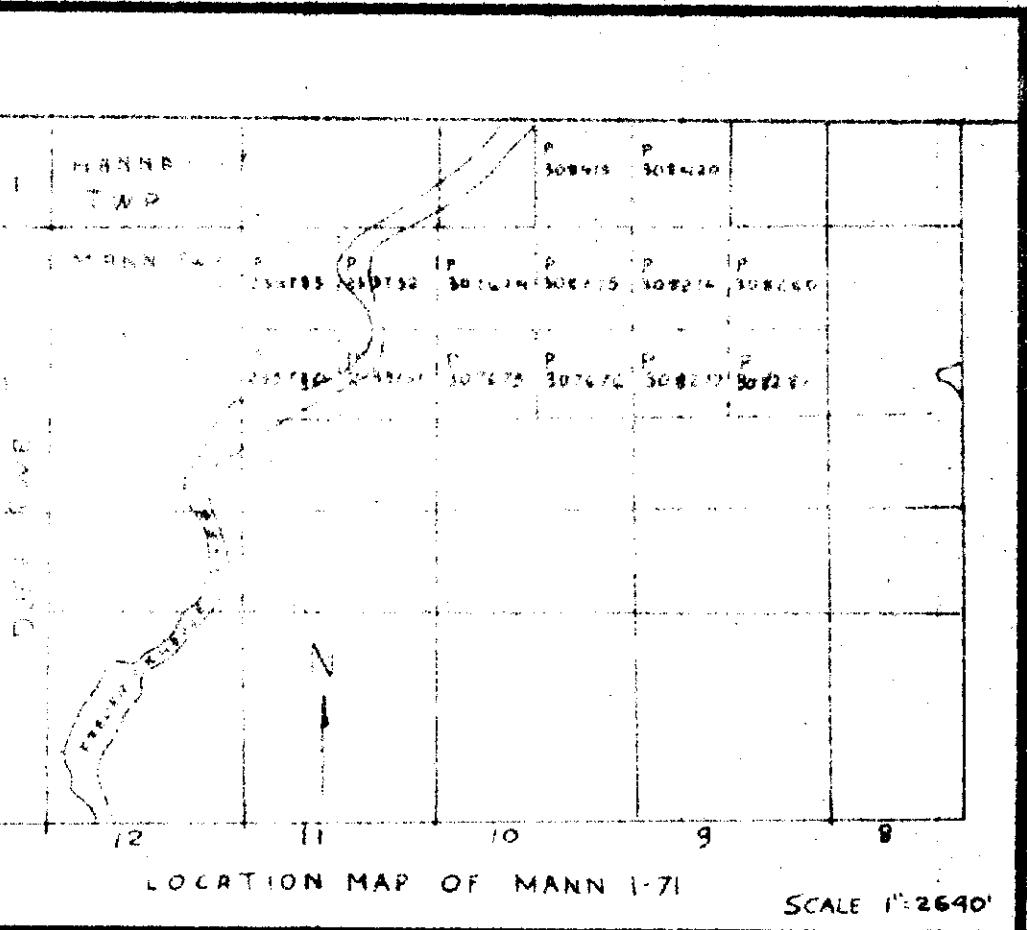
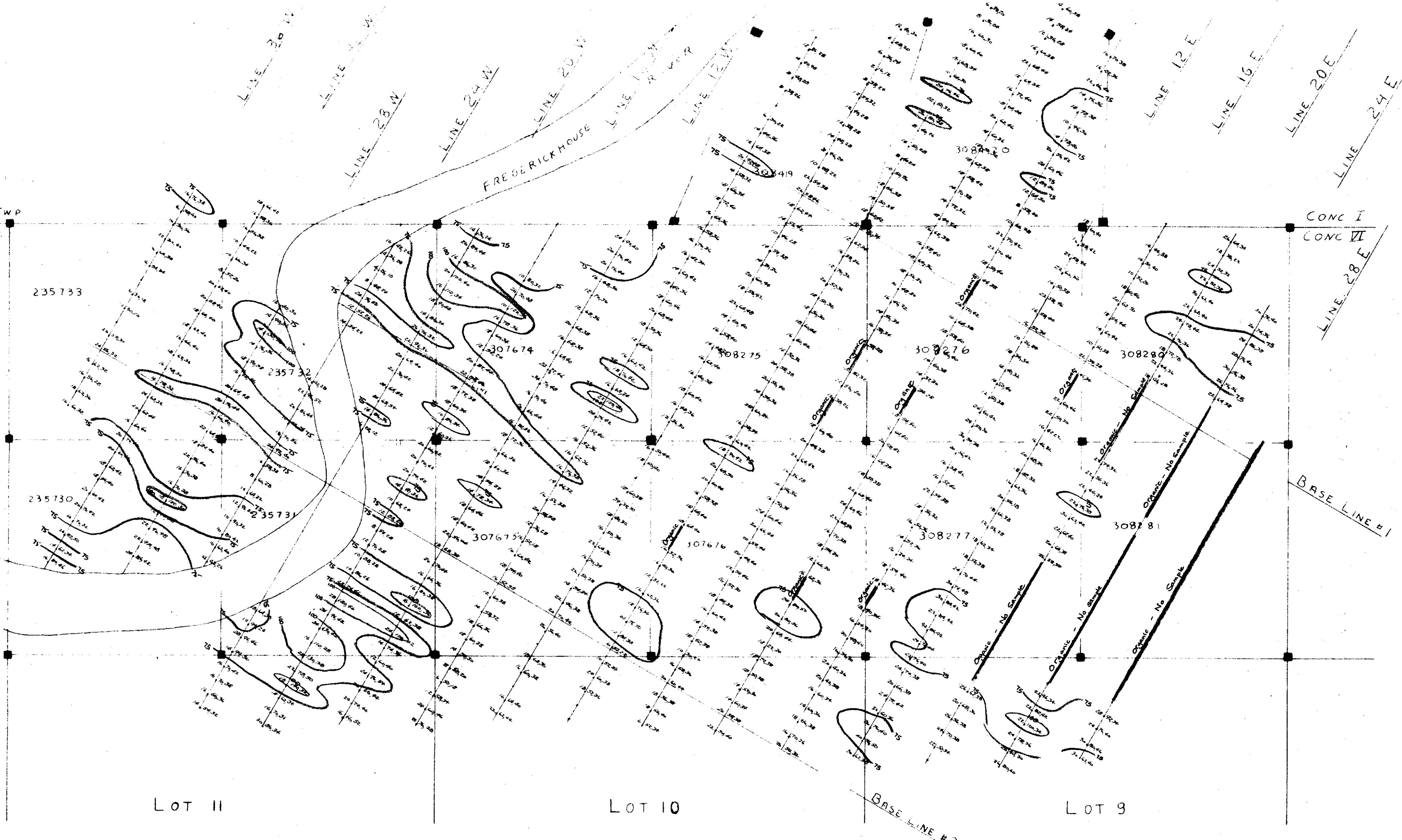
q.T. HANNA

M-490

2.1073



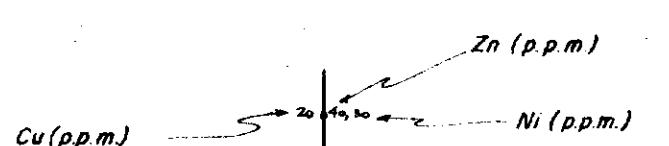
42A14NE0078 2.1073 HANNA



LEGEND

Course Fractions ($<8 >80$)
Horizon Sampled - C Zone
Depth of Sampling - Approx 12"
Values Shown are Total Metal.
G.C.I. No. 16376

ELEMENTS



Organic Material - No Sample Taken

Ed Hall

ZINC (P.P.M.)

COPPER (P.P.M.)
6-19 p.p.m. Background
20-24 p.p.m. Threshold
25-54 p.p.m. Anomalous

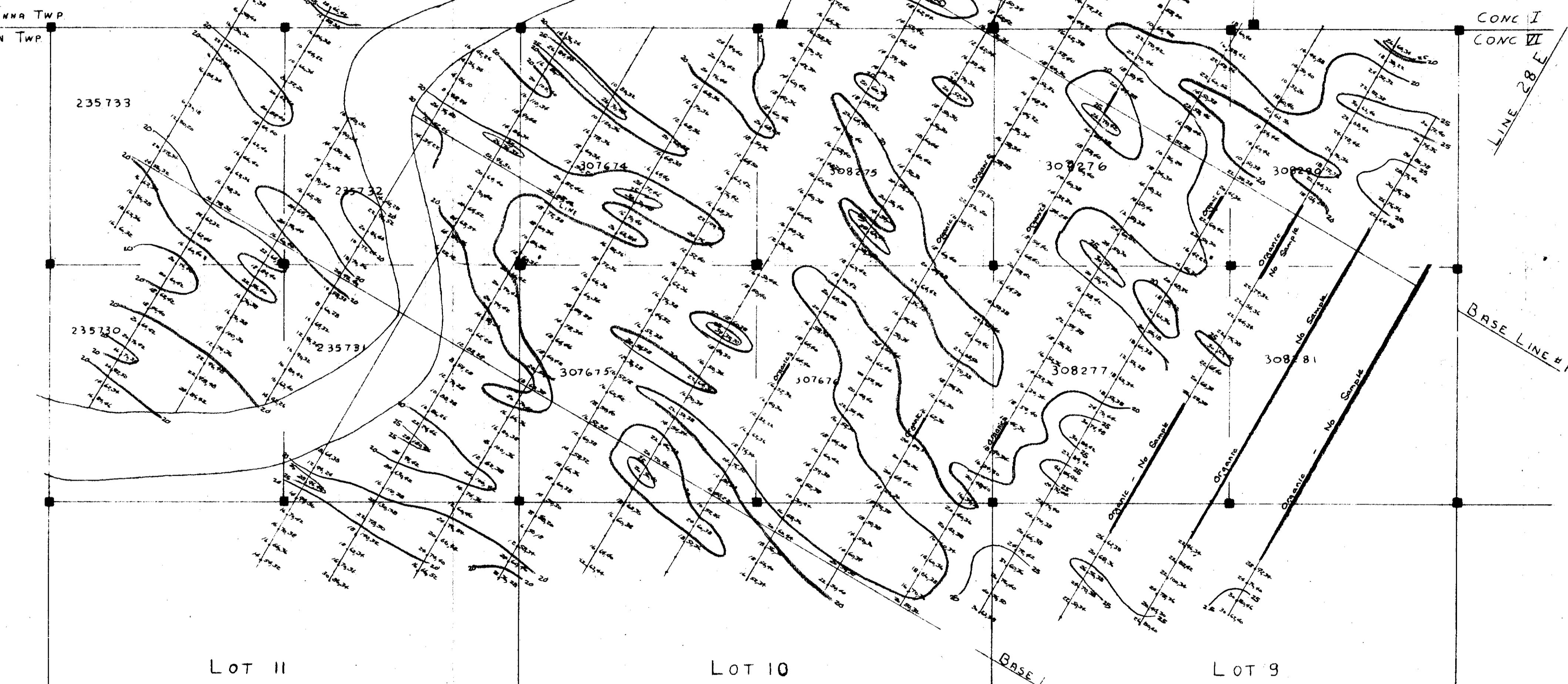
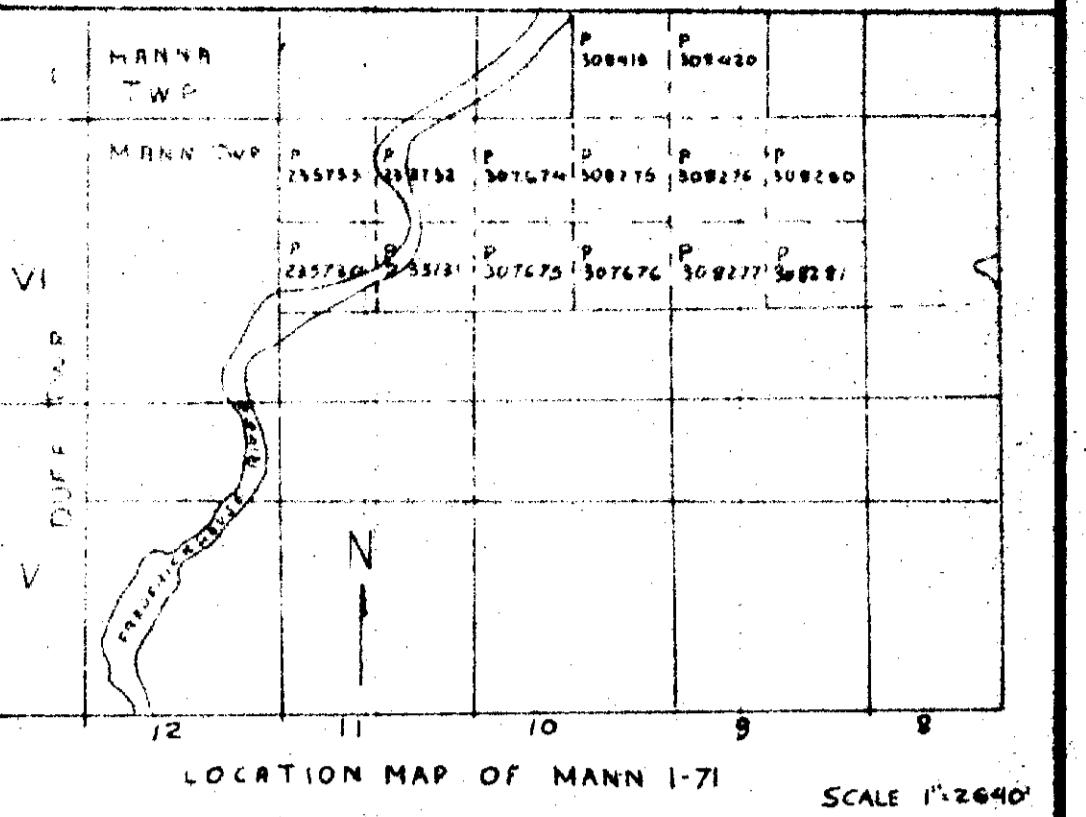
ZINC (P.P.M.)
16-74 p.p.m. Background
75-99 p.p.m. Threshold
100-180 p.p.m. Anomalous

NICKEL (P.P.M.)
12-39 p.p.m. Background
40-49 p.p.m. Threshold
50-54 p.p.m. Anomalous

REVISED	GEOCHEMICAL SURVEY		
APPROVED	MANN 1-71		
	TESLUK OPTION		
	MANN TWP ONTARIO		
PROJECT: MANN (TESLUK OPTION)			
PROJ. NO. 1952 SURVEYED BY: B. ANDERSON DATE: FEB. 22, 72			
N.T.S. 42 R. 19.5 DRAWN BY: B. MERCURI SCALE: 1:400'			
DWG. NO.	NORANDA EXPLORATION CO. LTD.		
	OFFICE: TIMMINS ONTARIO		



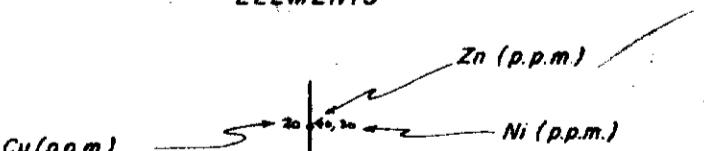
J
220



LEGEND

Course Fractions ($< 0.2 > 0.0$)
Horizon Sampled - C Zone
Depth of Sampling - Approx. 12"
Values Shown are Total Metal.
G.C.I. No. 16376

ELEMENTS



Organic Material - No Sample Taken

COPPER (P.P.M.)

6-19 p.p.m. Background
20-24 p.p.m. Threshold
25-54 p.p.m. Anomalous

ZINC (P.P.M.)

16-74 p.p.m. Background
75-99 p.p.m. Threshold
100-180 p.p.m. Anomalous

NICKEL (P.P.M.)

12-39 p.p.m. Background
40-49 p.p.m. Threshold
50-54 p.p.m. Anomalous

COPPER (P.P.M.)

GEOCHEMICAL SURVEY
MANN I-71
TESLUK OPTION

MANN TWP. ONTARIO

PROJECT: MANN (TESLUK OPTION)

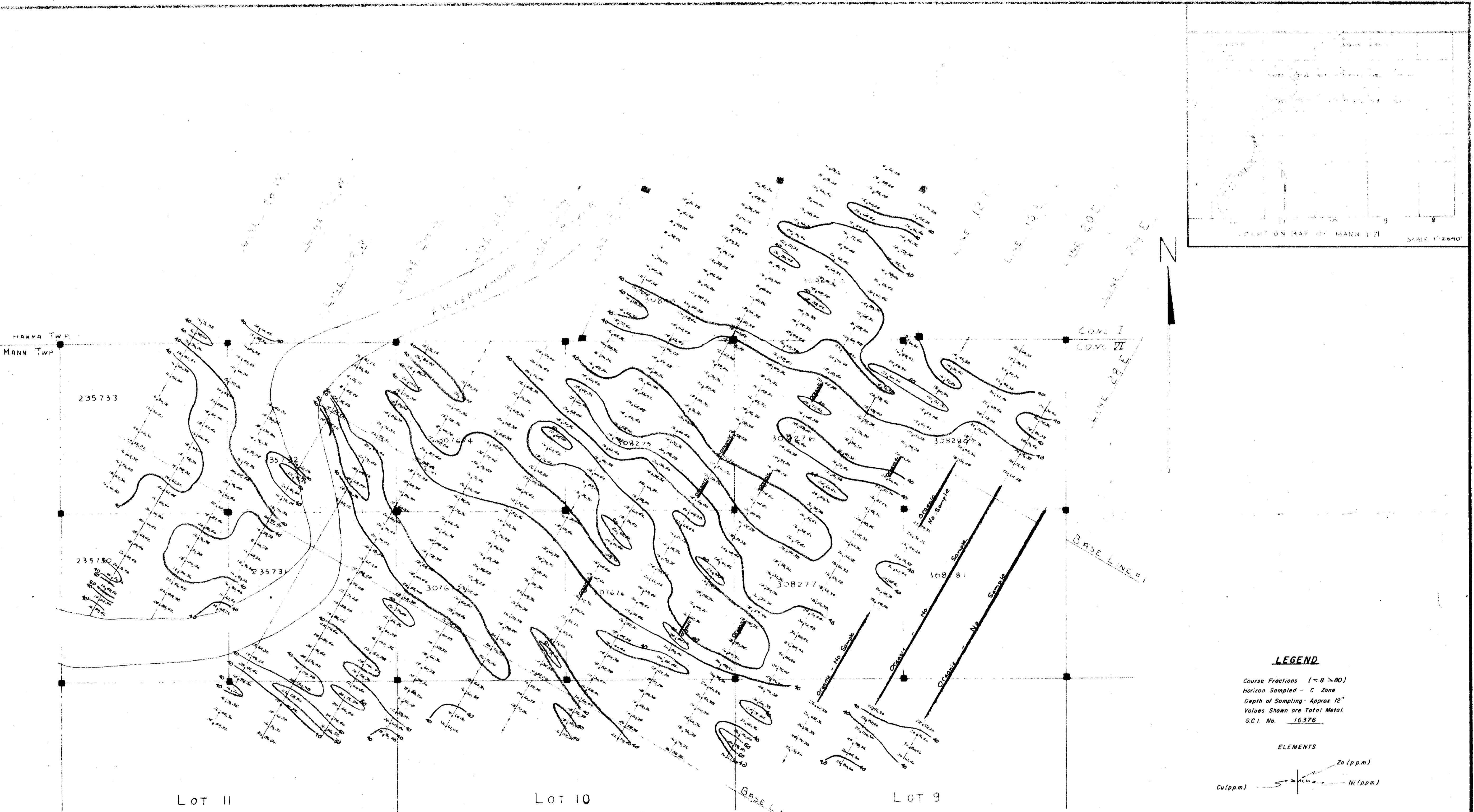
PROJ. NO. 1952 SURVEYED BY: S. ANDERSON DATE: FEB 22, 72

N.T.S. 42 R:14:5 DRAWN BY: B. MERCURI SCALE: 1:400'

DWG. NO. NORANDA EXPLORATION CO. LTD.

OFFICE: TIMMINS ONTARIO





COPPER (PPM)

6-19 p.p.m. Background
20-24 p.p.m. Threshold
25-54 p.p.m. Anomalous

ZINC (PPM)

16-74 p.p.m. Background
75-99 p.p.m. Threshold
100-180 p.p.m. Anomalous

NICKEL (PPM)

12-39 p.p.m. Background
40-49 p.p.m. Threshold
50-54 p.p.m. Anomalous

REVISED

APPROVED

GEOCHEMICAL SURVEY

MANN 1-71
TESLUK OPTION

MANN TWP. ONTARIO

PROJECT: MANN (TESLUK OPTION)

PROJ. NO. 1952 SURVEYED BY: R. ANDERSON DATE: FEB 22, 72

N.T.S. 1:250,000 DRAWN BY: B. MERCURI SCALE: 1" = 400'

DWG. NO.

NORANDA EXPLORATION CO. LTD.

OFFICE: TIMMINS ONTARIO

