

**PETER E. WALCOTT
& ASSOCIATES LTD**

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A GEOPHYSICAL REPORT

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ON

A GROUND MAGNETIC SURVEY

Julia West Property, Atlin Area, B.C.
59° 43'N, 133° 29'W
N.T.S. 104N/11 & 12

CLAIMS SURVEYED: JULIA 4 to 7

SURVEY DATES: November 18th - 29th, 1993

OPERATOR: SURPRISE LAKE EXPLORATION LIMITED PARTNERSHIP
Vancouver, British Columbia

OWNERS: SURPRISE LAKE EXPLORATION LIMITED PARTNERSHIP

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

BY

23,304

PETER E. WALCOTT & ASSOCIATES LIMITED

Vancouver, British Columbia

DECEMBER 1993

PETER E. WALCOTT
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- 1 -

INTRODUCTION.

Between November 18th and 29th, 1993, Peter E. Walcott & Associates Limited undertook a small magnetometer surveying programme on a part of the Julia West property, located in the Atlin area of British Columbia, for the Surprise Lake Exploration Limited Partnership at the request of Mr. D.G.S. Purvis, General Partner.

The surveying was carried out over twenty one N 80°W flagged "chain and compass" lines established from a similar N 10°E baseline.

Measurements of the total intensity of the earth's magnetic field were made at 10 metre intervals along the lines using an EDA Omni magnetometer.

The survey was tied into a previously carried out survey on a small grid adjacent to and crossing the north end of the grid obliquely by rechaining, re-reading and comparing the results of the two most westerly lines.

The combined data after levelling are presented in contour and profile form on plan maps - Maps W-510-1 & 3 - of the line grid that accompany this report, while the data from the present survey alone is posted on Map W-510-2.

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PROPERTY, LOCATION & ACCESS.

The property is located in the Atlin Mining Division of British Columbia and consists of the following claims:

<u>Claim Name</u>	<u>Tenure No.</u>	<u>No. of Units</u>	<u>Anniversary</u>
JULIA 4	314293	12	October 25th
JULIA 5	314292	6	October 25th
JULIA 6	308079	15	March 9th
JULIA 7	308078	18	March 7th
JULIA 8	202728	12	June 12th
JULIA Fr.	202730	1	June 12th

The claims are situated straddling Birch creek some 4 kilometres north of its confluence with Pine Creek, and some 15 kilometres northeast of the town of Atlin.

Access was obtained by means of the all-season Atlin-Surprise Lake gravel road which parallels Pine Creek and hence by 4 wheel drive vehicle along a similar road that runs up Birch Creek.

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PREVIOUS WORK.

Previous work on the property in recent times to the best of the writer's knowledge consisted of airborne electromagnetic and magnetic surveying by Dighem in 1984, and limited ground magnetic and VLF electromagnetic surveying by Scott Geophysics Ltd. in 1987.

The results of the above are well documented in reports held by the Surprise Lake Exploration Limited Partnership.

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GEOLOGY.

The reader is referred to reports on the adjacent property and surrounding claims by L. Dandy and R. Gonzales for Cream Silver Mines in 1986, and by R. Diment of Noranda Exploration in 1990.

Basically the Atlin area lies within a northwest trending sequence of upper Paleozoic Cache Creek Group rocks - radiolarian cherts, pelites, carbonates, and volcanics -, the Atlin Terrane, intruded by Mesozoic granite, alaskite and quartz monzonite.

Within the Atlin Terrane Permian ultramafic rocks form a discordant belt that cuts the tectonic fabric of the former. These Atlin Intrusions, consisting for the most of peridotite, serpentinite and minor mafic dykes, commonly exhibit intense carbonitization along their margins characterized by the presence of mariposite.

The majority of the known lode gold deposits are associated with these quartz-carbonite altered ultramafics in contact with the Cache Creek volcanics.

The property is underlain by Cache Creek Group volcanics and sediments intruded in places mostly in the eastern part by Permian ultramafics as above with thick sequences of glacial till cover in the lower elevation areas.

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PURPOSE.

The purpose of the survey was to (a) complete sufficient work on the property to satisfy assessment requirements, and (b) examine the ground magnetic response of the ultramafic - Cache Creek contact trending along Birch Creek as to possible gold occurrences as suggested by the airborne magnetic low signature on the Dighem survey - possible zone of carbonitization.

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SURVEY SPECIFICATIONS.

The magnetic survey was carried out using an Omni precession magnetometer manufactured by EDA Instruments Ltd. of Metropolitan Toronto, Ontario. This instrument measures variations in the earth's magnetic field intensity to an accuracy of plus or minus one gamma. Corrections for diurnal variations of the earth's field were made by comparison with readings taken at 20 second intervals on a similar Omni base magnetometer.

In all some 22.5 kilometres of line were established, some 1.6 kilometres of a previous grid rechaind, and some 24.1 kilometres of magnetic work undertaken using the above method.

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DISCUSSION OF RESULTS.

The results of the ground magnetic survey confirmed the presence of the magnetic low west of Birch Creek on the southern portion of the grid - Map W-510 - 1 - as indicated on the airborne survey, and showed a strong sharp magnetic gradient along the eastern edge of the same creek.

East of this creek in the south and crossing it around 1100N is a wide band of choppy strong magnetic intensity striking northwesterly through the grid presumably the magnetic signature of the ultramafic mapped at the higher elevations east of Birch Creek. This choppy signature typical of shallow lying volcanic and ultramafics can readily be seen on Map 510-3, the profile plot of the magnetic data, and was also obtained on the previous work done by Scott Geophysics in 1987.

Modelling - see enclosed plates - of the gradient and this high on Lines 300N, 400N, 800N & 1000N suggest a possible low angle contact between the ultramafics and the Cache Creek rocks - possible thrust fault - in contrast to that with the smoother undefined high to the west as illustrated by modelling the profile of Line 700N. The trace of this fault is shown on Map W-510-3. It should be mentioned here that on the modelling plates negative numbers increase easterly occasioned by the fact that the grid plan faces westerly.

A strong narrow linear magnetic low that could be indicative of a shear/fault zone of intensely altered rock can be seen trending north northeasterly in the northwest corner of the grid near the undefined western edge of the ultramafic, and is undelineated to the north.

The strongest linear magnetic low noted is centred on Lines 500W and 600W on the work of Scott Geophysics Ltd. and could be representative of an alteration zone on the fault contact between the ultramafic to the west and Cache Creek andesites. This low is situated near the head of gold pay in Birch Creek.

A potentially large area of low magnetic intensity corresponding to a northerly striking airborne low is noted on the southern parts and ends on Lines 0, 100W & 200W of the Scott Geophysics Ltd. work where it was interpreted as representative of Cache Creek sediments. This low is to the west of mapped outcroppings of tale - bearing ultramafics and crosses the headwaters of small pup whose confluence with Birch Creek marks the head of pay in the latter.

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SUMMARY, CONCLUSIONS & RECOMMENDATIONS.

Between November 18th and 29th, 1993 Peter E. Walcott & Associates Limited carried out a limited ground magnetic survey over a part of the Julia West property in the Atlin area of British Columbia for the Surprise Lake Exploration Limited Partnership.

The magnetic survey confirmed the existence of a low to the west of Birch Creek and suggested that a fault contact between the ultramafics and the Cache Creek volcanic-sedimentary package runs along the east side of the creek as evidenced by the steep magnetic gradient.

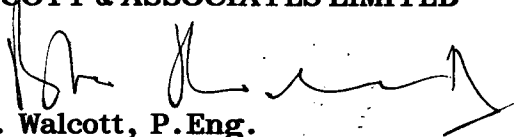
The survey further delineated a narrow linear magnetic low in the northwest corner of the grid trending northwesterly in the same direction as a similar low defined by Scott Geophysics Ltd. in 1987, both of which could be related to listwanitic alteration zones.

As a result the writer recommends that further work be carried out to investigate these possible fault/shear zones for their gold prospect. To this end he suggests that I.P. traversing be carried out to search for low grade gold mineralization associated with the possible listwanitic alteration zones which should be highly silicified, exhibiting high resistivities, and contain some 1 to 4% disseminated sulphides giving rise to moderate chargeability responses.

In addition the magnetic survey should be extended to cover and properly define the magnetic low noted on the eastern extremity of the 1987 grid with possible I.P. followup if warranted.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LIMITED


Peter E. Walcott, P.Eng.
Geophysicist

Vancouver,
British Columbia

December 1993

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APPENDIX

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- i -

COST OF SURVEY.

Peter E. Walcott & Associates Limited undertook the survey on a contract basis for a total cost of \$13,547.50 broken down as follows:

1.	Line establishment 24.1 kms at \$265.00 per km	\$6,386.50
2.	Magnetic surveying 24.1 kms at \$210.00 per km	\$5,061.00
3.	Reporting	<u>\$2,100.00</u>
		<u>\$13,547.50</u> =====

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PERSONNEL EMPLOYED ON SURVEY.

<u>Name</u>	<u>Occupation</u>	<u>Address</u>	<u>Dates</u>
Peter E. Walcott	Geophysicist	Peter E. Walcott & Assoc. Ltd. 605 Rutland Court, Coquitlam, B.C. V3J 3T8	Dec. 5th - 12th, 93
G. MacMillan	Geophysical Operator	" "	Nov. 18th - 29th, 93
J. W. R. Smith	Geophysical Assistant	" "	Nov. 23rd - 28th, 93
J. Walcott	Typing	" "	Dec. 29th, 1993

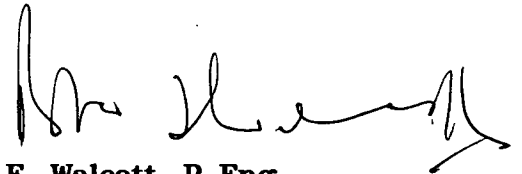
**PETER E. WALCOTT
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CERTIFICATION.

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

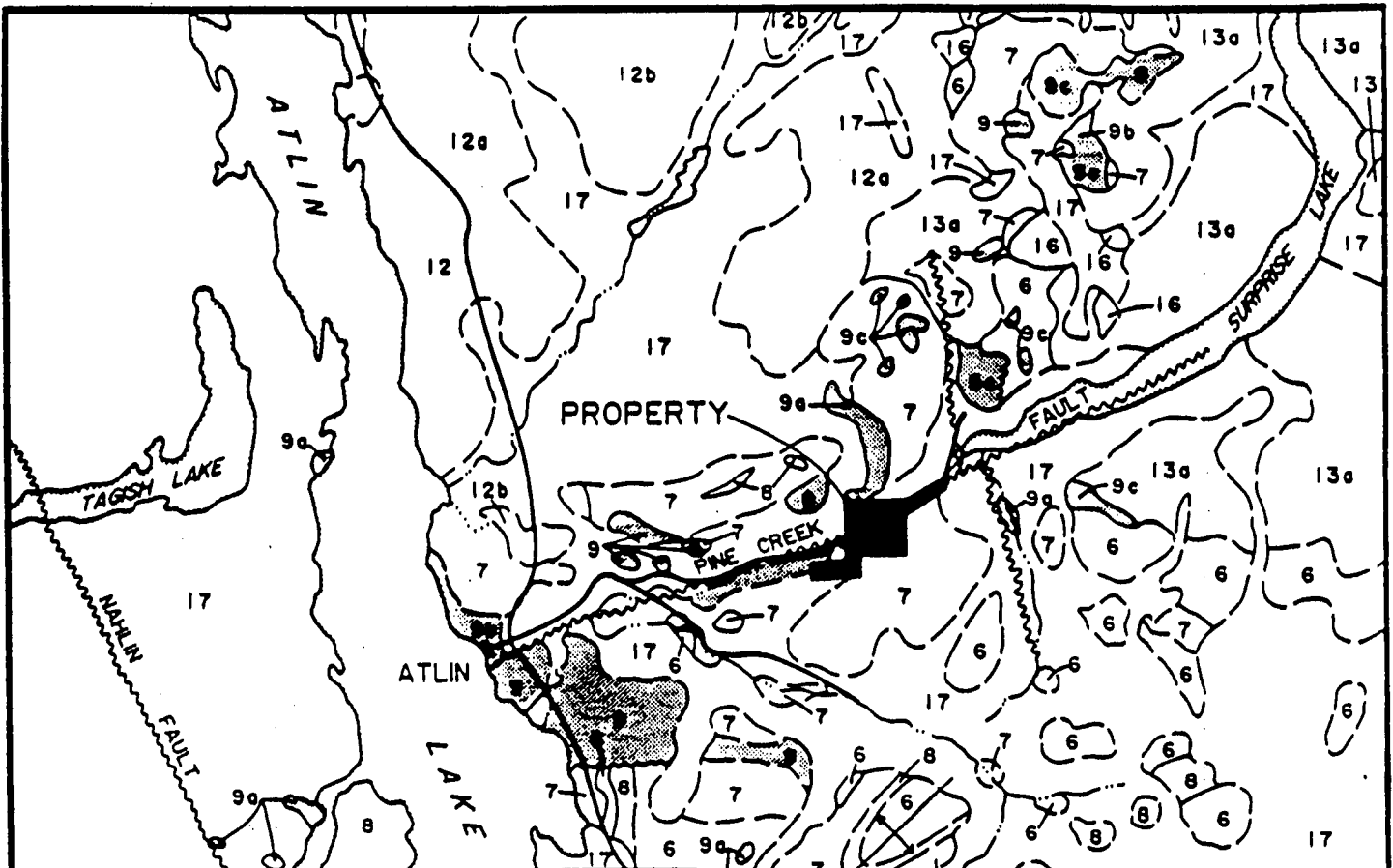
1. I am a graduate of the University of Toronto in 1962 with a B.A.Sc. in Engineering Physics, Geophysics Option.
2. I have been practising my profession for the last thirty one years.
3. I am a member of the Association of Professional Engineers of British Columbia and Ontario.
4. I hold no interests, direct or indirect, in the securities or properties of Surprise Lake Exploration Partnership Limited nor do I expect to receive any.



Peter E. Walcott, P.Eng.

**Vancouver,
British Columbia**

December 1993



LEGEND

QUATERNARY

17 GLACIAL DRIFT ALLUVIUM

TERTIARY

16 OLIVINE BASALT

CRETACEOUS

13 ALASKITE

JURASSIC

12 UNDIFFERENTIATED GRANITIC ROCKS

PENNSYLVANIAN & PERMIAN ATLIN INTRUSIONS

9 PERIDOTITE

9b SERPENTINITE

9c CARBONITIZED SERPENTINITE

9d TALC BEARING (STEATITIZED) ULTRAMAFIC ROCKS

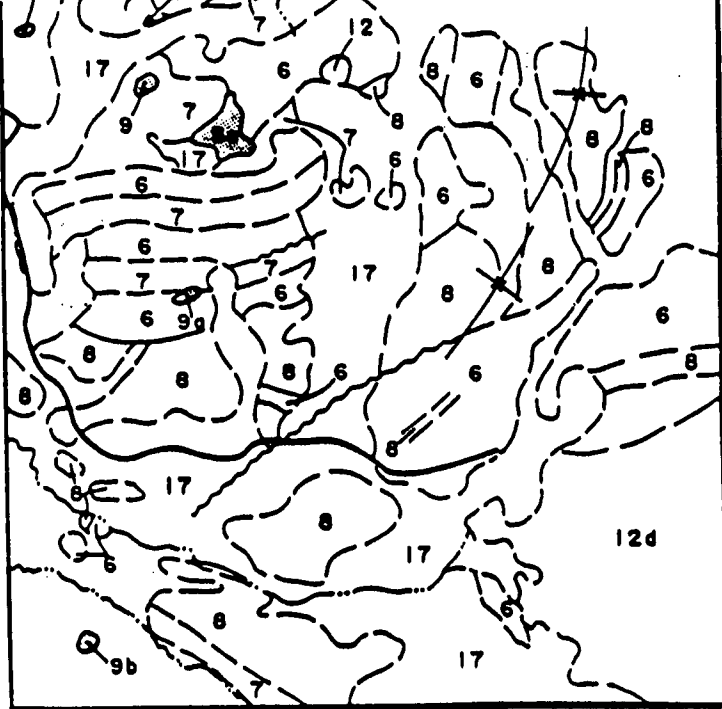
CACHE CREEK GROUP

6 CHERT, ARGILLITE, CHERT PEBBLE CONGLOMERATE

7 GREENSTONE, GREYWACKE, DERIVED AMPHIBOLITE

8 LIMESTONE, LIMESTONE BRECCIA

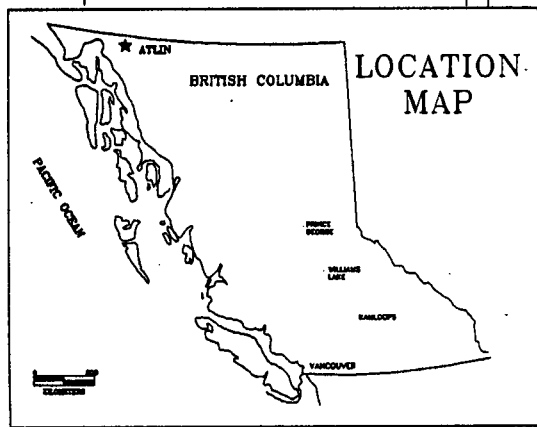
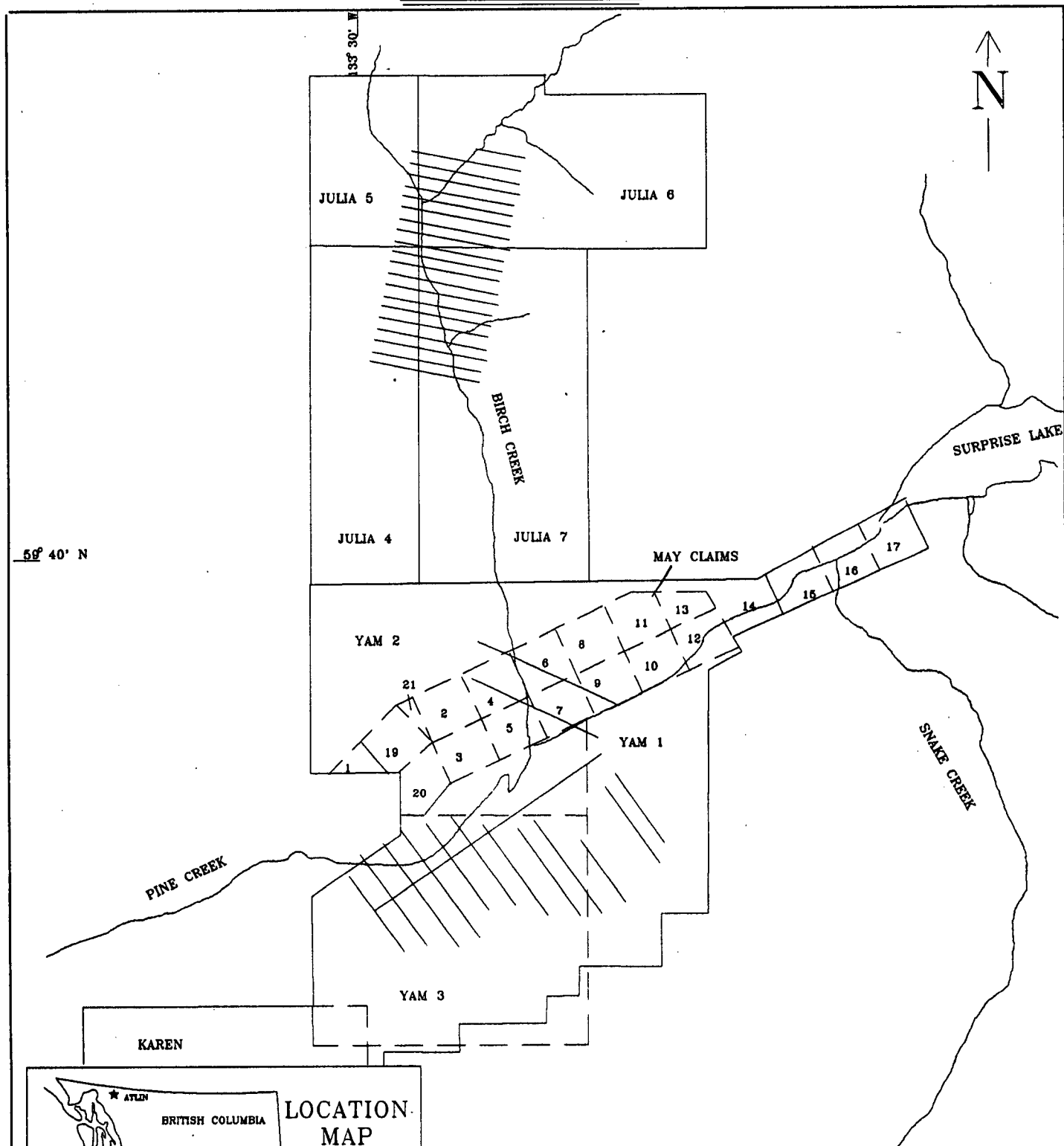
——— GRAVEL ROAD ~~~~~ FAULT
 —+— SYNCLINE —+— ANTICLINE



REVISED	PINELODE	
	REGIONAL GEOLOGY	
PROJ. No. 369	SURVEY BY: _____	DATE: MAY 1950
N.T.S. 104 N/12	DRAWN BY: HARDEN	SCALE: 1:250,000
DWG. No.	NORANDA EXPLORATION	
	OFFICE: WHITEHORSE	

SCAL 11827

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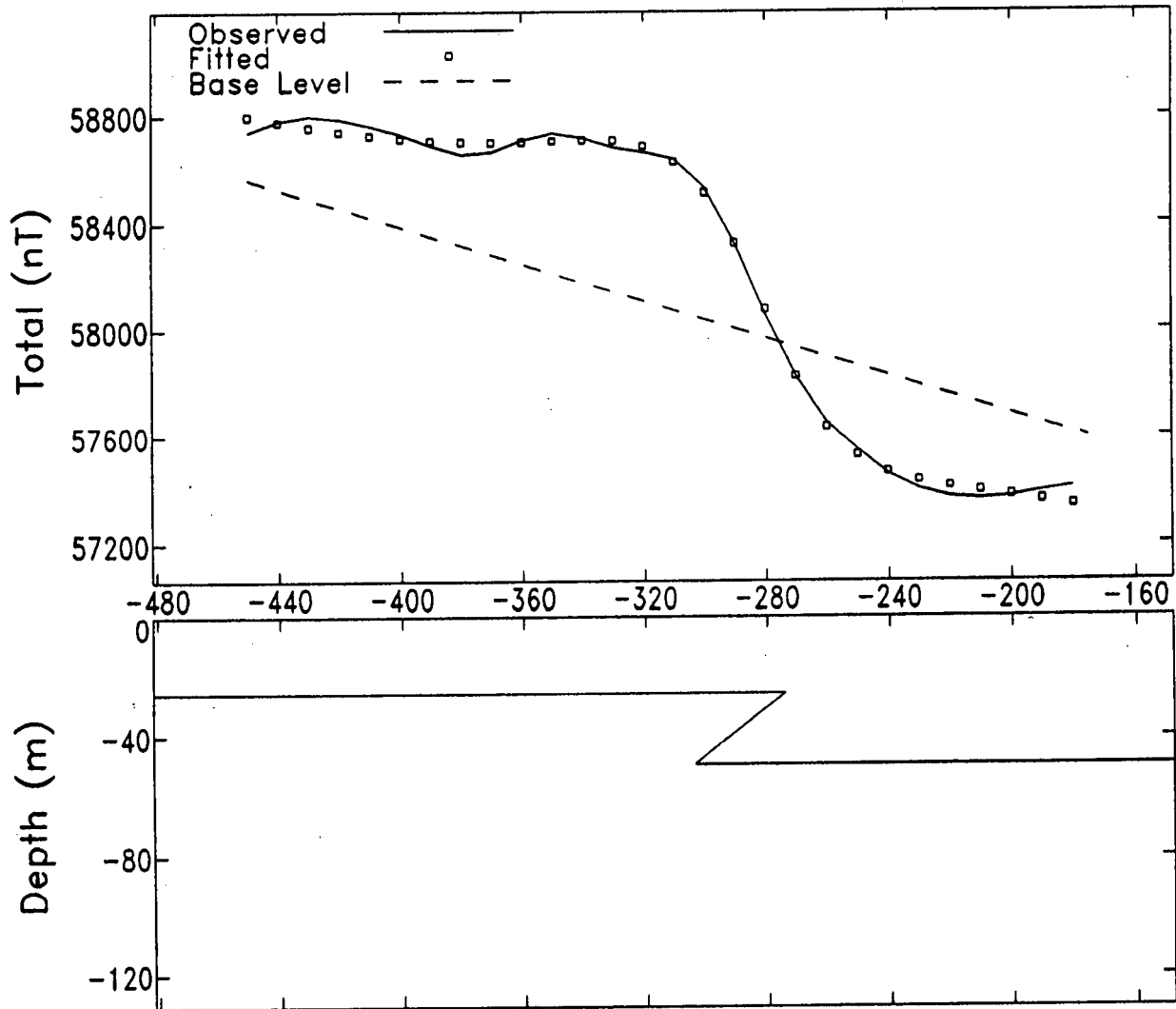
SURPRISE LAKE EXPLORATION LIMITED PARTNERSHIP

JULIA PROPERTY, ATLIN M.D., B.C.
CLAIM & GRID LOCATION MAP
N.T.S. 104 N/ 11 & 12

500 0 500 1000 1500
(METERS)

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SURPRISE LAKE EXPLORATION
Line 300 N



MODEL PARAMETERS:

Model Type		Step
Depth	F	25.4 m
Thickness	F	23.8 m
Dip	F	39 deg
Susceptibility	F	0.0142 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	-274.1033 m
Cross Position	X	300 m
Base Level	F	57945.91 nT
Base Slope	F	-3.511573 nT/m

(F-fitted, X-fixed, L-limit)

GEOMAGNETIC FIELD:

Field Strength	58000 nT
Inclination	76 deg
Declination	28 deg

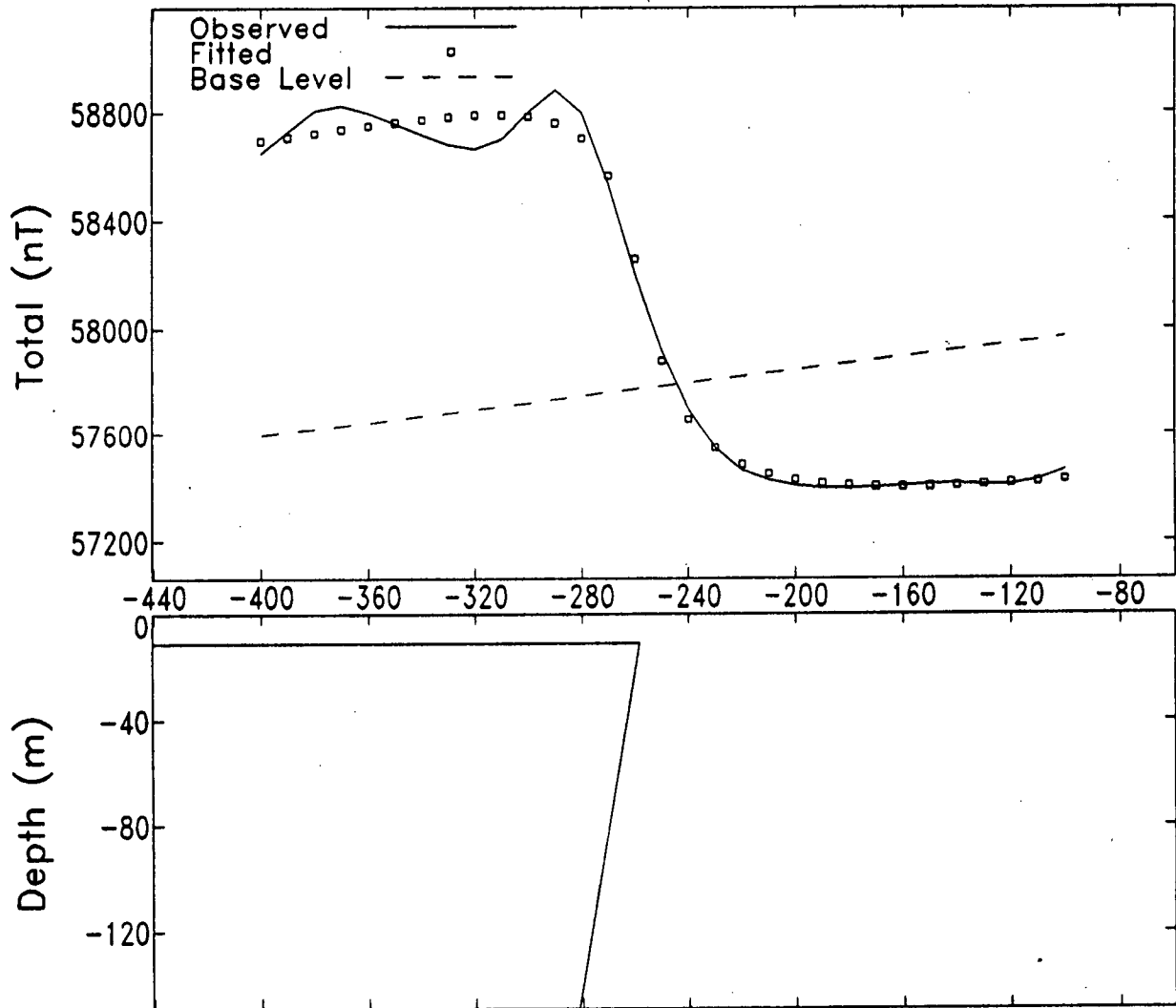
COORDINATES:

Sensor Height	2 m
Strike Perp	85 deg
Line Direction	-80 deg
Main Direction	-80 deg
Main Offset	
Cross Direction	
Cross Offset	

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SURPRISE LAKE EXPLORATION

Line 400 N



MODEL PARAMETERS:

Model Type		Step
Depth	F	11.1 m
Thickness	F	2997 m
Dip	F	81 deg
Susceptibility	F	0.00522 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	-258.6469 m
Cross Position	X	400 m
Base Level	F	57771.36 nT
Base Slope	F	1.234634 nT/m

(F-fitted, X-fixed, L-limit)

GEOMAGNETIC FIELD:

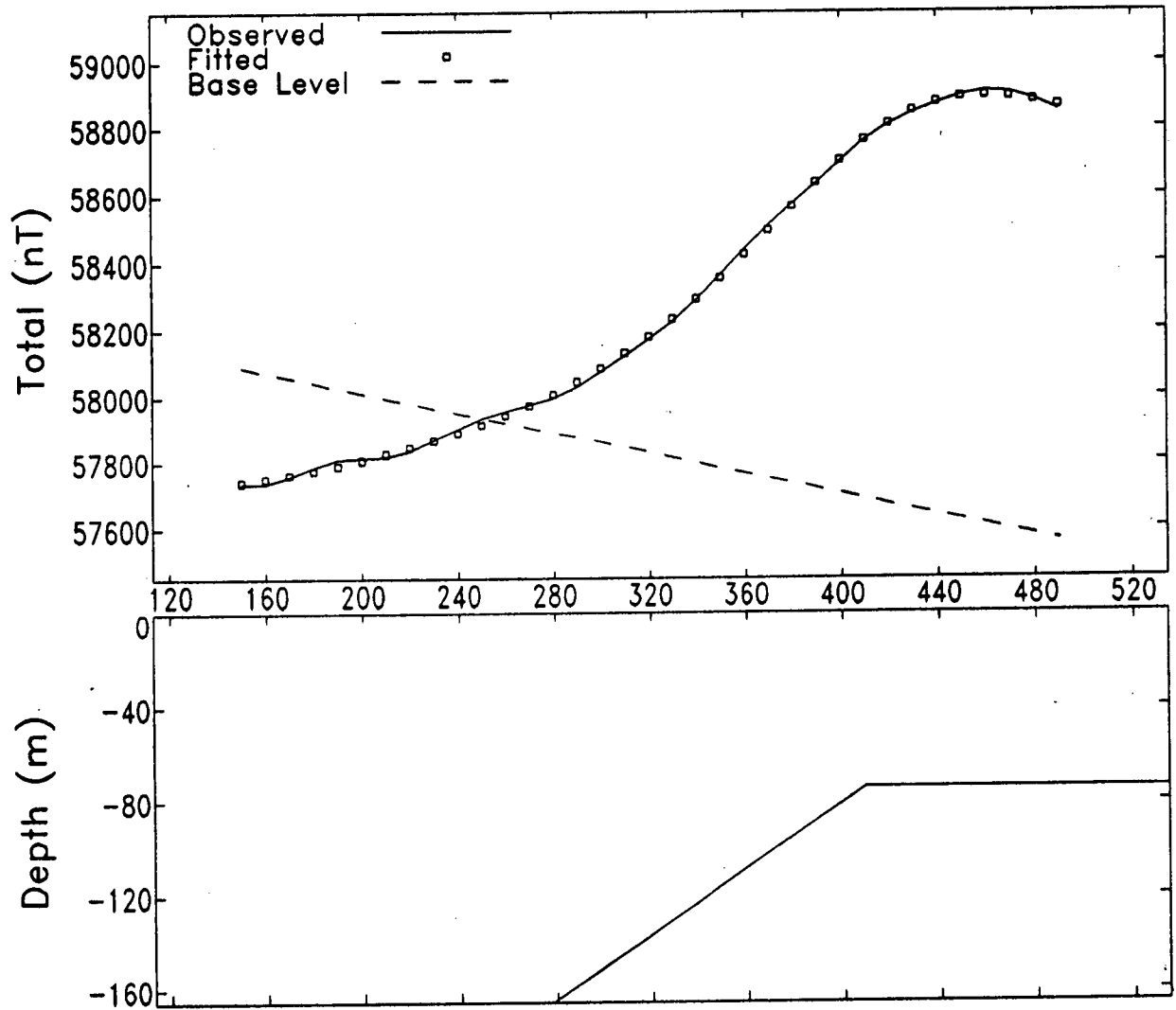
Field Strength	58000 nT
Inclination	76 deg
Declination	28 deg

COORDINATES:

Sensor Height	2 m
Strike Perp	85 deg
Line Direction	-80 deg
Main Direction	-80 deg
Main Offset	
Cross Direction	
Cross Offset	

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SURPRISE LAKE EXPLORATION
Line 700 N



MODEL PARAMETERS:

Model Type		Step
Depth	F	74.1 m
Thickness	F	671 m
Dip	F	145 deg
Susceptibility	F	0.0124 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	409.0367 m
Cross Position	X	700 m
Base Level	F	57688.86 nT
Base Slope	F	-1.546175 nT/m

(F-fitted, X-fixed, L-limit)

GEOMAGNETIC FIELD:

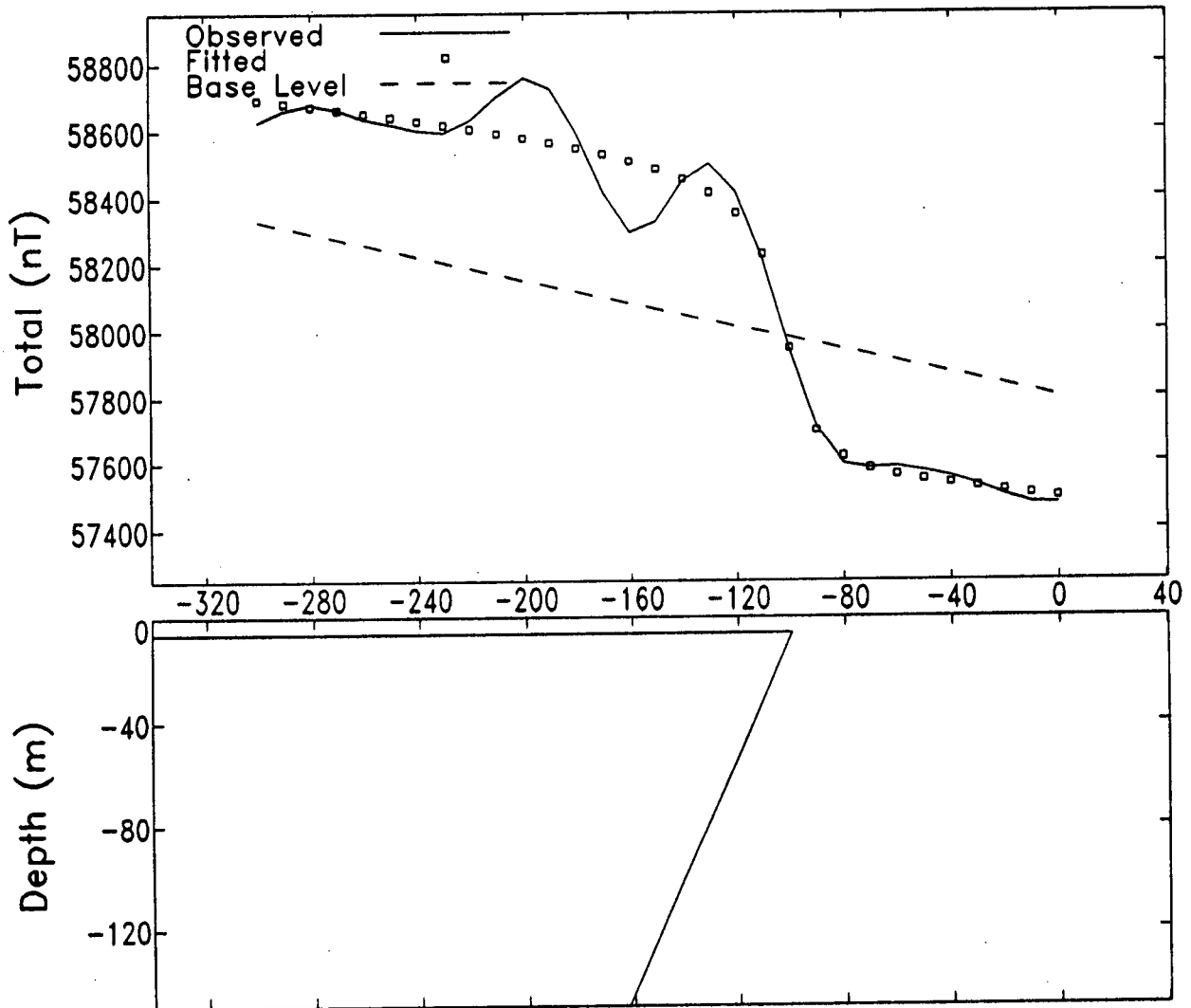
Field Strength	58000 nT
Inclination	76 deg
Declination	28 deg

COORDINATES:

Sensor Height	2 m
Strike Perp	-80 deg
Line Direction	-80 deg
Main Direction	-80 deg
Main Offset	
Cross Direction	
Cross Offset	

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SURPRISE LAKE EXPLORATION
Line 800 N



MODEL PARAMETERS:

Model Type		Step
Depth	F	6.49 m
Thickness	F	278 m
Dip	F	67 deg
Susceptibility	F	0.00297 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	-99.99396 m
Cross Position	X	800 m
Base Level	F	57976.77 nT
Base Slope	F	-1.759181 nT/m

(F-fitted, X-fixed, L-limit)

GEOMAGNETIC FIELD:

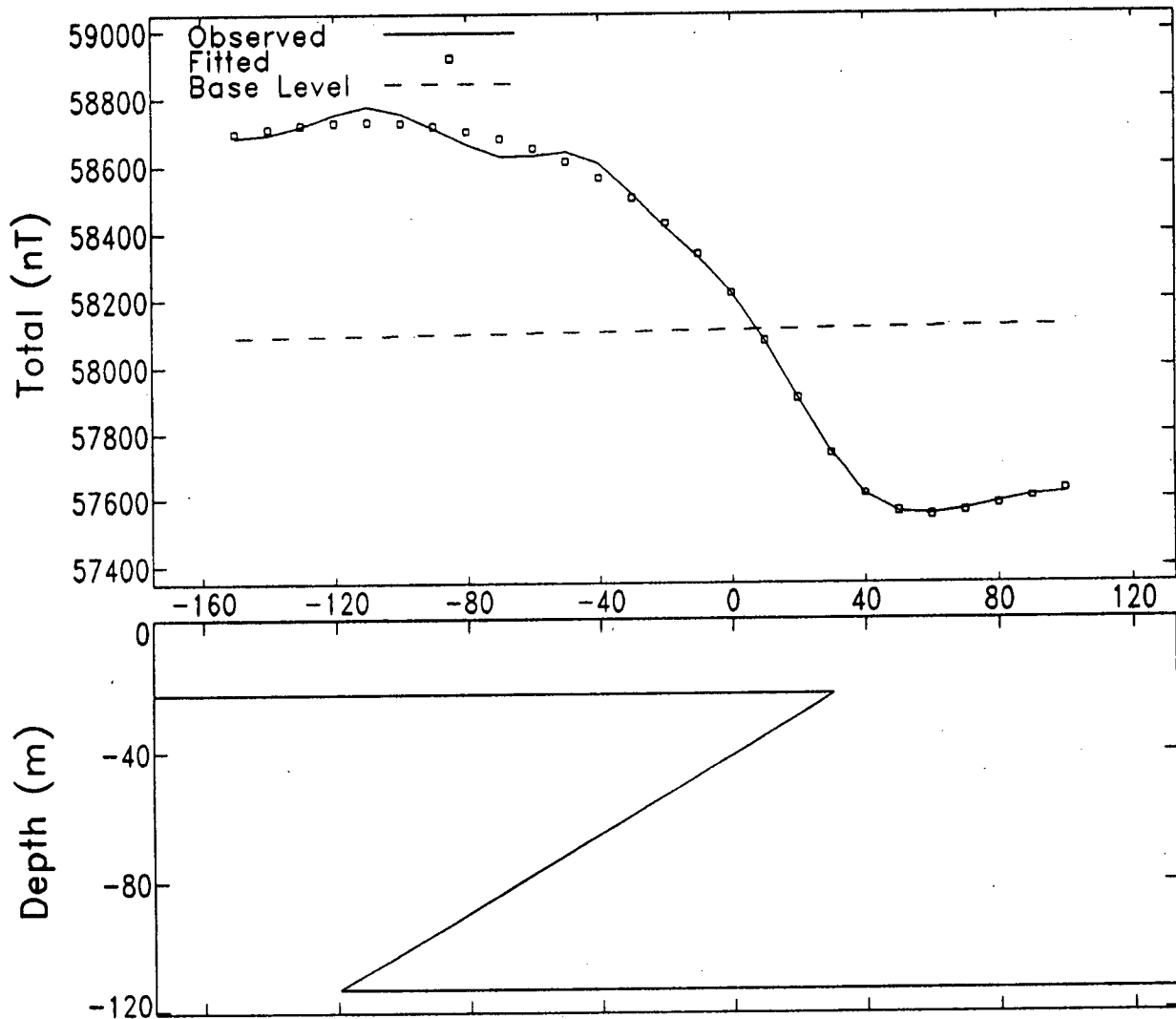
Field Strength	58000 nT
Inclination	76 deg
Declination	28 deg

COORDINATES:

Sensor Height	2 m
Strike Perp	85 deg
Line Direction	-80 deg
Main Direction	-80 deg
Main Offset	
Cross Direction	
Cross Offset	

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SURPRISE LAKE EXPLORATION
Line 1000 N



MODEL PARAMETERS:

Model Type		Step
Depth	F	22.7 m
Thickness	F	90.8 m
Dip	F	31 deg
Susceptibility	F	0.00909 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	30.4062 m
Cross Position	X	1000 m
Base Level	F	58114.48 nT
Base Slope	F	.142841 nT/m

(F-fitted, X-fixed, L-limit)

GEOMAGNETIC FIELD:

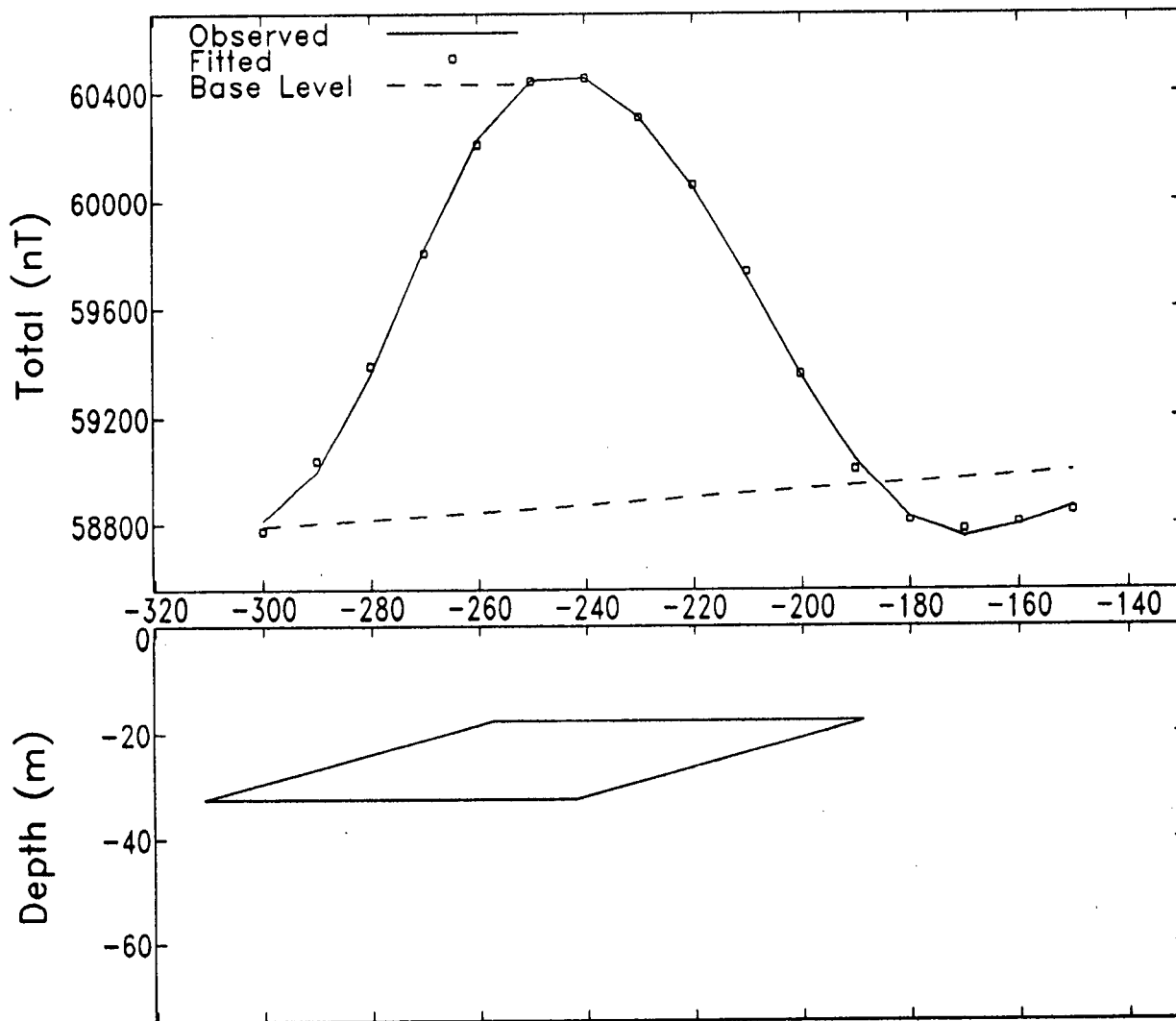
Field Strength	58000 nT
Inclination	76 deg
Declination	28 deg

COORDINATES:

Sensor Height	2 m
Strike Perp	85 deg
Line Direction	-80 deg
Main Direction	-80 deg
Main Offset	
Cross Direction	
Cross Offset	

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SURPRISE LAKE EXPLORATION
Line 1400 N



MODEL PARAMETERS:

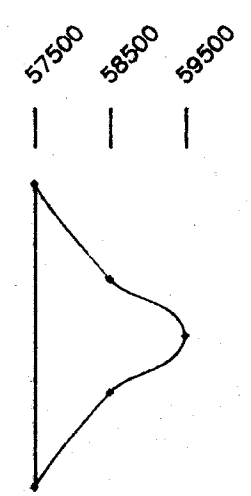
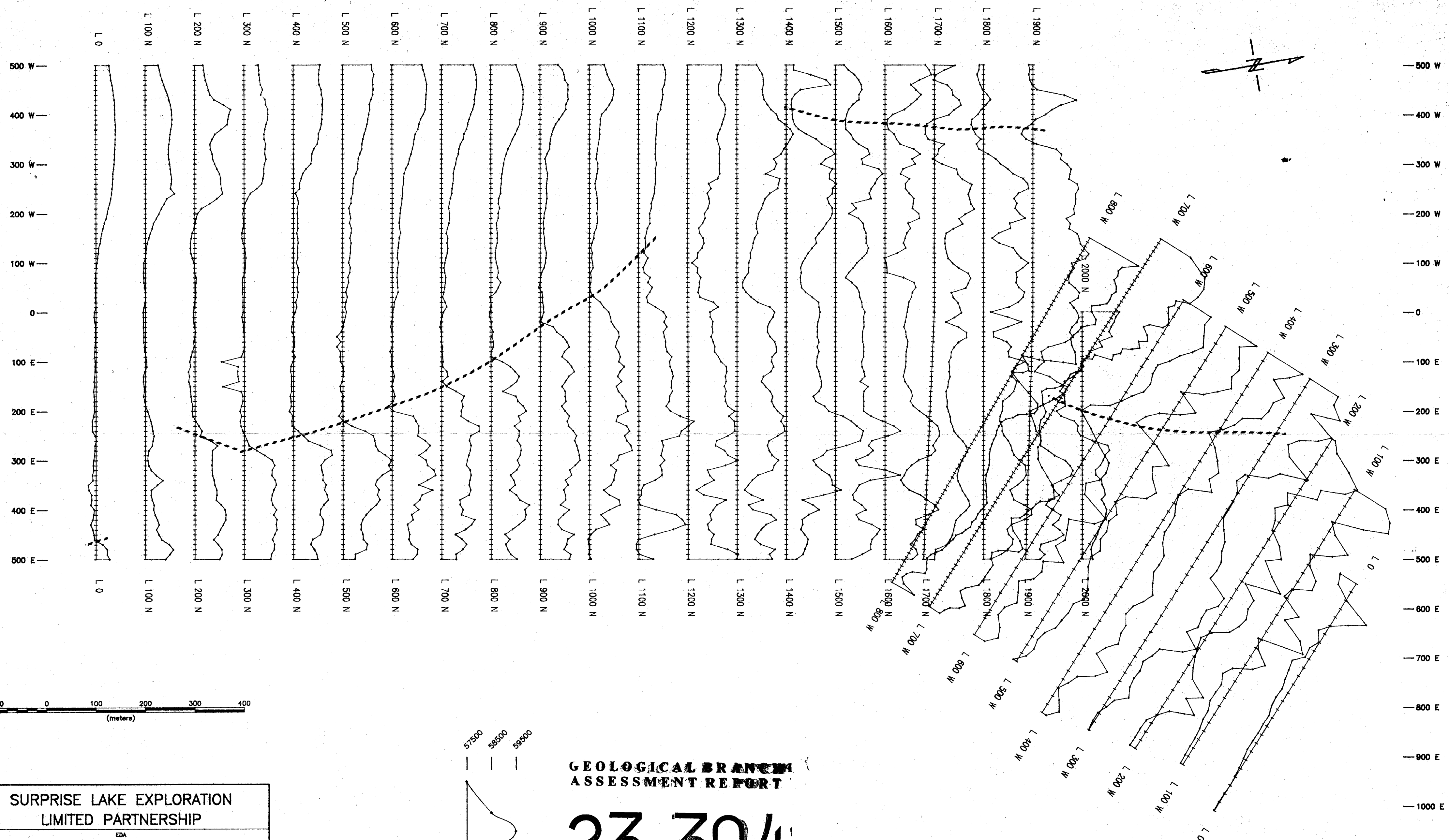
Model Type		Tabular2
Depth	F	17.6 m
Half Width	F	34.4 m
Half Length	X	75.0 m
Offset	X	0 m
Dip	F	165 deg
Thickness	F	14.7 m
Susceptibility	F	0.0271 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	-223.0869 m
Cross Position	X	1400 m
Base Level	F	58896.88 nT
Base Slope	F	1.385399 nT/m

GEOMAGNETIC FIELD:

Field Strength	58000 nT
Inclination	76 deg
Declination	28 deg

COORDINATES:

Sensor Height	2 m
Strike Perp	-80 deg
Line Direction	-80 deg
Main Direction	-80 deg
Main Offset	
Cross Direction	
Cross Offset	



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

23,304

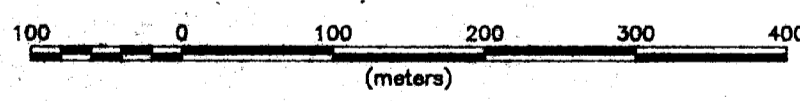
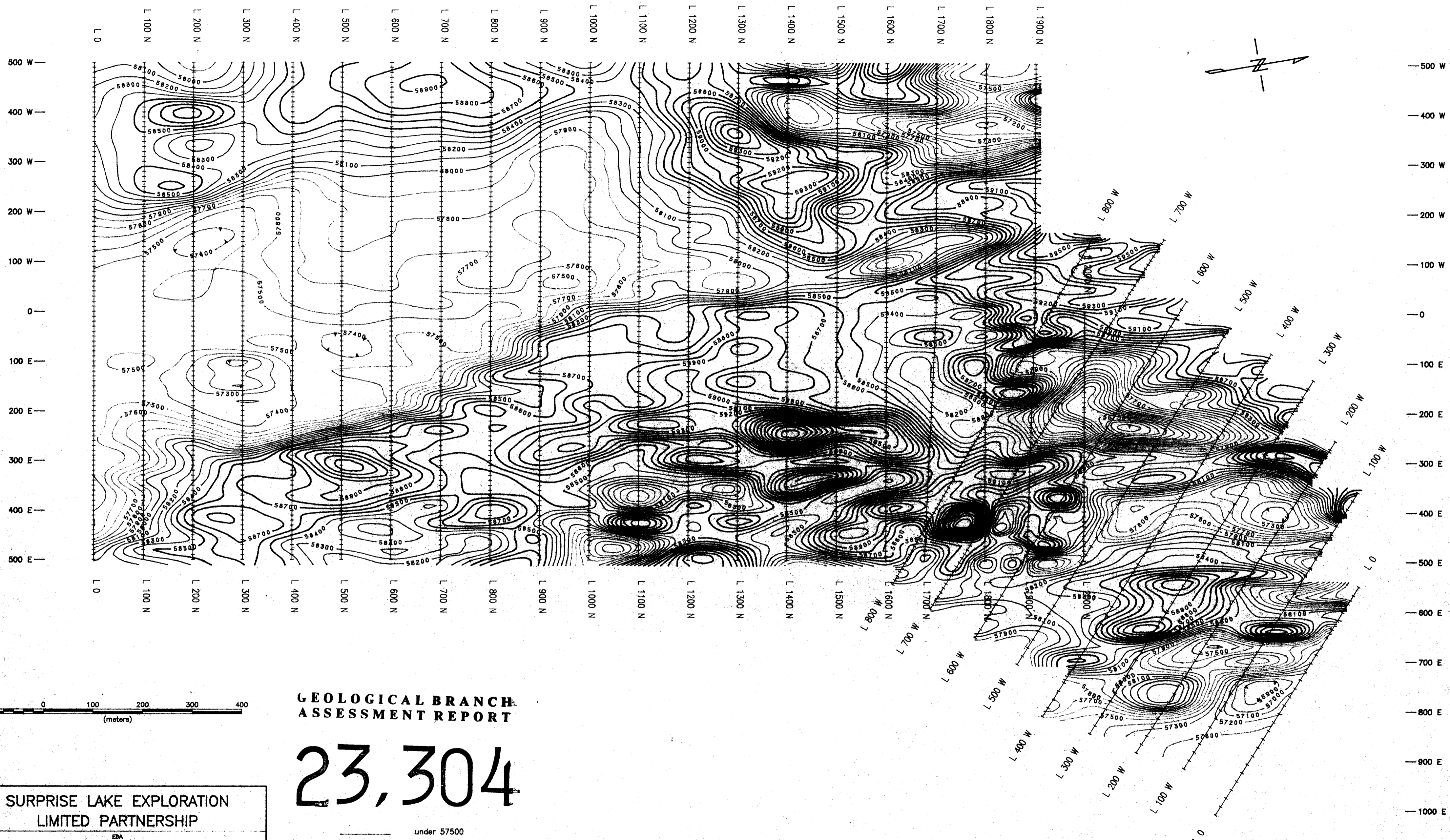
1 cm. = 1000 gammas
Base level = 57500
--- Interpreted fault

**SURPRISE LAKE EXPLORATION
LIMITED PARTNERSHIP**

EDA
**MAGNETOMETER SURVEY
PROFILES OF TOTAL FIELD INTENSITY**
in gammas

JULIA CLAIMS
ATLIN MIN. DIV., BRITISH COLUMBIA
NOVEMBER 1993

Map No. W-510-3 N.T.S. 104 N/11 & 12
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**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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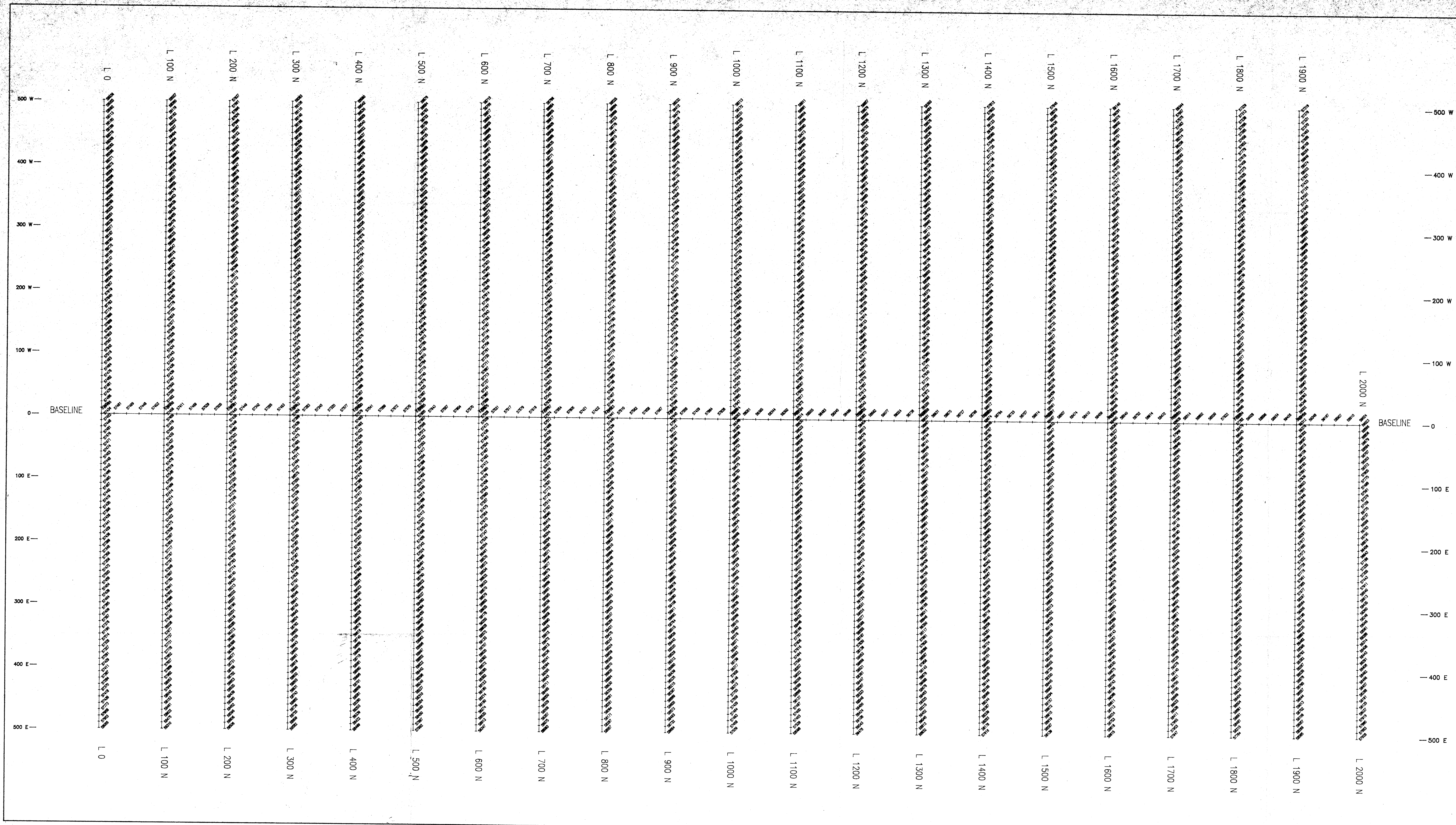
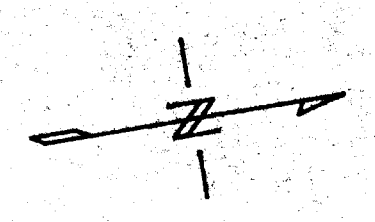
- under 57500
- 57500 to 57900
- 58000 to 584000
- 58500 to 58900
- 59000 and over

**SURPRISE LAKE EXPLORATION
LIMITED PARTNERSHIP**

EDM
**MAGNETOMETER SURVEY
CONTOURS OF TOTAL FIELD INTENSITY
in gamma**

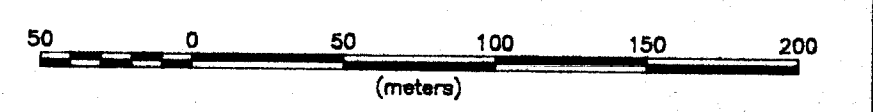
JULIA CLAIMS
ATLIN MIN. DIV., BRITISH COLUMBIA
NOVEMBER 1993

Map No. W-510-1 N.T.S. 104 N/11 & 12
PETER E. WALCOTT & ASSOC. LTD.



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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**SURPRISE LAKE EXPLORATION
LIMITED PARTNERSHIP**

DA
**MAGNETOMETER SURVEY
POSTINGS OF TOTAL FIELD INTENSITY**

JULIA CLARK
ATLIN MIN. DIV., BRITISH COLUMBIA
NOVEMBER 1993

Map No. W-510-2 N.T.S. 104 N/11 & 12
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