ASSESSMENT REPORT

BOWLER CREEK

NATURE OF REPORT: Crone Electromagnetic Survey
CLAIMS: BC2, Zinc 1-6
MINING DIVISION: Kamloops
NATIONAL TOPOGRAPHIC SERIES: 82M~~3W~~ 4E
LATITUDE: 51° 00.5 North
LONGITUDE: 119° 30.5 West
OWNER AND OPERATOR: Orell Resources Ltd.
AUTHOR: James Black, P.Eng.
DATE: April 15, 1983

TABLE OF CONTENTS

INTRODUCTION

Location and Access

(i) The Bowler Creek claims are located on the eastern edge of the Adams Plateau and are shown on NTS 83M/3W. They are accessible by good logging roads from the north side of Shuswap Lake. The logging road leaves Shuswap Lake one mile east of the Adams River bridge.

HISTORY AND OWNER

(ii) Plateau Metals Ltd. worked on these claims early in the 1950's. Pyrite, pyrrhotite, magnetite showings have been known and explored over a number of years by various companies. In 1976 Craigmont Mines Ltd. optioned the property from Orell Resources Ltd. and completed geochemical, geophysical and geological surveys which were followed by an exploration diamond drilling program. They returned the property to Orell Resources Ltd. in the fall of 1978. J.M. Black P.Eng. consolidated Craigmont's work and recommended a drilling program which was completed in 1979 with moderately successful results.

The claims are underlain by a series of volcanic and sedimentary rocks which were laid down under relatively deep water conditions. The environment during deposition was acidic due to vulcanism and large thicknesses of chert were deposited. This chert is partly argillacious and/or calcareous. Intercalated with these impure cherts are andesite flows and a few sedimentary horizons. Concordant massive sulphide bodies consisting of pyrrhotite, pyrite, and minor chalcopyrite are present and were drilled. An economic zone of zinc mineralization is indicated from the diamond drilling.

SUMMARY OF WORK PERFORMED

(iii) Geophysical

8740 meters of gridline was established on the BC2 and Zinc 1-6 mineral claims with picketed stations every 40 meters. The gridlines were 100 meters apart. The gridlines had a bearing of N30°W.

Measurements of the 390 Hz, 1830 Hz and 5010 Hz frequencies were taken of each station and the results are presented in contour form on individual "pseudo-sections" of the lines surveyed. These contour maps can be found in the jacket of this report.

SURVEY SPECIFICATIONS

(iv) The Crone Electromagnetic Survey on the Bowler Creek claim group was carried out by equipment supplied by Crone Geophysics Ltd. of 3607 Wolfedale Road, Mississauga, Ontario, L5C 1V8. Manpower was provided by Orell Resources Ltd. consisting of a third year geology student, Luke Burlett, two college students, Kevin Kane and Tom O'Brien and the president of Orell Resources Ltd., Cyril Cecil Kane, prospector. The survey was a follow-up to earlier work completed in 1979 but the direction of the grid lines changed to intersect the rock structure at a right angle. The personnel used have previous experience in the use of the Crone equipment having received field instructions from Crone personnel in the use of the instruments and completing other surveys in previous years.

With the Crone horizontal shootback EM method both operators traverse along the same line. Both operators in turn transmit and receive - measuring the dip angle of the field. The two dip angles are then added together and equal "0" if no conductors are present. The station measured is the mid-point between the two men. The separation between the two men can vary from 100' to 600' (30 meters to 200 meters). Readings are generally taken at two frequencies if a conductor is detected. The ratio of the resultant dip angles permits an evaluation of the conductivity of the body.

OPERATION - The way the coils are held in the transmit and receive positions is very important and is as follows:

The two operators proceed along the survey line until they reach their positions. The leading operator receives first (switch at Rx). The trailing operator who is

the chief operator (he records the readings) places his coil in the transmit position - accurately horizontal - and switches it on Tx. Note both operators must be perpendicular to the line of traverse with the other operator always on his left hand side.

The gain control position is not critical - if the field strength meter remains off scale when the coil is rotated, then the gain is set too high.

(1)

OPERATOR RECEIVING	OPERATOR TRANSMITTING
- Switch at Rx	- Switch at Tx
- Coil moved to Null	- Coil Horizontal
- Inclinometer read on red scale (Example -8°)	- Inclinomter accurately kept on red T mark
- Other operator to his left	- Other operator to his left

(2) Leading operator shouts "Off" and calls reading -8° to chief (over 300' use Walki-Talkies)

(3) Both operators remaining in the same position and facing in the same direction reverse the procedure

LEADING OPERATOR TRANSMITTING	OPERATOR RECEIVING
- Switch at Tx	- Switch at Rx
- Coil Horizontal	- Coil moved to Null
- Inclinometer accurately kept on red T mark	- Inclinometer read on red scale (Example +8°)
- Other operator to his left	- Other operator to his left

(4) Operator records readings - Shouts "Off" - Both men switch to "Off" and move to next station

FREQUENCIES - In most areas use 1830 Hz for basic coverage and 390 Hz in anomalous areas. In areas of highly conductive background conditions, where the 1830 Hz frequency produces -5° to -20° readings over wide areas, then both 390 Hz and 1830 Hz frequencies should be used for basic coverage. In the exploration for weak conductors, use 5010 Hz and 1830 Hz.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Numerous anomalous readings were obtained. Interpretation of these is inconclusive, inasmuch as they indicate a body which crosses two anomalies previously outlined by a EM 16 survey. The EM anomalies had been found to correspond generally to magnetometer anomalies.

In view of the difficulty of coring certainly a dipping, non-planar mineral bed on a steep slope, a more detailed and more extensive EM survey is recommended.

ITEMIZED COST STATEMENT

1.	Grid lay out and line cutting - Wages	$ 955.64
2.	Survey with Crone EM - Wages	1,345.56
3.	Equipment rental - Crone Geophysics	394.06
4.	Supplies	63.11
5.	Vehicles - 4 X 4 16.50 days	821.83
6.	Camp Costs 16.50 days (4 men)	821.83
7.	Drafting 10 days	850.00
8.	Engineer Report	500.00
		$5,752.03
	Mob/Demob	600.00
		$5352.03

CLAIM	RECORD NUMBER
Zinc	437 (6)
BC2	540 (10)

AUTHOR'S QUALIFICATIONS

I am a graduate in geological engineering from the University of B.C. and have a Ph.D. in economic geology from McGill University. I am a registered geological engineer with the Association of Professional Engineers of B.C. I have had over 40 years experience in examination and exploration of mineral occurrences, especially in the cordilleran area.

Aug 23/83

J.M. Black, P.Eng.

CERTIFICATE

I, J.M. Black of North Vancouver, B.C. do hereby certify that

i) I am a geological engineer with an office at 843 Prospect Avenue, North Vancouver, B.C., V7R 2M2.

ii) I am a graduate of UBC with degree of M.Sc. in geological engineering, 1935. I am a graduate of McGill University with degree of Ph.D. in economic geology, 1942. I am a member of the Association of Professional Engineers of B.C. I have practiced my profession for over 40 years.

iii) I am the author of the accompanying report, which is based on personal knowledge of the property.

iv) I have no beneficial interest in the property or claims discussed and I do not expect to receive any.

Aug 23/83

J.M. Black, P.Eng.

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ASSESSMENT REPORT

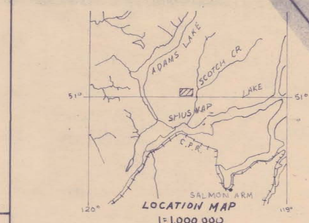
11,254

BC-2

ZINC-1-6

BC-3

BC-1



LOCATION MAP
1:1,000,000

LEGEND

- 6 Basic dike
- 5 Qtz. Feld. Porp. dike
- 4 Sulfides
- 3 Andesite
- 2 Tuffite
- 1 Rhyolite
- Q Vein Qtz.
- Fault, assumed (teeth on down thrown block)
- Claim post, assumed
- DDH

GRAB SAMPLE
Cu 1.49%

GRAB SAMPLE
Ag 1.28 oz
Pb 1.33%
Zn 1.00%

GRAB SAMPLE
Ag 1.40 oz
Pb 2.20%
Zn 1.70%

GRAB SAMPLE
Ag .80 oz
Pb 0.28%
Zn 3.55%

GRAB SAMPLE
Ag 1.42 oz
Pb 1.46%
Zn 1.22%

GRAB SAMPLE
Ag 9.2 oz
Pb 0.98%
Zn 2.05%

GRAB SAMPLE
Ag .43 oz
Pb 0.61%
Zn 0.40%

Grid
Aug 13/83

Bowler Creek #1

OREL RESOURCES LTD.

ADAMS PLATEAU, B.C.

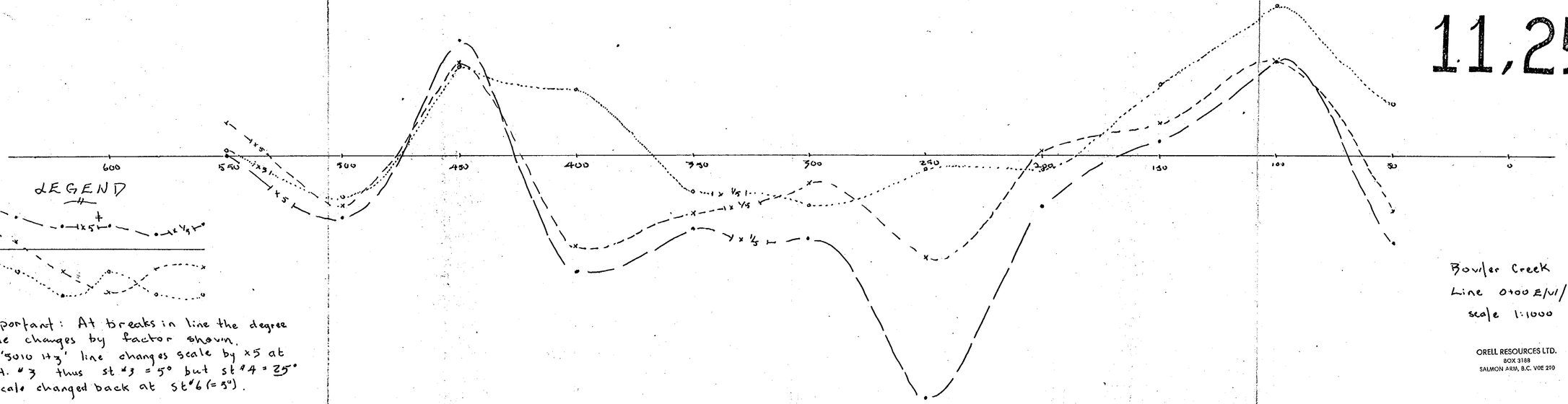
GEOLOGY of BOWLER CREEK

100 0 100 Meters

scale 1:5000

NTS 82 N/3

Horizontal Shootback
CEM SURVEY



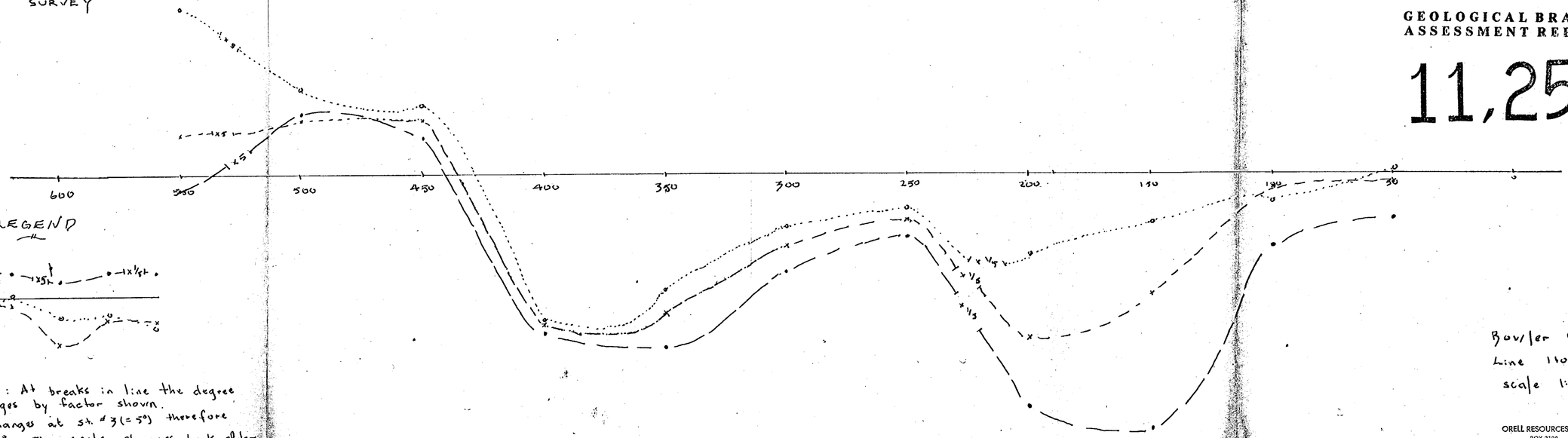
LEGEND

† important: At breaks in line the degree scale changes by factor shown.
ex) '5010 1+3' line changes scale by x5 at st. #3 thus st #3 = 5° but st #4 = 25°
scale changed back at st #6 (= 5°).

Bowler Creek
Line 0+00 E/W/ South
scale 1:1000

OREL RESOURCES LTD.
BOX 3188
SALMON ARM, B.C. V0E 2T0

Horizontal Shootback
CEM SURVEY



LEGEND

† - important: At breaks in line the degree scale changes by factor shown.
ex) scale changes at st. # 3 (= 5°) therefore st. # 5 = 25°. The scale changes back after st. # 5, so st. # 6 = 5°

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,254

Bowler Creek
Line 1100E/South
scale 1:1000

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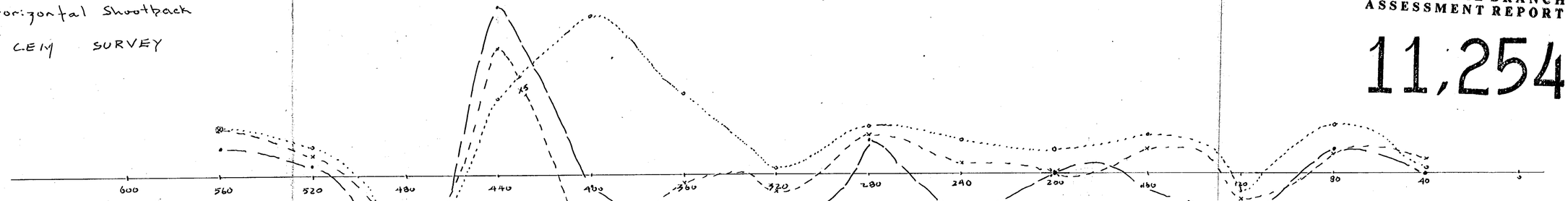
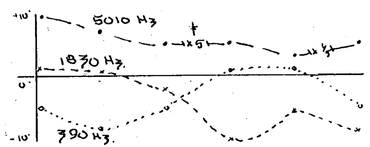
Horizontal Shootback

CEM SURVEY





† - important: At breaks in line the degree scale changes by factor shown.
eg) '5010 Hz' line changes at st# 3. Thus st# 3 = 5°
but st# 4 = 25°. The scale changes back at st# 6 (= 5°)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,254

Bowler Creek
Line 1100W/South
Scale 1:1000

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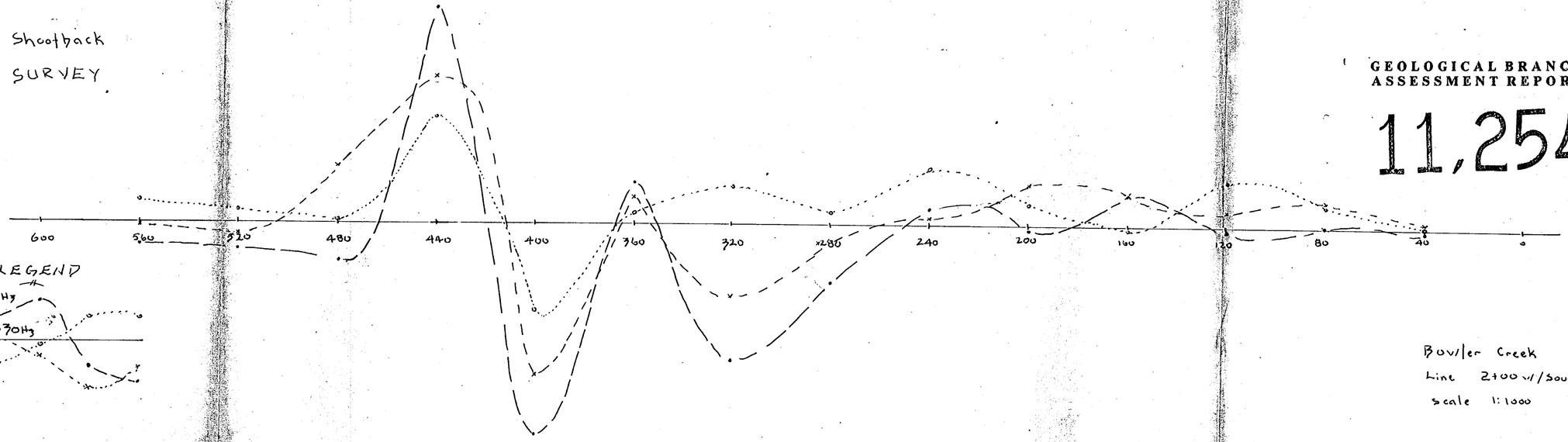
Horizontal Shootback

CEM SURVEY



GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,254

Bowler Creek

Line 2400 N/South

Scale 1:1000

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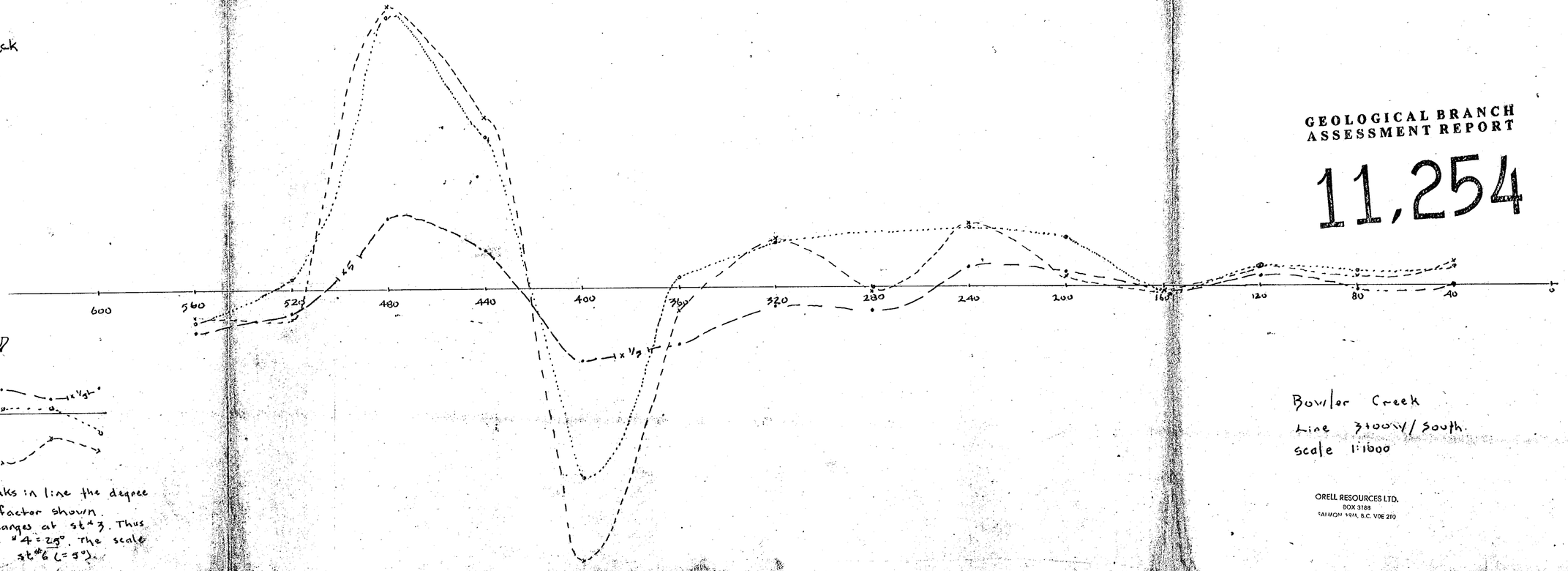
Horizontal Shootback

CEM SURVEY



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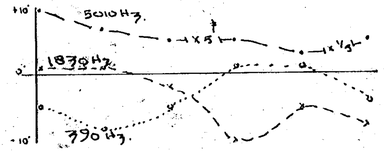

† - important: At breaks in line the degree scale changes by factor shown.
ex) '5010 Hz' line changes at st # 3. Thus st # 3 = 5° but st. # 4 = 25°. The scale changes back at st # 6 (= 5°).

Bowlor Creek
Line 3100W / South.
Scale 1:1000

OREL RESOURCES LTD.
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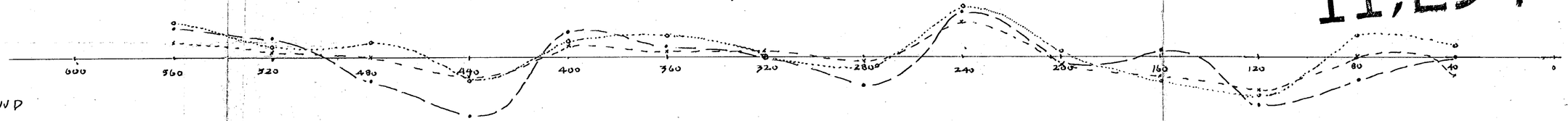
SALMON ARM, B.C. V0E 2T0

Horizontal Shootback

CEM SURVEY



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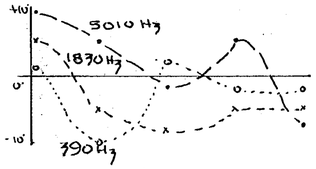

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11,254

Bowler Creek

Line 4+00 W/South

scale 1:1000

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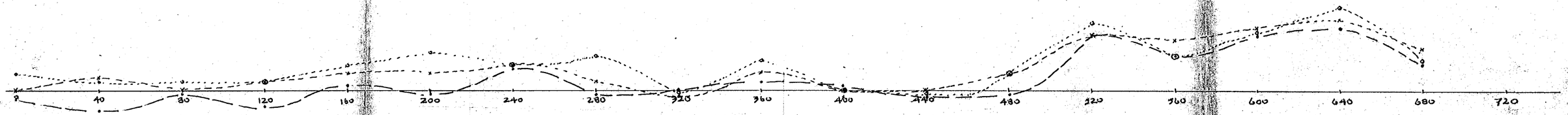
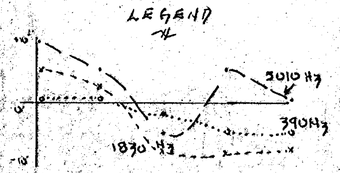
SALMON ARM, B.C. V0E 2T0

Horizontal Shootback

CEM SURVEY





Bowser Creek

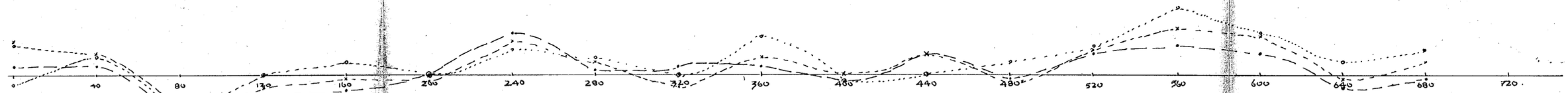
Line 9+30 E/W/North

Scale 1:1000.

ORELL RESOURCES LTD.
BOX 3188
SALMON ARM, B.C. V0E 2T0

Horizontal Shoolback

CEM SURVEY



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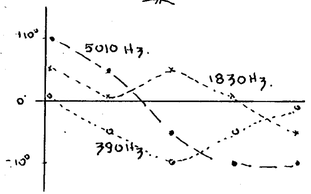
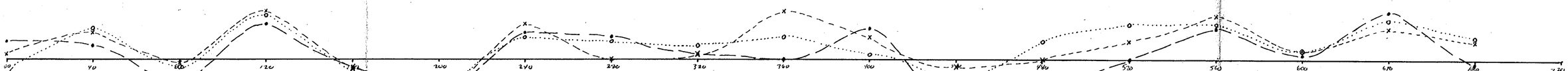


Bowler Creek
Line 1+00 W/ North
scale 1:1000.

ORELL RESOURCES LTD.
BOX 3189
SALMON ARM, B.C. V0E 2T0

Horizontal Shootback

CEM SURVEY



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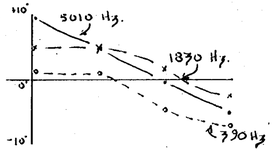

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SALMON ARM, B.C. V0E 2T0

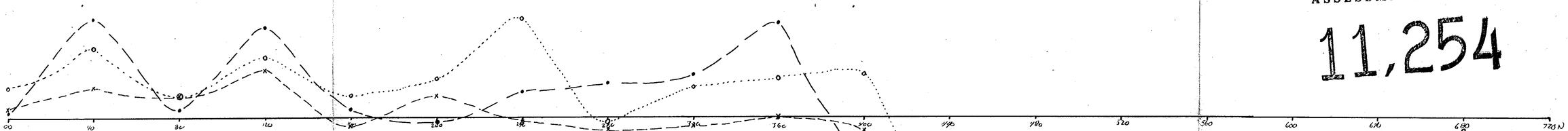
BOWLER CREEK

Line 2+00W/North

scale 1:1000

Horizontal Shoolback

CEM SURVEY



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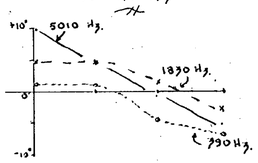

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,254

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BOX 3188
SALMON ARM, B.C. V1E

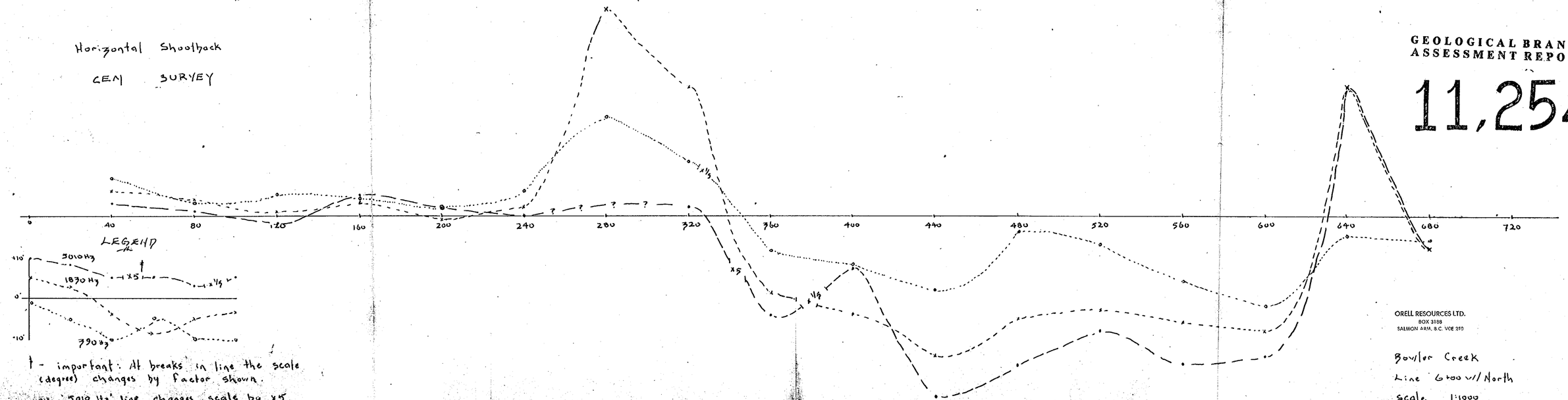
Bowler Creek

Line 3400 W/North

scale 1:1000

Horizontal Shootback

CEM SURVEY



LEGEND

† - important: At breaks in line the scale (degree) changes by factor shown.

eg. '3010 Hz' line changes scale by x5 at St. #3 thus St. #3 = 5° but St #4 = 25° Scale changed back at St # 6 @ 5°)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,254

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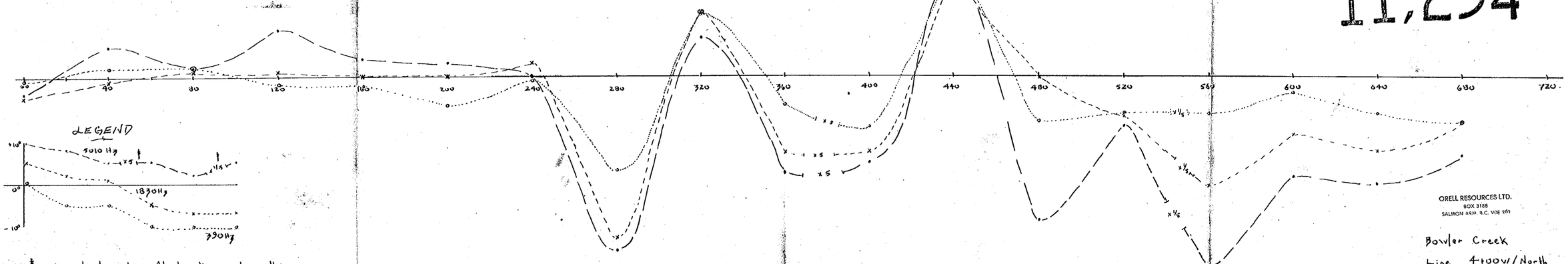
Bowlor Creek

Line 6700 W/ North

Scale 1:1000

Horizontal Shootback

CEN SURVEY



† - important note: At breaks in line the degree scale changes by factor shown.
ex: '3010Hz' line changes at st.#3
thus st.#3 = 3°, st.#4 = 25° and changes back at st. #6 (= 5°)

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ASSESSMENT REPORT

11,254

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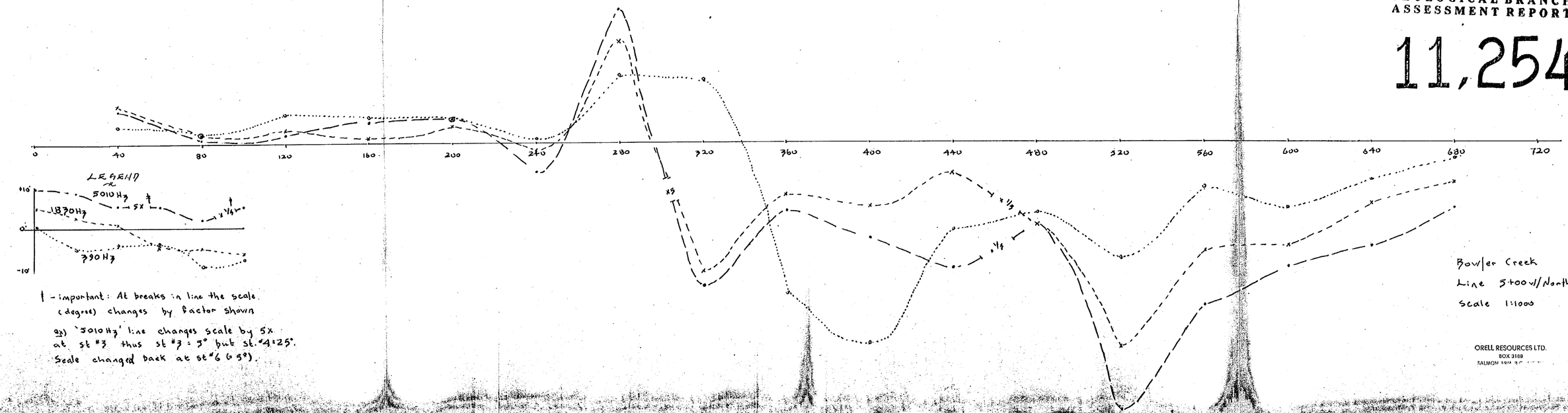
Bowser Creek
Line 4+00W/North
Scale 1:1000

Horizontal Shootback

CEM . SURVEY



† - important: At breaks in line the scale (degree) changes by factor shown

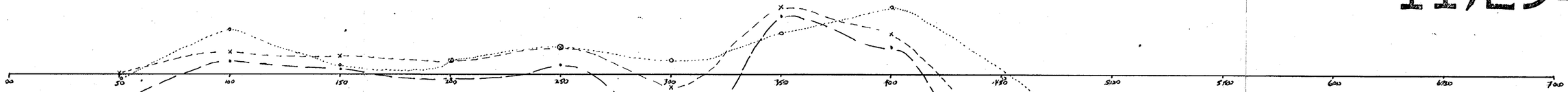
eg) '5010 Hz' line changes scale by 5x at st #3 thus st #3 = 5° but st. #4 = 25°. Scale changed back at st #6 (= 5°).

Bowler Creek
Line 5+00N/North
Scale 1:1000

ORELL RESOURCES LTD.
BOX 3188
SALMON ARM, B.C.

Horizontal Shootback

CEM SURVEY



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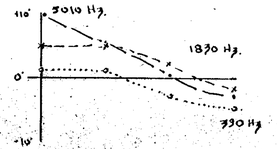

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BOX 3188
SALMON ARM, B.C. V0E 2T0

Bowler Creek

Line 7+00W/North

Scale 1:1000.