

5734

#5734

DEER LAKE OPTION, LITTLE FORT, B.C.

PERCUSSION DRILLING PROGRAM

Kamloops Mining Division

51°30' Lat.

120°20' Long.

October, 1975

U. Paltser

92P/9W

CLAIM: LV

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5734 MAP

DEER LAKE OPTION, LITTLE FORT, B.C.
PERCUSSION DRILLING PROGRAM

Kamloops Mining Division

TABLE OF CONTENTS

	<u>PAGE</u>
SUMMARY	
1. INTRODUCTION	
1.1 Property	1
1.2 Location and Access	1
2. PREVIOUS WORK	
2.1 Geochemistry	3
2.2 Geophysics	3
2.3 Geology	4
2.4 Percussion Drilling (1974)	5
2.5 Geophysics (1975)	6
3. PERCUSSION DRILLING PROGRAM	
3.1 General	7
3.2 Summary of Results	8
4. CONCLUSIONS	10
5. RECOMMENDATIONS	11

A P P E N D I C E S

	<u>PAGE</u>
I CLAIM STATUS	12
II STATEMENT OF QUALIFICATIONS	13
III TABLE OF ASSAY RESULTS	14
IV STATEMENT OF EXPENDITURES	15
V LIST OF REFERENCE REPORTS	17
VI DESCRIPTION OF ROAD AND DRILL SITE CONSTRUCTION	18

I L L U S T R A T I O N S

DWG. NO.

#1 L 2642B	Location and Claim Map
2 L 6325	Road and Drill Site Construction
3 I.P. 2707	Chargeability Contours (1975)
4 I.P. 2706	Resistivity Contours (1975)
5 I.P. 2705	Chargeability Contours (1974)
6 I.P. 2704	Resistivity Contours (1974)
7 I.P. 2703	I.P. Test (1975)

DEER LAKE OPTION, LITTLE FORT, B.C.

PERCUSSION DRILLING PROGRAM

Kamloops Mining Division

S U M M A R Y

In October 1975, two inclined rotary percussion drill holes were completed on a high chargeability zone redefined by a dipole-dipole array induced polarization survey.

The holes, which were spotted at the twin peaks of the anomaly, intersected traces of pyrite but no economic mineralization.

The lack of sulphides suggests the increase in chargeability is a result of alteration minerals, geological contacts or structural features.

It is apparent that I.P. anomalies on the property are not indicative of sulphides and do not represent a source for the copper geochemical anomaly.

No other potential targets on the property remain to be tested.

DEER LAKE OPTION, LITTLE FORT, B.C.

PERCUSSION DRILLING PROGRAM

Kamloops Mining Division

1. I N T R O D U C T I O N

1.1 Property

The 46 LV claims were acquired by option after a 1972 regional lake bottom sampling survey found high accumulations of copper in the area of Laurel and Latremouille Lakes on ground held by Deer Lake Mines Ltd.

By 1973, an option agreement with Deer Lake Mines Ltd. was signed and additional claims were staked by Rio Tinto Canadian Exploration Ltd. over weaker geochemical anomalies at Emar and Dum Lakes. Exploration since then has resulted in the abandonment of the claims owned by Rio Tinto with exception of 27 ADD claims contiguous with the LV claims.

1.2 Location and Access

The claim block is located in the south-central interior of British Columbia, 10 miles northwest of the village of Little Fort.

The property is directly accessible by a logging road which originates at milepost 11 on Highway 24, the gravel road linking Little Fort and 100 Mile House.

2. PREVIOUS WORK

2.1 Geochemistry

The initial phase of exploration on the LV claims consisted of detailed soil and drainage sampling to define areas of anomalous metal concentrations.

A report on this work, completed in 1973, is listed in Appendix V and describes the geochemical exploration in detail.

The geochemical survey found high levels of copper in the drainage adjacent to the anomalous lakes but distributed in the soils to lesser extent. Three circular anomalous areas were evident on the property and the report concluded with a recommendation for further exploration by I.P. surveys.

2.2 Geophysics

In 1974, an induced polarization and magnetometer survey was completed over the entire property and the geochemical targets.

At the time of the survey, it was thought that the sulphide mineralization would occur primarily as

fracture fillings (low grade "porphyry" type); consequently, a pole-dipole array with large electrode spacings (400 & 800 ft.) was used to measure the bulk characteristics.

The survey detected two main zones of high chargeability estimated to represent 3-7% sulphides flanking the geochemical anomalies.

Since the area of the geophysical anomalies did not contain sufficient outcrop to explain the I.P. effects, a drilling program was required to test the zones.

2.3 Geology

The property is situated on the northeastern margin of the Thuya batholith, which is composed of intrusive diorites and granodiorites in contact with Nicola group volcanics and sediments. Since overburden in the area is extensive, geological mapping did not establish the position of the intrusive contact and no significant copper mineralization was found in outcrop on the property.

The mapping did, however, determine the geology to be very complex - varying in composition from rhyolite to pyroxenite. Magnetic data suggests a northwesterly

trend which could not be confirmed because of the featureless appearance of the rock types.

From percussion drill results and the geological mapping, it appears that the property is underlain predominantly by diorites and andesites but it is unclear whether the chlorite and pyrite signify hydrothermal alteration or mineralization characteristic of the Nicola group.

2.4 Percussion Drilling (1974)

Seven vertical drill holes were completed to a maximum depth of 200 feet on the chargeability zones defined by the I.P. survey.

All the holes exhibited traces of pyrite mineralization and contained abundant chlorite in the cuttings. Generally, the copper assays did not exceed 0.01%.

Although several of the holes were not at the I.P. peaks, it was obvious that the sulphides intersected by the drilling did not explain the geophysical results leaving in doubt not only the validity of the I.P. survey but also the cause of the geochemical anomalies.

2.5 Geophysics (1975)

A dipole-dipole induced polarization over the main chargeability zone displaced the peak of the anomaly and accentuated the high and low readings.

The short electrode spacing of the array was better suited to detect narrow zones of chargeability and also illustrated the geological complexity. Drawings I.P.-2704, 5, 6, 7 can be used to compare the geophysical results.

On the basis of the 1975 survey, two percussion drill holes were planned to test the dual peaks of the main zone at 23+50E and 25+50E on line 180 North.

3. PERCUSSION DRILLING PROGRAM

3.1 General

During the period October 24-27, 1975, A. Miller Percussion Drilling of Kamloops completed 452 feet (140 m.) of drilling on the property.

The drill and compressor, which were mounted on a converted army truck, were equipped to drill inclined holes enabling a wider section of the anomaly to be tested.

Continuous sampling of the bedrock was achieved by the circulation of water and rock fragments to the surface, which were then diverted to a mechanical sampler consisting of a notched rotating disc. As the water and rock fragments flowed over the disc, material in the notches constituting the sample was ejected from the sampler and collected in a plastic bag. The remaining 7/8 of the material passed through the sampler unaffected. Generally, separate samples were taken for every 10 foot interval of drilling.

Additional processing of the sample consisted of decanting excess water from the rock fragments leaving a wet sludge which was taken to Kamloops

Research and Assay Lab where it was dried and analyzed by standard atomic absorption methods.

Each sample was analyzed for copper and a composite sample for each drill hole was assayed for gold, silver, lead, zinc and nickel. The results are tabulated in Appendix III.

3.2 Summary of Results

Percussion hole 75P-1 collared at 180N 25E, -70° dip, azimuth 060°, length 200 feet was drilled to intersect a peak of the I.P. anomaly at 25+50E.

An examination of samples indicates abundant chlorite, sericite, minor sericitized feldspar and only traces of pyrite to be present. From this evidence it is suggested the rock type consists of altered diorite with no visible copper mineralization.

Assay results returned negligible base and precious metal values. (Appendix III.)

Percussion hole 75P-2 collared at 180N 23E, -70° dip, azimuth 060°, length 252 feet tested a second peak of the I.P. anomaly at 23+50E.

The rock type, mineralization and assay results are exactly as 75P-1.

The locations of the holes relative to the 1975 chargeability anomaly are illustrated on Drawings I.P. 2707 and 2703.

4. CONCLUSIONS

The chargeability anomalies have been tested by a total of nine percussion drill holes since November 1974 with unfavourable results.

The sulphide content of the drill cuttings averages less than 1% and does not explain the anomalous chargeability values. It is concluded the anomalous zones are produced by a combination of alteration minerals, geological contacts and structural features unrelated to economic sulphide mineralization.

As a result, the lake bottom and stream sediment copper anomalies are not derived from bedrock mineralization associated with geophysical anomalies and no other sources are evident on the property.

5. R E C O M M E N D A T I O N S

The lack of encouraging drilling results indicates no further exploration is warranted on the property.

U. Paltser
U. Paltser

UP/pr
Vancouver Office
October 1975

APPENDIX I

C L A I M S T A T U S

The Deer Lake Option is comprised of 46 claims (LV 27-72), which were optioned by Rio Tinto Canadian Exploration Ltd. from Deer Lake Mines Limited in 1973.

Previous assessment work has been applied to maintain the LV claims in good standing until May 5, 1978 and the next rental fee due date for the claims is May 5, 1977.

The 27 ADD claims which adjoin the property in the northwest are owned by Rio Tinto Canadian Exploration Ltd. and are not within the option. The ADD claims expire August 9, 1976.

APPENDIX II

STATEMENT OF QUALIFICATIONS

1. I am a graduate of Queen's University in Kingston, Ontario with a B.Sc. degree in geological engineering and a member of the Association of Professional Engineers of British Columbia.

2. Since graduating in 1970, I have been employed by Rio Tinto Canadian Exploration Ltd. as a field geologist and supervised or reported on geological, geophysical, geochemical and drilling programs in Eastern Canada and British Columbia.

U. Paltser

U. Paltser, P. Eng.

APPENDIX III

TABLE OF ASSAY RESULTS

Percussion Drill Hole 75P-1

<u>Rock type and observations</u>	<u>From</u>	<u>To</u>	<u>Interval (ft)</u>	<u>Cu (%)</u>
Diorite α - abundant chlorite & sericite, trace pyrite	12	200	188	.less than (\angle) 0.01

Composite assay over 188 feet: -.01% Pb, .01% Zn,
.01% Ni; Trace Ag, Trace Au

Percussion Drill Hole 75P-2

<u>Rock type and observations</u>	<u>From</u>	<u>To</u>	<u>Interval (ft)</u>	<u>Cu (%)</u>
as 75P-1	13	220	207	\angle .01
	220	230	10	.02
	230	240	10	.01
	240	252	12	\angle .01

Composite assay over 239 feet: -.01% Pb, -.01% Zn,
.01% Ni, Trace Ag, Trace Au



Kamloops Research & Assay Laboratory Ltd.

WEST TRANS CANADA HIGHWAY - BOX 946 - KAMLOOPS, B.C. V2C 5N4

B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS

Deer Lake Option
Little Fort, B.C.
Proj. #8604

CERTIFICATE OF ASSAY

TO Rio Tinto Canadian Exploration Ltd.,

4 - 465 Victoria St.,

Kamloops, B. C. Attention: Mr. D. B. Petersen

Certificate No. K-807

Date Nov. 4, 1975.

I hereby certify that the following are the results of assays made by us upon the herein described drill sludge samples

Kral No.	Marked	GOLD	SILVER	Cu	Pb	Zn	Ni			
		Ounces Per Ton	Ounces Per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent
	<u>No. 1 Hole</u>									
K-807- 1	8 - 20'			L .01						
2	20 - 30'			L .01						
3	30 - 40'			L .01						
4	40 - 50'			L .01						
5	50 - 60'			L .01						
6	60 - 70'			L .01						
7	70 - 80'			L .01						
8	80 - 90'			L .01						
9	90 - 100'			L .01						
10	100 - 110'			L .01						
11	110 - 120'			L .01						
12	120 - 130'			L .01						
13	130 - 140'			L .01						
14	140 - 150'			L .01						
15	150 - 160'			L .01						
16	160 - 170'			L .01						
17	170 - 180'			L .01						
18	180 - 190'			L .01						
19	190 - 200'			L .01						
20	Composite #1 Hole	Tr	Tr		L .01	.01	L .01			

Cont'd...

NOTE:

Rejects retained three weeks
Pulps retained three months
unless otherwise arranged.

Res. Blundell
.....
Registered Assayer, Province of British Columbia



Kamloops Research & Assay Laboratory Ltd.

WEST TRANS CANADA HIGHWAY - BOX 946 - KAMLOOPS, B.C. V2C 5N4

B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS

2.

CERTIFICATE OF ASSAY

TO Rio Tinto Canadian Exploration Ltd.

Certificate No. K-807

Date Nov. 4, 1975.

I hereby certify that the following are the results of assays made by us upon the herein described drill sludge samples

Kral No.	Marked	GOLD	SILVER	Cu						
		Ounces Per Ton	Ounces Per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent
	<u>No. 2 Hole</u>									
K-807-21	13 - 30'			L .01						
22	30 - 40'			L .01						
23	40 - 50'			L .01						
24	50 - 60'			L .01						
25	60 - 70'			L .01						
26	70 - 80'			L .01						
27	80 - 90'			L .01						
28	90 - 100'			L .01						
29	100 - 110'			L .01						
30	110 - 120'			L .01						
31	120 - 130'			L .01						
32	130 - 140'			L .01						
33	140 - 150'			L .01						
34	150 - 160'			L .01						
35	160 - 170'			L .01						

Cont'd...

NOTE:

Rejects retained three weeks
Pulps retained three months
unless otherwise arranged.

.....*Ray Stender*.....
Registered Assayer, Province of British Columbia



Kamloops Research & Assay Laboratory Ltd.

WEST TRANS CANADA HIGHWAY - BOX 946 - KAMLOOPS, B.C. V2C 5N4

B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS

3.

CERTIFICATE OF ASSAY

TO Rio Tinto Canadian Exploration Ltd.,

Certificate No. K-807

Date Nov. 4, 1975.

I hereby certify that the following are the results of assays made by us upon the herein described drill sludge samples

Kral No.	Marked	GOLD	SILVER	Cu	Pb	Zn	Ni			
	<u>Hole No. 2</u>	Ounces Per Ton	Ounces Per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent
K-807-36	170 - 180'			L .01						
37	180 - 190'			L .01						
38	190 - 200'			L .01						
39	200 - 210'			L .01						
40	210 - 220'			L .01						
41	220 - 230'			.02						
42	230 - 240'			.01						
43	240 - 250'			L .01						
44	Composite #2 Hole	Tr	Tr		L .01	L .01	.01			

L denotes "less than"
Tr denotes "trace"

NOTE:

Rejects retained three weeks
Pulps retained three months
unless otherwise arranged.

.....*R. M. Stewart*.....
Registered Assayer, Province of British Columbia

APPENDIX IV

STATEMENT OF EXPENDITURES

I Physical Work - Road & Drill Site Construction
 Period: October 18, 19, 25, 1975

(i) Contractor:		
Kinbasket Construction		
D7 bulldozer	\$40/hr x 22	\$ 880.00
(ii) Supervision:		
U. Paltser - geologist	\$65/day x 2 days	130.00
4 x 4 Truck + gas	\$12/day x 2 days	39.20
Meals & Accommodation		5.00
Chain Saw Rental	\$15/day x 1½ days	22.50
		<hr/>
		1,076.70

II Percussion Drilling
 Period: October 24-27, 1975

(i) Contractor:		
A. Miller	452 feet of drilling @ \$4/ft	\$1,808.00
Mob & Demob from Kamloops		455.00
		<hr/>
		2,263.00
(ii) Supervision:		
U. Paltser - geologist	\$65/day x 4 days	260.00
Host Rental truck + gas	\$16/day + 10¢/mile	180.86
		<hr/>
		440.86
(iii) Assaying:		
Kamloops Research & Assay Lab.		
42 samples for Cu	\$4/sample	168.00
2 samples for Pb, Zn, Ni, Au, Ag	\$23/sample	46.00
		<hr/>
		214.00

APPENDIX IV
(Cont 'd.)

III Report Preparation

U. Paltser - geologist	\$65/day x 5	\$	325.00
Drafting services	\$30/day x 2		60.00
Printing			30.00
Other			60.00
			<hr/>
			475.00

TOTAL: \$ 4,469.56

APPENDIX V

LIST OF REFERENCE REPORTS

1. Petersen, D.B.; Troup, A.G. Geochemical Report on the Deer Lake Mines Option, Laurel Lake Area, B.C., 1973.
2. Beckmann, H.; Marsh, H.W. Deer Lake Option and Add Claims, Little Fort Area, B.C. Report on Geophysical Surveys, 1974.
3. Paltser, U.; Troup, A.G. Deer Lake Option and Add Claims, Little Fort, B.C. Percussion Drilling Program, 1974.

APPENDIX VI

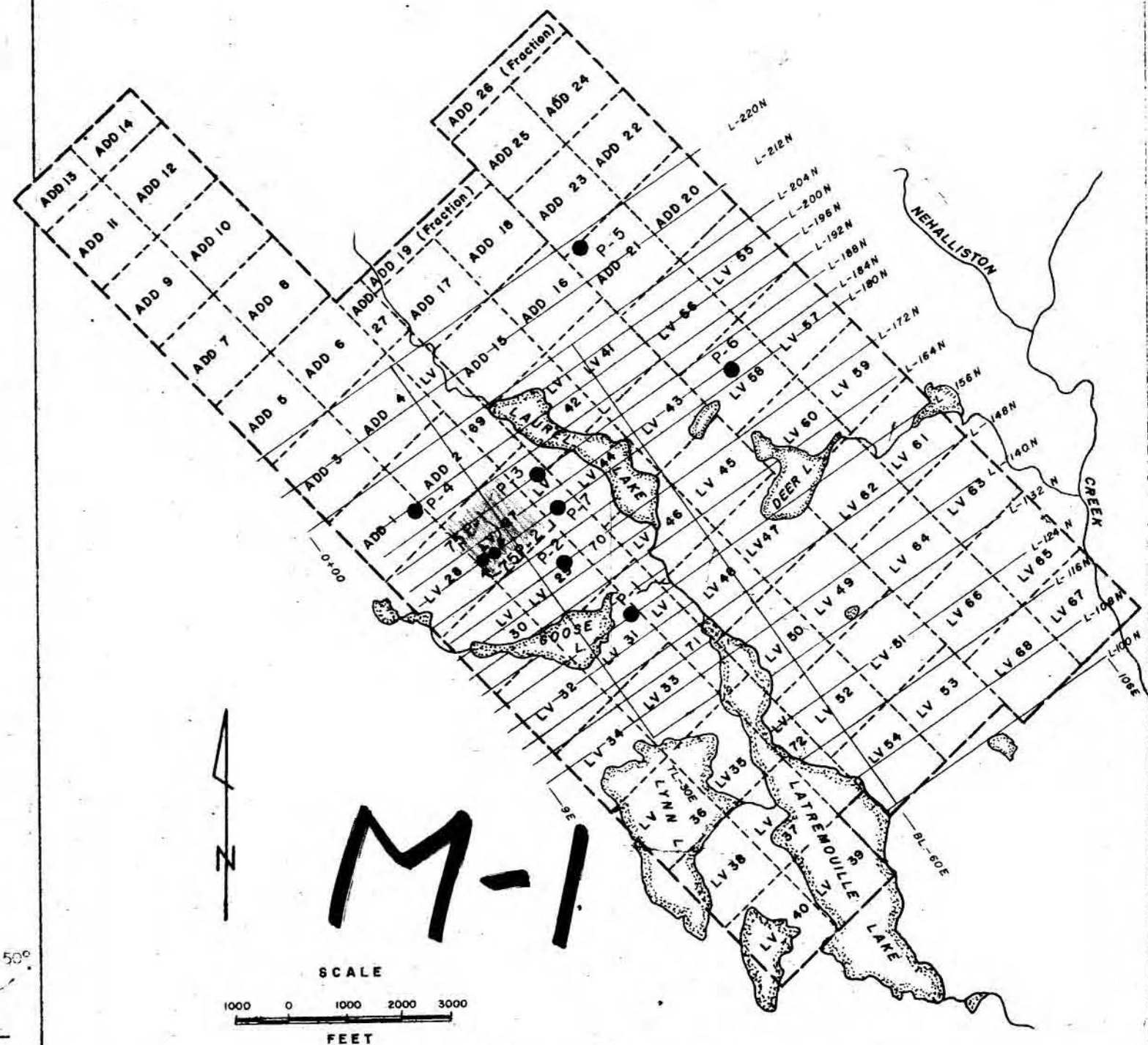
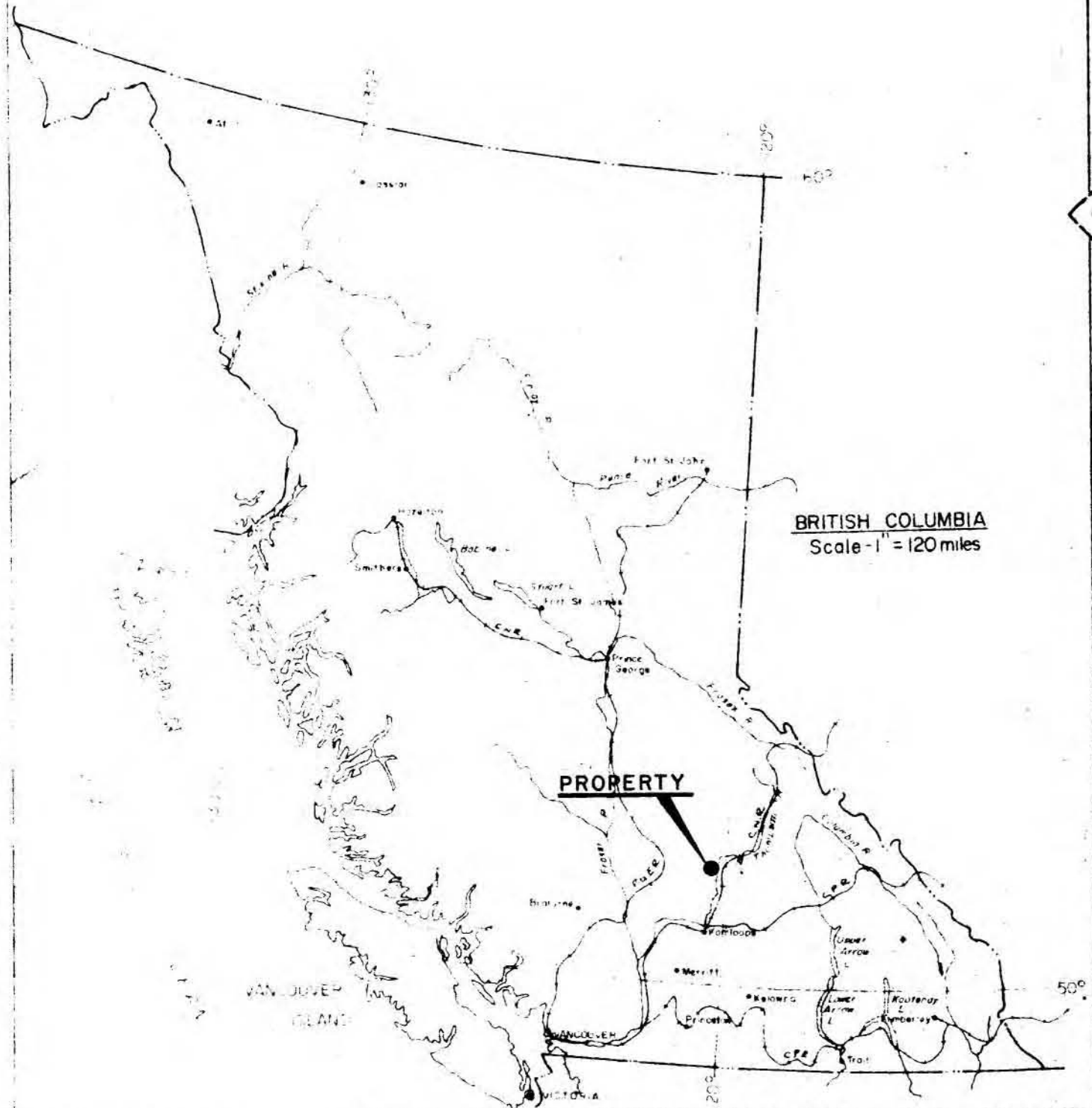
DESCRIPTION OF ROAD AND DRILL SITE CONSTRUCTION

Two drill sites and approximately 1000 feet (300 m) of access road were constructed during the period October 18-19 and October 25, 1975.

The work was completed by a D7 bulldozer owned by Kinbasket Construction of Barriere, B.C. under contract to Rio Tinto Canadian Exploration Ltd.

Generally, the new road averaging 14 feet (4.3 m) in width followed an overgrown skidder trail except when the road base became unsuitable for heavy equipment.

The two drill sites consisted of level, cleared areas (70 x 70 feet) (21.5 x 21.5 m) of sufficient size for the drilling equipment.



1974 Drilling P-1 to P-7
 1975 Drilling 75P-1, 75P-2

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. **5734** MAP

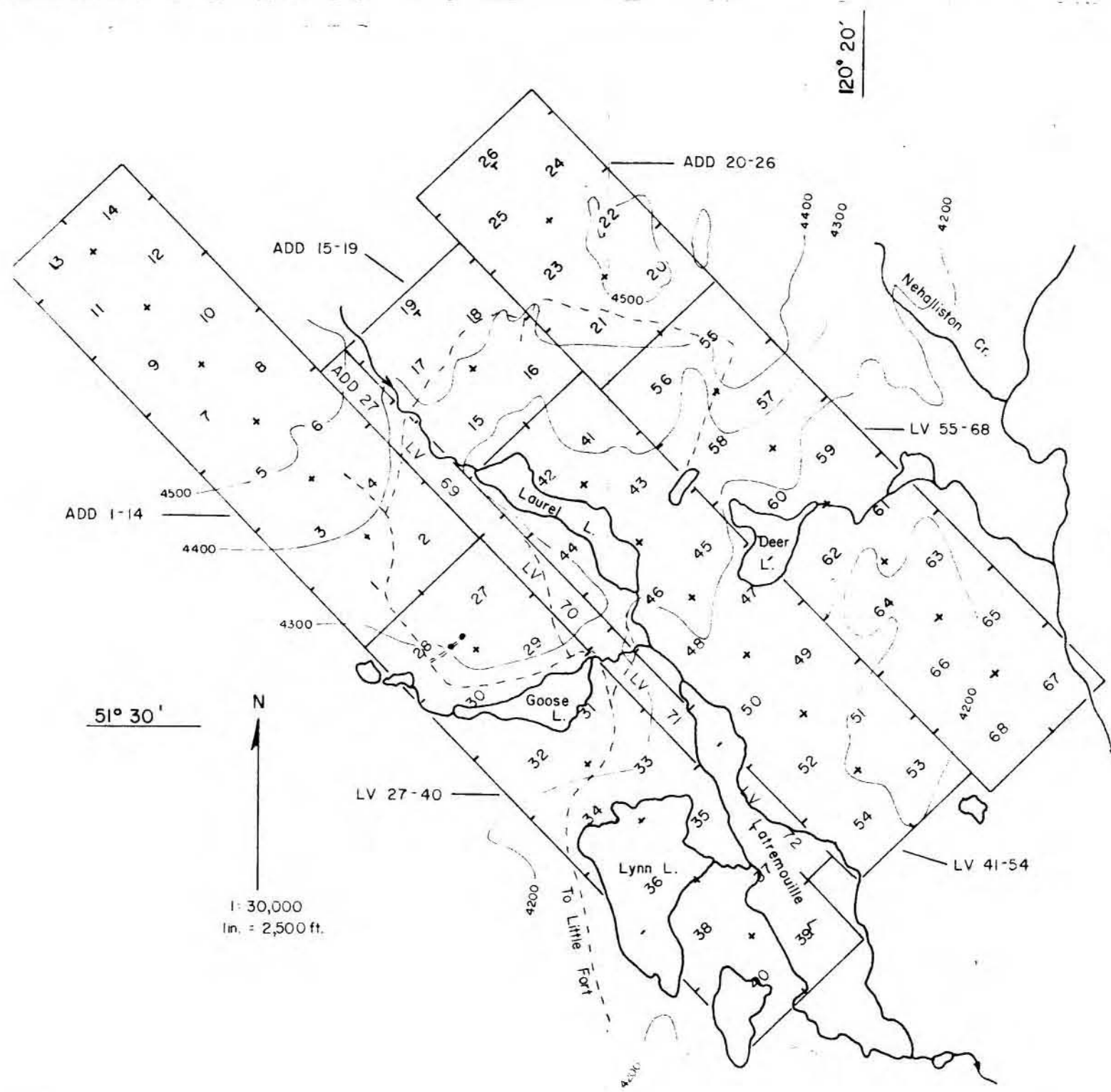
5734

N.T.S.
 92-P-8

RIO INTO CANADIAN EXPLORATION LTD
 DEER LAKE OPTION - B.C.

LOCATION MAP

JAN. 75 A.T./y.m. DWG L-2642



- Creeks
- - - Roads
- - - Road building
- Drill site
- 4200 - Elevation Contour

Department of
 Mines and Petroleum Resources
ASSESSMENT REPORT
 NO. 5734 MAP 2

RIO TINTO CANADIAN EXPLORATION LTD.		
DEER LAKE OPTION - B.C.		
ROAD and DRILL SITE CONSTRUCTION		
NOV. 1975	U.P./u.p.	DWG. L-6325

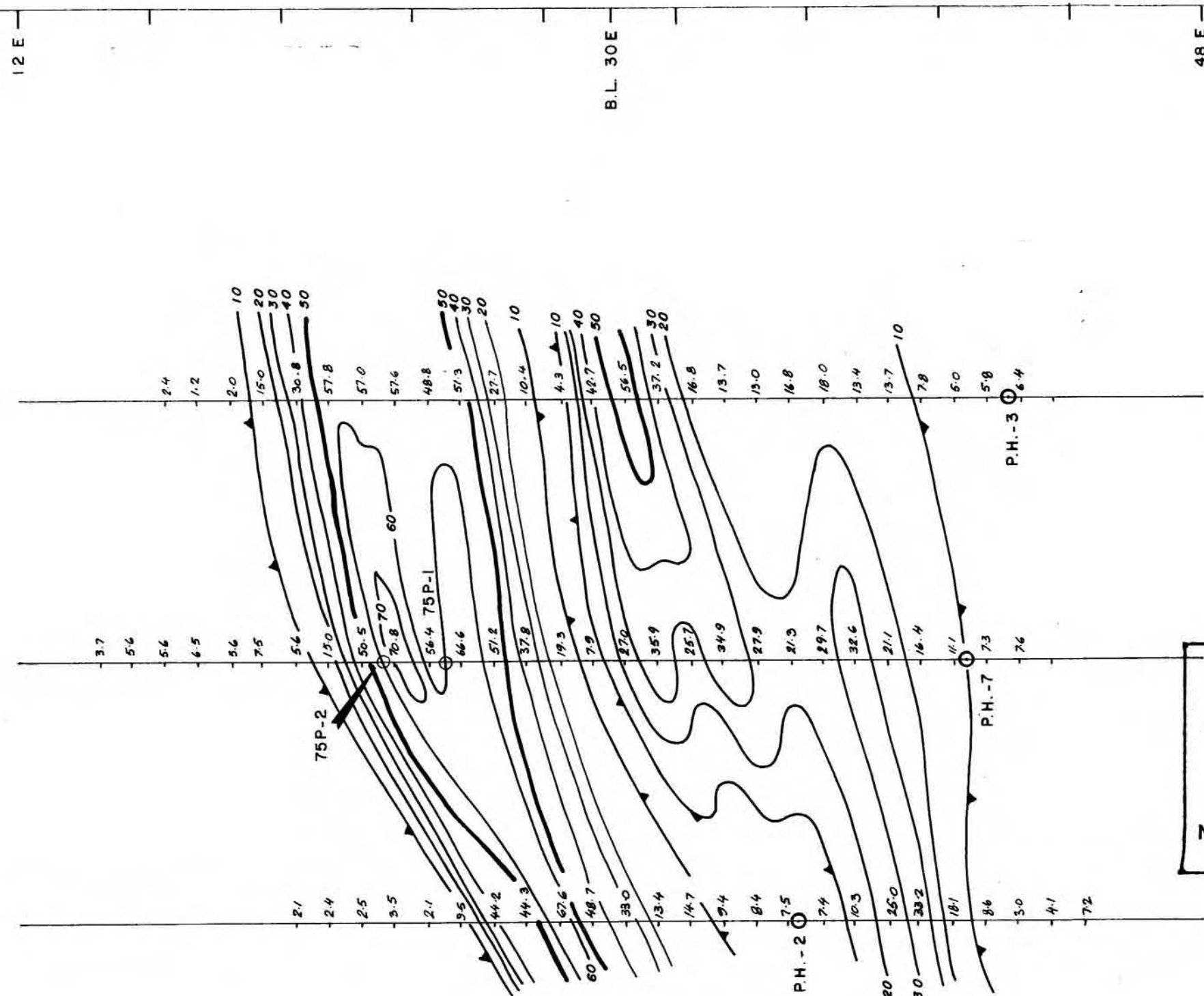
SCALE



L - 188 N

L - 180 N

L - 172 N



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 5734 MAP 3

August 15, 1975
A. Beckmann

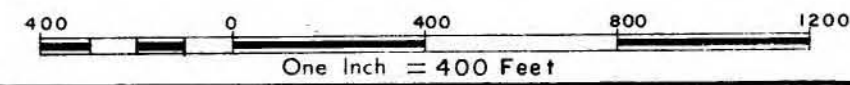
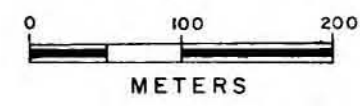
LEGEND:

Chargeabilities Dipole-Dipole $a = 100'$
 33.0 Chargeability value in Millivolts/Volt

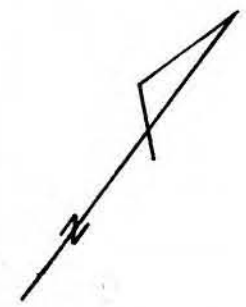
30 Millivolts/volt Contour Interval
 40 " " "
 50 " " "

Chargeability Low

N. T. S.
 92 - P - 9



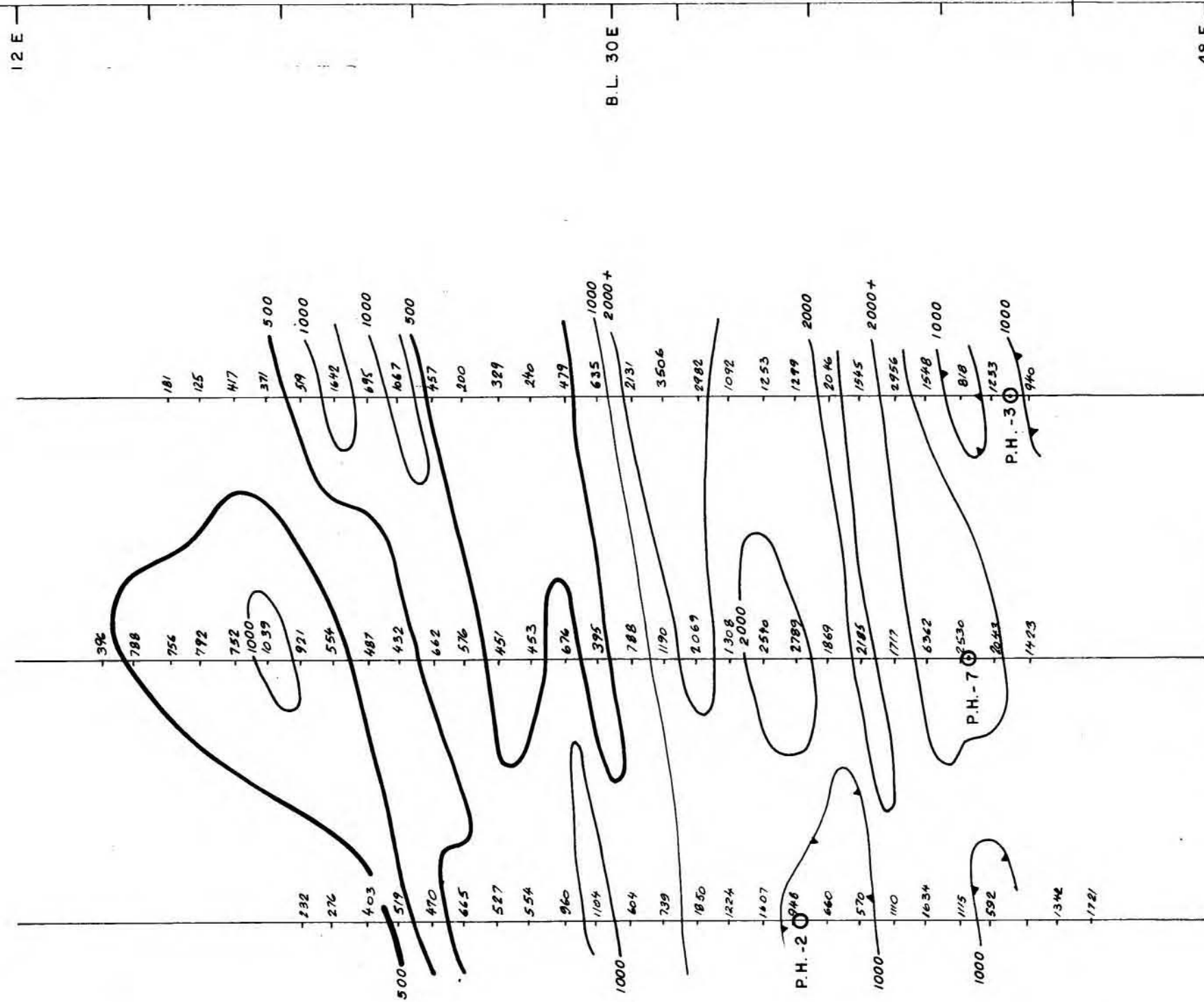
RIO TINTO CANADIAN EXPLORATION LTD.		
DEER LAKE OPTION - B. C.		
CHARGEABILITY CONTOURS		
N - 1		
Aug. - 1975	H. B. / e. b.	DWG. I.P. - 2707



L - 188 N

L - 180 N

L - 172 N



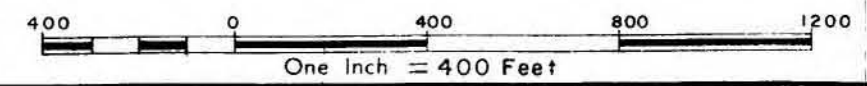
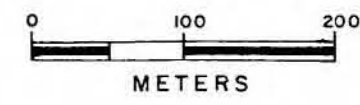
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5734 MAP 4

October 6, 1975
A. Beckmann

LEGEND:

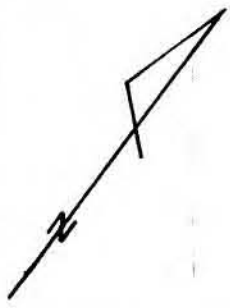
- Resistivities Dipole-Dipole $a = 100'$
 665 Resistivity value in Ohm-meters
- 500 Ohm-meters Contour Interval
 - 1000 " " "
 - 2000 " " "
- V* Resistivity Low

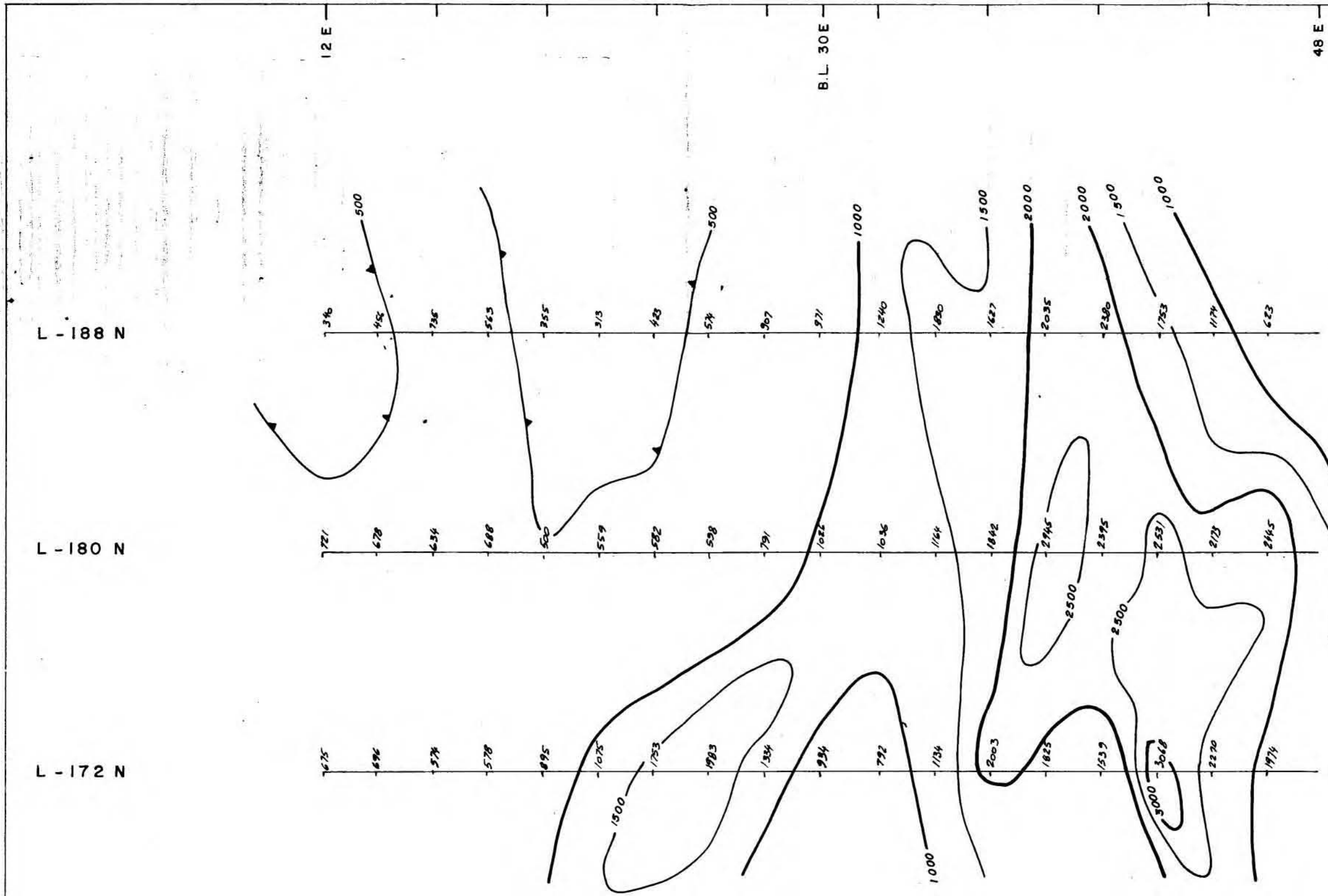
N. T. S.
92 - P - 9



RIO TINTO CANADIAN EXPLORATION LTD.
DEER LAKE OPTION - B. C.
RESISTIVITY CONTOURS
N-1

Aug - 1975 H. B. / e. b. DWG. R-2706



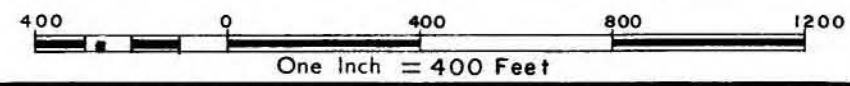
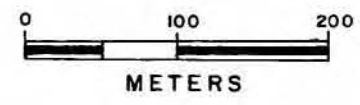


Department of
 Mine and Petroleum Resources
 FILE SHEET REPORT
 NO. 5734 Map 6

August 15, 1975
A. Beckmann

LEGEND:
 Resistivities Pole-Dipole $a = 400'$
 934 Resistivity value in Ohm-meters
 ——— 500 Ohm-meters Contour Interval
 ——— 1000 " " "
 ——— 1500 " " "
 ~~~~~ Resistivity Low

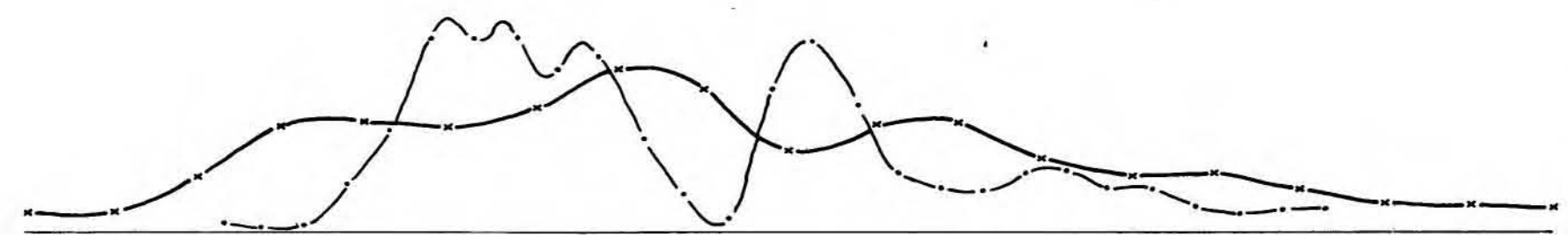
N. T. S.  
 92 - P - 9



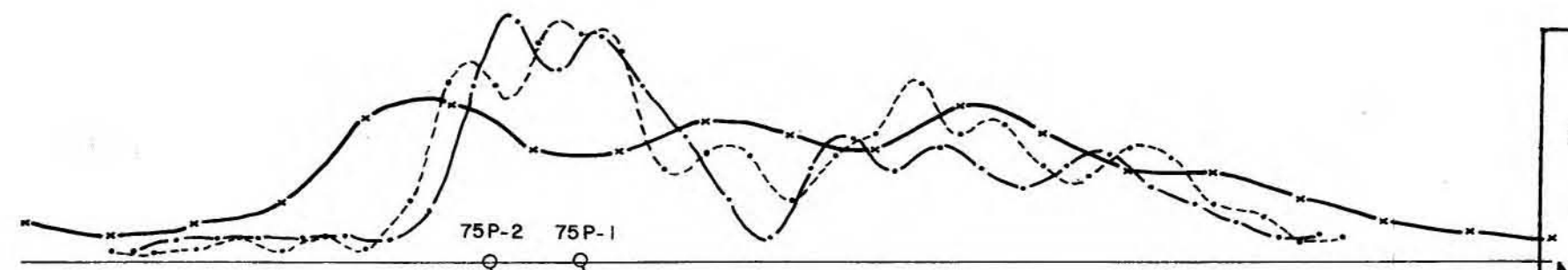
RIO TINTO CANADIAN EXPLORATION LTD.  
 DEER LAKE OPTION - B. C.  
**RESISTIVITY CONTOURS**  
 Aug. - 1975 H. B. / e. b. DWG. R-2704

12 E  
B.L. 30E  
48 E

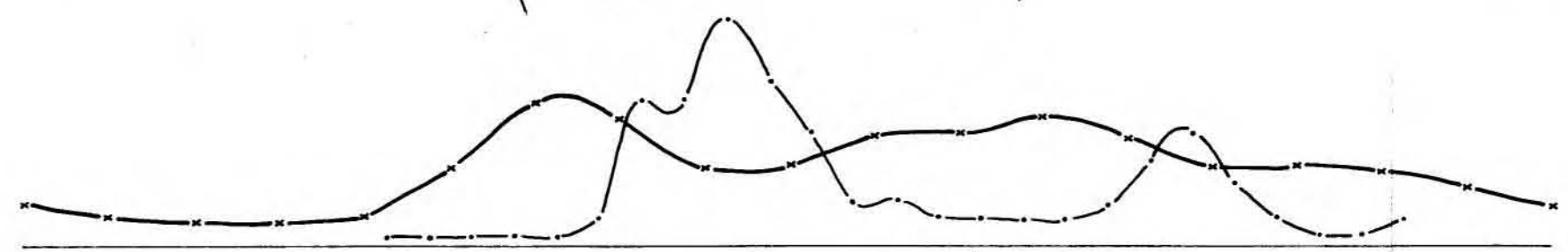
L - 188 N



L - 180 N



L - 172 N



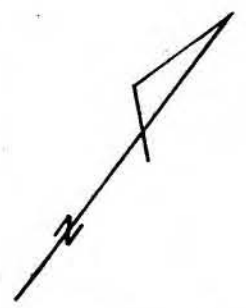
Department of  
Mines and Petroleum Resources  
ANALYSIS REPORT  
NO. 5734 MAP 7

October 6, 1975  
*H. Beckmann*

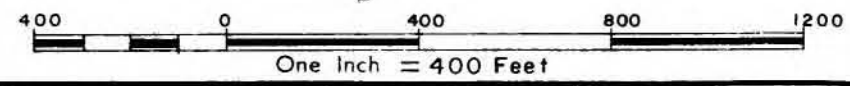
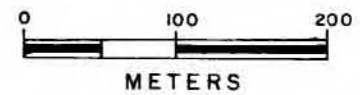
**LEGEND :**

Chargeability Profile scale 1" = 50 millivolts

- x—x Pole - Dipole a = 400'
- Dipole - Dipole a = 100' N 1
- Dipole - Dipole a = 100' N 2



N. T. S.  
92 - P - 9



|                                     |               |                  |
|-------------------------------------|---------------|------------------|
| RIO TINTO CANADIAN EXPLORATION LTD. |               |                  |
| DEER LAKE OPTION - B. C.            |               |                  |
| <b>I. P. TEST</b>                   |               |                  |
| Aug. - 1975                         | H. B. / e. b. | DWG. I.P. - 2703 |