3481

82E/6W

Report of the Induced Polarization And Resistivity Survey, Allendale Lake Area Lease Nos. 27521-30, 28552-55, 15423-35 28407-08, 28413-18 and 28441-44; Osoyoos Mining Division, Lat.49°00'N, Long.119°20'W British Columbia

by

Laurie E. Reed, P. Eng.,
Chief Geophysicist,
Selco Mining Corporation Limited
(Exploration Division)

for

Lessees: R.G. Ewers, R.W. McLean and R. Beaupre,
And Assignee of Claims: Selco Exploration Co. Ltd.,

Dates of Work: October 27 to November 5, 1971

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

SEIGEL ASSOCIATES LIMITED
GEOPHYSICAL CONSULTANTS & CONTRACTORS
A DIVISION OF SCINTREX LIMITED

November 16, 1971

Invoice No. BC 11106

E	EXEC. CIRC.	
FILE No.		
FOR ACTION	AD	
FOR ANSWER		
REC'D NOV 19 1971		
FOR INFO.	JSA	
	IGLS GS	
	LER	

Selco Exploration Company Limited
Sixth Floor, 55 Yonge Street
Toronto 1, Ontario

Attention: Mr. L. E. Reed
Chief Geophysicist

FOR PROFESSIONAL SERVICES RENDERED:

To execute an induced polarization survey on your behalf, Okanagan Falls area, British Columbia as per our contract dated October 22, 1971.

Induced Polarization Services:		
3 days mobilization and demobilization @ $260.00/day		$780.00
8 1/2 days production @ $340.00/day		2,890.00
11 1/2 days possible for period		
1 cook as required - 12 days @ $27.50/day		330.00
Field Expenses at Cost:		
Food and Lodging	$532.41	
Truck Expenses	279.30	
Telephone & Postage	45.00	
Travel & Field Expenses	16.98	
Shipping	10.35	
	$884.04	
Plus 10 percent	88.40	
	$972.44	972.44
Total:		$4,972.44
Less: Deposit		2,400.00
Balance Due:		$2,572.44

Additions & Extensions checked.....
Approved for Payment.....
Batch No. 1107

PAID

Terms: Due when rendered. Any amounts outstanding after 30 days will bear interest at the rate of 1 percent per month.

OK for payment
L Reed

INTRODUCTION

During the period October 27 to November 5, 1971 an induced polarization and resistivity survey was carried out over the Allendale Lake area. This area lies some 10 miles east-northeast of Okanagan Falls, B.C. The property is located in the Osoyoos Mining Division of British Columbia.

The survey area is underlain by several zones of a syenite intrusive. The purpose of the survey was to investigate several zones of sulphide mineralization within the intrusive. The mineralization is seen around grid line zero near the baseline.

The field work was carried out by Seigel Associates Ltd. under the direction of Chris Zogg, a geophysical operator on the staff of Seigel Associates Ltd. A crew of four men assisted the geophysical operator throughout this survey. Overall supervision and planning of the work was by Selco Exploration Co. Ltd.

Scintrex Mk VII time domain induced polarization equipment was employed on this property. The transmitting unit had a rating of 2.5 kilowatts using equal on and off times of 2.0 seconds. The receiving unit was remotely triggered by the rising and falling primary voltages set up in the ground by the transmitter. The integration of the transient polarization voltages takes place over 0.65 seconds after a 0.45 second delay time, following the termination of the current-on pulse.

Three electrode arrays (or pole-dipole, n = 1 arrays) with "a" spacings of 400 feet and 800 feet were used. Readings were on a 400 foot interval. Three electrode arrays with "a" spacings of 100 feet and 200 feet were used for detail over the central portion of the grid. These readings were on a 200 foot interval. Electrode orientations and plotting points are indicated on the drawings.

The basic grid consists of ten lines from Line 8 North to Line 32 South, which with one exception are 400 feet apart. The baseline is oriented 23° east of north. The lines generally extend from 28 West to 28 East, however alternate lines are shorter. As well some lines were shorter due to rugged topography.

In all 6.9 line miles each of pole-dipole, n = 1, a = 400 feet and a = 800 feet surveying were carried out. As well 1.6 line miles each of pole-dipole n = 1, a = 100 feet and 200 feet detail surveying were carried out. Detail coverage was on lines 0, 4 South, 8 South and 12 South.

DISCUSSION OF RESULTS

The plan contours of the pole-dipole n = 1, 2 = 400 feet results (Drg. AL.777) show a number of high zones having values from 10.0 to 13.0 milliseconds out of a background of 3.0 to 4.0 milliseconds. When observed in consideration of the resistivity response (drg. AL.775) the chargeability zones to the east and west are seen to lie along the margins of resistive highs. It is apparent in the resistivities that zoning of the intrusive is being observed. The behaviour of the chargeabilities suggests that an increase of metallic mineralization occurs along the margin of these zones.

The chargeability highs seen north-central on the grid are in a rather different setting. Although possibly relating to the limited resistive high noted there, the chargeability highs would seem to identify zones of higher metallics within the central intrusive phase. These highs in part are identified by the mineralization noted on the surface.

The detail on line zero (drg. AL.783) has revealed a fairly shallow near-surface and strong source just of the baseline. A concentration of metallic mineralization is indicated. This response while closed off to the south is indicated to extent north on the a = 400 feet map and is open to the north.

The a = 800 feet chargeability map (drg. AL.776) generally supports the a = 400 feet map, however some changes in behaviour of the sources in depth are noted. The shallow response noted in the detail apparently disappears or is too narrow to be detected. The stronger response at 8 West on line 8 North continues. Possibly the electrodes have been placed near a near-surface, fairly chargeable body of sufficient size to be observed on the larger electrode

spacing. This response remains open to the north. The resistivity contact related responses (drgs. AL.776 and AL.774) remain although these are somewhat subdued and changed in distribution. Apparently the implied contact mineralization continues to depth.

CONCLUSIONS & RECOMMENDATIONS

Two kinds of metallic mineralization settings have been identified in this survey. One would appear to be fairly concentrated small zones within the central phase of the intrusive. The other would appear to be weaker mineralization of broader distribution related to contacts between phases of the intrusive.

An investigation of the geology around these anomalies should be carried out in order to identify the source of the chargeability highs. As well the geochemical sampling programme should be extended from the anomalies toward the north in the direction of their apparent trend in order to determine the economic potential of the geophysical responses.

The present survey has not been carried far enough to give sufficient definition to the anomalies. It is recommended that given sufficient encouragement from geology and geochemistry the induced polarization survey be extended north and west in order to fully define the extent and nature of these responses.

Considerations relating to drilling should await the results of these further investigations.

L.E. Reed

January 7, 1972.

STATEMENT OF QUALIFICATIONS

I, Laurie E. Reed, of R.R. 3, Milton, Ontario state that:

(1) I am a graduate of Engineering Physics from the University of Waterloo (1964);

(2) I am a member of the Association of Professional Engineers of the Province of Ontario;

(3) I am a member of the Association of Professional Engineers of the Province of Manitoba;

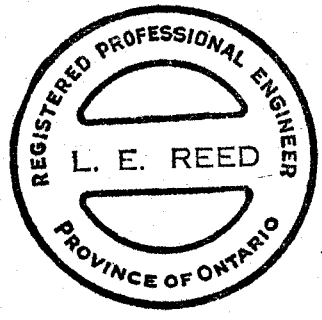
(4) I am an active member of the Society of Exploration Geophysicists;

(5) I am an active member of the European Society of Exploration Geophysicists;

(6) I am a member of the Canadian Society of Exploration Geophysicists;

(7) I am Chief Geophysicist of Selco Mining Corporation Limited (Exploration Division);

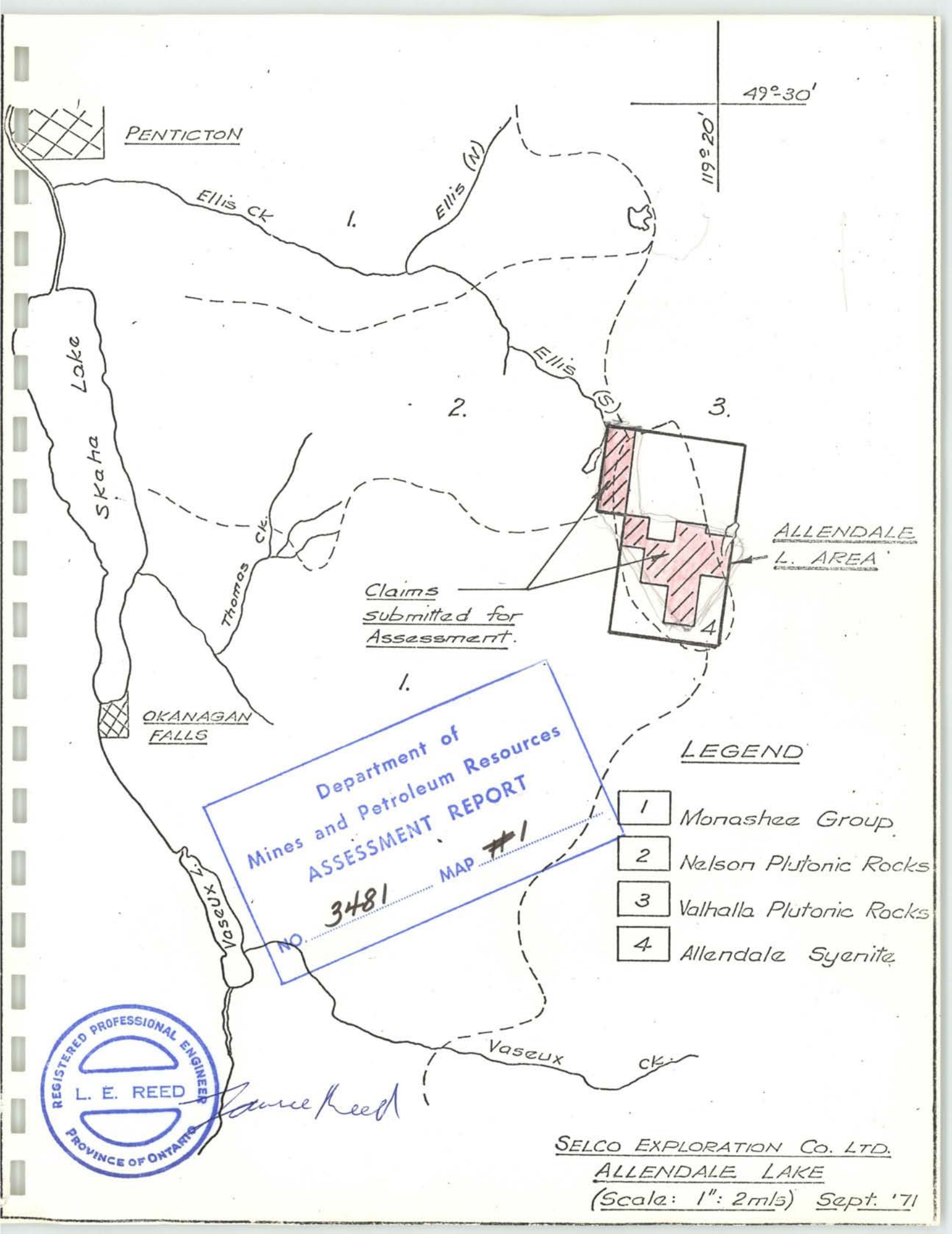
(8) I have practised my profession as a mining exploration geophysicist since 1964.



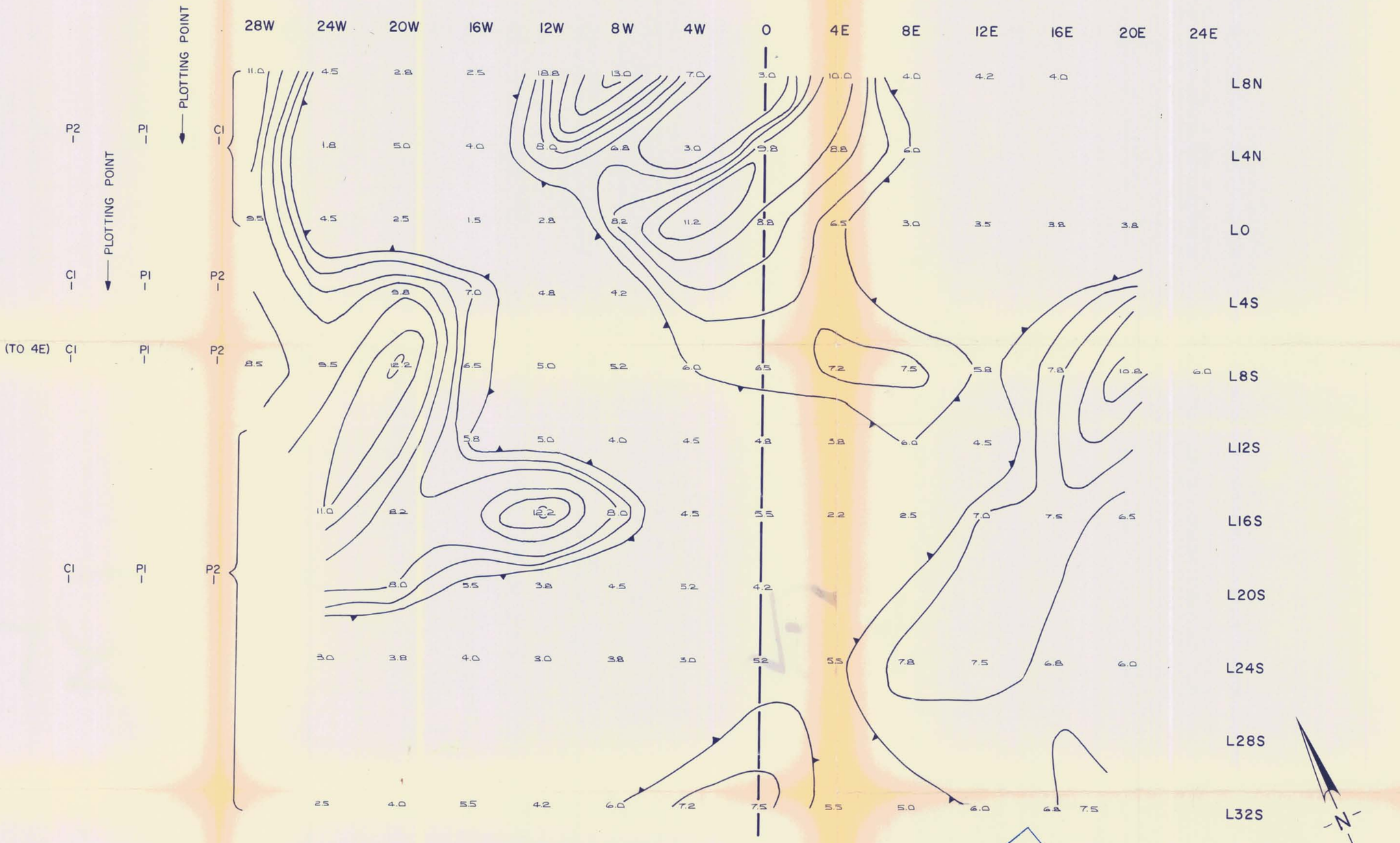
Laurie Reed

L.E. Reed, P. Eng.,
Chief Geophysicist,
Selco Mining Corporation Ltd.,
Exploration Division.

LER/eip.



SELCO EXPLORATION CO. LTD.
ALLENDALE LAKE
(Scale: 1": 2mls) Sept. '71



3481 M-2

REGISTERED PROFESSIONAL ENGINEER
L. E. REED
PROVINCE OF ONTARIO

NOTE: For location of claim boundaries & Location Map, see Drg. AL.774.

CONTOURS: every Millisecond above 6

0 400 800
FEET

SELCO EXPLORATION CO. LTD.

ALLENDALE LAKE AREA

INDUCED POLARIZATION SURVEY

Chargeability Milliseconds

Array — Pole Dipole: n=1: a=400ft

DRAWN BY L.R.	DATE NOV. 1971	PLAN NO AL. 777
TRACED BY C.C.	SCALE	

NOTE: For location of claim boundaries & Location Map, see Drg. AL.774.

CONTOURS: every 500 Meters

0 400 800
FEET

SELCO EXPLORATION CO. LTD.

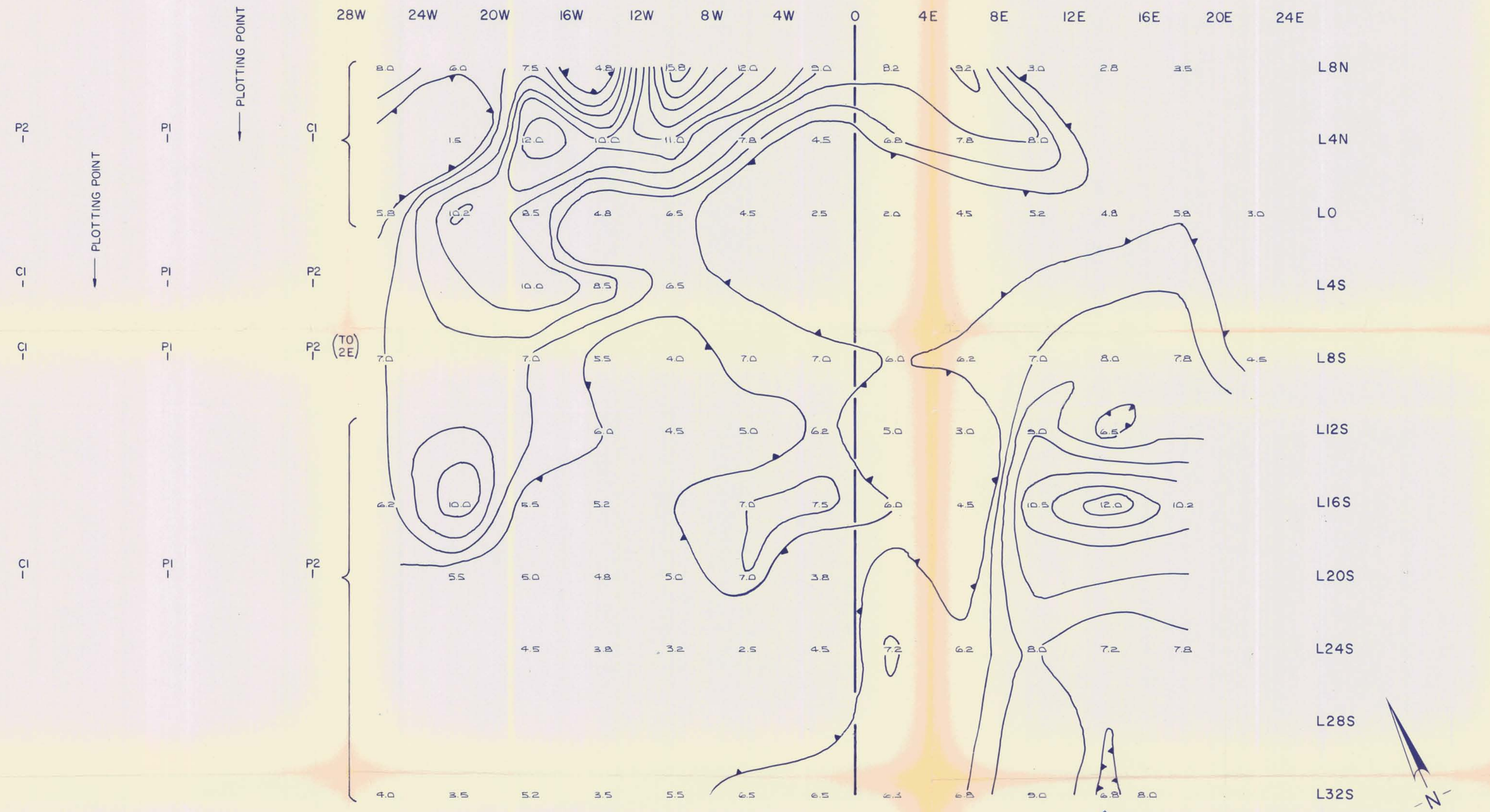
ALLENDALE LAKE AREA

INDUCED POLARIZATION SURVEY

Resistivity OHM-Meters

Array — Pole Dipole: n-I: a=400ft

DRAWN BY L.R.	DATE NOV. 1971	PLAN NO. AL.775
TRACED BY C.C.	SCALE	



NOTE: For location of claim boundaries & Location Map, see Drg. AL.774.

CONTOURS: every Millisecond above 6

0 400 800
FEET

SELCO EXPLORATION CO. LTD.

ALLENDALE LAKE AREA

INDUCED POLARIZATION SURVEY

Chargeability Milliseconds

Array — Pole Dipole: n= 1: a= 800 ft

DRAWN BY L.R.	DATE NOV. 1971	PLAN NO AL. 776
TRACED BY C.C.	SCALE	

28W 24W 20W 16W 12W 8W 4W 0 4E 8E 12E 16E 20E 24E

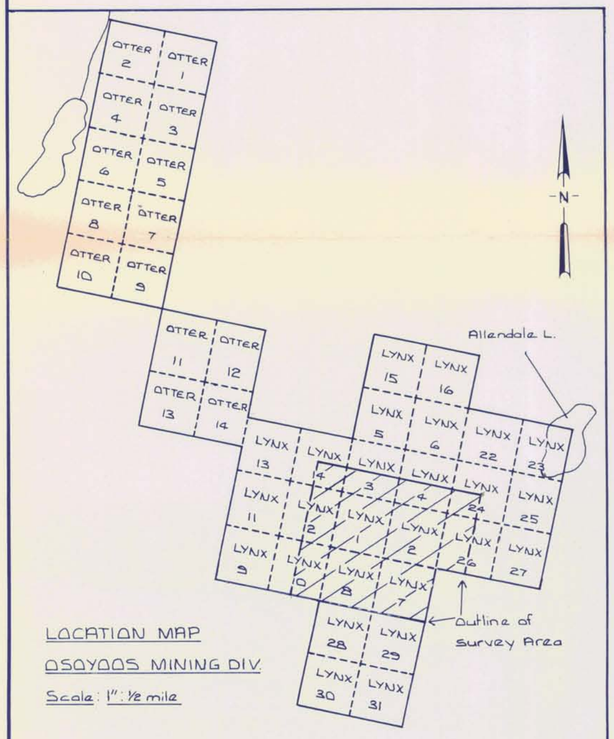
L8N L4N L0 L4S L8S L12S L16S L20S L24S L28S L32S

PLOTTING POINT

P2 P1 C1

LYNX 14 LYNX 12 LYNX 3 LYNX 4 LYNX 24 LYNX 1 LYNX 2 LYNX 26 LYNX 10 LYNX 8 LYNX 7

3240 1700 1930 1530 1990 1660 1255 1660 570 520 410 500
3625 2210 1690 3240 1960 2050 2475 1570 1410
4600 4000 2150 1225 1270 780 1380 770 835 815 765 1690 1530
610 1490 1350
6000 2300 1620 1440 995 1460 1070 2750 1100 1000 1420 2875
825 1880 900 715 610 635 615 790
2300 3400 710 820 1620 1050 845 890 730 1440 2760 6000
1195 570 1435 1040 1380 710
675 325 1565 950 470 1330 1230 1840 2030 3220
2840 1150 830 1000 960 765 1125 1380 1610 3850 2920 3530



LOCATION MAP
OSOYOOS MINING DIV.
Scale: 1" : ½ mile

CONTOURS: every 500 Meters

0 400 800
FEET

SELCO EXPLORATION CO. LTD.

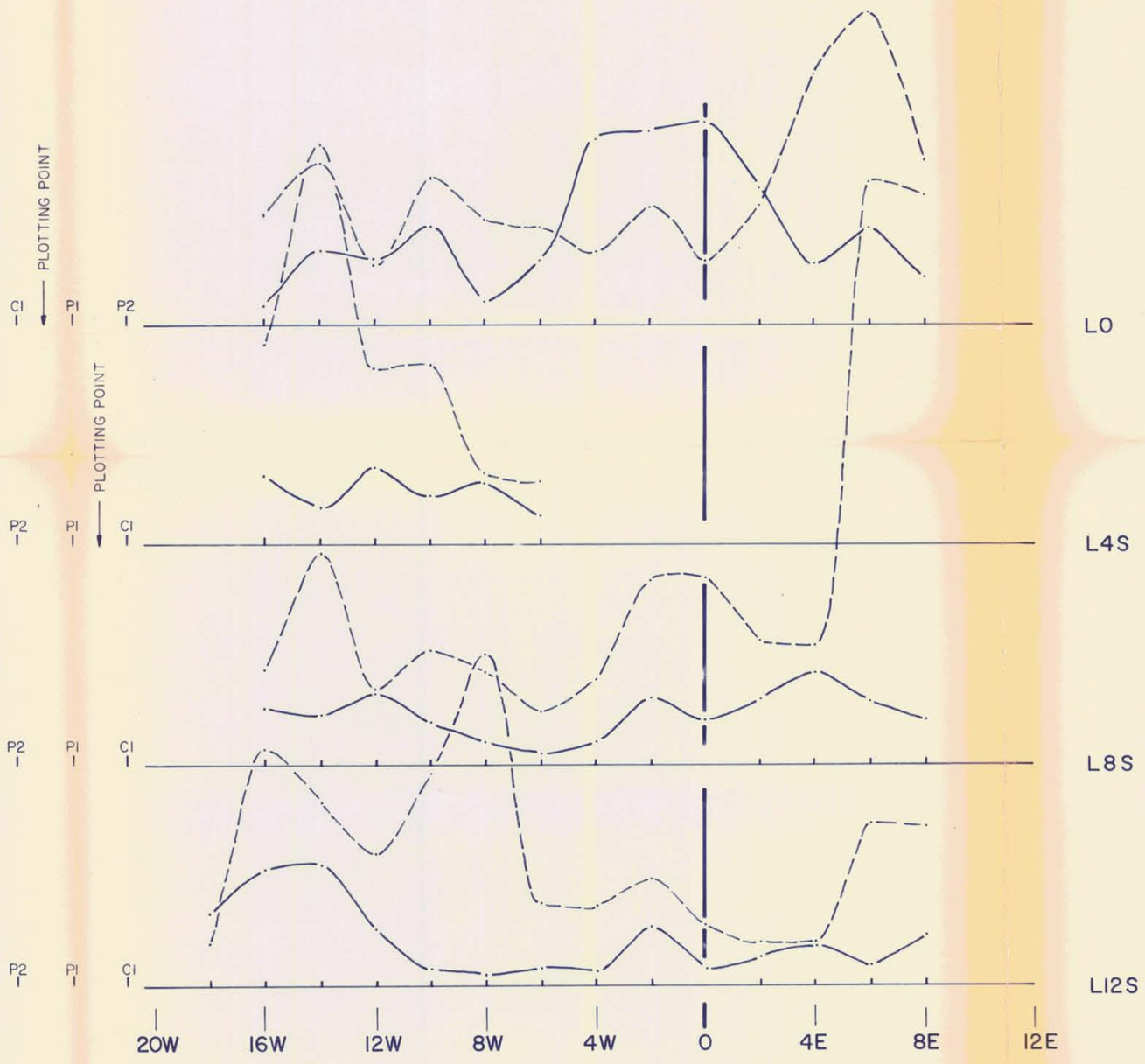
ALLENDALE LAKE AREA

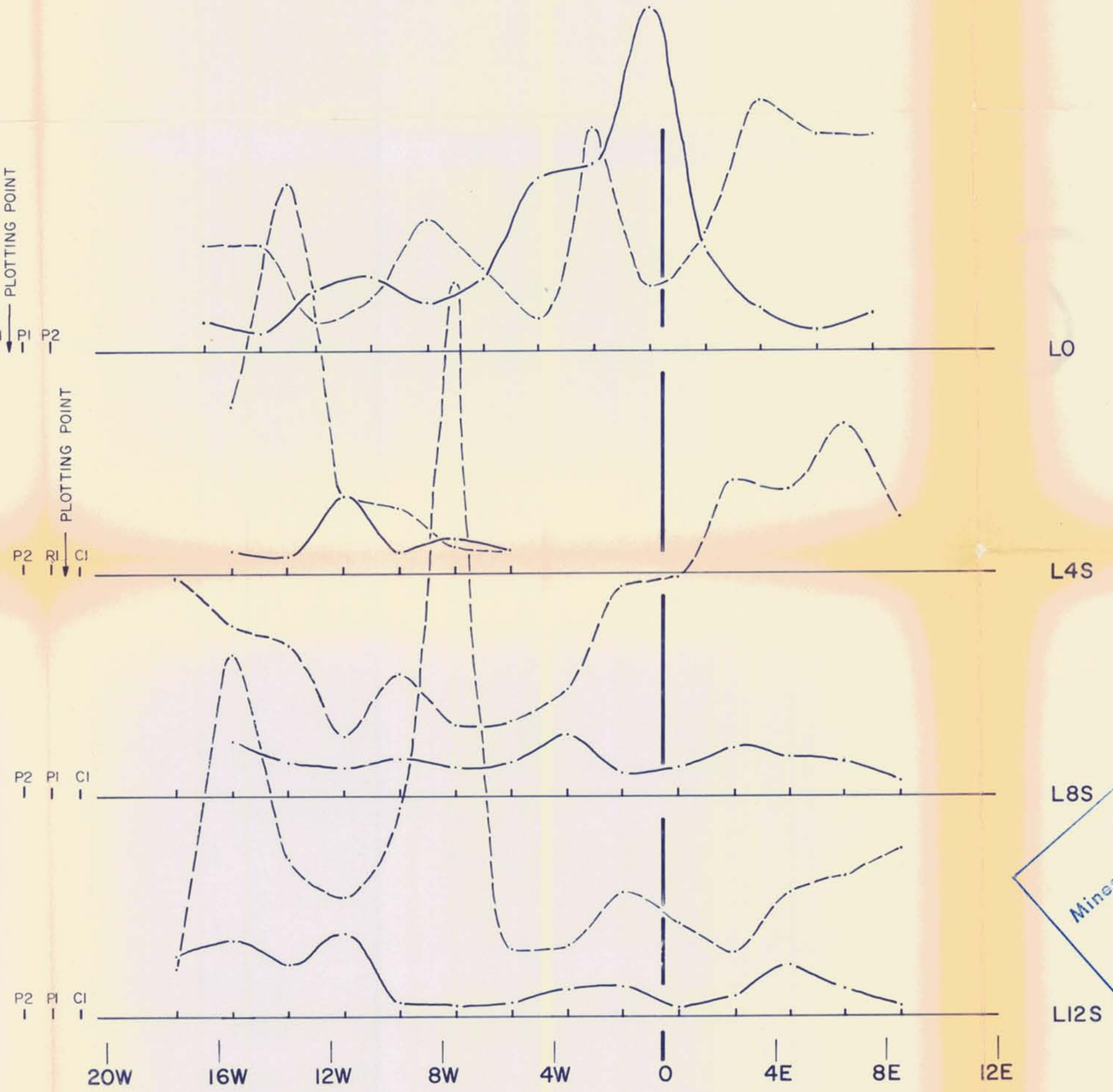
INDUCED POLARIZATION SURVEY

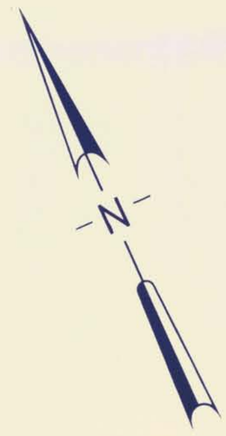
Resistivity OHM-Meters

Array — Pole Dipole: n=1: a=800ft

DRAWN BY L.R.	DATE NOV. 1971	PLAN NO
TRACED BY C.C.	SCALE	AL. 774







REGISTERED PROFESSIONAL ENGINEER
L. E. REED
PROVINCE OF ONTARIO

L. E. Reed

0 400 800
FEET

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3481 MAP #6

NOTE
CHARGEABILITY ———————
SCALE 1" = 10 MILLISECONDS
RESISTIVITY — — — — — — —
SCALE 1" = 1000 OHM-METERS

SELCO EXPLORATION CO. LTD.

ALLENDALE LAKE AREA

INDUCED POLARIZATION SURVEY

Array – Pole Dipole: n = 1: a = 100 & 200ft

DRAWN BY L.R.	DATE NOV. 1971	PLAN NO AL.783
TRACED BY C.C.	SCALE	