

83-#962 - 12734
12/84

A GEOPHYSICAL REPORT

ON

INDUCED POLARIZATION SURVEYS

Beaverdell Area, British Columbia

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

FOR

12,734

CANSTAT PETROLEUM CORPORATION

Vancouver, British Columbia

**PART
1 OF 2**

BY

PETER E. WALCOTT & ASSOCIATES LIMITED

Vancouver, British Columbia

FEBRUARY 1984

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1 /
PURPOSE	2 /
PREVIOUS WORK	3 /
GEOLOGY	4 /
SURVEY SPECIFICATIONS	5 /
DISCUSSIONS OF RESULTS	7 /
SUMMARY, CONCLUSIONS & RECOMMENDATIONS	10 /

APPENDIX

COST OF SURVEY	i /
PERSONNEL EMPLOYED ON SURVEY	ii /
CERTIFICATION	iii /
PSEUDO SECTIONS	iv /

ACCOMPANYING MAPS - Scale 1:2500

MAP POCKET

CONTOURS OF APPARENT CHARGEABILITY a=30m, n=1	W-334-1 /
" " " " n=2	W-334-2 /
" " " RESISTIVITY " , n=1	W-334-3 /
" " " " " , n=2	W-334-4 /
" " " CHARGEABILITY a=50m, n=1	W-334-5 /
" " " " " , n=2	W-334-6 /

INTRODUCTION.

Between October 7th and 19th, 1983, Peter E. Walcott & Associates Limited carried out limited induced polarization surveys over four grids in the Beaverdell area of British Columbia for Canstat Petroleum Corporation.

The surveys were carried out over "compass and hip chain lines" put in by the I.P. crew over grids called respectively nos. 1 to 4.

Measurements of apparent chargeability - the I.P. response parameter - and resistivity were made over these areas using the pole-dipole or dipole-dipole method of surveying with dipole lengths of 15, 30 or 50 metres and obtaining anywhere from first to fourth separation measurements where considered necessary.

The progress of the survey was hampered by the rugged nature of the terrain on grids #2 and 3.

The readings were initially obtained on a Crone Newmont type receiver but this was rendered inoperable when a rock dislodged by an uphill member of the crew caromed off a fallen log and struck it fairly on the analog display meter. A Hunttec Mk IV receiver was substituted to complete the survey and the data adjusted accordingly.

The data are presented in pseudo-section form on individual line profiles bound in this report. In addition contour plans of the data on plan maps of the grids are presented where considered appropriate.

A total of 7.1 kilometres were surveyed.

PURPOSE.

The purpose of the I.P. survey was to determine the nature of the I.P. response - if any - over favourable geochemical anomalies and V.L.F. conductors in an effort to better reinforce selected drill targets for economic mineralization.

PREVIOUS WORK.

Previous work on the grids and surrounding areas consisted of geological mapping, geochemical surveying, electromagnetic and induced polarization surveying and diamond drilling. The reader is referred to reports held by Canstat Petroleum for further information.

GEOLOGY.

The reader is referred to the previously mentioned reports held by Canstat.

SURVEY SPECIFICATIONS.

The induced polarization (I.P.) survey was carried out using a pulse type system, the principal components of which are manufactured by Crone Geophysics Ltd. and Hunttec Limited of Metropolitan Toronto, Ontario.

The system consists basically of three units: a receiver (Crone, Hunttec), a transmitter and a motor generator (Hunttec). The transmitter, which provides a maximum of 7.5 kw d.c. to the ground, obtains its power from a 7.5 400 c.p.s. three phase alternator driven by a gasoline engine. The cycling rate of the transmitter is 2 seconds "current-on" and 2 seconds "current-off" with the pulses reversing continuously in polarity. The data recorded in the field consists of careful measurements of the current (I) in amperes flowing through electrodes C₁ and C₂, the primary voltage (V) appearing between the two potential electrodes, P₁ and P₂, during the "current-on" part of the cycle, and the apparent chargeability (M_a) presented as a direct readout using a 450 millisecond delay and a 650 millisecond sample window by the Hunttec receiver, a digital receiver controlled by a microprocessor.

As previously mentioned the survey was initially started using a Crone Newmont type receiver - the sampling specifications of which are 450 millisecond delay and a 450 millisecond sample window. This instrument can only integrate up to 3 cycles at a time, and in noisy conditions the effect of noise must be removed by making several measurements and averaging on a hand calculator, whereas the Hunttec instrument can stack and carry out the running average any number of times.

The apparent resistivity (P_a) in ohm metres is proportional to the ratio of the primary voltage and the measured current, the proportionality factor depending on the geometry of the array used. The chargeability and resistivity are called apparent as they are values which that portion of the earth sampled would have if it were homogeneous. As the earth sampled is usually inhomogeneous the calculated apparent chargeability and resistivity are functions of the actual chargeability and resistivity of the rocks.

The majority of the surveying was carried out using the "pole-dipole" method of surveying. In this method the current electrode C₁, and the two potential electrodes, P₁ and P₂, are moved in unison along

SURVEY SPECIFICATIONS cont'd

the survey lines. The spacing "na" (n an integer) between C_1 and P_1 is kept constant for each traverse at a distance roughly equal to the depth to be explored by that traverse, while that of P_1 and P_2 (the dipole) is kept constant at "a". The second current electrode C_2 is kept constant at "infinity".

Thus usually on a "pole-dipole" array traverse with an electrode spacing of 100 metres a body lying at a depth of 50 metres will produce a strong response, whereas the same body lying at a depth of 100 metres will only just be detected. By running subsequent traverses at different electrode separations, more precise estimates can be made of depth, width, thickness and percentage of sulphides of causative bodies located by the I.P. method.

On the "dipole-dipole" method employed on grid #1 the second electrode C_2 is also moved along the survey lines - $C_1 - C_2$ also being the dipole length, "a", apart.

These surveys were carried out using 15, 30 and 50 metre dipoles and taking appropriate separation measurements.

DISCUSSION OF RESULTS.

Grid #1.

Essentially one line was run here over an essentially single line V.L.F. conductor and a coincident copper-lead and silver geochemical expression. In fact the V.L.F. conductor axis as indicated by the location of the hand trench appears to be at the boundary of a chargeability and resistivity low which could be indicative of deepening overburden.

Grid #2.

This grid was proposed to investigate a combined V.L.F. and lead-silver anomaly near the granodiorite-granitic contact.

Line 0 was surveyed with a 15 metre dipole and first to fourth separation measurements obtained. As can be seen from the pseudo-section plot a background of 6 to 8 milliseconds was obtained over the granodiorite above which three possible anomalous zones were discernible as illustrated.

The contact with the younger barren granite to the south would appear to be around the baseline as shown by the drop in the chargeability readings.

As the results showed good consistency over all spacings it was decided that the same information could be obtained faster by profiling with a 30 metre dipole and making only first and second separation measurements at 15 metre intervals.

The results are best illustrated by the contour plans of apparent chargeability - Maps W-334-1 & 2. Here it can be seen that most of the area surveyed exhibited anomalous values - i.e. indicative of minor sulphide mineralization throughout - above which more prominent anomalous conditions - zones A to C as outlined by the 12.5 millisecond contour - presumably representative of further concentrations of sulphide mineralization associated with alaskite dykes are readily apparent.

The strongest anomalous zone - zone A - located on or near the granite contact near the baseline and open to the northeast, with an indicated dip to the northwest from the first to fourth separation work on Line 250 E was tested by a drill set up on the road. Increased sulphide mineralization with traces of those of economic minerals was observed in the corings along with many dyke intersections.

DISCUSSION OF RESULTS cont'd

Zones B and C appeared to be of the same causative source as illustrated on the deeper separation work on Line 400 E. These zones are undefined to the west.

The strongest response of this zone was apparently tested by a previous holder of the ground as surmised from the location of an observed casing rod. However another hole was drilled on the road near the boundary of the zone around Line 400 E where similar subsurface conditions to those in the hole investigating zone A were encountered.

Two north northeasterly trending resistivity lows can be observed near the contact in the southeastern portion of the grid, which were coincident with the chargeability anomalies on some lines and not so on others. They presumably are representative of faulting - the stronger of these is coincident with a topographic draw - and the causative sources of the V.L.F. conductors.

Grid #3.

This grid was designed to cover a narrow silver lead geochemical anomaly on the one hand and a broader copper anomaly extending to the southeast on the other.

No anomalous chargeability response was obtained over the geochemical expression on Line 0 carried out with a 50 metre dipole with first and second separation readings at 25 metre intervals, where the background response over the granodiorite - 3 to 4 milliseconds - was somewhat lower than that obtained over grid #2 across the valley.

A broad weak response reasonably coincident with the copper anomaly and undefined to the southeast was obtained on the adjoining two traverses - Maps W-334-5 & 6.

Grid #4.

This grid basically consisted of a one line traverse with a 30 metre dipole over a lead-zinc anomaly in the granodiorite near the granite contact.

Background responses in the order of 3 milliseconds were observed across the line with the exception of a couple of higher

DISCUSSION OF RESULTS cont'd.

readings on the western extremity near the highway. This prompted the line to be extended to the west where a strong anomalous situation was encountered centred about the highway.

A cultural causative effect was immediately suspected and was confirmed by another small traverse a few hundred feet to the south - line A. Further investigation revealed a buried telephone cable notice posted on the roadside to the north.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.

Between October 7th and 19th, 1983, Peter E. Walcott & Associates Limited carried out limited induced polarization surveying over four grids in the Beavercell area of British Columbia for Canstat Petroleum.

The surveys failed to delineate any chargeability response that could be indicative of sulphide mineralization on grids #1 and 4 - essentially one line checks.

The results over grid #3 where a broad weak response was obtained over a portion of a large copper soil anomaly appear to indicate the presence of a large? low grade copper porphyry system certainly uneconomic at this time.


Those over grid #2, located near the granite contact, suggest the granodiorite to be weakly mineralized throughout in this area as indicated by the higher background chargeability values. Further concentrations of mineralization were indicated by zones of stronger induced polarization response, which in each case were undelineated.

Testing of these by borehole investigation revealed increased sulphide mineralization as the causative sources but with small proportions of those of economic minerals.

As a result the writer recommends that any further work in the area be based on geologic consideration although there would appear to be plenty of scope for further anomalies to the west on grid #2 albeit a costly drill proposition on account of the topography.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LIMITED


Peter E. Walcott, P.Eng.
Geophysicist

Vancouver, B.C.

February 1984

A P P E N D I X

COST OF SURVEY.

Peter E. Walcott & Associates Limited undertook the survey on a daily basis. Mobilization and report preparation costs were extra so that the total cost of services provided was \$14,869.95.

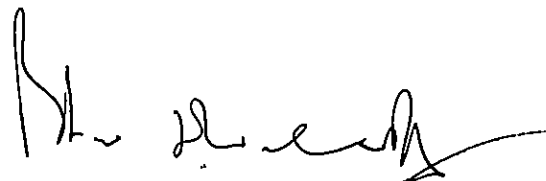
PERSONNEL EMPLOYED ON SURVEY.

<u>Name</u>	<u>Occupation</u>	<u>Address</u>	<u>Dates</u>
Peter E. Walcott	Geophysicist	Peter E. Walcott & Assoc. 605 Rutland Court, Coquitlam, B.C. V3J 3T8	Oct. 7th - 19th, 83 Jan. 25th, Feb. 10- 11th, 84
G, MacMillan	Geophysical Operator	"	Oct. 10th - 19th, 83 Jan. 5th - 20th, 84
R. Summerfield	"	"	Oct. 7th - 10th, 83
G. Mandryk	"	"	Oct. 10th - 19th, 83
D. Sloan	Geophysical Helper	"	"
K. Walcott	"	"	Oct. 7th - 10th, 83
J. Walcott	Typing	"	February 12th, 1984
Paul ?	Assistant	Canstat Petroleum 675 W. Hastings St., Vancouver, B.C.	Oct. 8th - 18th, 83

CERTIFICATION.

I, Peter E. Walcott, of the Municipality of Coquitlam, British Columbia, hereby certify that:

1. I am a Graduate of the University of Toronto in 1962 with a B.A.Sc. in Engineering Physics, Geophysics Option.
2. I have been practising my profession for the last twenty two years.
3. I am a member of the Association of Professional Engineers of British Columbia and Ontario.
4. I hold no interest, direct or indirect, in the securities or properties of Canstat Petroleum nor do I expect to receive any.



Peter E. Walcott, P.Eng.

Vancouver, B.C.

January 1984

I.P. Pseudo Sections



Anomalous Zone.



Possible Anomalous Zone.

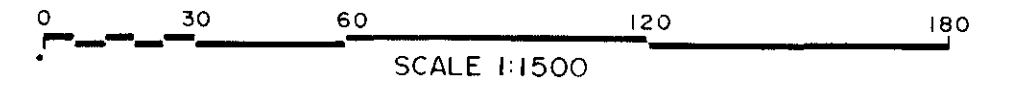


Zone undefined at ends.

CANSTAT PETROLEUM CORPORATION

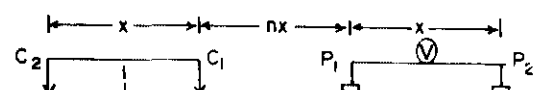
GRID # 1 - BEAVERDELL AREA
GREENWOOD MINING DIVISION - B.C.

LINES 0+00 & 0+50-E



INDUCED POLARIZATION SURVEY

DIPOLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODES NORTH OF POTENTIAL ELECTRODES

DIPOLE SEPARATION "x" - 15 & 30 METRES

TIME DELAY - 450 MILLI-SECONDS

SAMPLING TIME - 650 MILLI-SECONDS

TRANSMITTER - HUNTEC 7.5 KW.

RECEIVER - CRONE - WITH EQUIVALENT SPECIFICATIONS

CONTOUR INTERVAL

APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300, 500, 700, 1000, 2000 etc.

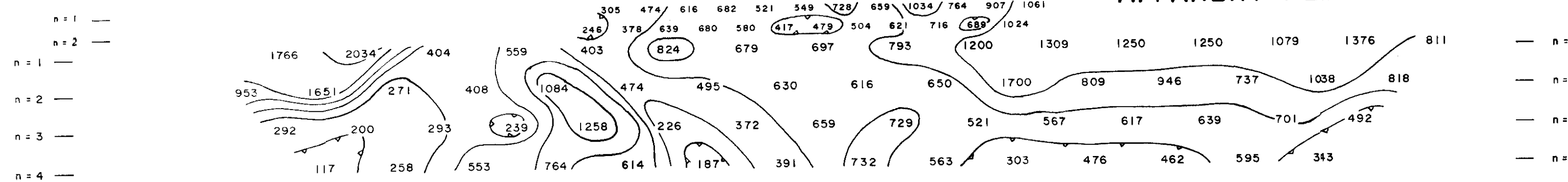
APPARENT CHARGEABILITY - 0, 1, 2, 3, 4, 5, etc.

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
OCTOBER - 1983

5+40-S 4+80-S 4+20-S 3+60-S 3+00-S 2+40-S 1+80-S 1+20-S 0+60-S 0+00

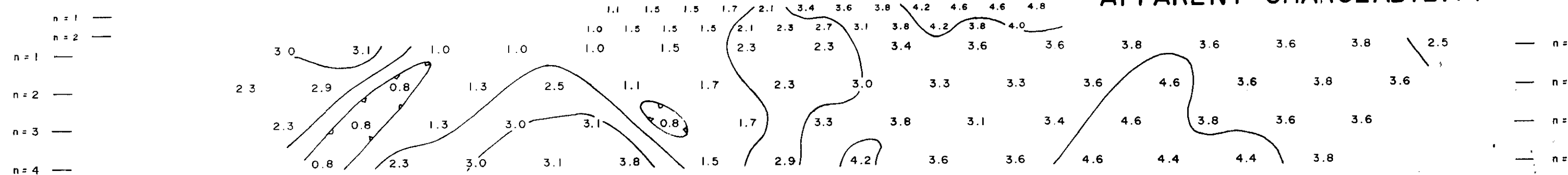
HAND TRENCH

APPARENT RESISTIVITY OHM-METRES



LINE
0+00

APPARENT CHARGEABILITY MILLI-SECONDS



3+90-S 3+30-S 2+70-S 2+10-S

RIDGE

1786 336 407 238 320 567 664 1538 917
1376 226 366 499 207 345 534 958 754

LINE
0+50-E

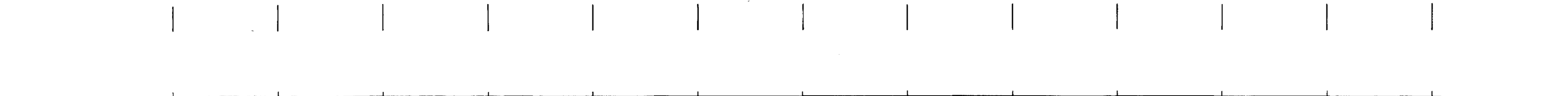
3.1 0.8 1.5 1.5 2.7 3.1 3.6 4.8 3.8
3.1 0.2 1.0 2.3 1.0 2.3 3.1 3.8 4.0

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,734

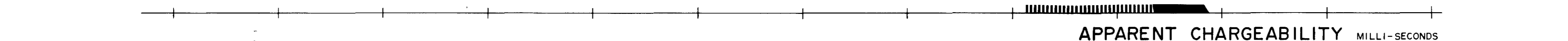
PART 1 OF 2

1+80-S 1+20-S 0+60-S 0+00 0+60-N 1+20-N 1+80-N 2+40-N 3+00-N 3+60-N 4+20-N 4+80-N 5+40-N



APPARENT RESISTIVITY OHM-METRES

n = 1	1068	1603	2219	1621	1013	1212	1427	1409	1618	1324	2092	1546	1895	3154	2413
n = 2	1555	1701	1782	1422	1312	1488	1375	1168	1476	1301	1464	1398	830	1445	1876
n = 3															
n = 4															



APPARENT CHARGEABILITY MILLI-SECONDS

n = 1	7.8	8.6	8.2	7.6	9.0	8.5	8.0	8.5	8.0	8.6	8.4	9.4	10.1	8.4	10.7
n = 2	9.1	9.7	10.2	9.4	9.7	9.5	9.7	11.2	10.2	10.4	10.9	11.3	14.1	14.3	13.9
n = 3															
n = 4															

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,734

PART 1 OF 2

CANSTAT PETROLEUM CORPORATION

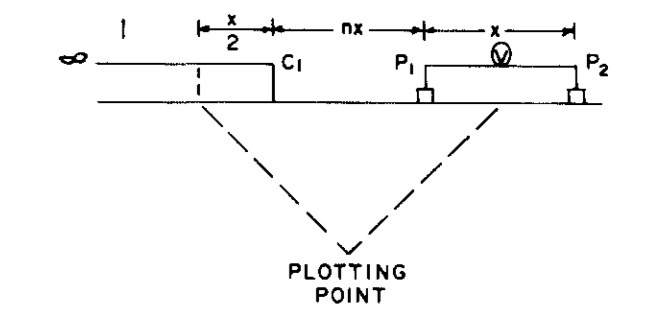
MAY CLAIMS - BEAVERDELL AREA
GREENWOOD MINING DIVISION - B.C.

LINE 4+50 EAST



INDUCED POLARIZATION SURVEY

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE NORTH OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "x" - 30 METRES
TIME DELAY - 450 MILLI-SECONDS
SAMPLING TIME - 650 MILLI-SECONDS
TRANSMITTER - HUNTEC 7.5 KW.
RECEIVER - HUNTEC MARK IX SERIAL NO. 1030
CONTOUR INTERVAL
APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300, 500, 700, 1000, 2000 etc.
APPARENT CHARGEABILITY - 0, 2.5, 5, 7.5, 10, 12.5, 15 etc.

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
OCTOBER - 1983

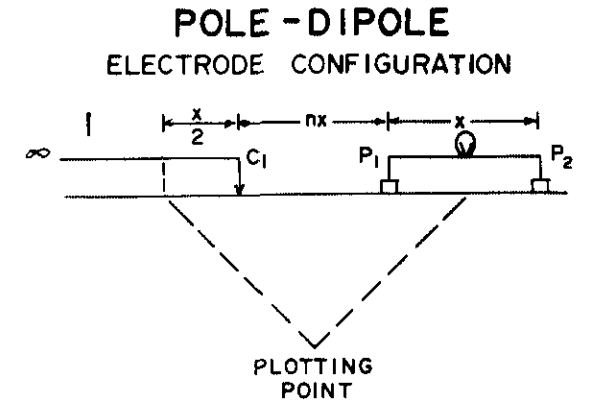
CANSTAT PETROLEUM CORPORATION

MAY CLAIMS - BEAVERDELL AREA
GREENWOOD MINING DIVISION - B.C.

(OLD) LINE 7+50 EAST



INDUCED POLARIZATION SURVEY



CURRENT ELECTRODE NORTH OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "x" - 30 METRES
TIME DELAY - 450 MILLI-SECONDS
SAMPLING TIME - 650 MILLI-SECONDS
TRANSMITTER - HUNTEC 7.5 KW.
RECEIVER - HUNTEC MARK IV SERIAL No. 1030
CONTOUR INTERVAL
APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300, 500, 700, 1000, 2000 etc.
APPARENT CHARGEABILITY - 0, 2.5, 5, 7.5, 10, 12.5, etc.

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
OCTOBER - 1983

8+80-N 9+40-N 10+00-N 10+60-N 11+20-N 11+80-N 12+40-N

APPARENT RESISTIVITY OHM-METRES

n = 1	1970	1747	1733	1825	1912	1433	1257	1346	1536	1282	1179	1393	1188	1242	1241	1211	1757	1194	n = 1
n = 2	1694	1812	1618	1660	1660	1442	1087	1080	1237	1268	1196	1441	1458	1671	1697	1376	1402	1135	n = 2

APPARENT CHARGEABILITY MILLI-SECONDS

n = 1	9.6	9.7	10.7	11.4	11.8	12.4	11.3	9.7	10.5	11.1	10.6	9.6	9.4	7.1	6.2	5.4	4.8	5.7	n = 1
n = 2	10.1	10.3	10.9	13.9	15.0	14.5	12.9	11.5	11.8	12.5	12.6	11.1	9.9	8.4	8.0	7.6	6.8	6.7	n = 2

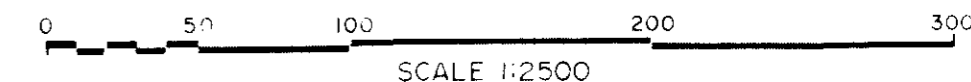
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,734 PART
1 OF 2

CANSTAT PETROLEUM CORPORATION

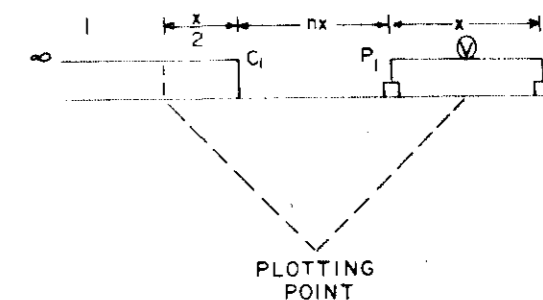
GRID # 3 - BEAVERDELL AREA
GREENWOOD MINING DIVISION - B.C.

LINE 0+00 SOUTH



INDUCED POLARIZATION SURVEY

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE WEST OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "x" - 50 METRES

TIME DELAY - 450 MILLI-SECONDS

SAMPLING TIME - 650 MILLI-SECONDS

TRANSMITTER - HUNTEC 7.5 KW.

RECEIVER - HUNTEC MARK IV SERIAL NO. 1030

CONTOUR INTERVAL

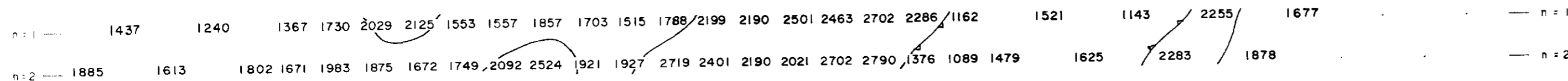
APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300,
500, 700, 1000, 2000 etc.

APPARENT CHARGEABILITY - 0, 2.5, 5, 7.5, 10, 12.5, 15 etc.

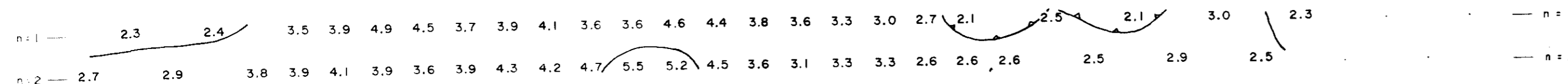
SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
OCTOBER - 1983

1+00-E 2+00-E 3+00-E 4+00-E 5+00-E 6+00-E 7+00-E 8+00-E 9+00-E

APPARENT RESISTIVITY OHM-METRES



APPARENT CHARGEABILITY MILLI-SECONDS



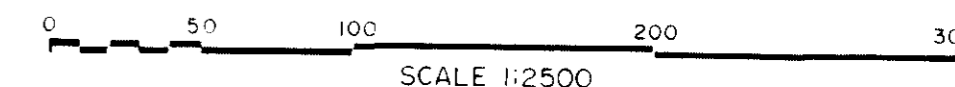
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,734 PART
1 OF 2

CANSTAT PETROLEUM CORPORATION

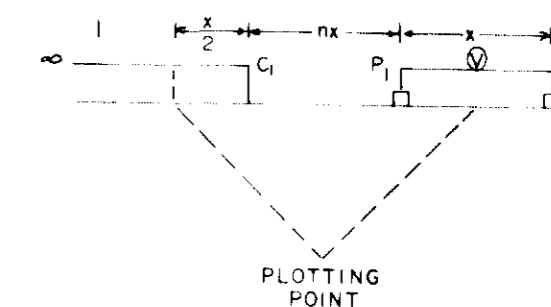
GRID # 3 - BEAVERDELL AREA
GREENWOOD MINING DIVISION - B.C.

LINE 2+00 SOUTH



INDUCED POLARIZATION SURVEY

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE WEST OF POTENTIAL ELECTRODE

DIPOLE SEPARATION "x" - 50 METRES

TIME DELAY - 450 MILLI-SECONDS

SAMPLING TIME - 650 MILLI-SECONDS

TRANSMITTER - HUNTEC 7.5 KW.

RECEIVER - HUNTEC MARK IV SERIAL NO. 1030

CONTOUR INTERVAL

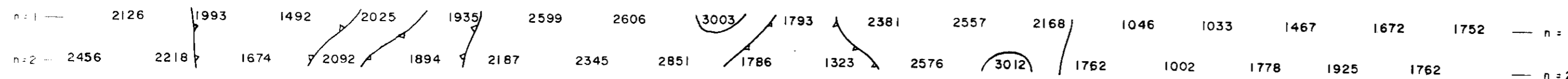
APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300,
500, 700, 1000, 2000 etc.

APPARENT CHARGEABILITY - 0, 2.5, 5, 7.5, 10, 12.5, 15 etc.

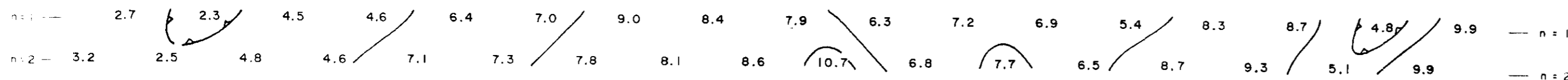
SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
OCTOBER - 1983

1+00-E 2+00-E 3+00-E 4+00-E 5+00-E 6+00-E 7+00-E 8+00-E 9+00-E

APPARENT RESISTIVITY OHM-METRES



APPARENT CHARGEABILITY MILLI-SECONDS



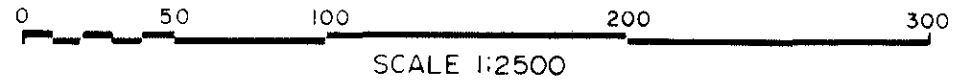
GEOLOGICAL BRANCH
INTERPRETATION REPORT

12,734 PART
1 OF 2

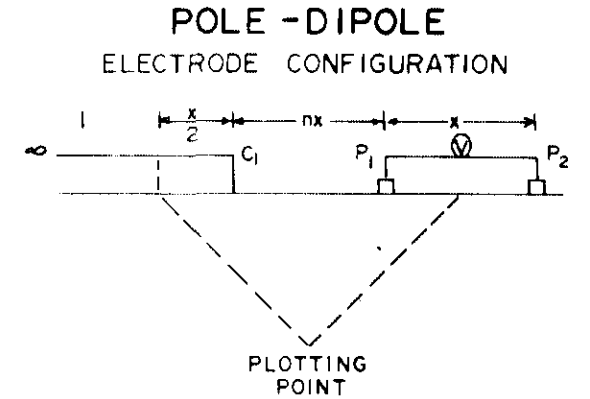
CANSTAT PETROLEUM CORPORATION

GRID # 3 - BEAVERDELL AREA
GREENWOOD MINING DIVISION - B.C.

LINE 4+00 SOUTH



INDUCED POLARIZATION SURVEY

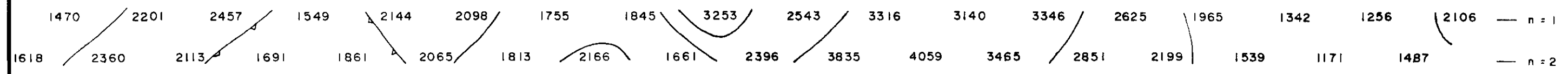


CURRENT ELECTRODE WEST OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "x" - 50 METRES
TIME DELAY - 450 MILLI-SECONDS
SAMPLING TIME - 650 MILLI-SECONDS
TRANSMITTER - HUNTEC 7.5 KW.
RECEIVER - HUNTEC MARK IV SERIAL NO. 1030
CONTOUR INTERVAL
APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300,
500, 700, 1000, 2000 etc.
APPARENT CHARGEABILITY - 0, 2.5, 5, 7.5, 10, 12.5, 15 etc.

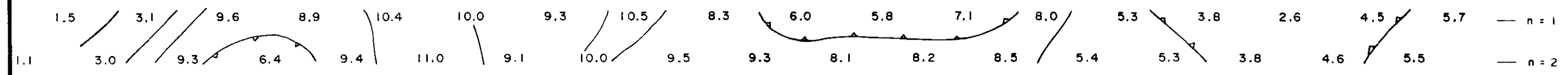
SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
OCTOBER - 1983

1+00-E 2+00-E 3+00-E 4+00-E 5+00-E 6+00-E 7+00-E 8+00-E 9+00-E

APPARENT RESISTIVITY OHM-METRES



APPARENT CHARGEABILITY MILLI-SECONDS



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,734

PART
1 OF 2

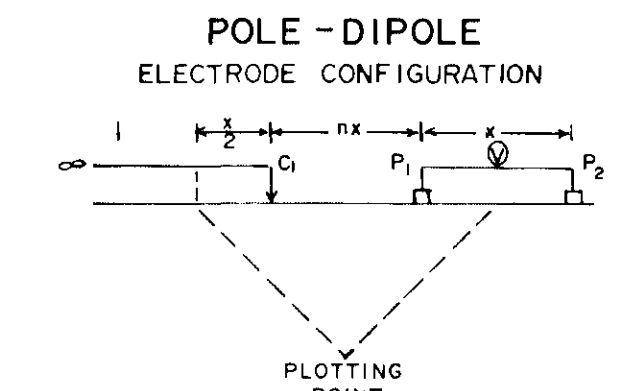
CANSTAT PETROLEUM CORPORATION

GRID # 4 - BEAVERDELL AREA
GREENWOOD MINING DIVISION - B.C.

LINES "O" & "A"



INDUCED POLARIZATION SURVEY



CURRENT ELECTRODE WEST OF POTENTIAL ELECTRODE
(EAST WHEN PARENTHESIZED - ())

DIPOLE SEPARATION "x" - 30 METRES

TIME DELAY - 450 MILLI-SECONDS

SAMPLING TIME - 650 MILLI-SECONDS

TRANSMITTER - HUNTEC 7.5 KW.

RECEIVER - HUNTEC MARK IX

CONTOUR INTERVAL

APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300, 500, 700, 1000, 2000 etc.

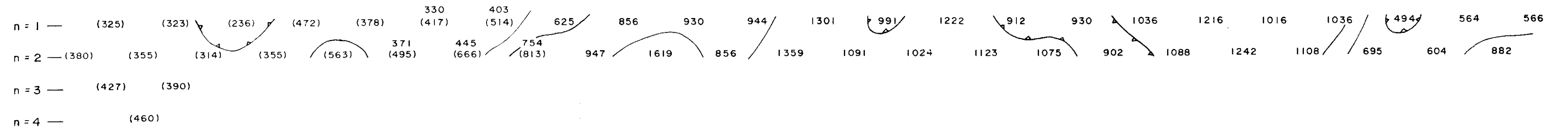
APPARENT CHARGEABILITY - 0, 5, 10, 15, 20, 25, 30, etc.

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
OCTOBER - 1983

0+90-W 0+30-W 0+30-E 0+90-E 1+50-E 2+10-E 2+70-E 3+30-E 3+90-E 4+50-E 5+10-E 5+70-E

DITCH POWER LINE HIGHWAY ROAD ROAD ROAD PITS TRENCH

APPARENT RESISTIVITY OHM-METRES

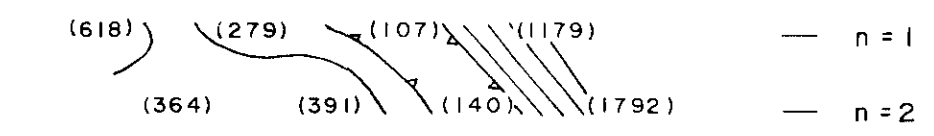
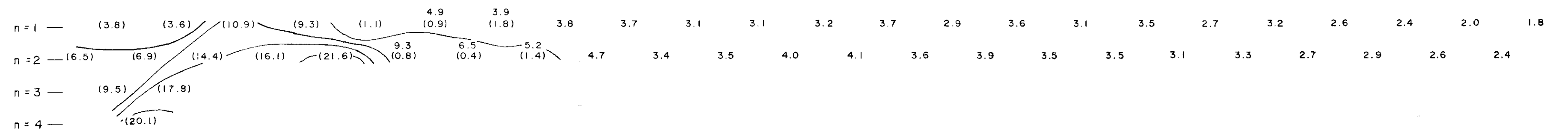


LINE "O"

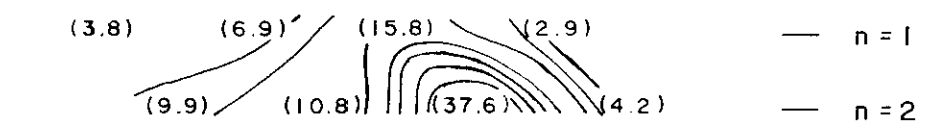
0+90-W 0+30-W 0+30-E 0+90-E

HIGHWAY POWER LINE

APPARENT CHARGEABILITY MILLI-SECONDS

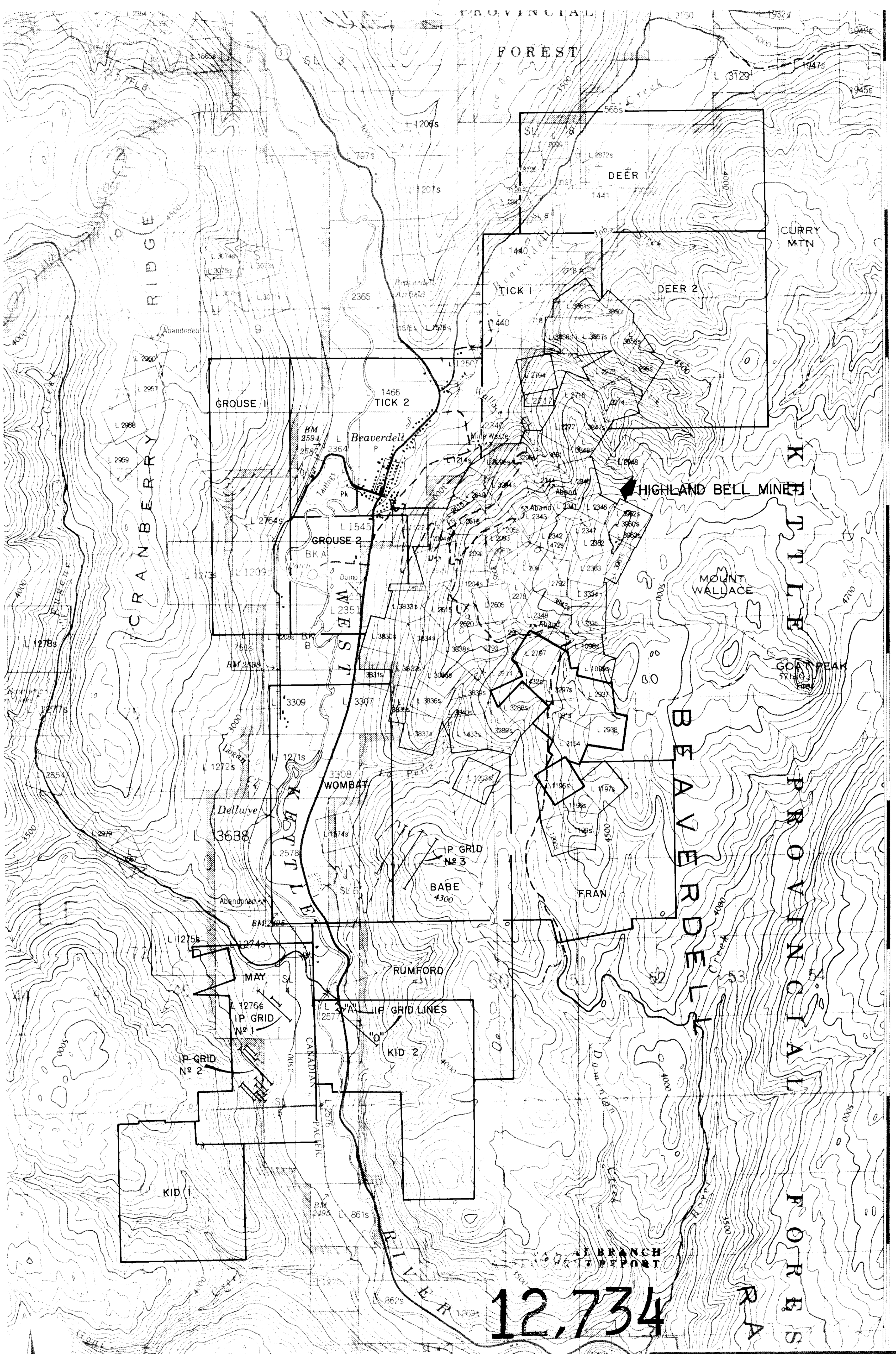


LINE "A"

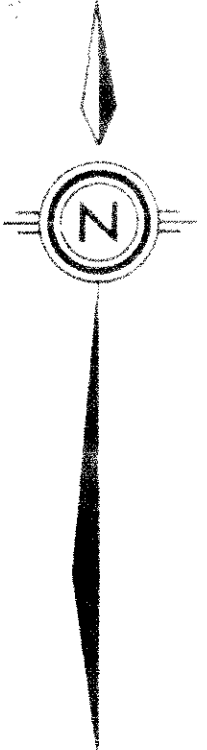



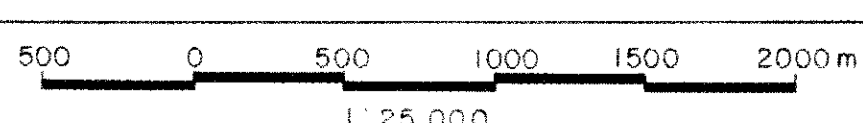
GEOLOGICAL BRANCH
EXPLORATION REPORT

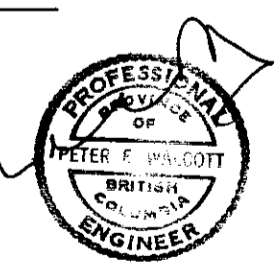
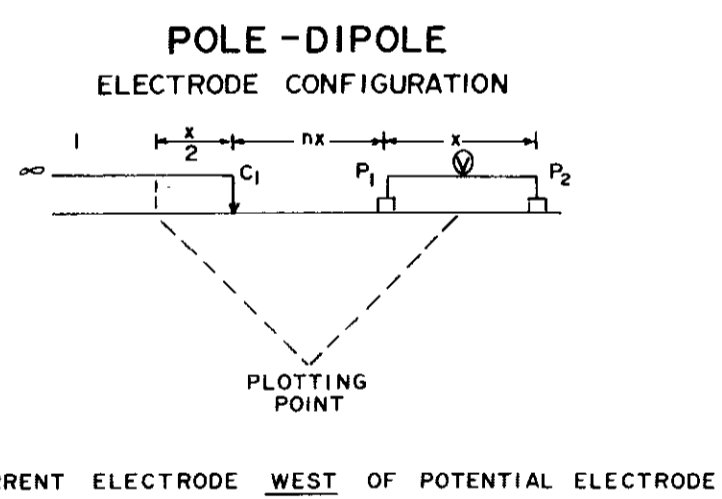
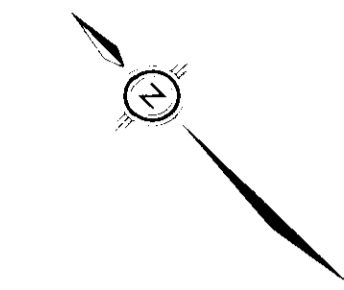
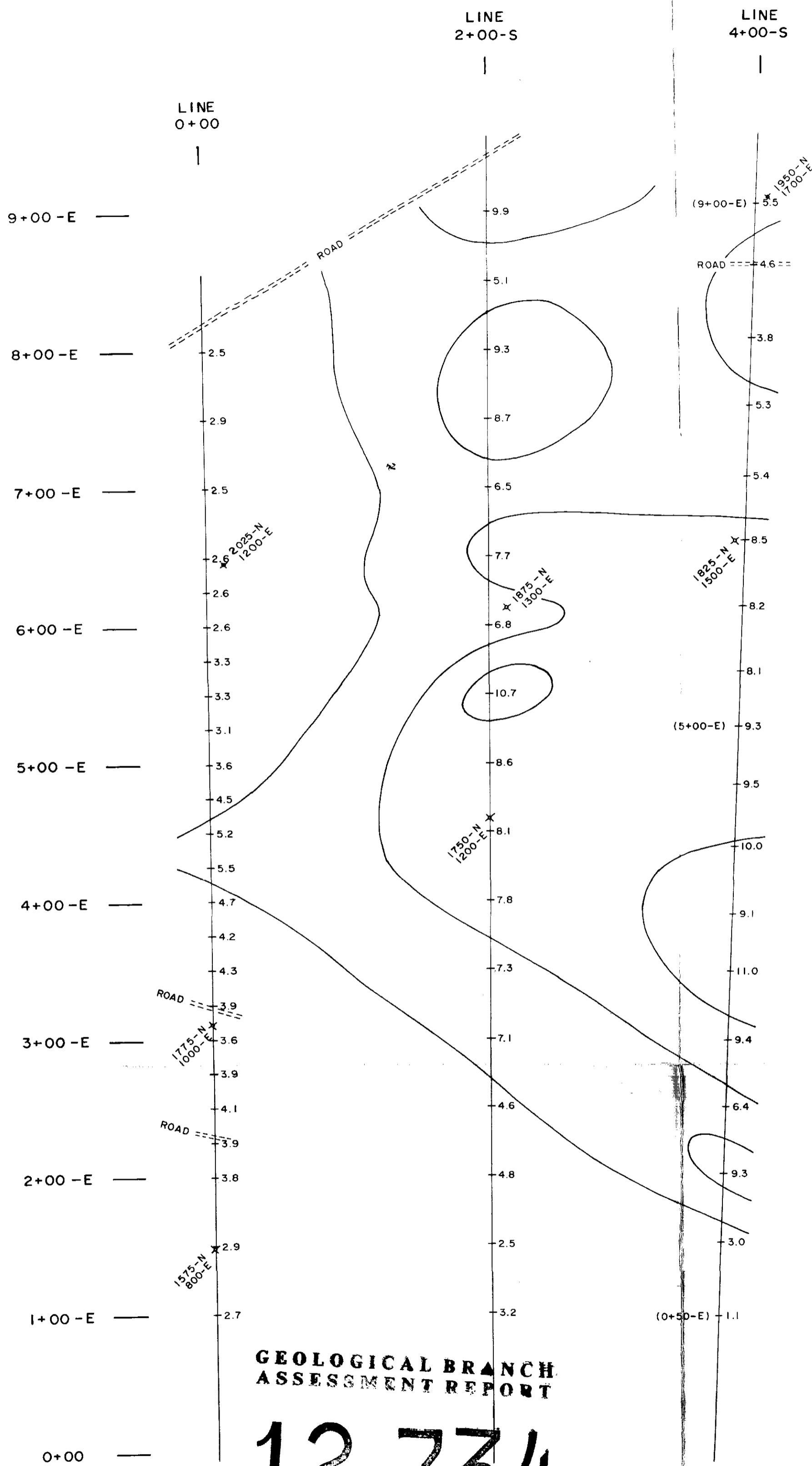
12,734 PART 1 OF 2



**PART
1 OF 2**



	Canstat Petroleum Corporation BEAVERDELL PROPERTIES GREENWOOD MINING DIVISION - B.C. NTS 82-E-6 E
	CLAIM MAP SHOWING IP GRID LOCATIONS
 1:25,000	
Date DEC., 1984 By J.R. / r.w.	FIG. No. I



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,734

PART 1 OF 2

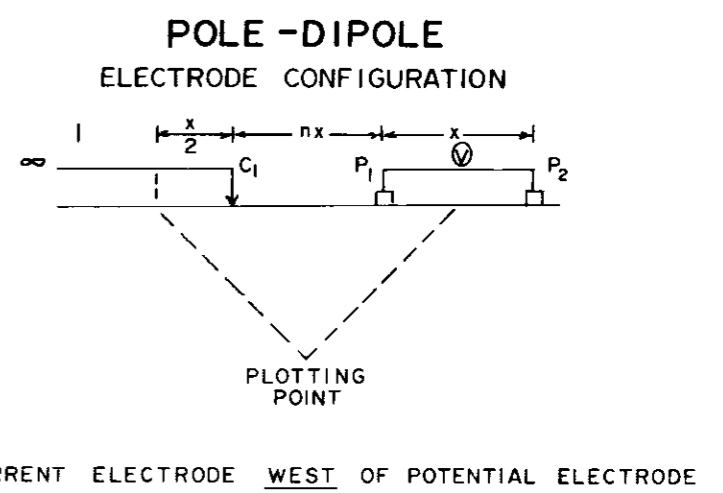
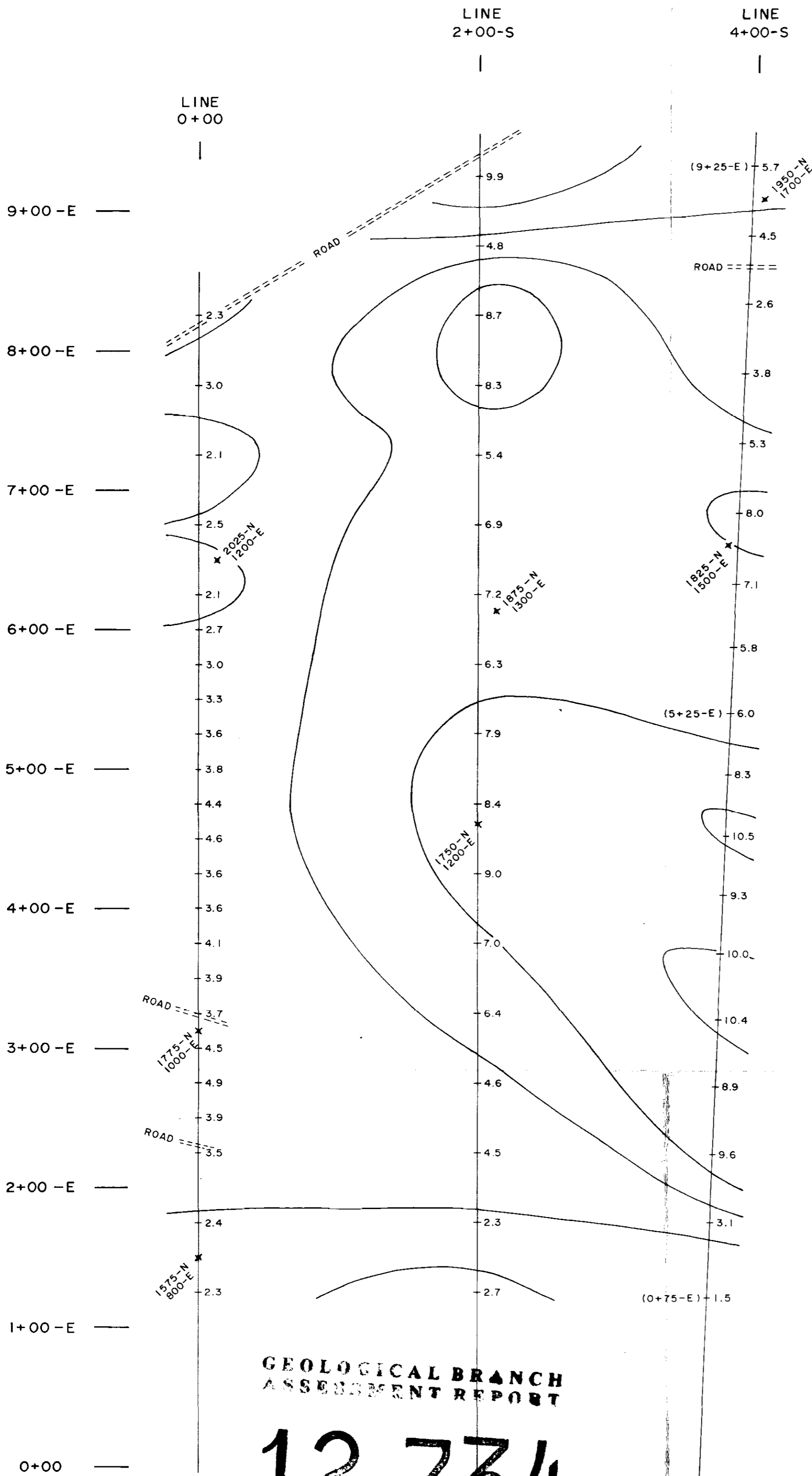
CANSTAT PETROLEUM CORPORATION
 GRID # 3 , BEAVERDELL AREA , GREENWOOD M.D. , B.C.

INDUCED POLARIZATION SURVEY
 CONTOURS OF APPARENT CHARGEABILITY
 (IN MILLI-SECONDS)
 "x" = 50 METRES , n = 2

SCALE 1 : 2,500

MAP No. W-334- 6
 TO ACCOMPANY A REPORT BY
 PETER E. WALCOTT , P.Eng.

PETER E. WALCOTT & ASSOC. LTD.
 OCTOBER - 1983



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,734

PART 1 OF 2



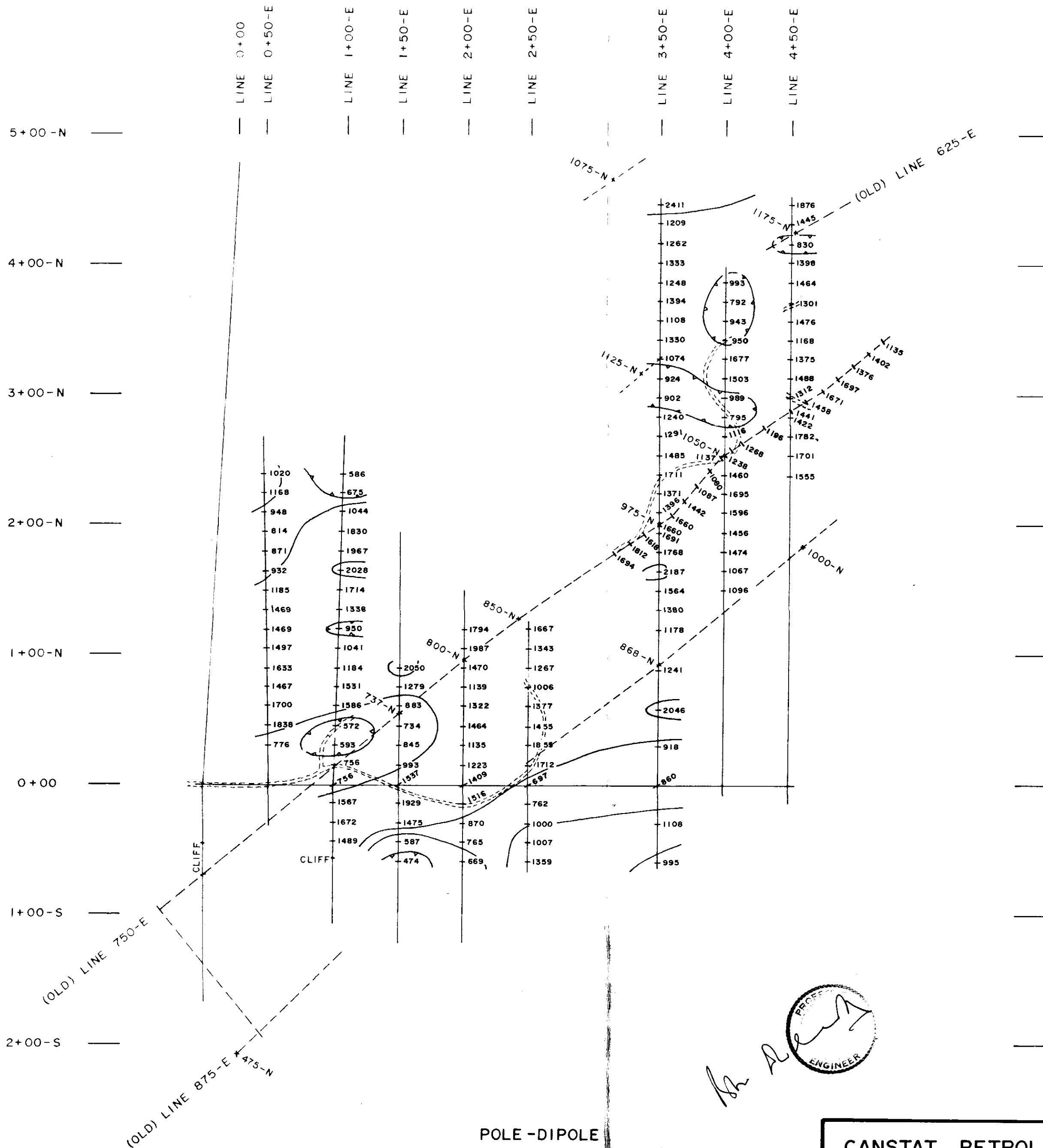
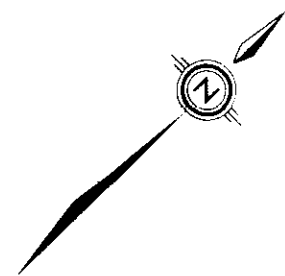
CANSTAT PETROLEUM CORPORATION
GRID #3, BEAVERDELL AREA, GREENWOOD M.D., B.C.

INDUCED POLARIZATION SURVEY
CONTOURS OF APPARENT CHARGEABILITY
(IN MILLI-SECONDS)
"x" = 50 METRES, n = 1

SCALE 1:2,500

MAP No. W-334-5
TO ACCOMPANY A REPORT BY
PETER E. WALCOTT, P.Eng.

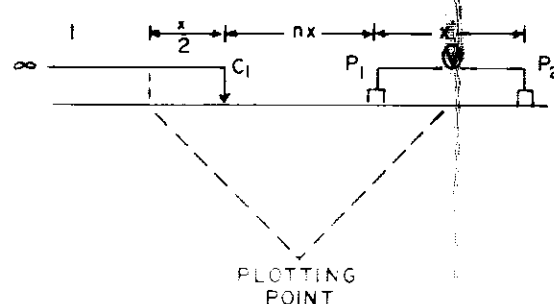
PETER E. WALCOTT & ASSOC. LTD.
OCTOBER - 1983



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,734
PART 1 OF 2

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE NORTH OF POTENTIAL ELECTRODE

CANSTAT PETROLEUM CORPORATION
GRID #2, BEAVERDELL AREA, GREENWOOD M.D., B.C.

INDUCED POLARIZATION SURVEY
CONTOURS OF APPARENT RESISTIVITY
(IN OHM-METRES)

"x" = 30 METRES, n = 2

SCALE 1:2,500

MAP No. W-334-4
TO ACCOMPANY A REPORT BY
PETER E. WALCOTT, P. Eng.

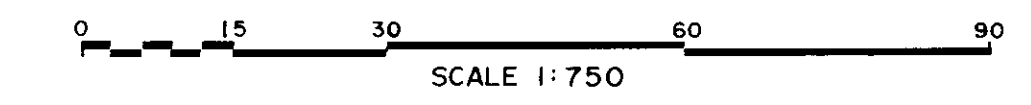
PETER E. WALCOTT & ASSOC. LTD.
OCTOBER -- 1983

12,734
PART 1 OF 2

CANSTAT PETROLEUM CORPORATION

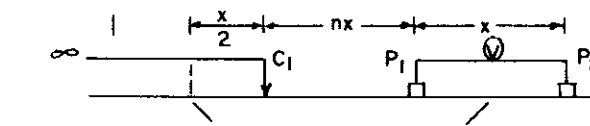
MAY CLAIMS - BEAVERDELL AREA
GREENWOOD MINING DIVISION - B.C.

LINE 0+00



INDUCED POLARIZATION SURVEY

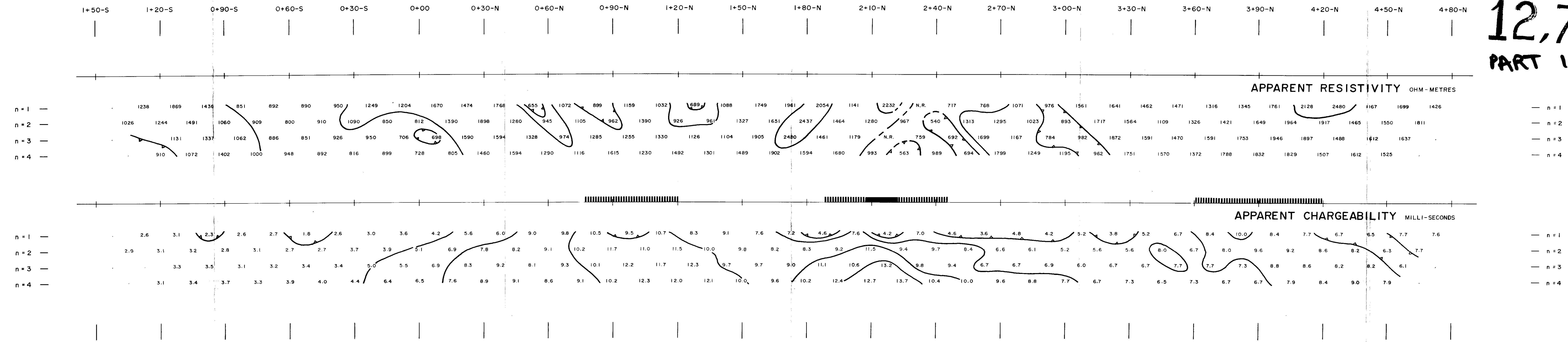
POLE-DIPOLE
ELECTRODE CONFIGURATION

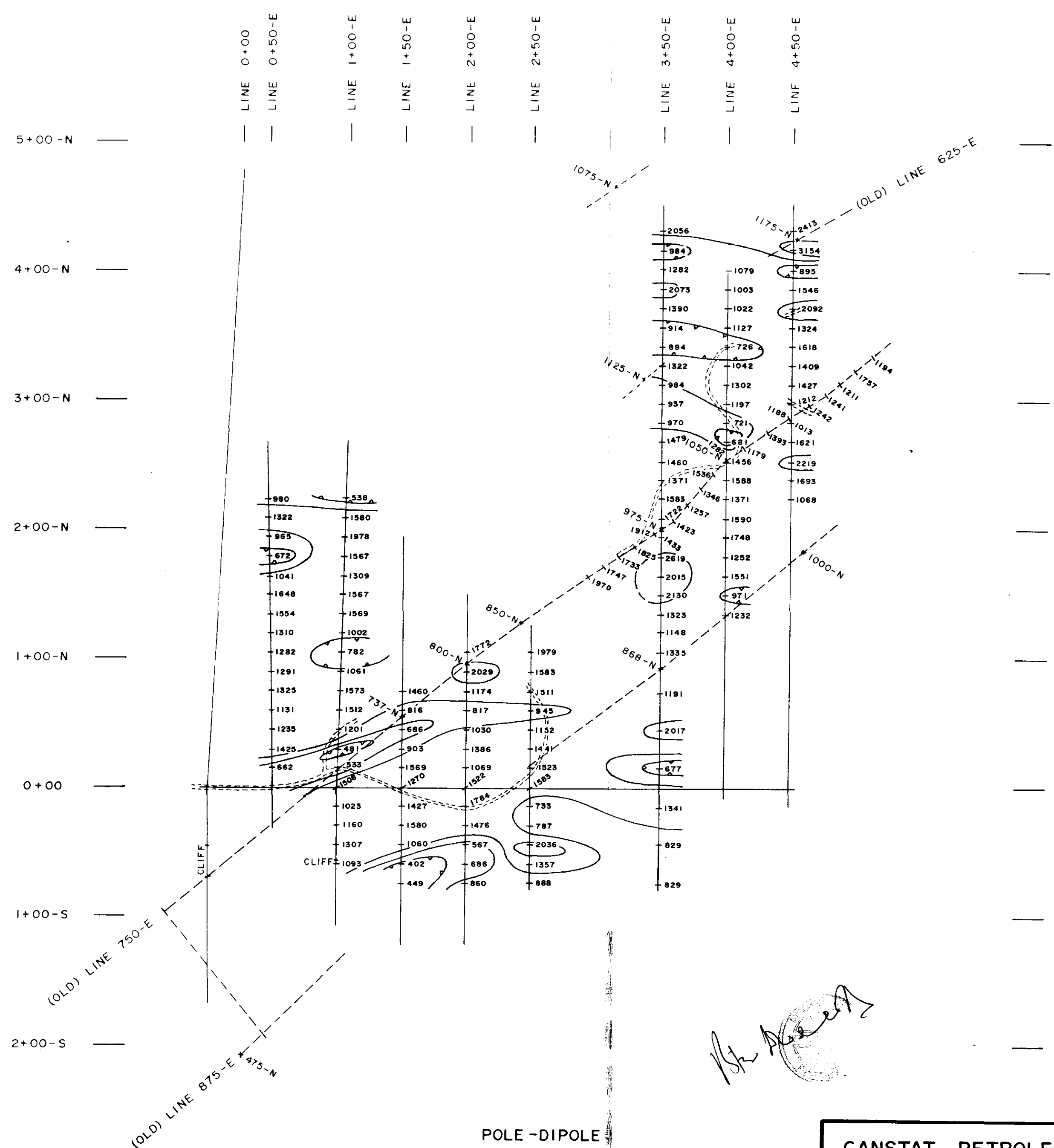
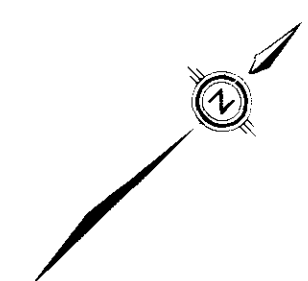


PLOTTING POINT

CURRENT ELECTRODE NORTH OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "x" - 15 METRES
TIME DELAY - 450 MILLI-SECONDS
SAMPLING TIME - 650 MILLI-SECONDS
TRANSMITTER - HUNTEC 7.5 KW
RECEIVER - HUNTEC MARK IX, & CRONE - WITH EQUIVALENT SPECIFICATIONS

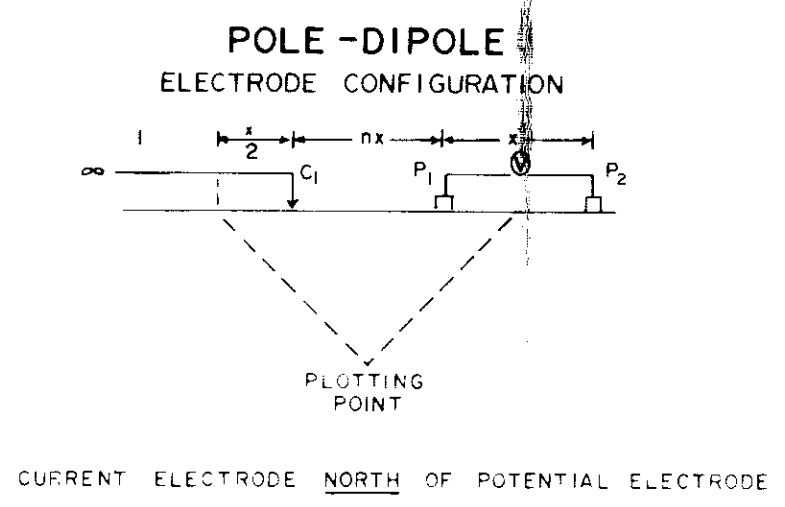
CONTOUR INTERVAL
APPARENT RESISTIVITY - 5,7,10,20,30,50,70,100,200,300, 500,700,1000,2000 etc.
APPARENT CHARGEABILITY - 0,2.5,5,7.5,10,12.5,15 etc.





BRANCH
REPORT

12,734
PART 1 OF 2



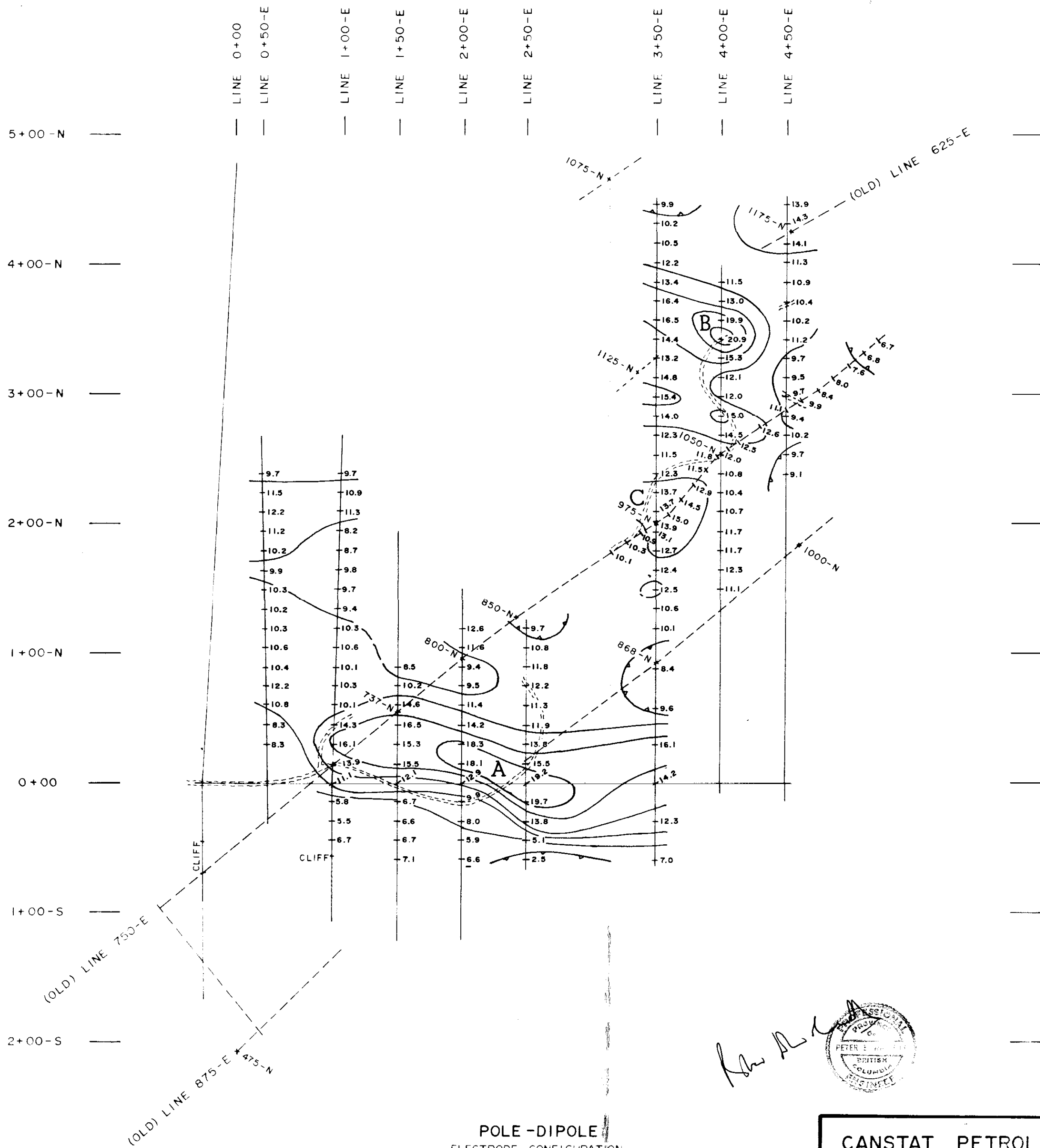
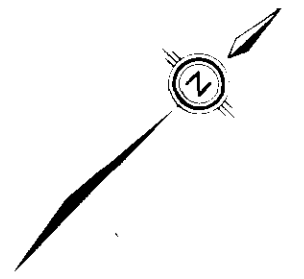
CANSTAT PETROLEUM CORPORATION
GRID #2, BEAVERDELL AREA, GREENWOOD M.D., B.C.

INDUCED POLARIZATION SURVEY
CONTOURS OF APPARENT RESISTIVITY
 (IN OHM-METRES)
 "x" = 30 METRES, n = 1

SCALE 1:2,500

MAP No. W-334-3
 TO ACCOMPANY A REPORT BY
 PETER E. WALCOTT, P. Eng.

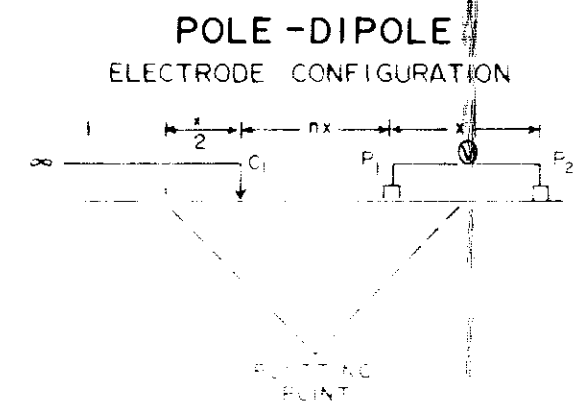
PETER E. WALCOTT & ASSOC. LTD.
 OCTOBER - 1983



Handwritten signature
 PETER E. WALKER
 BRITISH COLUMBIA
 REGISTERED

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

**12,734
 PART 1 OF 2**



CANSTAT PETROLEUM CORPORATION
 GRID #2, BEAVERDELL AREA, GREENWOOD M.D., B.C.

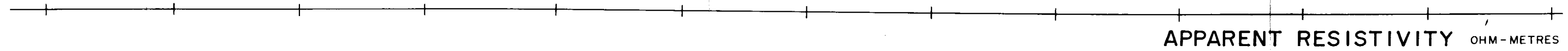
INDUCED POLARIZATION SURVEY
 CONTOURS OF APPARENT CHARGEABILITY
 (IN MILLI-SECONDS)

Scale: 1:2500
 Date: 1964

NO. 12,734
 PETER E. WALKER, P. ENG.

1+80-S 1+20-S 0+60-S 0+00 0+60-N 1+20-N 1+80-N 2+40-N 3+00-N 3+60-N 4+20-N 4+80-N 5+40-N

n = 1 —
n = 2 —
n = 3 —
n = 4 —



662 1425 1235 1131 1325 1291 1282 1310 1554 1648 1041 672 965 1322 980
 776 1838 1700 1467 1633 1497 1469 1469 1185 932 871 814 948 1168 1020
 892 2298 2202 1679 1958 1688
 1030 2639 2477 1940 1850 1334

n = 1 —
n = 2 —
n = 3 —
n = 4 —



7.8 8.0 0.6 10.7 9.1 8.8 8.1 7.5 6.9 7.9 9.4 10.4 10.2 9.8 8.2
 8.3 8.3 10.8 12.2 10.4 10.6 10.3 10.2 10.3 9.9 10.2 11.2 12.2 11.5 9.7
 8.4 8.3 10.9 13.1 11.3 11.3
 8.5 8.3 10.9 13.4 11.6 10.8

APPARENT RESISTIVITY OHM-METRES

APPARENT CHARGEABILITY MILLI-SECONDS

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,734

PART 1 OF 2

CANSTAT PETROLEUM CORPORATION

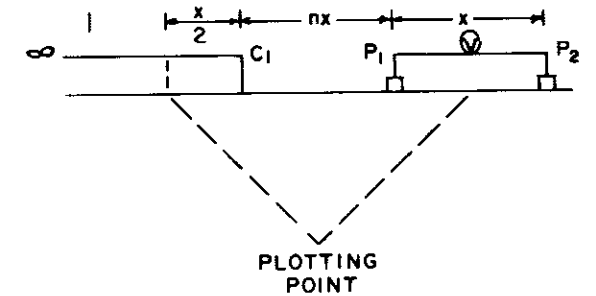
MAY CLAIMS - BEAVERDELL AREA
GREENWOOD MINING DIVISION - B.C.

LINE 0 + 50 EAST



INDUCED POLARIZATION SURVEY

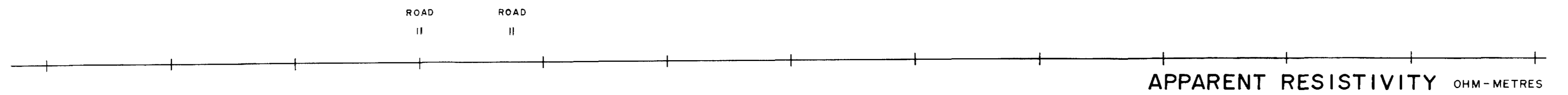
POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE NORTH OF POTENTIAL ELECTRODE
 DIPOLE SEPARATION "x" - 30 METRES
 TIME DELAY - 450 MILLI-SECONDS
 SAMPLING TIME - 650 MILLI-SECONDS
 TRANSMITTER - HUNTEC 7.5 KW.
 RECEIVER - HUNTEC MARK IX SERIAL NO. 1030
 CONTOUR INTERVAL
 APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300, 500, 700, 1000, 2000 etc.
 APPARENT CHARGEABILITY - 0, 2.5, 5, 7.5, 10, 12.5, 15 etc.

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
OCTOBER - 1983

1+80-S 1+20-S 0+60-S 0+00 0+60-N 1+20-N 1+80-N 2+40-N 3+00-N 3+60-N 4+20-N 4+80-N 5+40-N



Distance	n=1	n=2	n=3	n=4
1093	1489			
1307	1672			
1160	1567			
1023	756			
1508	756			
533	593			
481	572			
1201	1586			
1512	1531			
1573	1184			
1061	1041			
782	950			
1002	1338			
1569	1714			
1567	2028			
1309	1967			
1567	1830			
1978	1044			
1580	675			
538	586			



Distance	n=1	n=2	n=3	n=4
5.6	6.3			
5.7	5.5			
7.4	5.8			
10.9	11.1			
11.0	13.9			
14.8	16.1			
12.8	14.3			
9.5	10.1			
8.1	10.3			
7.3	10.1			
8.2	10.6			
9.1	10.3			
8.4	9.4			
8.5	9.7			
8.8	9.8			
7.9	8.7			
7.6	8.2			
7.4	11.3			
7.4	10.9			
10.7	9.7			

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,734

PART 1 OF 2

CANSTAT PETROLEUM CORPORATION

MAY CLAIMS - BEAVERDELL AREA
GREENWOOD MINING DIVISION - B.C.

LINE 1+00 EAST



INDUCED POLARIZATION SURVEY



CURRENT ELECTRODE NORTH OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "x" - 30 METRES
TIME DELAY - 450 MILLI-SECONDS
SAMPLING TIME - 6.50 MILLI-SECONDS
TRANSMITTER - HUNTEC 7.5 KW.
RECEIVER - HUNTEC MARK IX SERIAL No. 1030
CONTOUR INTERVAL
APPARENT RESISTIVITY - 5,7,10,20,30,50,70,100,200,300,
500,700,1000,2000 etc.
APPARENT CHARGEABILITY - 0,2.5,5,7.5,10,12.5, 5 etc.

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
OCTOBER - 1983

1+80-S 1+20-S 0+60-S 0+00 0+60-N 1+20-N 1+80-N 2+40-N 3+00-N 3+60-N 4+20-N 4+80-N 5+40-N



APPARENT RESISTIVITY OHM-METRES



APPARENT CHARGEABILITY MILLI-SECONDS



GEOLOGICAL BRANCH
ASSESSMENT REPORT

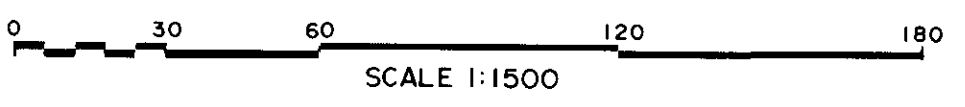
12,734

PART 1 OF 2

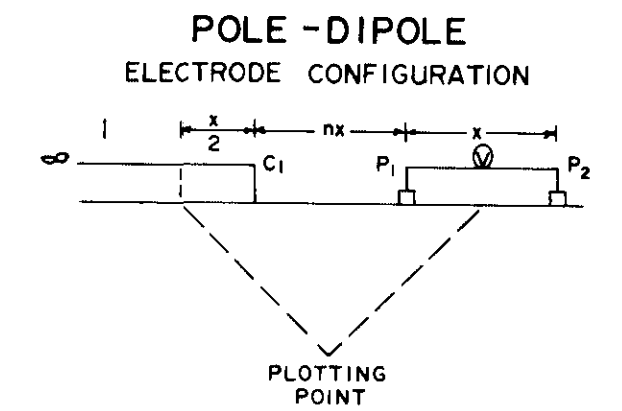
CANSTAT PETROLEUM CORPORATION

MAY CLAIMS - BEAVERDELL AREA
GREENWOOD MINING DIVISION - B.C.

LINE 1 + 50 EAST



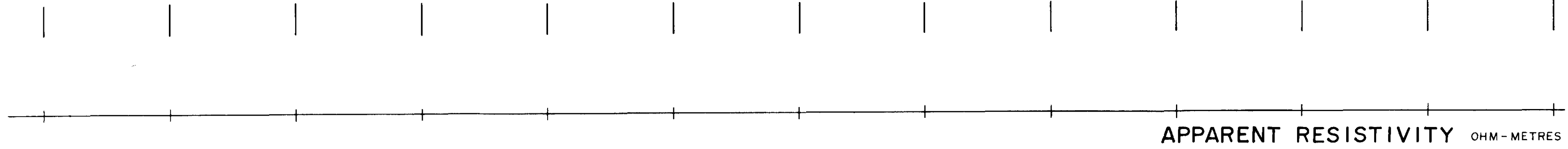
INDUCED POLARIZATION SURVEY



CURRENT ELECTRODE NORTH OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "x" - 30 METRES
TIME DELAY - 450 MILLI-SECONDS
SAMPLING TIME - 650 MILLI-SECONDS
TRANSMITTER - HUNTEC 7.5 KW.
RECEIVER - HUNTEC MARK IX SERIAL NO. 1030
CONTOUR INTERVAL
APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300, 500, 700, 1000, 2000 etc.
APPARENT CHARGEABILITY - 0, 2, 5, 5, 7, 5, 10, 12.5, 15 etc.

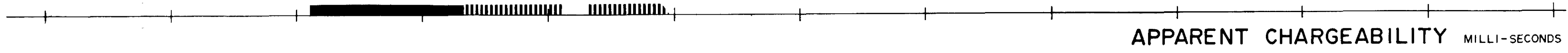
SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
OCTOBER - 1983

1+80-S 1+20-S 0+60-S 0+00 0+60-N 1+20-N 1+80-N 2+40-N 3+00-N 3+60-N 4+20-N 4+80-N 5+40-N



n = 1 — 860 686 567 1476 1784 1522 1069 1386 1030 817 1174 2029 1772
 n = 2 — 669 765 870 1516 1409 1223 1135 1464 1322 1139 1470 1987 1794
 n = 3 —
 n = 4 —

n = 1
 n = 2
 n = 3
 n = 4



n = 1 — 4.3 5.8 11.5 12.0 14.3 15.8 15.7 12.3 12.1 10.2 9.9 11.5 10.7
 n = 2 — 6.6 5.9 8.0 9.9 12.9 18.1 18.3 14.2 11.4 9.5 9.4 11.6 12.6
 n = 3 —
 n = 4 —

n = 1
 n = 2
 n = 3
 n = 4

GEOLOGICAL BRANCH
 ASSESSMENT REPORT

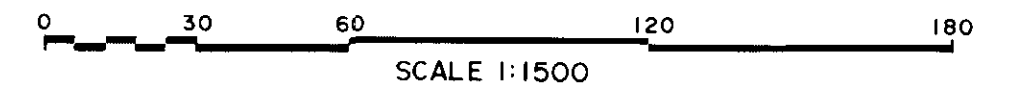
12,734

PART 1 OF 2

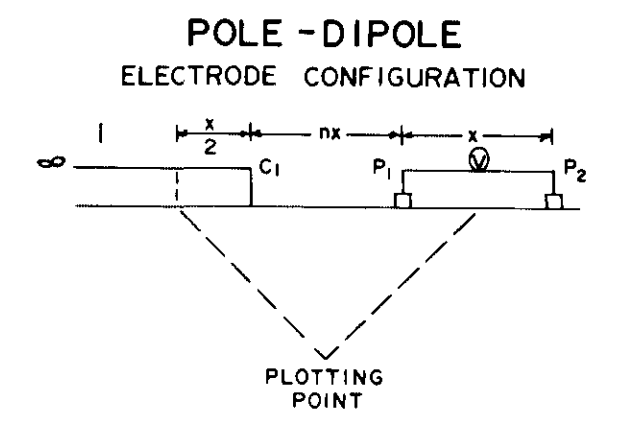
CANSTAT PETROLEUM CORPORATION

MAY CLAIMS - BEAVERDELL AREA
 GREENWOOD MINING DIVISION - B.C.

LINE 2 + 00 EAST



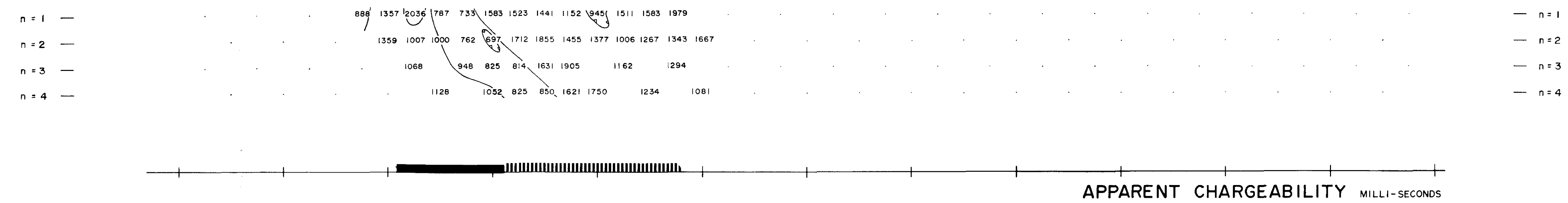
INDUCED POLARIZATION SURVEY



CURRENT ELECTRODE NORTH OF POTENTIAL ELECTRODE
 DIPOLE SEPARATION "x" - 30 METRES
 TIME DELAY - 450 MILLI-SECONDS
 SAMPLING TIME - 650 MILLI-SECONDS
 TRANSMITTER - HUNTEC 7.5 KW.
 RECEIVER - HUNTEC MARK IX SERIAL NO. 1030
 CONTOUR INTERVAL
 APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300,
 500, 700, 1000, 2000 etc.
 APPARENT CHARGEABILITY - 0, 2.5, 5, 7.5, 10, 12.5, 15 etc.

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
 OCTOBER - 1983

1+80-S 1+20-S 0+60-S 0+00 0+60-N 1+20-N 1+80-N 2+40-N 3+00-N 3+60-N 4+20-N 4+80-N 5+40-N



GEOLOGICAL BRANCH
ASSESSMENT REPORT

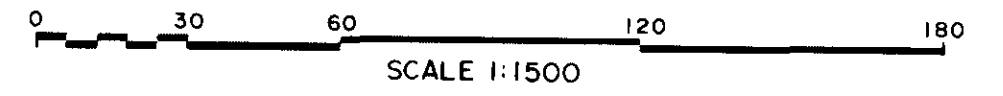
12,734

PART 1 OF 2

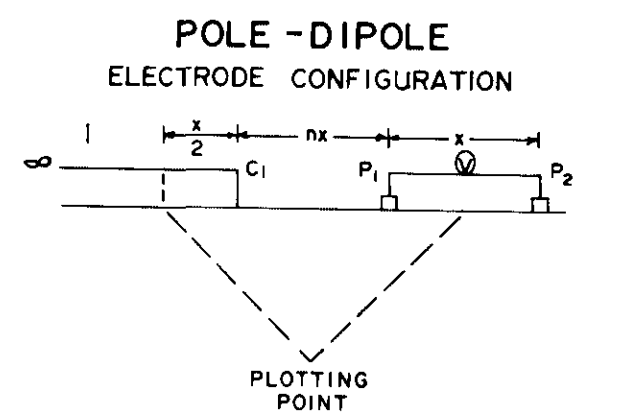
CANSTAT PETROLEUM CORPORATION

MAY CLAIMS - BEAVERDELL AREA
GREENWOOD MINING DIVISION - B.C.

LINE 2+50 EAST



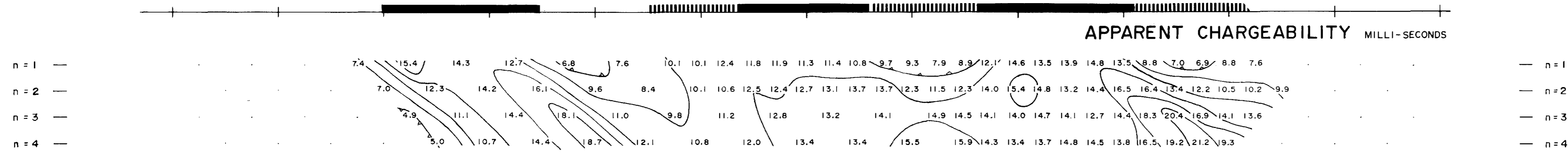
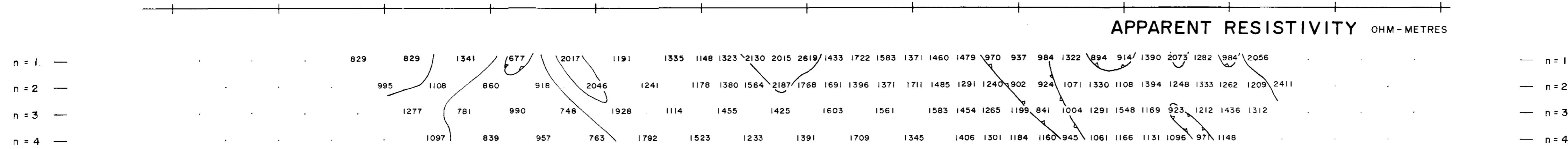
INDUCED POLARIZATION SURVEY



CURRENT ELECTRODE NORTH OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "x" - 30 METRES
TIME DELAY - 450 MILLI-SECONDS
SAMPLING TIME - 650 MILLI-SECONDS
TRANSMITTER - HUNTEC 7.5 KW.
RECEIVER - HUNTEC MARK IV SERIAL No. 1030
CONTOUR INTERVAL
APPARENT RESISTIVITY - 5,7,10,20,30,50,70,100,200,300,
500,700,1000,2000 etc.
APPARENT CHARGEABILITY - 0,2.5,5,7.5,10,12.5,15 etc.

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
OCTOBER - 1983

1+80-S 1+20-S 0+60-S 0+00 0+60-N 1+20-N 1+80-N 2+40-N 3+00-N 3+60-N 4+20-N 4+80-N 5+40-N



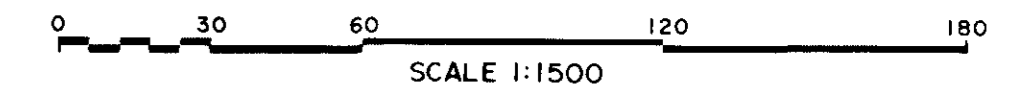
GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,734 PART
1 OF 2

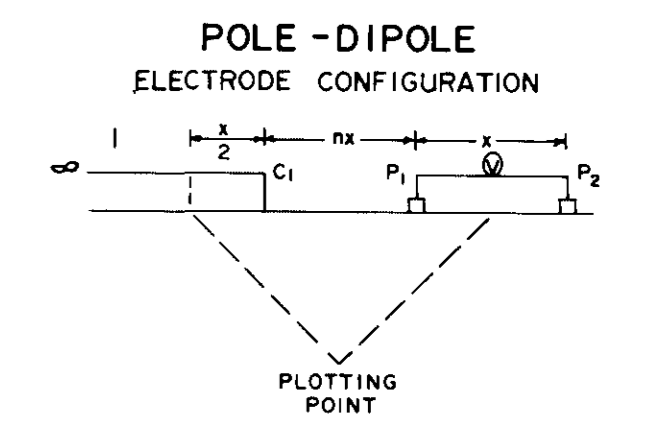
CANSTAT PETROLEUM CORPORATION

MAY CLAIMS - BEAVERDELL AREA
GREENWOOD MINING DIVISION - B.C.

LINE 3+50 EAST



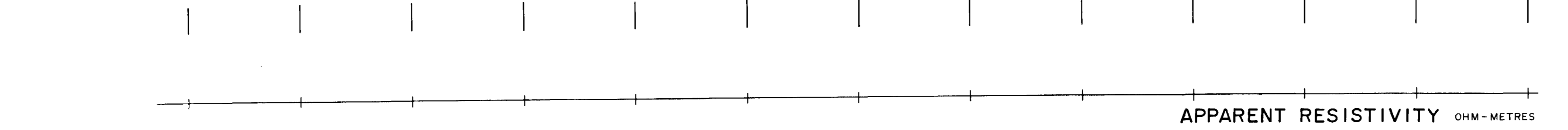
INDUCED POLARIZATION SURVEY



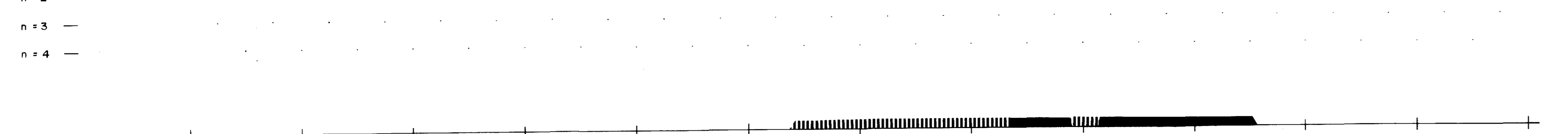
CURRENT ELECTRODE NORTH OF POTENTIAL ELECTRODE
DIPOLE SEPARATION "x" - 30 METRES
TIME DELAY - 450 MILLI-SECONDS
SAMPLING TIME - 650 MILLI-SECONDS
TRANSMITTER - HUNTEC 7.5 KW.
RECEIVER - HUNTEC MARK IV SERIAL NO. 1030
CONTOUR INTERVAL
APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300, 500, 700, 1000, 2000 etc.
APPARENT CHARGEABILITY - 0, 2.5, 5, 7.5, 10, 12.5, 15 etc.

SURVEY BY PETER E. WALCOTT & ASSOCIATES LTD.
OCTOBER - 1983

1+80-S 1+20-S 0+60-S 0+00 0+60-N 1+20-N 1+80-N 2+40-N 3+00-N 3+60-N 4+20-N 4+80-N 5+40-N



n = 1 — 1232 971 1551 1252 1748 1590 1371 1588 1456 681 721 1197 1302 1022 1127 726 1042 1003 1073
 n = 2 — 1096 1067 1474 1456 1596 1695 1460 1238 1116 795 989 1503 1677 950 943 792 993
 n = 3 —
 n = 4 —



n = 1 — 9.4 10.2 8.5 9.0 8.9 9.2 9.9 9.5 11.2 14.0 13.4 10.6 12.4 11.7 15.1 14.0 14.5 12.0 14.6
 n = 2 — 11.1 12.3 11.7 11.5 10.7 10.4 10.8 12.0 14.5 15.0 12.0 12.1 15.3 12.9 12.9 13.0 11.5
 n = 3 —
 n = 4 —

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

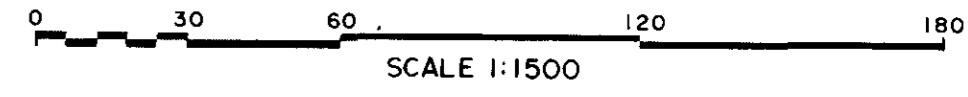
12,734

PART 1 OF 2

CANSTAT PETROLEUM CORPORATION

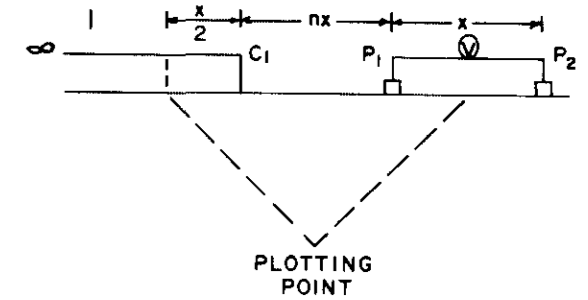
**MAY CLAIMS - BEAVERDELL AREA
 GREENWOOD MINING DIVISION - B.C.**

LINE 4+00 EAST



INDUCED POLARIZATION SURVEY

**POLE-DIPOLE
 ELECTRODE CONFIGURATION**



CURRENT ELECTRODE NORTH OF POTENTIAL ELECTRODE
 DIPOLE SEPARATION "x" - 30 METRES
 TIME DELAY - 450 MILLI-SECONDS
 SAMPLING TIME - 650 MILLI-SECONDS
 TRANSMITTER - HUNTEC 7.5 KW.
 RECEIVER - HUNTEC MARK IX SERIAL NO. 1030
CONTOUR INTERVAL
 APPARENT RESISTIVITY - 5, 7, 10, 20, 30, 50, 70, 100, 200, 300,
 500, 700, 1000, 2000 etc.
 APPARENT CHARGEABILITY - 0, 2.5, 5, 7.5, 10, 12.5, 15 etc.

SURVEY BY *PETER E. WALCOTT & ASSOCIATES LTD.*
 OCTOBER - 1983