

11073

The following is a list of the
 items which have been
 identified as being
 of interest to the
 Committee. The items
 are listed in the
 order in which they
 were received. The
 items are listed in
 the order in which
 they were received.
 (See also page 12 of
 the report for a
 more complete list
 of the items.)
 (Records No. 128368).

11073
 12

DEER LAKE OPTION AND ADD CLAIMS
LITTLE FORT AREA, B. C.
PERCUSSION DRILLING PROGRAM

U. Paltser
A. Troup

November, 1974

CLAIMS

<u>Names</u>	<u>Record Numbers</u>
LV - 27 to LV - 68 incl.	115217 to 115258 incl.
LV - 69 Fr to LV - 72 Fr incl.	115259 to 115262 incl.
ADD - 1 to ADD - 18 incl.	128353 to 128370 incl.
ADD - 19 Fr	128371
ADD - 20 to ADD - 25 incl.	128372 to 128377 incl.
ADD - 26 Fr	128378
ADD - 27	128379

LOCATION

Little Fort Area, British Columbia
N.T.S. 92-P-8,9
120°22' N , 50°31' N
Kamloops Mining Division

DATES

November 14 to November 27, 1974

DEER LAKE OPTION AND ADD CLAIMS
LITTLE FORT AREA, B. C.
PERCUSSION DRILLING PROGRAM

U. Paltser
A. Troup

November, 1974

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY	
1. INTRODUCTION.....	1
2. LOCATION AND ACCESS.....	2
3. PERCUSSION DRILLING PROGRAM	
1. General.....	3
2. Drilling and Sampling.....	3
3. Drilling Results.....	4
4. DISCUSSION OF ASSAY RESULTS.....	8
5. CONCLUSIONS.....	9
6. RECOMMENDATIONS.....	10

APPENDICES

- I Assay Results
- II Statement of Costs
- III Statement of Qualifications

MAPS AND ILLUSTRATIONS

- #1 Location Map Scale: 1" = 2,640 ft. Dwg. L-2642-B
- #2 + #2 Location of Drill Holes Scale: 1" = 400 ft. Dwg. D-4439-2A

DEER LAKE OPTION AND ADD CLAIMS
LITTLE FORT AREA, B. C.
PERCUSSION DRILLING PROGRAM

U. Paltser
A. Troup

November, 1974

S U M M A R Y

In November 1974 a percussion drill program involving 1250 feet of drilling in seven holes was completed in the Little Fort Area, B.C. The work was carried out on a block of 73 claims, the LV and ADD claims, held by Rio Tinto Canadian Exploration Ltd.

Purpose of the program was to test areas over which previous surveys had detected very high copper values in stream sediment, adjacent to zones of elevated I.P. chargeability response.

Results of the program were disappointing. No significant copper values were obtained from any of the holes. The highest assay was 0.05% Copper obtained over a 10 foot interval. In addition, an insufficient amount of sulfide was detected to account for the I.P. chargeability anomalies.

It is recommended that a petrographic examination of drill cuttings be made and all data on the property be reassessed before additional work is planned.

DEER LAKE OPTION AND ADD CLAIMS
LITTLE FORT AREA, B. C.
PERCUSSION DRILLING PROGRAM

U. Paltser
A. Troup

November, 1974

1. INTRODUCTION

Following a regional geochemical sampling program which found anomalous copper values in the vicinity of Laurel and Latremouille Lake, 46 claims, the LV claims, were optioned from Deer Lake Mines Ltd., (Deer Lake Option), later 27 additional claims, the ADD claims, were staked by Rio Tinto Canadian Exploration Ltd., to completely cover the area of interest.

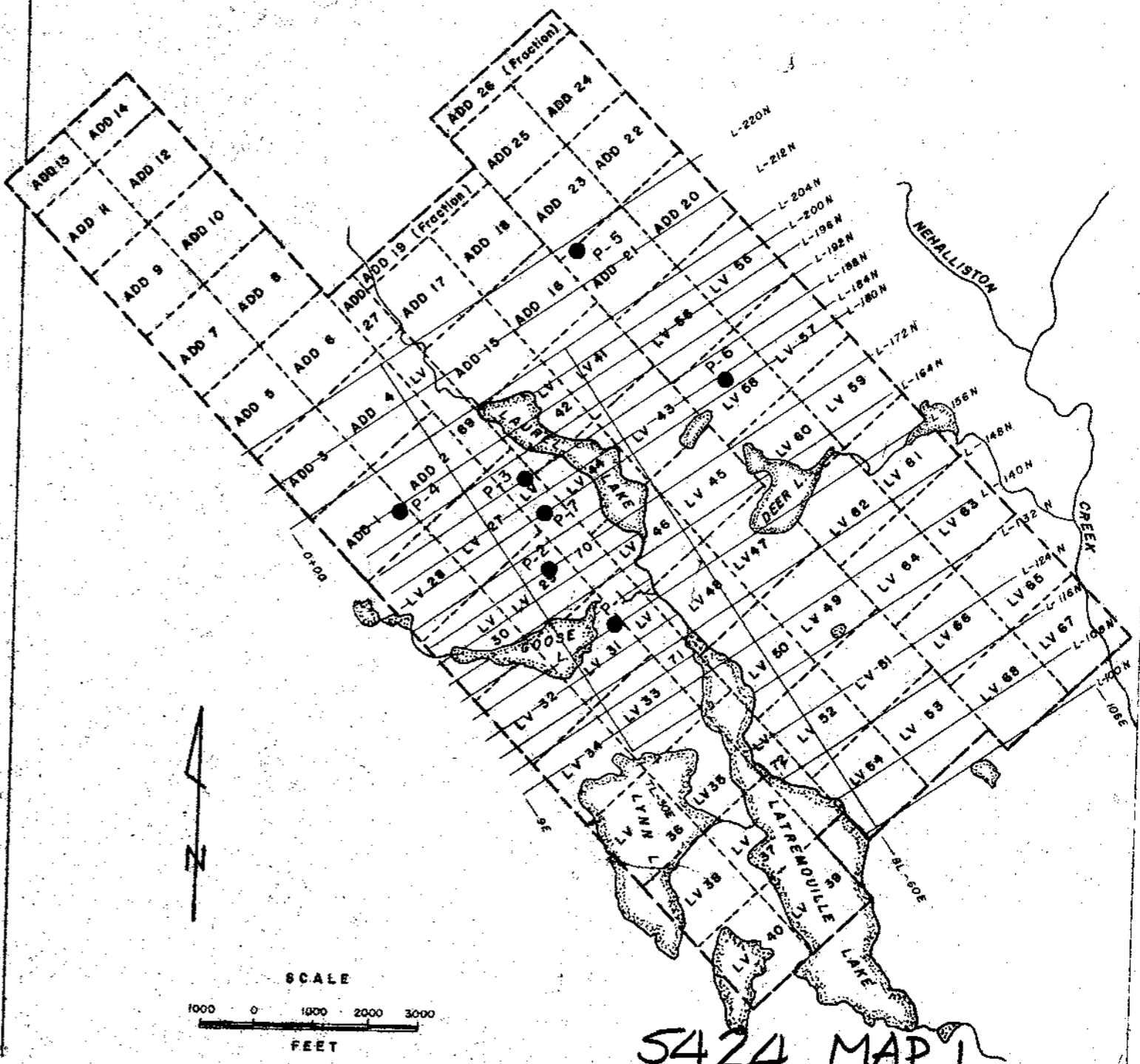
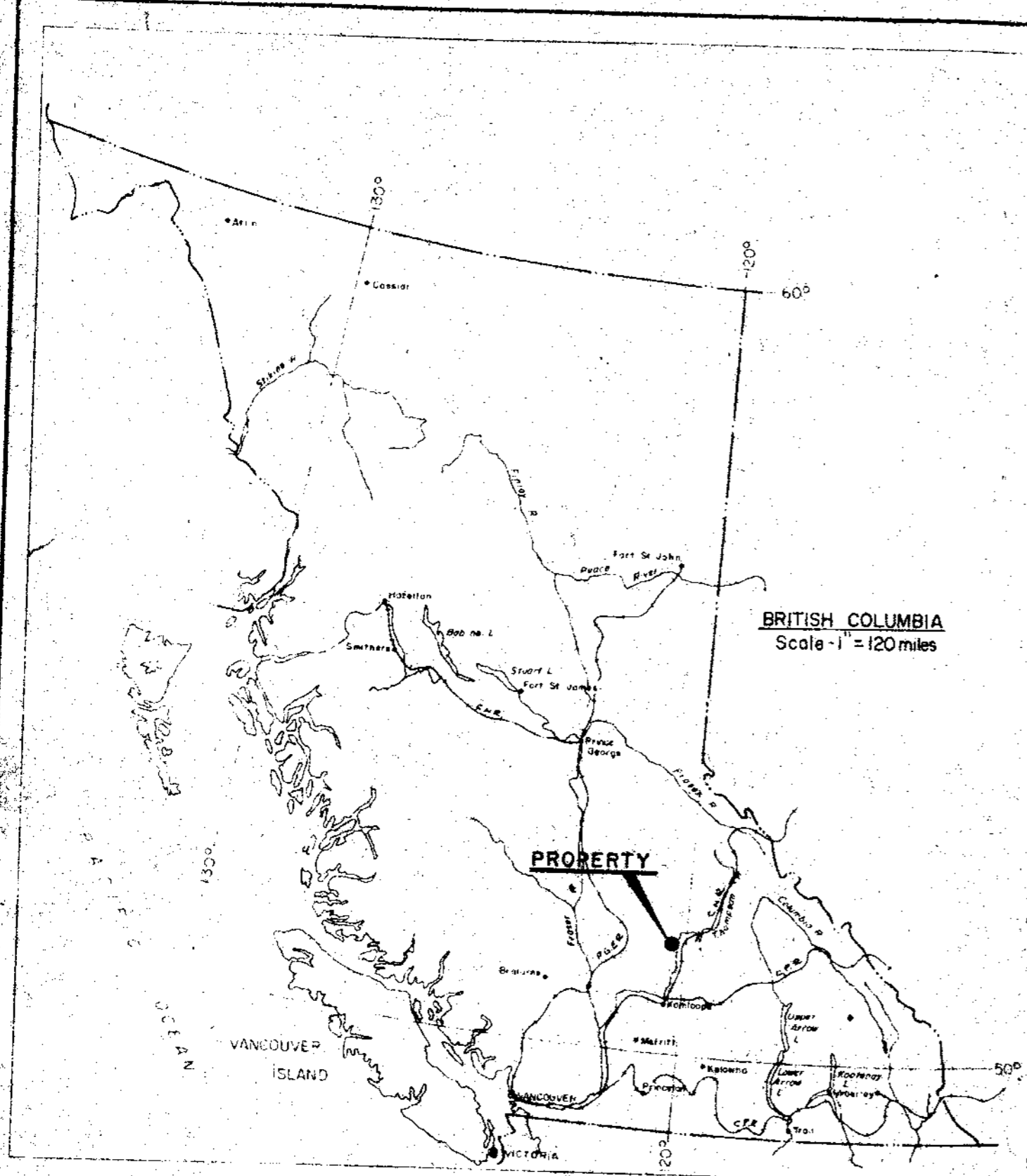
Subsequently, the property was investigated by airborne geophysics, geochemistry (soil and stream), geological mapping and ground geophysical surveys. With the exception of the I.P. and magnetometer surveys completed earlier this year, previous work had proved inconclusive in explaining or defining the source of the copper anomaly.

After completion of the I.P., definite drill targets were evident and a program of percussion drilling was recommended to test chargeability anomalies for copper mineralization.

2. LOCATION AND ACCESS

The property consisting of 73 claims is situated on a gently rolling plateau at a mean elevation of 4,000 feet approximately 10 air miles north-west of Little Fort, B. C.

Excellent access to the centre of the property is provided by a logging road which intersects Highway 24 approximately 11 miles west of Little Fort.



N.T.S.
92-P-8,9

RIO TINTO CANADIAN EXPLORATION LTD		
DEER LAKE OPTION - B. C.		
LOCATION MAP		
JAN. 75	A.T./y.m.	DWG L-2642 B

3. PERCUSSION DRILLING PROGRAM

1. General

The drilling contract was awarded to Josco Mining Company Limited of Kamloops, B.C. who completed the 7 holes between November 14th and November 26th, 1974.

The drilling rig was mounted with the compressor on a converted skidder which reduced moving time but because of increased weight proved awkward on narrow roads, soft roadbeds, and corners with grades. Unless exploration conditions are ideal and roads are well drained, this machine is too bulky.

2. Drilling and Sampling

After the machine was on the drill site the overburden was penetrated using a carbide tipped bit mounted on the end of the casing. When bedrock was reached a smaller bit and rods were inserted into the casing. Drilling was carried out using a water flush and the return water was diverted through a sample splitter (this consists of a rotating metal wheel equipped with notches to remove one eighth of the return water and rock fragments).

The sample was collected in a metal pail lined with a plastic bag. It usually consisted of 10-15 gal. of murky water and about 4 lb. of ground rock fragments. Rock fragments were never larger than 1/8" in diameter.

At the end of each run, the water and suspended material (chlorite, clay minerals, etc.) was decanted from the rock fragments to ensure that the fine fraction of the sample was not washed away. This procedure was followed for each sample taken at 10 foot intervals in the hole.

The samples were analysed for copper and sulphur content by Bondar-Clegg & Company Limited of North Vancouver.

3. Drilling Results

A total of 7 holes ranging in depth from 80 to 200 feet were completed during the program. Holes were stopped short of a depth of 200 feet only if bad ground conditions were encountered.

The locations of the drill sites are shown on accompanying Drawing No. D-4439-2A. Assay results are given in Appendix I.

Pertinent data and field observations based on a megascopic examination of each sample are summarized below.

Hole P-1:

Grid location - 157 + 30 N, 37 + 00 E,
Dip 90°, depth 200 ft.
0' - 15' overburden
15' -200' Gabbro - mafics altered to chlorite,
feldspars are creamy white. Minor
epidote but no sulphides visible.

Hole P-2:

Grid location - 171 + 92 N, 35 + 57 E,

Dip 90°, depth 200 ft.

0' - 25' overburden

25' - 60' Gabbro - as gabbro in P-1 except feldspar appears sericitized and traces of pyrite are visible.

60' -160' Diorite - less chlorite with few feldspars intact (altered to sericite). Flakes of biotite, calcite and pyrite in the fine fraction.

160' -200' Gabbro - as 25' - 60'.

Hole P-3:

Grid location - 188 + 00 N, 42 + 27 E,

Dip 90°, depth 190 ft.

0' - 15' overburden

15' -190' Gabbro or Diorite - finer grained, basic in composition and very chloritic with traces of pyrite.

Hole P-4:

Grid location - 193 + 00 N, 18 + 00 E,

Dip 90°, depth 200 ft.

0' - 35' overburden

35' -200' Gabbro or Diorite - as P-3.

Hole P-5:

Grid location - 215 + 00 N, 71 + 00 E,

Dip 90°, depth 180 ft.

0' - 20' overburden

20' -180' Gabbro or Diorite - generally as P-3 with more pyrite.

Hole P-6:

Grid location - 182 + 00 N, 80 + 65 E,

Dip 90°, depth 80 ft.

0' - 25' overburden

25' - 80' Gabbro - very chloritic, fine grained, no visible sulphides. Possible fault zone - caving in hole.

Hole P-7:

Grid location - 179 + 80 N, 40 + 75 E,

Dip 90°, depth 200 ft.

0' - 10' overburden

10' -200' Gabbro - coarser fragments as P-1, still chloritic, trace pyrite.

The samples were all similar in composition but differed in texture. This was thought to be due to variations in abundance of chlorite.

Holes P-1, P-2 and P-7 produced fragments larger than the other holes and contained feldspar grains. The relative ease in drilling these holes suggests a more competent rock with less fracturing.

Conversely, the other holes produced a greater proportion of fines and considerable difficulty was experienced in keeping the holes open.

Pyrite mineralization was visible as minute cubes and grains in most of the holes but the consistency of the sample (i.e. wet sand) made an accurate estimation impossible.

4. DISCUSSION OF ASSAY RESULTS

The assay results obtained from the percussion drill samples are given in Appendix I. No significant copper values were obtained from any of the seven drill holes. The highest assay was 0.05% copper obtained over a 10 foot interval in hole P-1. The majority of the samples returned copper values on the order of 0.01 to 0.02%.

In each drill hole, one ten foot section from each 50 foot interval was analysed for total sulfur. From the sulfur values, the maximum possible pyrite concentrations have been computed. These data are shown in Appendix I. With the exception of holes P-5 and P-6 which returned pyrite values on the order of 1½ to 2%, the pyrite content of each of the holes is on the order of one half of one percent or less. This is far too little sulfide to explain the chargeabilities of up to 5 times background obtained on this property.

5. CONCLUSIONS

Assay results obtained from the current drill program revealed no significant copper values in any of the holes and only minor pyrite concentrations in five of the holes. These observations lead to the following conclusions:

- 1) the high copper concentrations found in drainage systems on this property do not originate in the areas tested by this drill program.
- 2) the I.P. chargeability anomalies outlined on this property are caused by some factor other than sulfide mineralization.

6. RECOMMENDATIONS

In view of results of the present program the following recommendations are made:

- 1) a complete reassessment of all available data on the property should be made prior to the planning of any additional work.
- 2) a petrographic examination of the percussion drill cuttings should be made, to determine if alteration minerals that could account for the chargeability anomalies are present.
- 3) future drilling on the property should involve core drilling, in order to obtain samples of sufficient size to allow identification of rock type and alteration minerals.

U. Palter

A. Troup

A. Troup

Vancouver Office
December 31, 1974

A P P E N D I X I

ASSAY RESULTS

Hole Number	From	To	% Cu	% S ₂	% FeS ₂ (Calculated)
Hole P-1					
157+30N, 39+00E	15'	20'	0.01	-	-
	20'	30'	0.01	-	-
	30'	40'	0.02	-	-
	40'	50'	0.02	-	-
	50'	60'	0.01	0.35	0.65
	60'	70'	0.01	-	-
	70'	80'	0.01	-	-
	80'	90'	0.02	-	-
	90'	100'	0.01	-	-
	100'	110'	0.05	0.23	0.43
	110'	120'	0.03	-	-
	120'	130'	0.01	-	-
	130'	140'	0.01	-	-
	140'	150'	0.01	-	-
	150'	160'	0.01	0.11	0.20
	160'	170'	0.01	-	-
	170'	180'	0.01	-	-
	180'	190'	0.01	-	-
	190'	200'	0.01	-	-
Hole P-2					
171+92N, 35+57E	25'	30'	0.01	-	-
	30'	40'	0.01	-	-
	40'	50'	0.01	-	-
	50'	60'	0.01	0.04	0.07
	60'	70'	0.02	-	-
	70'	80'	0.01	-	-
	80'	90'	0.01	-	-
	90'	100'	0.01	-	-
	100'	110'	0.01	0.17	0.31
	110'	120'	LO.01	-	-
	120'	130'	0.01	-	-
	130'	140'	0.01	-	-
	140'	150'	LO.01	-	-
	150'	160'	LO.01	0.73	1.36
	160'	170'	0.01	-	-
	170'	180'	0.04	-	-
	180'	190'	0.03	-	-
	190'	200'	0.02	-	-

Hole Number	From	To	% Cu	% S ₂	% FeS ₂ (Calculated)
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Hole P-3
188+00N, 42+27E

5'	10'	0.02	-	-
10'	20'	0.02	-	-
20'	30'	0.02	-	-
30'	40'	0.02	-	-
40'	50'	0.02	-	-
50'	60'	0.03	0.25	0.46
60'	70'	0.02	-	-
70'	80'	0.02	-	-
80'	90'	0.02	-	-
90'	100'	0.02	-	-
100'	110'	0.02	0.15	0.28
110'	120'	0.02	-	-
120'	130'	0.02	-	-
130'	140'	0.02	-	-
140'	150'	0.02	-	-
150'	160'	0.01	0.09	0.16
160'	170'	0.02	-	-
170'	180'	0.03	-	-
180'	190'	0.04	-	-

Hole P-4
193+00N, 18+00E

35'	40'	0.01	-	-
40'	50'	0.01	-	-
50'	60'	0.01	0.06	0.11
60'	70'	0.01	-	-
70'	80'	0.01	-	-
80'	90'	0.01	-	-
90'	100'	0.01	-	-
100'	110'	0.01	0.02	0.03
110'	120'	0.01	-	-
120'	130'	0.01	-	-
130'	140'	0.01	-	-
140'	150'	0.01	-	-
150'	160'	0.01	0.05	0.09
160'	170'	0.01	-	-
170'	180'	0.01	-	-
180'	190'	0.01	-	-
190'	200'	0.01	-	-

Hole Number	From	To	% Cu	% S ₂	% FeS ₂ (Calculated)
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Hole P-5					
215+00N, 71+00E	20'	30'	L0.01	-	-
	30'	40'	L0.01	-	-
	40'	50'	L0.01	-	-
	50'	60'	0.01	0.29	0.54
	60'	70'	L0.01	-	-
	70'	80'	L0.01	-	-
	80'	90'	L0.01	-	-
	90'	100'	0.01	-	-
	100'	110'	0.03	0.95	1.77
	110'	120'	0.01	-	-
	120'	130'	0.01	-	-
	130'	140'	0.02	-	-
	140'	150'	0.04	-	-
	150'	160'	0.04	1.38	2.58
	160'	170'	0.03	-	-
	170'	180'	0.04	-	-

Hole P-6					
182+00N, 80+65E	25'	30'	0.01	-	-
	30'	40'	0.02	-	-
	40'	50'	0.02	-	-
	50'	60'	0.02	0.98	1.83
	60'	70'	0.03	-	-
	70'	80'	0.02	-	-

Hole P-7					
179+80N, 40+75E	10'	20'	0.01	-	-
	20'	30'	0.01	-	-
	30'	40'	0.02	-	-
	40'	50'	0.03	-	-
	50'	60'	0.02	0.25	0.46
	60'	70'	0.01	-	-
	70'	80'	0.01	-	-
	80'	90'	0.03	-	-
	90'	100'	0.03	-	-
	100'	110'	0.03	0.11	0.20
	110'	120'	0.03	-	-
	120'	130'	0.03	-	-
	130'	140'	0.03	-	-
	140'	150'	0.02	-	-
	150'	160'	0.01	0.12	0.22
	160'	170'	0.01	-	-
	170'	180'	0.01	-	-
	180'	190'	0.01	-	-
	190'	200'	0.01	-	-

APPENDIX II

STATEMENT OF EXPENDITURES

-1. Deer Lake Option			
(a) Drilling			
870 feet of percussion drilling	\$ 3/ft.		\$2,610.00
mobilization and demobilization			250.00
water truck	\$40/shift		120.00
(b) Supervision and Report Preparation			
U. Paltser (Nov. 14-27)	14 days	\$40/day	560.00
A. Troup	7 days	\$50/day	350.00
(c) Food and Accommodation			
			147.75
(d) Fuel and Transportation			
4 x 4 Truck	10 days	\$10/day & gas	211.07
4 x 4 Rental Truck	3 days @	\$15/day & gas	70.00
Air Fare Kamloops - Vancouver			25.00
(e) Supplies			
			3.09
(f) Bulldozer Work - Drill sites, roads			
D 7F (Nov. 6- 7)	11 hours @	\$34.25/hr.	376.75
D 7 (Nov. 20-26)	5 hours @	\$25/hr.	125.00
Supervision	(1 day)		40.00
Mobilization - Demobilization			189.00
(g) Assaying Costs			
81 Samples for Cu	@ \$ 4/sample		324.00
13 Samples for S ₂	@ \$ 6/sample		78.00
Drying Charges	@ 20¢/lb.		71.95
Transportation of Samples to Lab.			35.25

T O T A L

\$5,586.86

3,578.46

2,008.40

STATEMENT OF EXPENDITURES

2. Add Claims

(a) Drilling			
380 feet of percussion drilling	\$ 3/ft.		\$1,140.00
mobilization and demobilization			250.00
water truck	\$40/shift		80.00
(b) Supervision & Report Preparation			
U. Paltser (Nov. 14-27)	10 days @ \$40/day		400.00
A. Troup	3 days @ \$50/day		150.00
(c) Food & Accommodation			
			230.00
(d) Fuel & Transportation			
4 x 4 Truck	7 days @ \$10/day & gas		130.90
4 x 4 Rental Truck	3 days @ \$15/day & gas		75.00
Air Fare Vancouver - Kamloops			25.00
(e) Supplies			
			1.31
(f) Bulldozer Work - Drill sites, roads			
D 7F (Nov. 6- 7)	4 hr. @ \$34.25		137.00
D 7 (Nov. 20-26)	21 hr. @ \$25.00		525.00
Supervision (1 day)			40.00
Mobilization & Demobilization			189.00
(g) Assaying Costs			
33 Samples for Cu	@ \$ 4/sample		132.00
6 Samples for S ₂	@ \$ 6/sample		36.00
Drying Charges	@ 20¢/lb.		18.05
Transportation of Samples to Lab.			17.00

T O T A L \$3,576.46

A P P E N D I X I I I

STATEMENT OF QUALIFICATIONS

1. I am a graduate of Queen's University in Kingston, Ontario where I received a degree in Geology from the Faculty of Applied Science (Engineering).

2. Since graduating in 1970, I have been a permanent employee of Rio Tinto Canadian Exploration Limited as a field geologist.

3. During my employment I have supervised and reported on geological, geophysical and drilling programs in eastern Canada and most recently in British Columbia.

U. Paltser
U. Paltser

STATEMENT OF QUALIFICATIONSA. TROUPACADEMIC

1967	B.Sc. Geology	McMaster University, Ontario
1969	M.Sc. Geochemistry	McMaster University, Ontario

PRACTICAL

1969-1974	Rio Tinto Canadian Exploration Limited. Vancouver, B.C.	Geologist involved in all phases of porphyry copper exploration in B.C.
1968 (summer)	McMaster University Dept. of Geology Hamilton, Ontario	M.Sc. thesis work. Reconnaissance mapping and geochemical study, Lake Shubenacadia area, Nova Scotia.
1967 (summer)	Canex Aerial Exploration Ltd., Toronto, Ontario	Geologist in charge of detailed mapping and reconnaissance geochemical programme in Gaspe, Quebec.
1966 (summer)	McMaster University, Dept. of Geology Hamilton, Ontario	Summer vacation work. Detailed and reconnaissance mapping in northern Ontario.
1965 (summer)	International Nickel Co. of Canada. Thompson, Manitoba	Summer vacation work. Detailed mapping in the Thompson Area, Manitoba.
1964 (summer)	Geological Survey of Canada. Ottawa, Ontario	Summer vacation work. Regional geochemical survey in the Keno Hill area, Yukon.

A. Troup

BASE LINE 60E

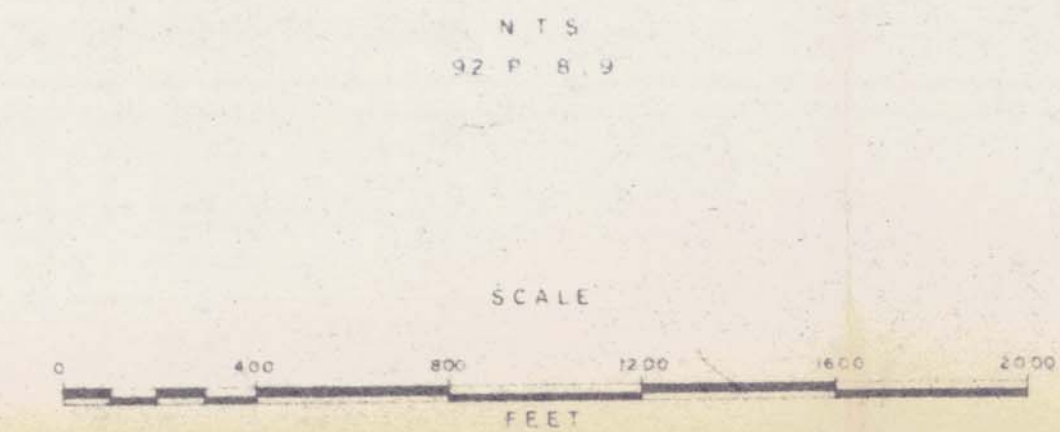
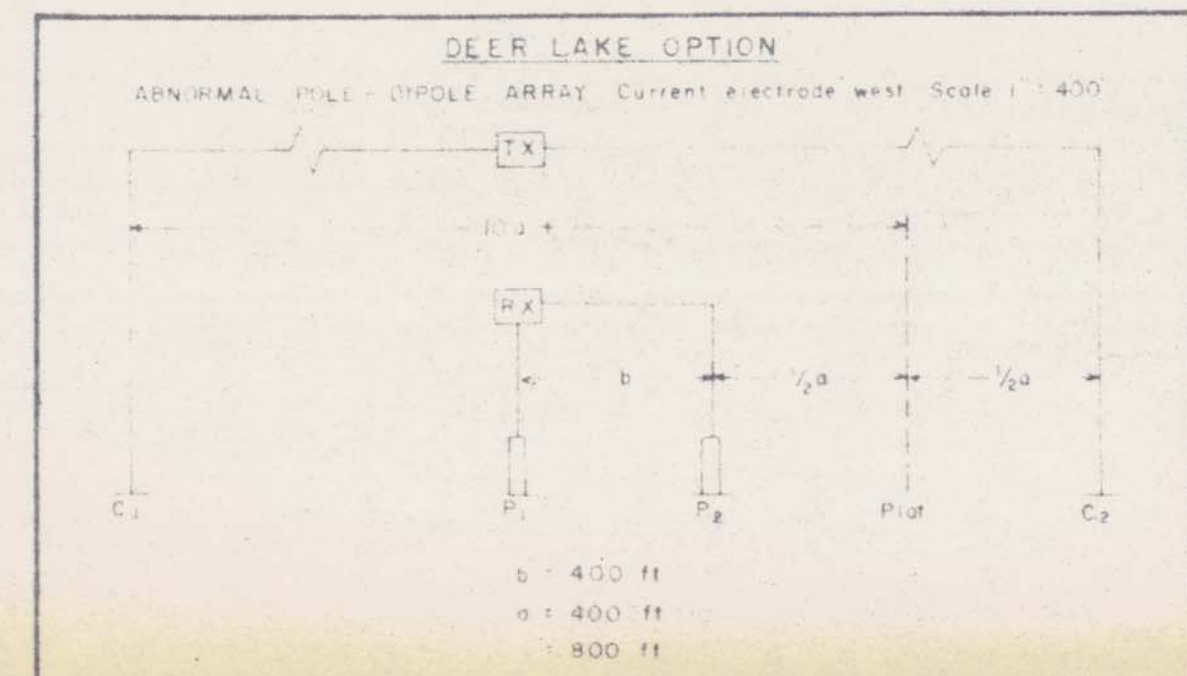
BASE LINE 60E

BASE LINE 30E



LEGEND

- P-1 ● PERCUSSION DRILL HOLE
- 9.0
- 10.0 CHARGEABILITY VALUES IN MILLISECONDS
- CONTOUR INTERVAL 5 MILLISECONDS
- 30 MILLISECOND CONTOUR INTERVAL
- CHARGEABILITY LOW

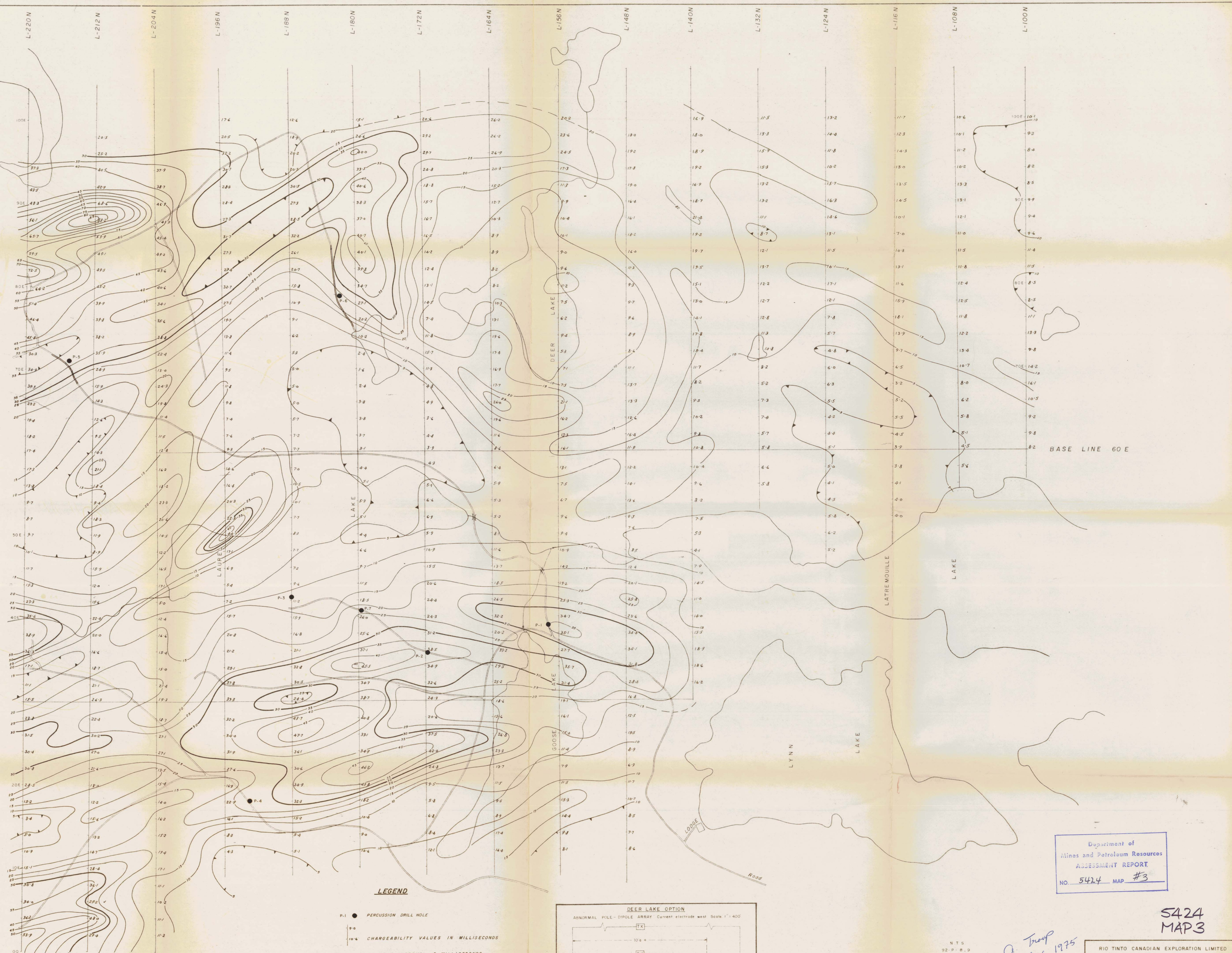


Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5424 MAP #2

*Cr. Tinto, 1975
March 16, 1975*

5424
MAP 2

RIO TINTO CANADIAN EXPLORATION LIMITED
DEER LAKE OPTION - BC
PERCUSSION DRILL HOLES
AND
(CHARGEABILITY CONTOURS)
SCALE 1:400 FEET
JAN. 75 A.T./y.m. DWG D-4439-2A



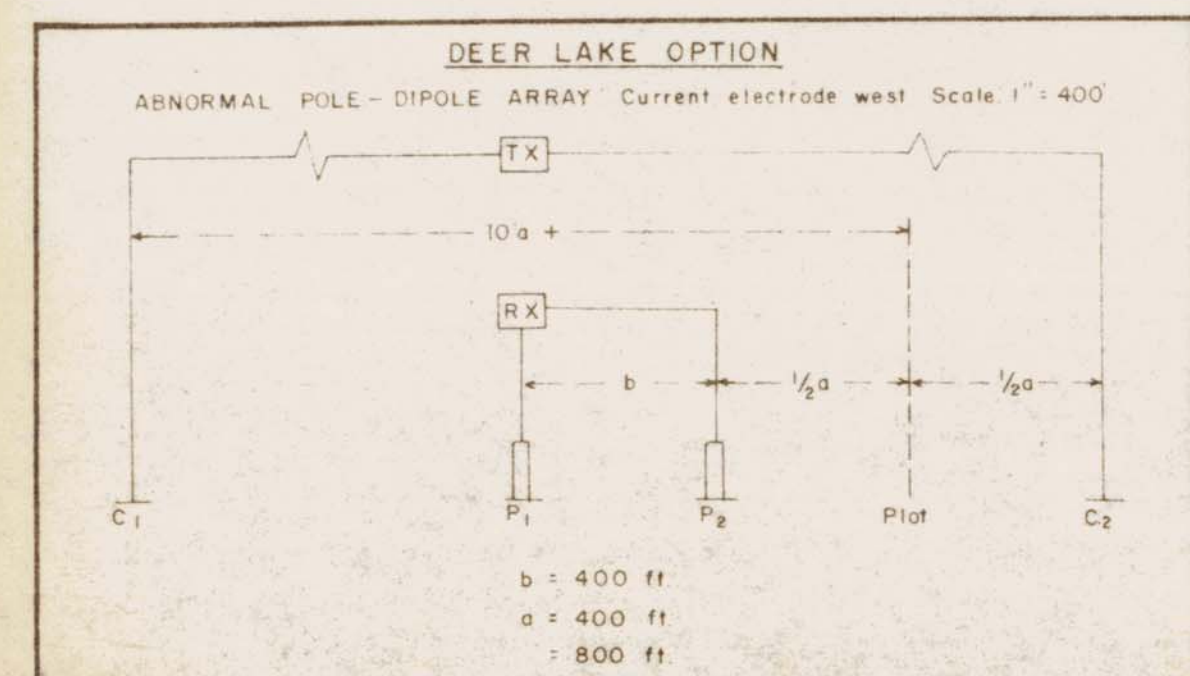
BASE LINE 60E

BASE LINE 60E

BASE LINE 30E

LEGEND

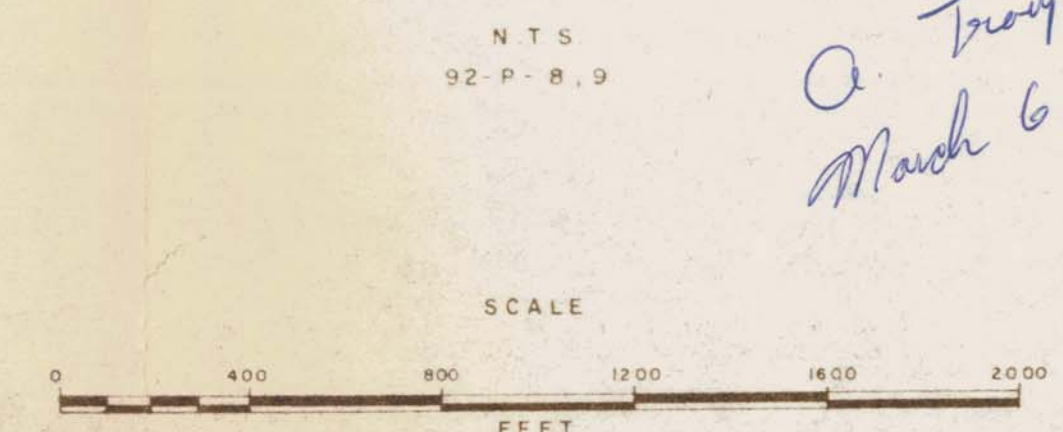
- P-1 ● PERCUSSION DRILL HOLE
- 9.0
- 10.4 CHARGEABILITY VALUES IN MILLISECONDS
- CONTOUR INTERVAL 5 MILLISECONDS
- 30 MILLISECOND CONTOUR INTERVAL
- ↔ CHARGEABILITY LOW



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 5424 MAP #3

5424
 MAP 3

A. Troop
 March 6, 1975



RIO TINTO CANADIAN EXPLORATION LIMITED		
DEER LAKE OPTION - BC		
PERCUSSION DRILL HOLES AND CHARGEABILITY CONTOURS		
Scale: 1" = 400 FEET		
JAN. 75	A.T./y.m.	DWG D-4439-2A