GEOPHYSICAL REPORT

INDUCED POLARIZATION SURVEY

827630 92B/13

LARA PROJECT

VANCOUVER ISLAND, B.C.

on behalf of

ABERMIN CORPORATION 1500 - 1075 West Georgia Street Vancover, B.C. V6E 3C9

Field work completed: April 2 to 27, 1987

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May 24, 1987

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ACCOMPANYING MAPS

Chargeability and Resistivity pseudosections	1:2500	scale
Chargeability contour plan (first separation)	1:5000	scale
Resistivity contour plan (first separation)	1:5000	scale

1. INTRODUCTION

Induced polarization and resistivity surveys were conducted over portions of Abermin Corporation's Lara Project, Vancouver Island, B.C., within the period April 2 to 27, 1987. The work was conducted by Scott Geophysics Ltd.

The pole dipole electrode array was used on the survey, with an "a" spacing of 25 meters and "n" separations of 1 to 5. The current electrode was to the south of the receiving electrodes on all survey lines.

2. SURVEY LOCATION

The Lara Project is located about 15 kilometers west southwest of Chemainus, B.C. Access is via secondary logging roads from the main Chemainus River haul road at mile 13.

3. SURVEY GRID AND SURVEY COVERAGE

A total of 44.875 line kilometers were surveyed on the Lara project. An additional 1.125 kilometers were repeated in various areas where technical difficulties were encountered (interference from the power line or noise due to large voltage changes between dipoles). Stations read in the vicinity of the power line that were not acceptable are not included on the pseudosections nor in the production figures.

4. PERSONNEL

Alan Scott, geophysicist, was the party chief on the survey and operated the IPR11 receiver during the periods April 2-6 and April 15-27. Alan Wynne, geophysicist, was the party chief and operated the IPR11 receiver from April 7 to 14.

5. INSTRUMENTATION AND PROCEDURES

A Scintrex IPR11 time domain microprocessor based induced polarization receiver and a Scintrex 2.5 kw IPC7 transmitter were used for the survey. Readings were taken using a 2 second alternating square wave. The chargeability for the eighth slice (690 to 1050 milliseconds after shutoff; midpoint at 870 milliseconds) is the value that has been plotted on the accompanying plans and pseudosections.

The survey data was archived, processed, and plotted using a Corona PPC 400 microcomputer running Scintrex Soft II software.

6. DISCUSSION OF RESULTS

The results of the survey are presented on the accompanying reduced scale pseudosections (1:2500 scale), and in contour plan form for the first separation chargeability and resistivity (1:5000 scale).

The pseudosections have been coloured at the following intervals:

Chargeability:	yellow	5 to	10 m:	illiv	olts/volt
	ochre	10 to	15 m	illiv	olts/volt
	orange	15 to	20 m:	illiv	olts/volt
	lt. red	20 to	30 m.	illiv	olts/volt
	dk. red	>	30 m:	illiv	olts/volt
Resistivity:	purple	<	200	ohm	meters
······································	dk. blue	200 to	500	ohm	meters
	lt. blue	500 to	1000	ohm	meters
	lt. green	1000 to	2000	ohm	meters
	dk. green	2000 to	5000	ohm	meters
	brown	>	5000	ohm	meters

Chargeability anomalies have been categorized on the pseudosections and contour plans as follows:

	strong chargeability high
27777	moderate chargeability high
	weak chargeability high
	weak chargeability high, poorly defined

If the anomaly has been defined at a separation other than the first, that separation is noted at the anomaly symbol (e.g. n=2).

In some cases an arrow has been noted on the pseudosection to indicate the probable axis of the source of that particular anomaly.

Chargeability highs generally exhibit well defined linearity accross the survey area in a west northwest direction. The approximate axis of anomalies that appear to correlate to a distinct stratigraphic and/or structural feature have been identified on the chargeability contour plan and pseudosections, and assigned the letters A through P.

Anomaly A

Anomaly A includes the weak to moderate chargeability highs at the south end of lines 59W to 62W. It appears to be primerily caused by a thin near surface moderate chargeability and high resistivity layer, quite different to all other anomalies detected on the survey. However, the northern edge of the anomaly may be due to a steeply deeping source. Anomaly A is given a low priority for further work.

Anomaly B

Anomaly B1 is coincident with the main Coronation Zone on lines 58W to 65W. In particular, the strong response on line 63W is coincident with massive sulphides in trench 43. Therefore, any chargeability highs along this trend are considered high priority targets. The strongest responses along this trend, aside from line 65W, are at line 58W and line 51W. Correlation of anomaly B1 on lines 68W and 70W is less well defined, and the zone may actually be represented by the weak high at 1525N on line 68W. Anomaly B2 may represent a new horizon, or may correlate to anomaly C. Note the large variability in response along anomaly B1, and the short strike length of the stronger responses. This suggests that fill in survey along this trend on a 50 meter line spacing may be effective in defining higher sulphide content pods.

Anomaly C

Anomaly C consists of a broad moderate to strong response extending accross the survey area, as identified by the two trends C1 and C2 on the contour plan, and the weaker responses C3 and C4 to the north. It is uncertain whether trends C1 and C2 represent discrete zones, or if they represent the approximate edges of one broad zone of increased sulphide content. Anomalies C3 and C4 should be considered as distinct targets to C1 and C2.

Anomaly D

Anomaly D is a well defined moderate to strong chargeability high from line 54W to line 62W. It is inferred to continue, as a weaker response, to line 70W.

Anomaly E

Anomaly E is a weak to moderate chargeability high about 150 meters north of anomaly D on lines 54W to 62W. Anomaly E should be considered as a separate target to anomaly D.

Anomalies F through M

These generally weak, occassionally moderate chargeability highs could not be recommended for further work only on the basis of their geophysical response. However, correlation to the geological and geochemical data bases, and past diamond drilling results, may upgrade them to valid targets.

Anomaly N

Anomaly N is a moderate to strong well defined chargeability high near the north end of lines 65W to 69W.

Anomalies O and P

Anomalies 0 and P lie at the north end of lines 66W and 64W. They may be caused by the same geologic feature.

7. RECOMMENDATIONS

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Correlation of the chargeability anomalies defined in this report to the geological and geochemical data bases, and to past diamond drilling results, is recommended in order to select specific targets for further work.

Fill in survey along the Coronation Zone to a 50 meter line separation to explore for short strike length high sulphide content pods is recommended.

If additional survey work is required within 100 meters the powerlines, new lines should be established at right angles to the powerlines. Lines A and B, which were perpendicular to the power lines, gave acceptable results, whereas it was not possible to obtain accurate measurements on the existing grid (lines at a shallow angle to the pewerline).

Respectfully Submitted,

Alan Scott, Geophysicist





INSTUMENT: SCINTREX IPR II POLE DIPOLE ARRAY a = 25 metres M7 (690 to 1050 milliseconds)

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Heavy contours at 5,10,20,30 mV/V Light contours at 2.5, 7.5, 15, 25 mV/V Strong chargeability high Moderate chargeability high Weak chargeability high ---- Weak, poorly defined

Axis of chargeability high (moderate to strong) - - - Axis of chargeability high (weak to moderate) ••••• Axis of chargeability high (poorly defined)

> ABERMIN CORPORATION LARA PROJECT B.C. INDUCED POLARIZATION SURVEY

CHARGEABILITY CONTOUR PLAN

FIRST SEPARATION (n=1)

Survey by : Scott Geophysics Ltd





POLE DIPOLE ARRAY a=25 metres Heavy contours at 300, 1000, 3000 ohm metres Light contours at 500,750,1500,2000 ohm metres

> ABERMIN CORPORATION LARA PROJECT B.C. INDUCED POLARIZATION SURVEY RESISTIVITY CONTOUR PLAN FIRST SEPARATION (n=1) Survey by : Scott Geophysics Ltd.