+870
1670

REPORT ON
INDUCED POLARIZATION SURVEY
ON THE
JILL CLAIM GROUP
CRANBROOK AREA, B.C.
FOR
PLACID OIL COMPANY
BY
CANADIAN AERO MINERAL SURVEYS LIMITED
Project No. 8328

REPORT ON

INDUCED POLARIZATION SURVEY

ON THE

JIM CLAIM GROUP

CRANBROOK AREA, B.C.

FOR

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BY

CANADIAN AERO MINERAL SURVEYS LIMITED

PROJECT NO. 8328

Aime R. Brazeau, P.Eng.,
Geophysicist

W. Schuur, M.Sc.,
Geophysicist.

OTTAWA, Ontario,
October 10, 1968.

TABLE OF CONTENTS

Accompanying this Report:-

- Apparent Chargeability Contour Maps #1a, 1b, 1c. scale 1" = 1/8 Mile. (3 sheets).
- Apparent Resistivity Contour Maps #2a, b, c, scale 1" = 1/8 Mile. (3 sheets).
- Combined Apparent Chargeability and Apparent Resistivity Profile Presentation horizontal scale 1" = 200 feet. (6 sheets). #3a, b, c, d, e, f.

S U M M A R Y

During the period from May 13th. till August 2nd., 1968, Canadian Aero Mineral Surveys Limited conducted an induced polarization survey, covering approximately 96 line miles in the Cranbrook area for Placid Oil Company. A total of 5 anomalous zones has been outlined. The anomalous zones have been classified as first, second and third priority follow-up targets and, wherever possible, drill hole locations were determined from where the various structures, corresponding with the individual zones, could be tested most advantageously.

REPORT ON
INDUCED POLARIZATION SURVEY
IN THE
CRANBROOK AREA, B.C.
FOR
PLACID OIL COMPANY

I. INTRODUCTION

From May 13th. till August 2nd., 1968, Canadian Aero Mineral Surveys Limited conducted an induced polarization survey over the Jill claim group in the Cranbrook area, B.C., on behalf of Placid Oil Company.

Aime R. Brazeau, P.Eng., was in charge of field operations. Occasionally, reference will be made to the 1967 report dated December 28, 1967.

Survey data is presented as combined apparent resistivity and apparent chargeability profiles on a scale of 1" = 200 feet.

Both apparent resistivity and apparent chargeability readings obtained with the 400 feet spacing are also presented on contour maps at a scale of 1" = 1/8 mile.

The indicated North arrow on these maps has been used as reference for drill hole directions.

II. EQUIPMENT AND PERSONNEL

The equipment used was a high sensitivity D.C. pulse-type induced polarization unit, MK - V-A, built by Sharpe Instruments Limited.

The power unit employed was capable of generating 2.5 kw.

The following Canadian Aero Mineral Surveys Limited

personnel were associated with the survey:

A.R. Brazeau, P.Eng. Valleyfield, P.Q.	Geophysicist
D. Fitzsimmons Ottawa, Ontario.	Draftsman
W. Schuur, M.Sc., Ottawa, Ontario.	Geophysicist

All further personnel, necessary for the field operations were provided by Placid Oil Company.

III. GEOLOGY

Some publications and maps have been used as reference for the geology of the areas. Reference is made here to the December 28, 1967 report.

IV. DISCUSSION OF RESULTS

Jill Claim Group

A total of 507,900 line feet was surveyed on the Jill claim group not including detailing that was carried out over anomalous areas.

Data obtained over the Jill claim group is presented in profile form on sheets 8, 9, 10, 11, 12, 13. They have been numbered from 8 to 13 to give continuity to the 1967 survey profile sheets numbered from 1 to 7.

In contour form this data is incorporated in the six contour maps accompanying this report.

From both the resistivity and the chargeability contour maps two distinct trends are recognizable in the area to wit: one

in a N20°E direction (Base line "H" and base line "I" area), the other in a northwesterly direction (Base line "J" area).

The general background chargeability value, as observed on the contour maps is approximately 4 - 6 milliseconds.

Note that in the northern part of Base line "I" (profile sheet no. 10) there is an increase in the thickness of overburden. As a consequence, the background chargeability is of lower value in this area.

Chargeability readings of twice the background value are considered anomalous and, based on this, a number of anomalous zones has been outlined. These zones have been labelled from Jill-1 to Jill-5.

Zone Jill-1 is located on line 15S only. This line is characterized by extremely rugged topography which in some cases can have a strong influence on the induced polarization results. In this instance, most of the anomalous readings are attributed to topographic effects for the following reasons. At station 45W on line 15S, the chargeability values obtained with the 400 feet (31 milliseconds) and the 200 feet (20 milliseconds) spacings confirm each other; however, the 100 feet spacing readings are not anomalous. From station 50W to station 53W on the smae line (line 15S) the 100 feet and 200 feet spacing chargeability values are about 15 milliseconds, but the 400 feet chargeability values are not anomalous. A genuine induced polarization anomaly is, in most cases, free of such discrepancies between the chargeability values obtained with the various spacings. For the reasons mentioned above, the Jill-1 zone

does not warrant immediate follow-up.

Chargeability and resistivity contour maps show an almost due north trend for the Jill-2 zone. Lines 30S, 35S and line 45S have been detailed with smaller spacings in an attempt to delineate underground formations. The results do not give a clear picture; resistivity values are not much different from background values, and chargeability readings with small spacings indicate that the source is sub-horizontal and fairly close to surface at approximately 5+00 east on line 45S, possibly dipping very flatly to the east. Zone Jill-2 reminds strongly of zone "D" and "S" of the 1967 survey and, because the two zones of the 1967 survey failed to give mineralization of interest, no immediate follow-up can be recommended.

Zone Jill-3 runs approximately north-south and is evident on three survey lines, namely line 10S, line 15S and line 20S. Detail work has been done on line 10S and line 20S. On each of the three lines mentioned above, the same patterns of underground formation repeat itself: an increase in chargeability coupled with a decrease for resistivity values. A two layer case interpretation of data at station 30W on line 20S and at station 29W on line 10S yielded a depth to top of source of the anomalous readings of 180 feet below surface. The best location for a drill hole to test the source of zone Jill-3 is at 34W on line 20S to be drilled vertically. The source is estimated to consist of up to 2% average by volume of polarizable material.

Zone Jill-4 can be seen on at least three lines and finds its best expression on line 15N where detail work was done. There is a marked increase in chargeability coupled with a decrease in resistivity with all the spacings used. It appears that the causative structure dips fairly steeply to the east and comes close to surface at station 44E. Zone Jill-4 is thought to be a good drilling target with an expected amount of up to 3% average by volume of polarizable material.

The best drill hole location appears to be at 45+50E on line 15S to be drilled west at an inclination of -45° for at least 250 feet.

Zone Jill-5 is best expressed on line 60N; its extension is not evident on the two adjacent lines. Line 60N was extended so that the zone could be closed. The small spacing readings show an increase in chargeability and a decrease in resistivity at around 24E on line 60N. An intermediate dip to the east is suggested. Zone Jill-5 should be tested by a drill hole collared at 25+00E on line 60N, at an angle of -60° to the west. The 400 feet readings suggest that zone Jill-5 extends to the east where the burial of the source of anomalous zone Jill-5 appears to be deeper than at around S+25E on line 60N.

Consequently an alternate drill hole could be collared at 34E on line 60N where a vertical drill hole should intersect the source of anomaly within 300 feet from surface. An amount of up to 2.5% average by volume of polarizable material can be expected.

On profile sheets 10 and 13, there are some three zones where the chargeability values are above the value of 9 milliseconds. It is estimated that the chargeability values are not high enough compared to background values to warrant immediate follow-up.

V. CONCLUSIONS AND RECOMMENDATIONS

The induced polarization survey on the Jill claims has been successful in outlining five (5) anomalous zones, three of which look sufficiently promising to be followed-up by drilling. Information obtained from the ground magnetic data would be of help to better evaluate zone Jill-1 and zone Jill-2. We would like to draw attention to the presence of fences in the vicinity of zone Jill-5; as far as the writer knows, there is no fence in the neighbourhood of station 25E on line 60N however.

Based on the combined induced polarization and resistivity data, the following anomaly list has been prepared. At the same time drill hole locations are given from which the zones may be tested most advantageously.

First Priority

Zone Jill-4:- collar at 45+50E on line 15N, drill west at -45° for at least 250 feet.

Zone Jill-5:- a) collar at 25+00E on line 60N, drill west at -60°

b) collar at 34E on line 60N, drill vertically for at least 300 feet.

Second Priority

Zone Jill-3:- collar at 34W on line 20S, drill vertically for at

least 350 feet.

Third Priority

Zone Jill-1:- No drilling recommended.

Zone Jill-2:- No drilling recommended.

Further follow-up should depend on additional information obtained with other geophysical, geological or cheochemical methods.

Respectfully submitted,

Aime R. Bruneau, P.Eng.,
Geophysicist.

W. Schuur, M.Sc.,
Geophysicist.

OTTAWA, Ontario,
October 10, 1968.

APPENDIX I

A. EQUIPMENT

The equipment used by Canadian Aero Mineral Surveys Limited is the high sensitivity D.C. pulse-type I.P. unit Mk. V, built by Sharpe Instruments Limited. A current on-time of 1.5 seconds and a measuring time of 0.5 seconds are employed. A choice of 3 power units is available with this equipment, of respectively 1.2 k.w., 2.5 k.w. and 7.5 k.w. output to match requirements in specific areas. For surveys requesting a very high stable power source a 10 k.w., Volkswagen engine driven, power unit is also available.

B. FIELD PROCEDURE

All electrode configurations in common use in resistivity surveying like dipole-dipole, two array, three array, Wenner and Schlumberger configuration, can be used for DC induced polarization surveying. Canadian Aero Mineral Surveys Limited preferably uses the three array because of low coupling effect and high effective penetration. With this array one current electrode is placed at "infinity", a distance of at least 5 times the maximum spacing used during the survey from any survey station. The other current electrode and the two potential electrodes are equally spaced in line along the survey traverses.

In many areas high resistive bedrock is overlain by good conducting soils, which effectively prevent current to enter the

bedrock. To be able to obtain information about bedrock, spacings used have to be 20 and more times the depth of the overburden. In such cases, using any of the usual arrays, it is not possible to detect the presence of small or moderate sized bodies. Under these circumstances the gradient or rectangle method is both feasible and desirable. It reduces the effect of masking, retains a high degree of resolution and has good depth penetration. With this method, the two current electrodes are placed along a traverse at a mutual distance of 4000' or more. The potential electrodes are kept within the middle third of the current electrode spacing. For each current electrode set-up a rectangle of dimensions 1/3 X 1/4 the current electrode spacing is surveyed. For the gradient array method the potential electrode spacing is usually kept within 1/20 of the current electrode spacing.

For the other electrode configurations the electrode spacing depends primarily on required depth of penetration and size of body expected. Most common spacings for reconnaissance survey with the three array are the 400' and 200'. Readings are normally taken at 200' intervals along the lines, but in areas of interest this interval is reduced to 100'. In some cases anomalous areas are further detailed using additional spacings - 800', 400', 200', 100' and 50' - to provide information as regards the change of electrical properties with depth.

At each observation point both the primary voltage - steady state voltage - and secondary voltage - transient voltage or overvoltage - are observed. The primary voltages are converted

by formula to apparent resistivities expressed in units of ohm meters. Secondary voltages are measured by integration and divided by their corresponding primary voltages to obtain the apparent chargeabilities. The chargeability expressed in units of milli-volt seconds per volt or milliseconds is the I.P. characteristic of the medium.

C. DATA PRESENTATION

Results are presented as combined apparent resistivity and apparent chargeability profiles. Resistivities are plotted at a logarithmic scale of 2" = 1 cycle. Apparent chargeabilities are plotted at a scale of 1" = 5 milliseconds. Apparent chargeability readings obtained with the reconnaissance spacing are also presented on a contour map. For the surveys done with the gradient method, contouring is done separately for each block, due to irregularities in the current distribution in the various blocks. For all other electrode configurations contouring is done continuously over the entire survey area.

A. I, Aime R. Brazeau, am by profession a Mining Engineer, residing in the City of Valleyfield, in the Province of Quebec.

B. I graduated in the year 1964 from Ecole Polytechnique. University of Montreal, with a Bachelor of Applied Science Degree in Mining Engineering, with a minor in Geophysics.

C. For two years, I have been employed by Canadian Aero Mineral Surveys Limited as a geophysicist.

D. I am a registered member of the Association of Professional Engineers of the Province of Quebec.

Aime R. Brazeau

A. R. Brazeau, B.Sc.A., P. Eng.

March 25, 1968
Ottawa, Canada

4

115°51' 115°50' 115°49' 115°48' 115°47'

49°28'

ZONE "4"

ZONE "3"

ZONE "2"

TIE LINE F

BASE LINE I

TIE LINE D

BASE LINE H

BASE LINE G

L 5590

L. 4591

S L. 10

S.L. E

S.L. C

L. 2790

S.L. B

Creek

Peavine

Creek

Hogg

49°23'

ELECTRODE CONFIGURA
ELECTRODE SPACING..
CONTOUR INTERVAL..
INDEX CONTOUR....
INTERMEDIATE CONTOU

115°49' 115°48' 115°47' 115°46' 115°45' 49°28'

ZONE "4"

ZONE "3"

S.L. 18

BASE LINE J

TIE LINE F

TIE LINE D

BASE LINE I

L 5590

Creek

L. 4591

Creek

Peavine

S.L. C

S.L. B

L 2790

Hogg

49°27'

49°26'

49°25'

49°24'

115°49' 115°48' 115°47' 115°46' 115°45'

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 1670 MAP 13

TO ACCOMPANY GEOPHYSICAL REPORT
(INDUCED POLARIZATION)
ON THE
JILL CLAIM GROUP
CRANBROOK AREA FORT STEELE M.D.
BRITISH COLUMBIA
OCT. 10, 1968 A. BRAZEAU, W. SCHUUR.

CHARGEABILITY CONTOUR PLAN
CRANBROOK S.E.
SCALE- 8 INCHES TO 1 MILE
FOR
PLACID OIL COMPANY
BY
CANADIAN AERO MINERAL SURVEYS LIMITED

ELECTRODE CONFIGURATION ..... 3 ARRAY
ELECTRODE SPACING ..... 400 FEET
CONTOUR INTERVAL ..... 2 MILLISECONDS
INDEX CONTOUR .....
INTERMEDIATE CONTOUR .....

1670

A.P. Brazeau

(1a)

ELECTRODE CONFIGUR...
ELECTRODE SPACING
CONTOUR INTERVAL
INDEX CONTOUR ...
INTERMEDIATE CONTOU...

L 5253
L 5241
L 5240
L 5460
L 5242
L 5243
L 5255
L 3066
L. 12530
L. 12992
L. 3694
Palmer Creek
CANADIAN PACIFIC
RAILWAY
BASE LINE A
BASE LINE G
BASE LINE B
BASE LINE H
TIE LINE B
TIE LINE E
RIVER
2804
115°55'
115°54'
115°53'
115°52'
115°51'
49°28
49°27
49°26
49°25
49°24
35+00N
30+00N
25+00N
20+00N
15+00N
10+00N
5+00N
0+00
5+00S
10+00S
15+00S
20+00S
25+00S
30+00S
35+00S
40+00S
45+00S
50+00S
53A fr.
54 fr.
53 fr.
52 fr.
57 fr.
58 fr.
N.R.

TO ACCOMPANY GEOPHYSICAL REPORT
(INDUCED POLARIZATION)
ON THE
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CRANBROOK AREA FORT STEELE M.D.
BRITISH COLUMBIA
OCT. 10, 1968 A. BRAZEAU, W. SCHUUR.

CHARGEABILITY CONTOUR PLAN
CRANBROOK S.W.
SCALE - 8 INCHES TO 1 MILE
FOR
PLACID OIL COMPANY
BY
CANADIAN AERO MINERAL SURVEYS LIMITED

ELECTRODE CONFIGURATION	3 ARRAY
ELECTRODE SPACING	400 FEET
CONTOUR INTERVAL	2 MILLISECONDS
INDEX CONTOUR	
INTERMEDIATE CONTOUR	

1670
A.H. Brazeau
16

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1670 MAP 1c

115°51' 49°32' 115°50' 115°49' 115°48' 115°47'

L. 10331 L. 5248 L. 3570 L. 6437 L. 6237 L. 7317 L. 8914 L 4841 L 4842 L 8916 L 9805 L 4684 L 12991 L 8917 L 3572 L 8918 L 2873 L 1214 L 4837 L 12142 L 7421 L 5249 L. 3575 L 5801 L 2310 L. 10087 L. 10088 L. 7794 L. 2311 L. 10094 L. 10727 L 8753 L 30 L 31

BASE LINE C
BASE LINE K N 10 E
BASE LINE A
BASE LINE D
BASE LINE J
TIE LINE A
TIE LINE G

PACIFIC
CANADIAN

ELIZABETH LAKE
L 17
PROV. PARK

JIM SMITH LAKE
PROV. PARK

Jim Smith Creek
Jim Smith Lake

ZONE "5"

ELECTRODE CONFIGURATION
ELECTRODE SPACING
CONTOUR INTERVAL
INDEX CONTOUR
INTERMEDIATE CONTOUR

49°31' 49°30' 49°29' 49°28' 115°50' 115°49' 115°48' 115°47'

115°49' 115°48' 115°47' 115°46' 115°45' 49°32'

L. 5248 L. 3570 L. 6437 L. 287 L. 28

L. 7317 L. 6237

L 4841

L 4842

L 9805

L 4684

L 29

L 4

Creek

BASE LINE K N 10 E

BASE LINE L

RAILWAY

L 3572

L 5

L 2873

PACIFIC

L 30

CRANBROOK

Joseph

L 22

L 4837

CANADIAN

L 32

TIE LINE G

49°30

ELIZABETH LAKE
L 17
PROV. PARK

L 3912

L 5249 L. 3575

BASE LINE D

Creek

L 31

L 3911

ZONE "5"

BASE LINE J

L 7225

S.L. 20

L. 10087

L. 10088

L 7095

BASE LINE G

49°29

49°28

115°49' 115°48' 115°47' 115°46' 115°45'

TO ACCOMPANY GEOPHYSICAL REPORT
(INDUCED POLARIZATION)
ON THE

JILL CLAIM GROUP

CRANBROOK AREA FORT STEELE M.D.
BRITISH COLUMBIA

OCT. 10, 1968 A. BRAZEAU, W. SCHUUR.

CHARGEABILITY CONTOUR PLAN

CRANBROOK N.E.

SCALE - 8 INCHES TO 1 MILE

FOR

OIL COMPANY

BY

CANADIAN AERO MINERAL SURVEYS LIMITED

ELECTRODE CONFIGURATION	3 ARRAY
ELECTRODE SPACING	400 FEET
CONTOUR INTERVAL	2 MILLISECONDS
INDEX CONTOUR	
INTERMEDIATE CONTOUR	

1670

(1c)

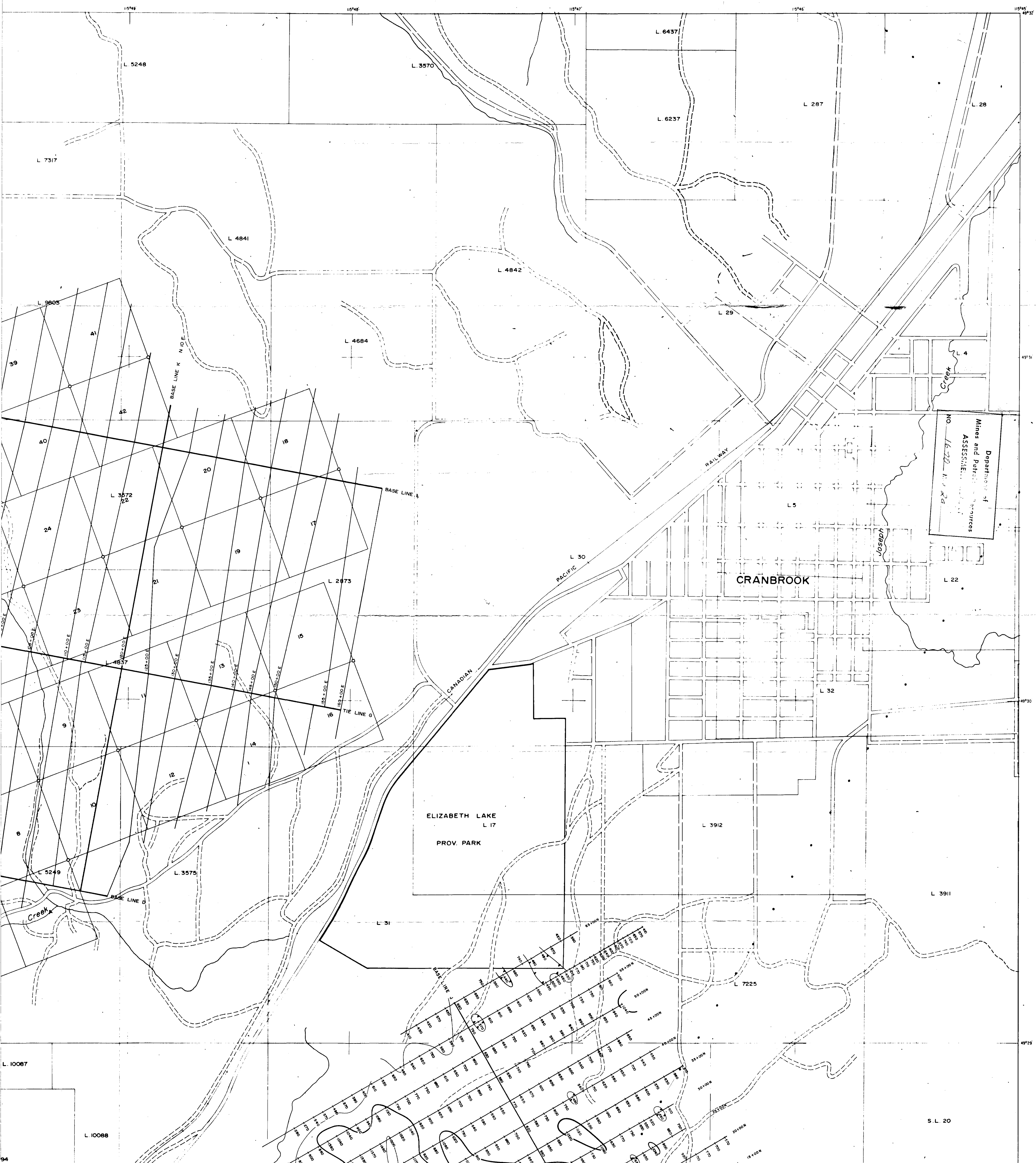
2

115°51' 115°50' 115°49' 115°48' 115°47'

49°32'

L. 10331
L. 5248
L. 3570
L. 6437
L. 6237
L. 7317
L. 8914
L. 4841
L. 4842
L. 9803
L. 8916
L. 4684
49°31'
BASE LINE C
BASE LINE K N 10 E
L. 12991
L. 8917
BASE LINE L
L. 3572
L. 8918
L. 30
PACIFIC
L. 2873
L. 1214
L. 4837
CANADIAN
TIE LINE G
49°30'
L. 12142
L. 742
ELIZABETH LAKE
L 17
PROV. PARK
L. 5249
L. 3575
BASE LINE D
Creek
L. 3801
Smith
Jim
L. 2310
L 31
BASE LINE J
JIM SMITH LAKE
PROV. PARK
Jim Smith
Lake
L. 10087
L. 10088
L. 7794
TIE LINE A
L. 2311
L. 10094
L. 10727
L. 8753
49°29'
49°28'
5°5
115°50'
115°49'
115°48'
115°47'

ELECTRODE CONFIGUR
ELECTRODE SPACING..
CONTOUR INTERVAL..
INDEX CONTOUR....
INTERMEDIATE CONTOU



RESISTIVITY CONTOUR PLAN

CRANBROOK N.E.

SCALE - 8 INCHES TO 1 MILE

FOR

PLACID OIL COMPANY

BY

CANADIAN AERO MINERAL SURVEYS LIMITED

ELECTRODE CONFIGURATION .... 3 ARRAY
ELECTRODE SPACING .... 400 FEET
CONTOUR INTERVAL .... 500 OHM-METERS
INDEX CONTOUR ....
INTERMEDIATE CONTOUR ....

1670

A R Brazeau

(2a)

115°51'
115°50'
115°49'
115°48'
115°47'
49°28'
49°27'
49°26'
49°25'
45+00N
40+00N
35+00N
30+00N
25+00N
20+00N
15+00N
10+00N
5+00N
BASE LINE 0
5+00S
10+00S
15+00S
20+00S
25+00S
30+00S
35+00S
40+00S
45+00S
50+00S
TIE LINE F
BASE LINE I
TIE LINE D
BASE LINE H
L 5590
L 4591
L 2790
S L 10
S L E
S L. C
S L. B
Creek
Peavine
Creek
Hogg
ELECTRODE CONFIGUR
ELECTRODE SPACING
CONTOUR INTERVAL
INDEX CONTOUR
INTERMEDIATE CONTOU

115°49'
115°48'
115°47'
115°46'
115°45'
49°28'
49°27'
49°26'
49°25'
49°24'

S.L. 18

BASE LINE J

TIE LINE F

TIE LINE I

TIE LINE D

L 5590

L. 4591

L 2790

S.L. C

S.L. B

Creek

Creek

Peavine

Hogg

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1670 MAP 26

TO ACCOMPANY GEOPHYSICAL REPORT
(INDUCED POLARIZATION)
ON THE

JILL CLAIM GROUP

CRANBROOK AREA FORT STEELE M.D.
BRITISH COLUMBIA

OCT. 10, 1968 A. BRAZEAU, W. SCHUUR.

ELECTRODE CONFIGURATION ..... 3 ARRAY
ELECTRODE SPACING ..... 400 FEET
CONTOUR INTERVAL ..... 500 OHM-METERS
INDEX CONTOUR .....
INTERMEDIATE CONTOUR .....

RESISTIVITY CONTOUR PLAN

CRANBROOK S.E.

SCALE- 8 INCHES TO 1 MILE

1670 FOR PLACID OIL COMPANY

BY

CANADIAN AERO MINERAL SURVEYS LIMITED

A.R. Brazeau

(2b)

49°28'
49°27'
49°26'
49°25'
49°24'
115°57'
115°56'
115°55'
115°54'
115°53'

BASE LINE A

BASE LINE B

Palmer Bar Creek

Palmer Bar

MOYIE RIVER

CANADIAN PACIFIC

BASE LINE

L 5253
L 5241
L 5240
L 5242
L 5243
L 2804
L 5255

54ft.
53Aft.
53ft.
52ft.
57ft.
58ft.

ELECTRODE CONFIGURA
ELECTRODE SPACING..
CONTOUR INTERVAL..
INDEX CONTOUR....
INTERMEDIATE CONTOU

TO ACCOMPANY GEOPHYSICAL REPORT
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CRANBROOK AREA FORT STEELE M.D.
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ELECTRODE CONFIGURATION ..... 3 ARRAY
ELECTRODE SPACING ..... 400 FEET
CONTOUR INTERVAL ..... 500 OHM-METERS
INDEX CONTOUR .....
INTERMEDIATE CONTOUR .....

RESISTIVITY CONTOUR PLAN

CRANBROOK S.W.

SCALE- 6 INCHES TO 1 MILE

FOR

PLACID OIL COMPANY

BY

CANADIAN AERO MINERAL SURVEYS LIMITED

A.R. Brazeau

1670

(2c)

BASE LINE "H"

4+00E

4+00W

8+00W

12+00W

16+00W

20+00W

24+00W

28+00W

32+00W

36+00W

40+00W

44+00W

48+00W

52+00W

56+00W

60+00W

N.R.

RESISTIVITY SCALE
(OHM METERS)

1000
500
200
100

NOTE: LINES NOT SPACED TO SCALE

Department of Mines and Resources
Mines and Geology Branch
OTTAWA, CANADA
NO. 1670

BASE LINE "H"

8+00 W | 4+00 W | 4+00 E | 8+00 E | 12+00 E | 16+00 E | 20+00 E | 24+00 E | 28+00 E | 32+00 E | 36+00 E | 40+00 E | 44+00 E | 48+00 E

N.R.

L-35+00N

L-30+00N

N.R.

N.R.

L-25+00N

L-20+00N

L-15+00N

L-10+00N

L-5+00N

L-0+00N

L-5+00S

8+00 W | 4+00 W | BASE LINE "H" | 4+00 E | 8+00 E | 12+00 E | 16+00 E | 20+00 E | 24+00 E | 40+00 E | 44+00 E | 48+00 E

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CRANBROOK AREA FORT STEELE M.D.
BRITISH COLUMBIA

OCT. 10, 1968 A. BRAZEAU, W. SCHUUR.

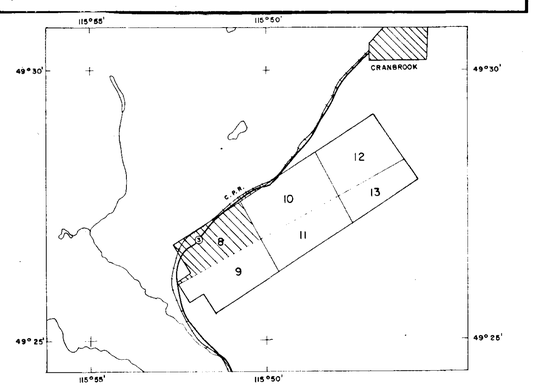
LEGEND

ELECTRODE CONFIGURATION.....3 ARRAY
ELECTRODE SPACING.....SSE INDEX

CHARGEABILITY | RESISTIVITY

SCALE

APPARENT CHARGEABILITY.....1"=5·0 MILLISECONDS
APPARENT RESISTIVITY.....2"/1 CYCLE 100–1000 Ω m



LOCATION MAP

INDUCED POLARIZATION SURVEY

PROFILE PRESENTATION

CRANBROOK AREA (JILL GROUP)

BRITISH COLUMBIA

FOR

PLACID OIL COMPANY

SCALE 1 INCH TO 200 FEET

CANADIAN AERO MINERAL SURVEYS LIMITED OTTAWA, ONT.

A.B. Brazeau

3a

1670

4+00E
BASE LINE "H"
4+00W
8+00W
12+00W
16+00W
20+00W
24+00W
28+00W
32+00W
36+00W
40+00W
44+00W
48+00W
52+00W
56+00W
60+00W

N.R

RESISTIVITY SCALE
(OHM METERS)
1000
500
200
100

NOTE: LINES NOT SPACED TO SCALE

8+00W 4+00W BASE LINE "H" 4+00E 8+00E 12+00E 16+00E 20+00E 24+00E 28+00E 32+00E 36+00E 40+00E 44+00E 48+00E

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1620 MAP 36

L-10+00S

L-15+00S

L-20+00S

L-25+00S

L-30+00S

L-35+00S

L-40+00S

L-45+00S

L-50+00S

8+00W 4+00W BASE LINE "H" 4+00E 8+00E 12+00E 16+00E 20+00E 40+00E 44+00E 48+00E

TO ACCOMPANY GEOPHYSICAL REPORT
(INDUCED POLARIZATION)
ON THE
JILL CLAIM GROUP
CRANBROOK AREA FORT STEELE M.D.
BRITISH COLUMBIA
OCT. 10, 1968 A. BRAZEAU, W. SCHUUR.

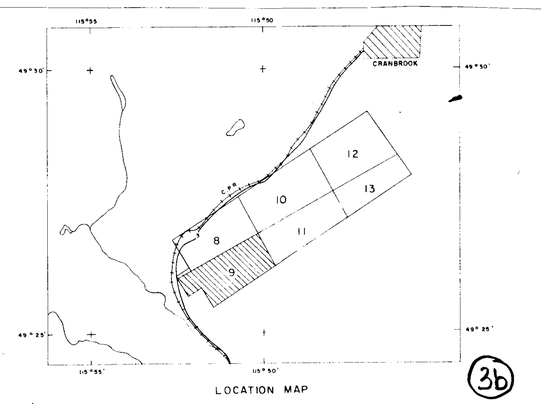
LEGEND

ELECTRODE CONFIGURATION ..... 3 ARRAY
ELECTRODE SPACING ..... SEE INDEX

CHARGEABILITY	RESISTIVITY
X a=100'	X a=100'
O a=200'	O a=200'
Δ a=400'	Δ a=400'
▲ a=600'	▲ a=600'

SCALE

APPARENT CHARGEABILITY ..... 1"=5·0 MILLISECONDS
APPARENT RESISTIVITY ..... 2"/1 CYCLE 100-1000 Ω-m



LOCATION MAP

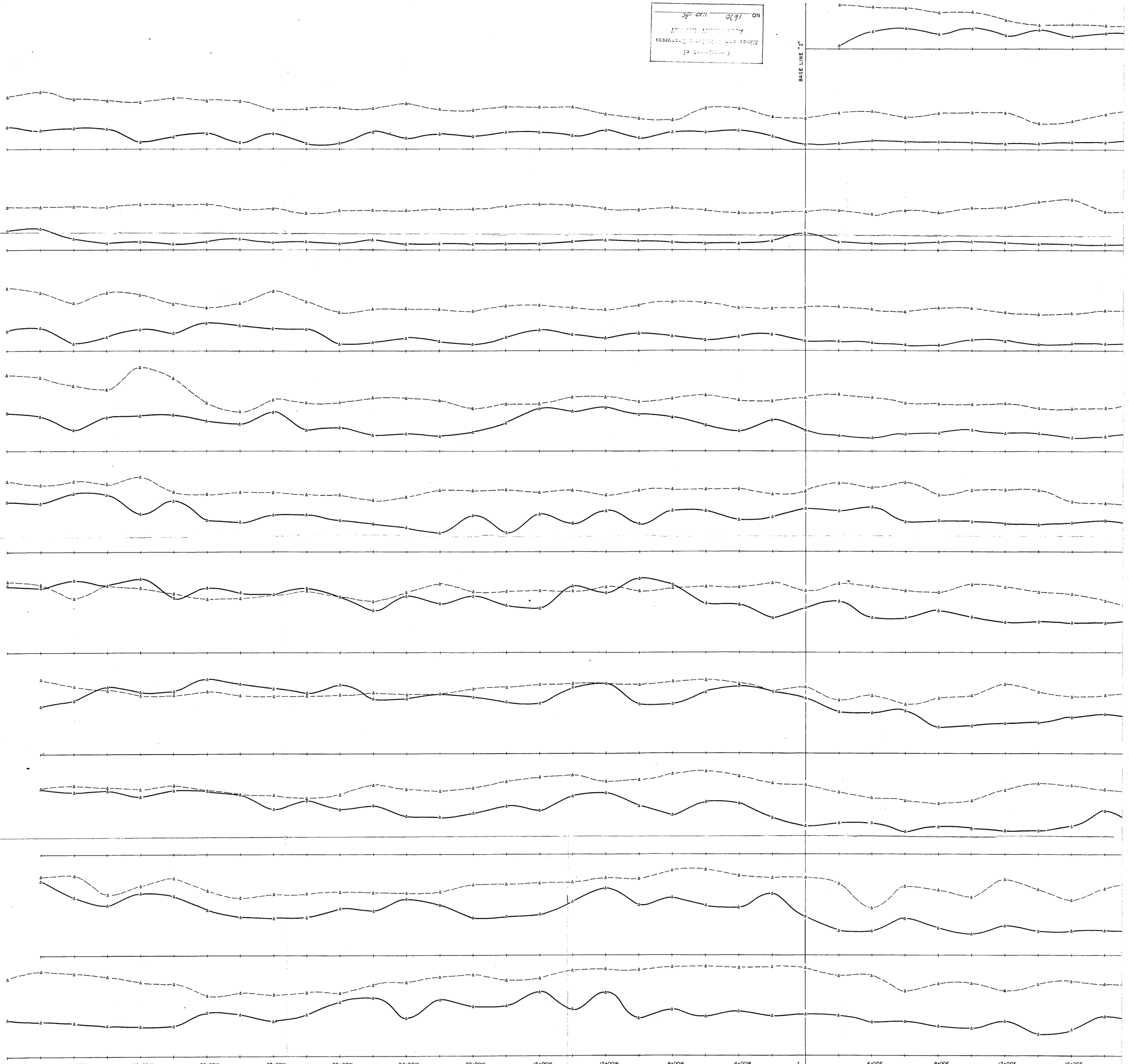
3b

INDUCED POLARIZATION SURVEY
PROFILE PRESENTATION
CRANBROOK AREA (JILL GROUP)
BRITISH COLUMBIA
FOR
PLACID OIL COMPANY
SCALE 1 INCH TO 200 FEET
CANADIAN AERO MINERAL SURVEYS LIMITED OTTAWA ONT.

1670

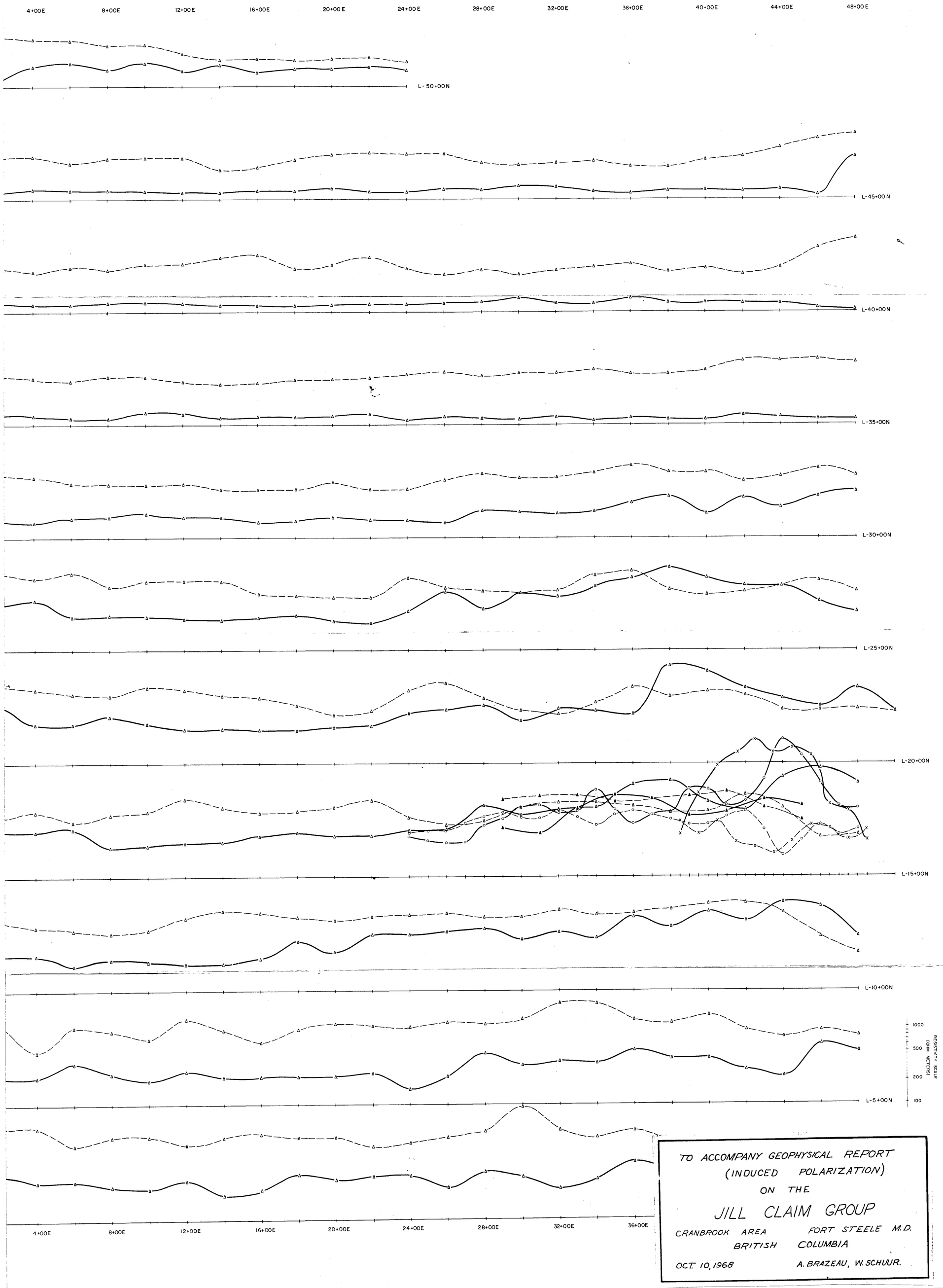
48+00W 44+00W 40+00W 36+00W 32+00W 28+00W 24+00W 20+00W 16+00W 12+00W 8+00W 4+00W BASE LINE "1" 4+00E 8+00E 12+00E 16+00E

Property of
Mines and Technical Resources
Rock Mechanics Section
NO. 1670 MAP 3C



48+00W 44+00W 40+00W 36+00W 32+00W 28+00W 24+00W 20+00W 16+00W 12+00W 8+00W 4+00W BASE LINE "1" 4+00E 8+00E 12+00E 16+00E

NOTE: LINES NOT SPACED TO SCALE



LEGEND

ELECTRODE CONFIGURATION. . . . . .3 ARRAY

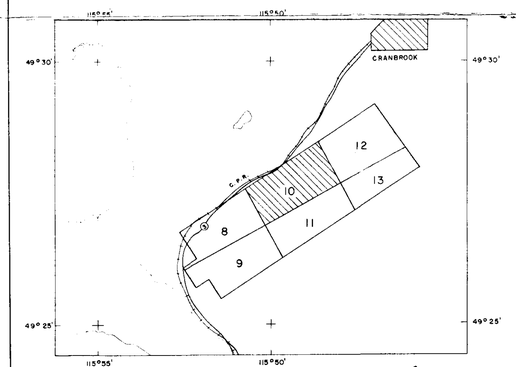
ELECTRODE SPACING. . . . . .SEE INDEX

CHARGEABILITY		RESISTIVITY
X——X	a = 100'	X– – –X
O——O	a = 200'	O– – –O
Δ——Δ	a = 400'	Δ– – –Δ
▲——▲	a = 600'	▲– – –▲

SCALE

APPARENT CHARGEABILITY. . . . . .1"=5·0 MILLISECONDS

APPARENT RESISTIVITY. . . . . .2"/1 CYCLE 100-1000 Ωm



LOCATION MAP

TO ACCOMPANY GEOPHYSICAL REPORT
(INDUCED POLARIZATION)
ON THE
JILL CLAIM GROUP
CRANBROOK AREA FORT STEELE M.D.
BRITISH COLUMBIA
OCT. 10, 1968
A. BRAZEAU, W. SCHUUR.

INDUCED POLARIZATION SURVEY

PROFILE PRESENTATION

CRANBROOK AREA (JILL GROUP)

BRITISH COLUMBIA

FOR

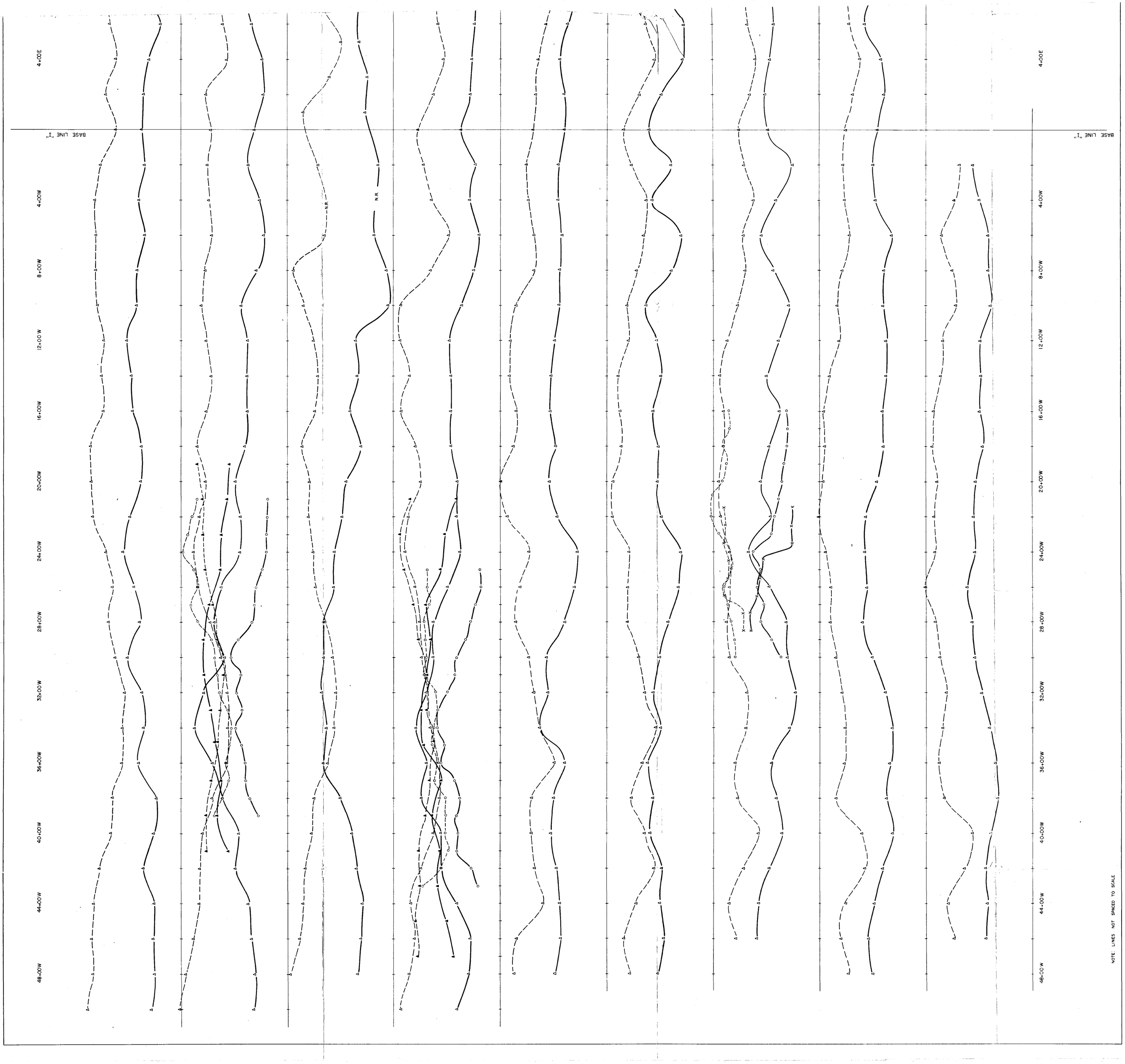
PLACID OIL COMPANY

SCALE 1 INCH TO 200 FEET

CANADIAN AERO MINERAL SURVEYS LIMITED, OTTAWA, ONT.

1670

(3c)



NOTE: LINES NOT SPACED TO SCALE

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1670 MAP 4A

8+00W 4+00W BASE LINE "1" 4+00E 8+00E 12+00E 16+00E 20+00E 24+00E 28+00E 32+00E 36+00E 40+00E 44+00E 48+00E

L- 5+00S

L-10+00S

N.R.

N.R.

L-15+00S

L-20+00S

L-25+00S

L-30+00S

L-35+00S

RESISTIVITY SCALE (OHM METERS) 1000 500 200 100

L-40+00S

L-45+00S

8+00W 4+00W BASE LINE "1" 4+00E 8+00E 12+00E 16+00E 20+00E 24+ 40+00E 44+00E 48+00E

TO ACCOMPANY GEOPHYSICAL REPORT
(INDUCED POLARIZATION)
ON THE
JILL CLAIM GROUP
CRANBROOK AREA FORT STEELE M.D.
BRITISH COLUMBIA

OCT. 10, 1968 A. BRAZEAU, W. SCHUUR.

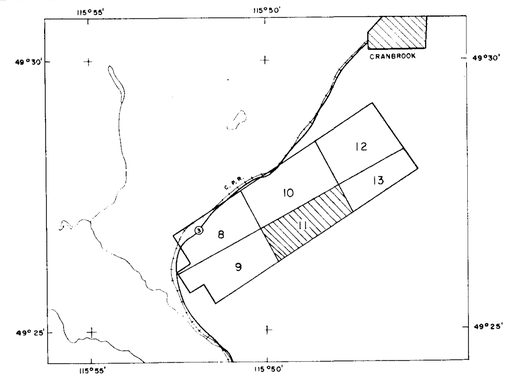
LEGEND

ELECTRODE CONFIGURATION. . . . . 3 ARRAY
ELECTRODE SPACING . . . . . SEE INDEX

CHARGEABILITY		RESISTIVITY
X——X	a = 100'	X— — —X
o——o	a = 200'	o———o
Δ——Δ	a = 400'	Δ———Δ
▲——▲	a = 600'	▲———▲

SCALE

APPARENT CHARGEABILITY. . . . . 1"=5·0 MILLISECONDS
APPARENT RESISTIVITY. . . . . 2"/1 CYCLE 100–1000 Ω-m



LOCATION MAP

INDUCED POLARIZATION SURVEY
PROFILE PRESENTATION
CRANBROOK AREA (JILL GROUP)
BRITISH COLUMBIA
FOR
PLACID OIL COMPANY
SCALE 1 INCH TO 200 FEET
CANADIAN AERO MINERAL SURVEYS LIMITED, OTTAWA, ONT.

1670

(3d)

BASE LINE "J"

4+00W

8+00W

12+00W

16+00W

20+00W

24+00W

28+00W

32+00W

36+00W

40+00W

44+00W

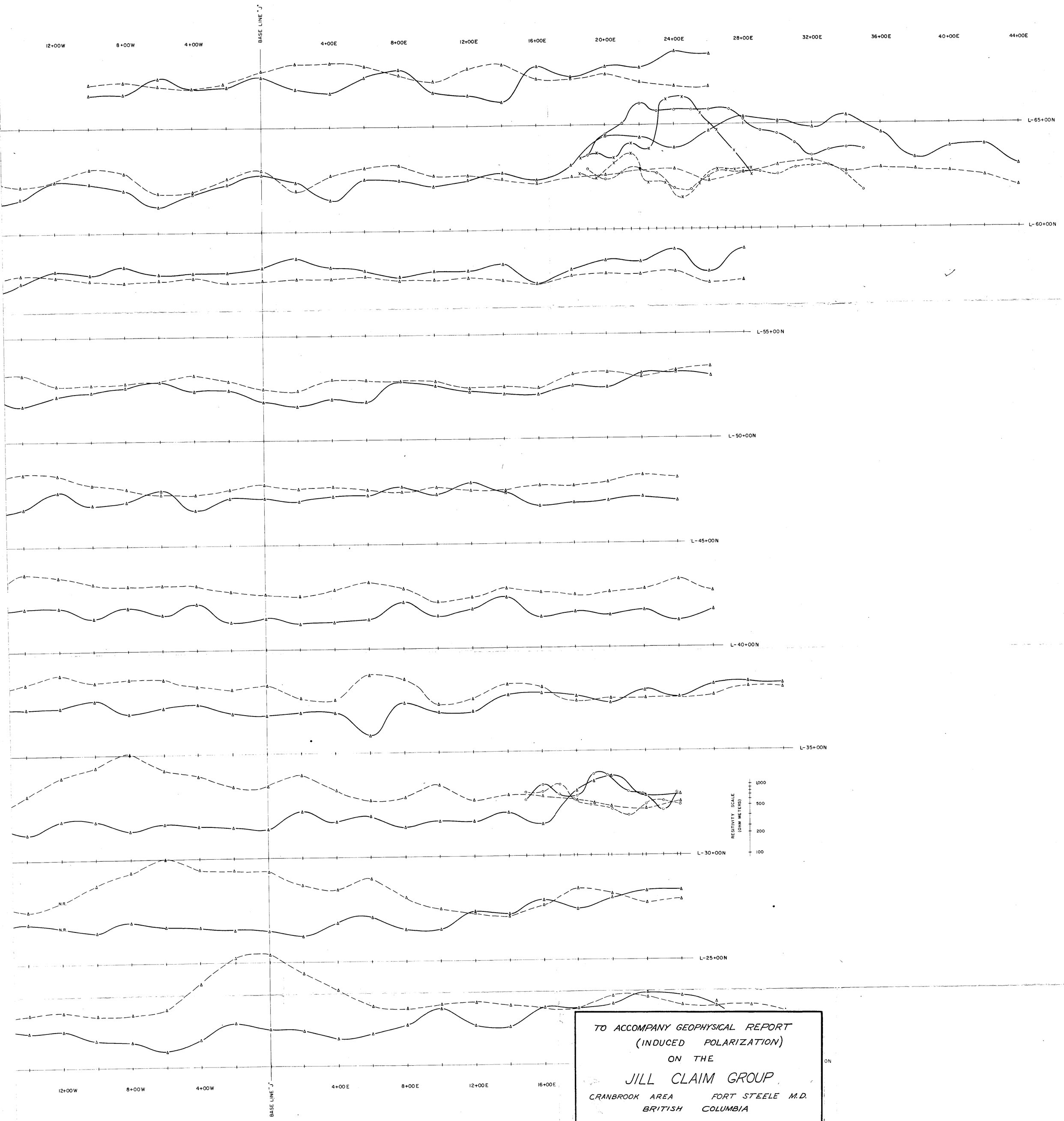
48+00W

N.R.

N.R.

NOTE : LINES NOT SPACED TO SCALE

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1670 MAP 5W



TO ACCOMPANY GEOPHYSICAL REPORT
(INDUCED POLARIZATION)
ON THE

JILL CLAIM GROUP

CRANBROOK AREA FORT STEELE M.D.
BRITISH COLUMBIA

OCT. 10, 1968 A. BRAZEAU, W. SCHUUR.

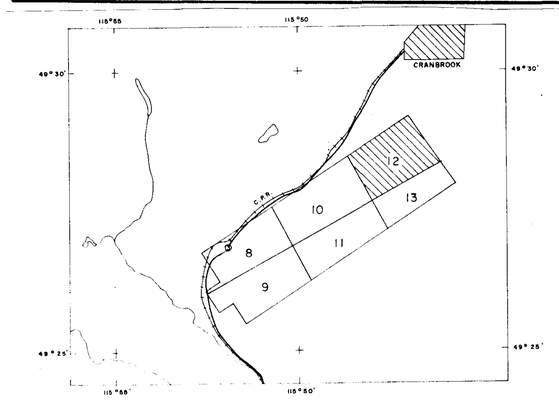
LEGEND

ELECTRODE CONFIGURATION . . . . . .3 ARRAY
ELECTRODE SPACING . . . . . SEE INDEX

CHARGEABILITY	RESISTIVITY
X a=100' X	X X
O a=200' O	O O
Δ a=400' Δ	Δ Δ
▲ a=600' ▲	▲ ▲

SCALE

APPARENT CHARGEABILITY . . . . . 1"=5·0 MILLISECONDS
APPARENT RESISTIVITY . . . . . 2"/1 CYCLE 100–1000 Ωm



LOCATION MAP

INDUCED POLARIZATION SURVEY

PROFILE PRESENTATION

CRANBROOK AREA (JILL GROUP)

BRITISH COLUMBIA

FOR

PLACID OIL COMPANY

SCALE 1 INCH TO 200 FEET

CANADIAN AERO MINERAL SURVEYS LIMITED OTTAWA ONT.

A.R. Brazeau

1670

3e

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1620 MAP 38

52+00W 48+00W 44+00W 40+00W 36+00W 32+00W 28+00W 24+00W 20+00W 16+00W 12+00W 8+00W 4+00W BASE LINE "J" 4+00E

RESISTIVITY SCALE (OHM METERS)
1000
500
200
100

52+00W 48+00W 44+00W 40+00W 36+00W 32+00W 28+00W 24+00W 20+00W 16+00W 12+00W 8+00W 4+00W BASE LINE "J" 4+00E

NOTE: LINES NOT SPACED TO SCALE

LEGEND

ELECTRODE CONFIGURATION . . . . . 3 ARRAY

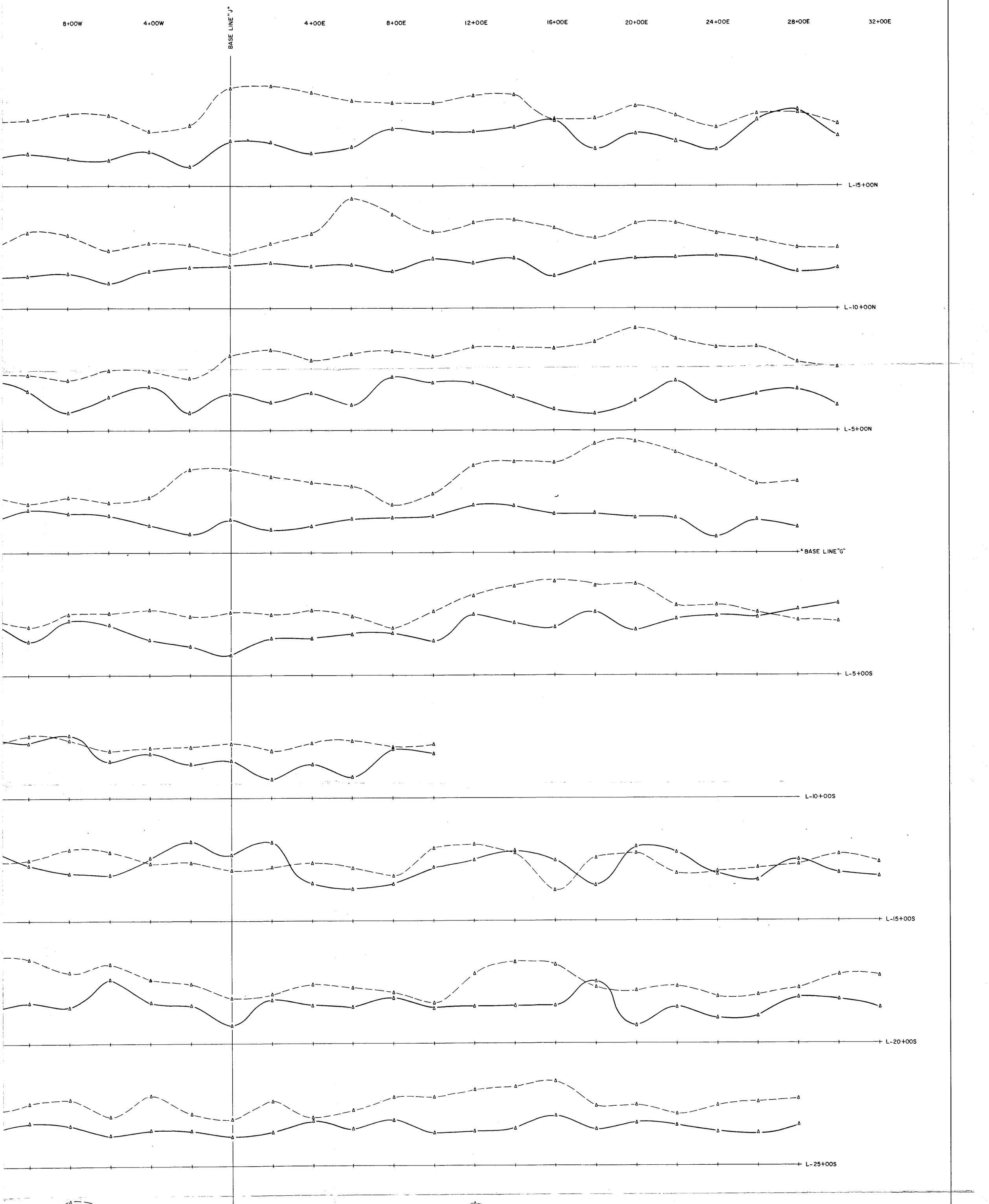
ELECTRODE SPACING . . . . . SEE INDEX

CHARGEABILITY	RESISTIVITY
x——x	x- - - -x
o——o	o- - - -o
Δ——Δ	Δ- - - -Δ
▲——▲	▲- - - -▲

SCALE

APPARENT CHARGEABILITY . . . . . 1"=5·0 MILLISECONDS

APPARENT RESISTIVITY . . . . . 2"/1 CYCLE 100-1000 Ω m



TO ACCOMPANY GEOPHYSICAL REPORT
(INDUCED POLARIZATION)
ON THE

JILL CLAIM GROUP

CRANBROOK AREA FORT STEELE M.D.
BRITISH COLUMBIA

OCT. 10, 1968

A. BRAZEAU, W. SCHUUR.

LEGEND

ELECTRODE CONFIGURATION . . . . . 3 ARRAY

ELECTRODE SPACING . . . . . SEE INDEX

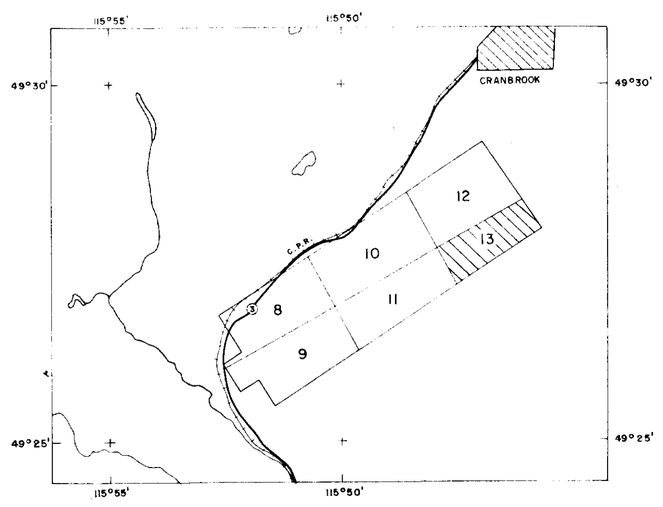
CHARGEABILITY

RESISTIVITY

SCALE

APPARENT CHARGEABILITY . . . . . 1"=5·0 MILLISECONDS

APPARENT RESISTIVITY . . . . . 2"/1 CYCLE 100-1000 Ω-m



LOCATION MAP

INDUCED POLARIZATION SURVEY

PROFILE PRESENTATION

CRANBROOK AREA (JILL GROUP)

BRITISH COLUMBIA

FOR

PLACID OIL COMPANY

SCALE 1 INCH TO 200 FEET

CANADIAN AERO MINERAL SURVEYS LIMITED OTTAWA ONT.

J. R. Brazeau

1670

(3f)