

GEOPHYSICAL SURVEYS
PIKE MINERAL CLAIM GROUP

Traffic Mountain
Watson Lake Mining Division
Yukon Territory

Longitude 130° 40' West
Latitude 62° 08' North

by:

John S. Brock
ATLAS EXPLORATIONS LIMITED

June 23 - July 12, 1966
July 27 - Aug. 18, 1966
Oct. 18 - Nov. 20, 1966
May 29 - June 23, 1966

GEOPHYSICAL SURVEYS
PIKE MINERAL CLAIM GROUP

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GEOPHYSICAL SURVEYS
PIKE MINERAL CLAIM GROUP

INTRODUCTION

Due to prospecting in the Traffic Mountain area, Atlas Explorations Limited became interested in the Pike Lake region in early June of 1966. The discovery of mineralized float prompted the staking of the Pike Mineral Claims. Follow up work consisted of aeromagnetic surveys, ground magnetic, electromagnetic and induced polarization surveys as well as geologic and geochemical surveys. Results proved encouraging and bulldozer trenching and limited diamond drilling programs were carried out during 1966 and 1967. Geophysical surveys were done during July, August and October-November, over three separate periods as further zones of economic potential were outlined during the course of follow-up and development work.

LOCATION AND ACCESS

The Pike Group is centered roughly at latitude $62^{\circ} 08'$ north and longitude $130^{\circ} 40'$ west, and covers much of the north half of claim sheet 105J-2, and a western portion of sheet 105J-1. The group is elongated in a westerly direction, and extends from the south slopes of Traffic Mountain to a point 15 miles to the west.

Access to the property is by aircraft from Ross River; air-line mileage is 52 miles. Most float-equipped aircraft may land on Pike Lake, $\frac{3}{4}$ miles in length. A temporary camp was established on the north side of Pike Lake, from which supplies were transported to the base camp, $1\frac{1}{2}$ miles to the

west, by helicopter or D6 Cat. Pike Lake is connected with the base camp by Cat road. During April 1967, a tote road was constructed from Finlayson Lake, on the Watson Lake-Ross River road to the Pike Group. This access served as 'winter road' entry and provided bombardier transport as far as the Telly River which could not be forded with the bombardier.

METHOD OF SURVEY

Instruments Used: For the magnetometer survey, a Jalander 46-65 magnetometer was used, the instrument is hand held and measures the vertical magnetic component by use of an oil-dampened fluxgate which automatically levels itself in the vertical direction. The range of this instrument is 10 to 250,000 gammas over five sensitivity ranges, the lowest being 10 gammas per scale division. The magnetometer is of light weight and readings can be obtained quickly, a conversion factor is necessary before gamma values can be determined.

For the electromagnetic survey, a Crone JEM dual frequency unit was employed. The Crone unit is of the inductive type and may be used either as a horizontal or vertical loop apparatus. Measurements are made of the resultant dip angle of the field and the width of null or out of phase component. It is designed to be operated with a maximum coil spread of 300 feet on frequencies of 480 and 1800 cps, with no inter-connecting cables. The effective depth penetration is 300 feet for a horizontal conductor with maximum coil spread. The equipment was chosen in order to give reliable information on the attitude and configuration of a conductor with results free from error due to topographic relief.

The induced polarization equipment was manufactured by Geoscience Incorporation of Lexington, Massachusetts. The Sender supplies a preset constant current that is applied

to the ground through two electrodes. The voltage between two potential electrodes is passed into the receiver. A meter is nulled at one frequency and gives a direct reading of the percent frequency effect at a second frequency. From the applied current and received potential, the apparent resistivity of the medium may be calculated

Linecutting: All grids designed for ground geophysical and geochemical surveys were laid out using 400 foot line spacing with 100 foot station intervals. Two hundred foot line spacing was used over areas requiring detailed information. 800 foot line spacing was used over areas requiring reconnaissance surveys for location of aeromagnetic anomalies. Central base lines were used for control, all cross lines were surveyed by picket and chain methods. Linecutters were hired from the settlement of Ross River. Survey control was later checked by stadia survey.

Magnetometer Survey: Prior to the actual magnetometer survey, readings were taken along the central base line at cross line intersection points. These stations were looped and re-read every hour as a means of controlling drift and diurnal variations. With base stations of an established value serving as reference points for each cross line portion of the survey, a rapid and precise check was kept on magnetic variations and the entire survey was thus kept on a relative basis during day to day operation. Each cross line was read with re-checks at the base station within every hour as an internal check for magnetic variation.

Electromagnetic Survey: All surveys were run with horizontal loop configuration and 300 foot coil spacing in order that the highest response could be obtained from flat lying sulphide bodies. Both 1800 and 480 cps readings were taken at each station. The coil configuration was not adaptable to conditions

of conductive overburden and conditions from such was expected. All traverses were made by the 'in line' method and over the same survey lines as the other geophysical and geochemical surveys.

Induced Polarization Survey: The electrodes were placed in collinear array, with the current electrodes separated by a distance 'a'. The potential electrodes were also separated by a distance 'a'. The nearest current and potential electrodes are then also separated by a distance 'Na', where $N = 1, 2$ or 3 . By varying N , the sender-receiver spacing, one obtains a depth-probing effect, since the effective depth of exploration varies with this spacing.

TREATMENT OF DATA

Magnetic Results: Magnetic results were corrected for diurnal and drift by the field operator. Final gamma values were then plotted on a grid plan using scale of 1:400. Data was then profiled and contoured using an interval of 20 gammas. All maps show major topographic features and claim post locations.

Electromagnetic Results: All resultant dip angles were plotted on a grid plan to scale 1:400. High and low frequency results were profiled, on a separate map high frequency values were contoured.

Induced Polarization Results: The results were plotted at the intersection between 45° diagonal lines drawn from the mid-points of the sender and receiver dipoles. Percent frequency effect values are plotted below the reference line, resistivity values in ohm-feet above. The row of data nearest the reference line corresponds with $N = 1$ values, the second row $N = 2$ and the third $N = 3$.

GEOLOGY

Pike region lies within major northwesterly-striking wrench fault zone and is underlain by steeply-dipping early Paleozoic cherts and shales folded around northwest-southeast striking axes and intruded by a Cretaceous granitic stock.

A portion of the Pike number 1 grid is underlain by steeply-dipping, N 70° W striking, partially chilled biotite granite dykes ranging from a few feet to 500 feet wide with length in total of about 2 miles. This dyke system appears to be an offshoot of the underlying Pike stock.

No outcrop was observed in the area of Pike Number 2 grid, however graphitic schist horizons bearing magnetite mineralization were found over Pike Number 3 grid.

Porphyry copper-silver mineralization with minor lead zinc veins, occur throughout much of the hydrothermally altered (silica, chlorite, clay-sericite, and biotite), chilled biotite granite dyke of the Pike grid.

GEOPHYSICAL RESULTS

Grid 1

Ground Magnetics: The Pike Number 1 grid area has a background level of about 1100 gammas, the survey gradient slopes southward from an average of 1200 gammas in the north to 1000 gammas in the south. The most pronounced anomalous feature is a broad sinuous band of below-background values which trend N 70° W and run across the entire grid area. Within this band values range up to 3000 gammas above background. Although the zone of high magnetics is contiguous, its appearance relative to the nearly smooth background profile level, is erratic for it is composed of isolated troughs with widely varying values.

A comparison between outcrop geology and ground magnetics shows that a narrow dyke-like, N 70° W-trending granitic intrusive underlies a portion of the magnetically negative zone. In the eastern grid area the dyke corresponds roughly

with the southern margin of the magnetically high zone, although the far eastern end of the dyke nearly bisects the zone. In the western grid area the dyke occurs in the midst of a much broader magnetic zone and appears to bear no particular spacial relation to it. In brief, relations between outcrop geology and ground magnetics suggest that the dyke is magnetic to varying degrees and is a small offshoot of a much larger underlying granitic mass.

It is notable that what are probably successively lower levels of the Pike granitic intrusion are reflected by outcrop geology, ground EM, and ground magnetics. The geologic map shows a dyke-like structure of 100 to 600 feet wide. EM indicates a broad non-conductive structure underlying the dyke with widths between 1,000 to 2,600 feet. The zone of high magnetics underlies not only the dyke and the EM non-conductive area, but expands into the western grid area. The discrepancy between EM and magnetics is perhaps best explained by the presence of conductive country rock capping most of the granitic intrusive in the western grid area.

Mineralized zones 1 and 2 (see geologic map) are crudely reflected by ground magnetics. In zone 1, mineralization occurs near or just north of a contact between high magnetics (intrusive) and country rock. In general the contact situation between negative anomalous zones and positive anomalous zones, appears to reflect erratically distributed pyrrhotite mineralization. Pyrrhotite is a prominent mineral in the known copper, lead, zinc assemblages of this zone.

Ground Electromagnetics: Much of the Pike grid area shows conductance with high frequency (1800 cps) resultant dip angles ranging from -5° to -30° . Two broad anomalous zones of less than -15° dips occur between the following coordinates: 50W to 26W, 4N-16N and 80W to 40W, 4S-26S. Both

anomalies are characterized by small elongate troughs of -25° and -30° dips which range in length from 100 to 1,000 feet and strike $N50^{\circ} - 70^{\circ} W$. The two anomalies are separated by a northwest-striking non-conductive band of about 1,500 feet wide. Dips of conducting units within the anomalies are steep, a particularly good example occurring on line 56W between 4S and 12S where a sub-outcrop positive hump occurs between two equally-spaced troughs of -15° and -30° .

Because the EM anomalies are broad, occur within a large EM conductive area, and correspond in location and attitude with known carbonaceous sediments, they are believed to reflect conductive country rocks. Individual conductive units strike $N 70^{\circ} W$, but the total conductive zone strikes northeasterly, indicating that the units are lens-like and lie within a stratigraphically transgressive zone.

The non-conductive band ranges in width from 1,000 to 2,600 feet and trends $N45^{\circ} W$ through the grid area. Because this band corresponds closely with outcropping granitic intrusive and a negative magnetic anomalous zone (interpreted as indicating intrusive) it too is believed to reflect intrusive rock.

Mineralization zones 1 and 2 lie close to the south margin of the non-conductive band; this relation reflects, as does ground magnetics, that mineralization occurs along the contact of the granitic intrusive of the Pike grid.

Induced Polarization (IP) Five profile lines were run in the western Pike grid area on lines 60W, 56W, 44W, 32W and 16W. Electrode spacing was $a = 100$ feet (except for line 60W where $a = 200$) and high frequency of 3 cps and low frequency of 0.1 cps were used.

The lines consist of central IP lows (reflected by negative P.F.E., or percentfrequency effect, which is directly proportional to metal factor) with extended anomalous (in PFE)

areas to the north and south; these low points lie north of mineralized intrusive. Because of an extensive PFE anomaly south of the central low and its cursory relation to mineralization.

In general, the low resistivity areas appear to reflect conductive country rock (carbonaceous sediments) and high resistivity areas, intrusive or pure quartzite or cherts. The only line crossing outcropping granite is 44W where only moderate resistivity values are shown. Because mineralization is known to occur in intrusive, the first prerequisite of significant PFE anomalies would seem to be a correspondence with high resistivity. The extensive anomalies correspond only locally with high resistivities, and are therefore probably caused by carbonaceous material. Only one point of PFE rise corresponds with high resistivity, and this is on line 56W at the western edge of zone 1 where mineralization could be reliably predicted.

Grid 2

Ground Magnetics: The Fike Grid Number 2 was surveyed magnetically during the late fall of 1966 in order to further extend results obtained on Grid 1 to the southwest. The magnetic survey outlined a broad sinuous anomaly trending in a northwesterly direction for approximately the length of the survey area, approximately 10,000 feet. Within this broad zone of magnetic response lies scattered peaks of single line value. The magnetics are partially coincident with a conductive zone extending in the same direction. It is thought that the probable cause of the magnetic anomaly and its enclosed irregular 'highs' is formational and due to the same rock units as explaining geophysical responses on Grid 1.

Ground Electromagnetics: A large, well defined conductor striking in a northwesterly direction across the grid was

outlined in partial coincidence with the magnetic responses. Within the conductive zone numerous small resultant negative dip angles of high intensity are delineated, their apparent strike is at 45° to the main conductive body. The electromagnetic results are thought to be due to an extension of carbonaceous horizons outlined on the Fike Number 1 Grid.

Grid 3

Ground Magnetics: An elongate aeromagnetic anomaly striking in a northwesterly direction was fully delineated on the ground by magnetometer survey. Good coincidence was obtained in relative intensities between the two surveys. No interpretation of the anomaly was carried out due to ground geologic work outlining concentrations of magnetite in metamorphic formations. Detailed geologic examinations of outcrop at geophysical stations revealed that coincident magnetic-electromagnetic anomalies within the major anomaly lay immediately over steeply-dipping black carbonaceous slates at points where slates have a magnetic content of one percent or better. Slates were crushed and tested for magnetics on stations across the three major magnetic anomalies in the area and a very close correspondence between variations in magnetometer profiles and percentage of magnetic material in the slates was found. Ground EM anomalies are abundant and may be unquestionably explained by the black slates.

Ground Electromagnetics: A Ronka EM 16 electromagnetic unit was used in place of the Crone JEM for the electromagnetic survey. It was estimated that the Ronka would be a deeper penetrating unit for follow-up of airborne electromagnetic anomalies in this area than the Crone. Results gained were on 18.6 kc frequency. The conductors outlined are extensive and trend in a northwest direction, the area outlined is more extensive than that shown by the airborne survey, the reason being the ground surveys deeper penetration (600 feet vs. 150 feet). The ir-

regular profiles of in and out-phase response is extremely pronounced and conductive axis are difficult to trace. The electromagnetics are typical of graphitic horizons with varying conductivity. This fact was later proven by ground examination of areas of high conductivity.

CONCLUSIONS

Grid 1: A broad magnetic anomaly of average intensity 1100 gammas trends N70°W and runs across the entire Pike grid, the magnetic response appears to reflect granitic intrusive. Pyrrhotite mineralization gives rise to isolated and erratic magnetic 'highs' throughout the granitic intrusive, the erratic magnetics perhaps indicate epigenetic mineralization.

Two broad anomalous zones of less than -15° resultant dip angles, reflect steeply dipping, northwest trending carbonaceous sediments in western Pike grid. The conductive zones are split by a non-conductive band of 1,000 to 2,000 feet in width which represents the granitic intrusive. Mineralized zones lie at the margins of the non-conductive intrusive band.

Broad, low-resistivity- moderate P.F.E. anomalies probably indicate carbonaceous sediments; high resistivity areas apparently indicate intrusive rock. Porphyry mineralization appears to be reflected only by combined high-resistivity-P.F.E. values as on lines 44W and 56W. One I.P. line crosses known mineralization and does not reflect it.

Grid 2: The coincident magnetic and electromagnetic (partial) anomalies of the Pike Number 2 grid are thought to be of formational nature and not sulphide mineralization, no further follow-up is recommended.

Grid 3: Magnetic and electromagnetic anomalies of an extensive nature were delineated both through airborne and ground surveys. The cause of each has been explained by the presence of magnetite bearing graphitic schists. No further work is recommended.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "John S. Brock". The signature is written in dark ink and is positioned below the typed name "John S. Brock".

John S. Brock,

Assistant Exploration Manager,
Atlas Explorations Limited

SHELDON AREA PROJECT

Traffic Mountain

Pike Mineral Claim Group

SUMMARY OF COSTS

A. <u>Grid 1</u> (Pike Mineral Claims 1- 20 , 33-40)			
1. Linecutting	a) total footage	161,000 ft.	
	b) cost, \$10/1000 ft.		
	c) total cost		\$ 1,610.00
2. Magnetometer	a) total line miles	30.5	
	b) total cost/line mile	\$50	
	c) total cost		1,525.00
3. EM	a) total line miles	23.6	
	b) total cost/line mile	\$110	
	c) total cost		2,596.00
4. IP	a) cost per day	\$245	
	b) days in field	7	
	c) total cost		1,715.00
B. <u>Grid 2</u> (Pike Mineral Claims 45-49, 52, 54, 65, 56, 59, 67, 69, 71, 73, 75)			
1. Linecutting	a) total footage	15.8 miles	
	b) cost 52/mile		
	c) total cost		822.00
2. Magnetometer	a) total line miles	15.8	
	b) cost/line mile	\$50	
	c) total cost		790.00
3. EM	a) total line miles	15.8	
	b) cost/line mile	\$110	
	c) total cost		1738.00
C. <u>Grid 3</u> (Pike Mineral Claims 25, 27, 29-31, 41, 43, 451, 453-464, 475-480)			
1. Linecutting	a) total miles cut	13.8	
	b) cost \$52/mile		
	c) total cost		717.00
2. Magnetometer	a) total line miles	13.8	
	b) cost at \$50/line mile		690.00
3. EM	a) total line miles	13.8	
	b) cost at \$110/line mile		1518.00
TOTAL COST, Pike Group			\$14221.00

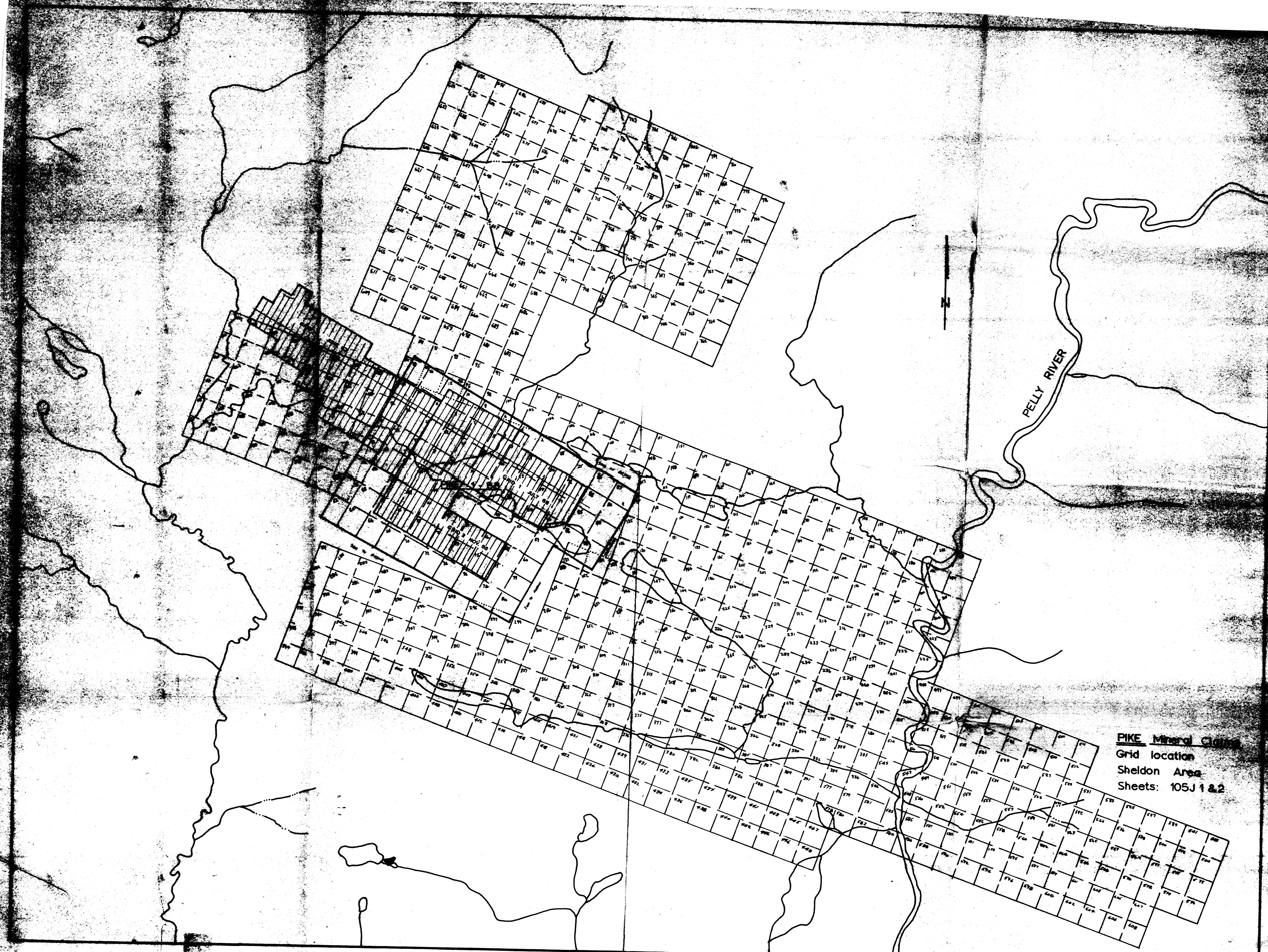
APPENDIX (iii)

PERSONNEL

Andy Harman	Party Chief	Vancouver, B.C.
Robert Lucas	Magnetometer op.	Vancouver, B.C.
Mike Smith	"	Amos, Quebec
Charles Wicks	"	Antigonish, Nova Scotia
Peter Dean	EM Operator	Victoria, B.C.
Ted Lightfoot	"	Vancouver, B.C.
Merle Curry	"	Whitehorse, Y.T.
Val Fratico	"	Vancouver, B.C.
Charlie Ollie	Linecutter	Ross River, Y.T.
McLary Acklack	"	"
John Acklack	"	"
Robert Etzel	"	"
Bill Etzel	"	"
Mike Shorty	"	"
Franklin Charlie	"	"
John S. Brock	Geophysicist	Vancouver, B.C.
Clyde L. Smith	Geologist	"

APPENDIX (iv)

KEY MAP



PELLY RIVER



PIKE Mineral Claims
Grid location
Sheldon Area
Sheets: 105J 1 & 2

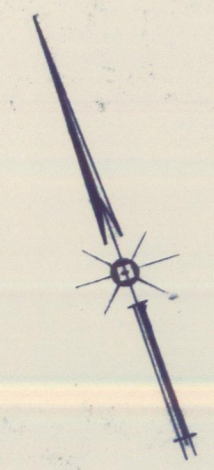
APPENDIX (v)

GRID 1

Magnetometer Survey

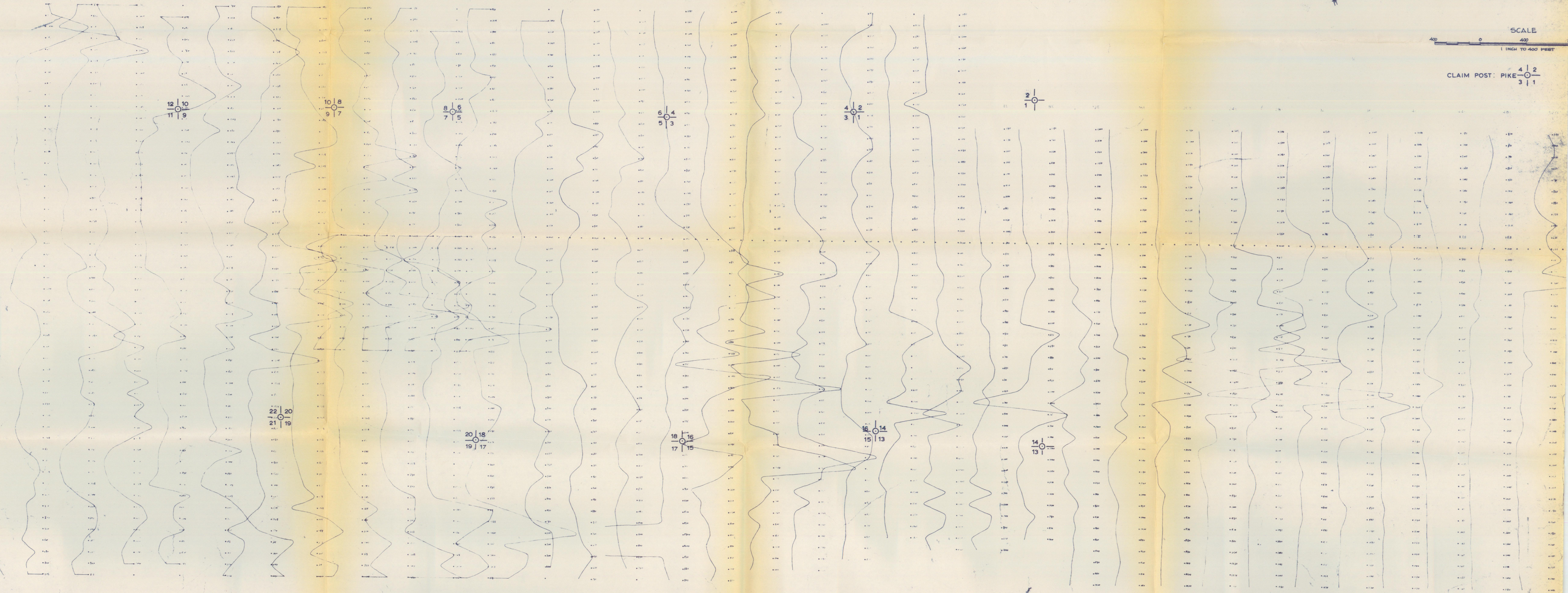
ATLAS EXPLORATION
ROSS RIVER, YUKON
TRAFFIC MTN AREA
PIKE MINERAL CLAIM
GROUND MAGNETOMETER SURVEY
GAMMA VALUES - PROFILE

Scale 1:400'
Date August 1951
Instrument Searle
Profile Scale 1:400 feet
Surveyed by J. H. Searle
Plotted by J. H. Searle
Checked by J. H. Searle



SCALE
1 INCH TO 400 FEET

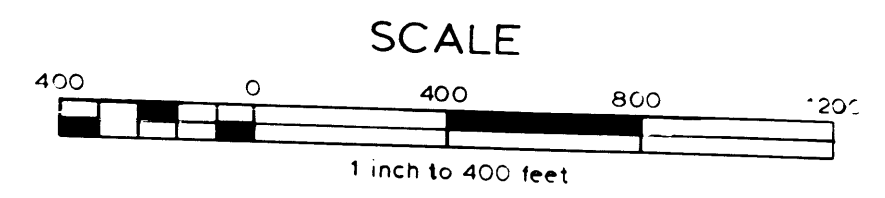
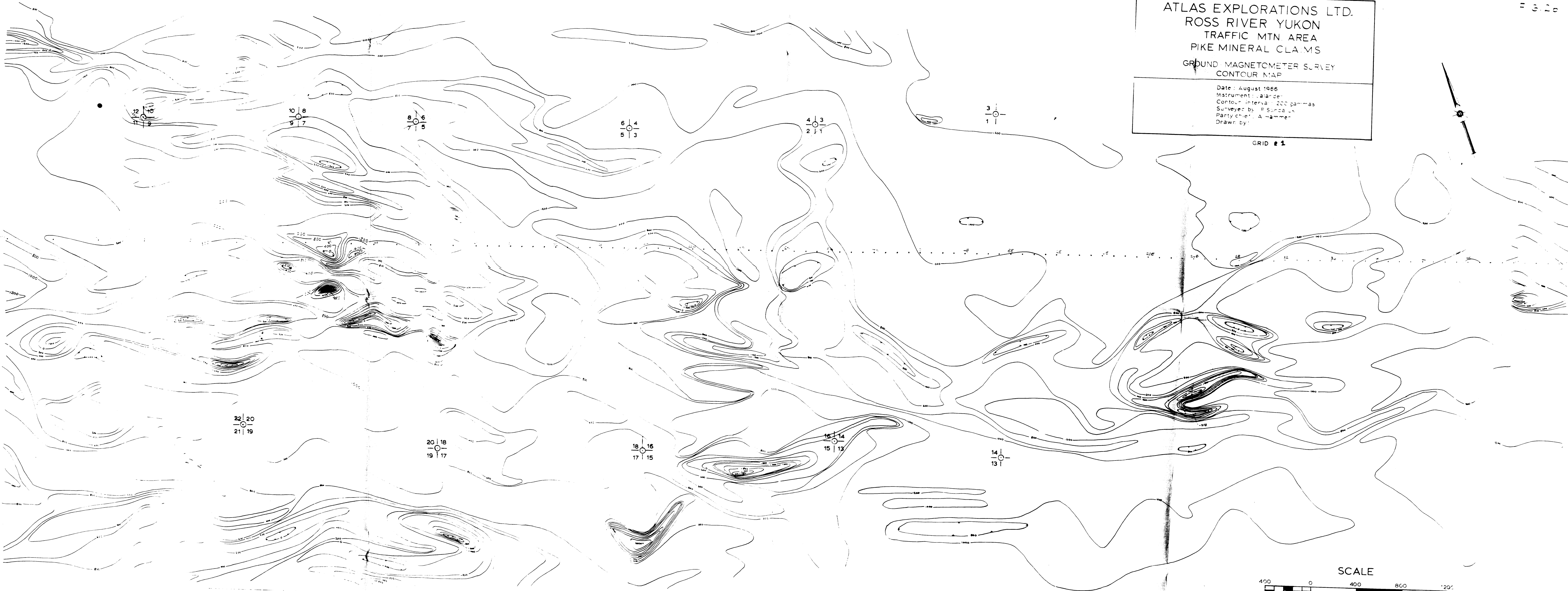
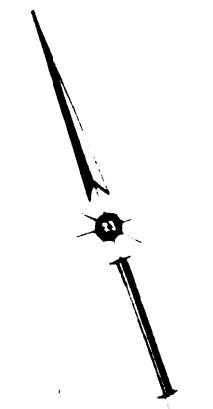
CLAIM POST: PIKE $\frac{4}{3} \frac{2}{1}$



ATLAS EXPLORATIONS LTD.
 ROSS RIVER YUKON
 TRAFFIC MTN AREA
 PIKE MINERAL CLAIMS
 GROUND MAGNETOMETER SURVEY
 CONTOUR MAP

Date: August 1966
 Instrument: Gander
 Contour Interval: 200 gammas
 Surveyed by: P. Surda et al.
 Party Chief: A. Hammer
 Drawn by:

GRID # 1

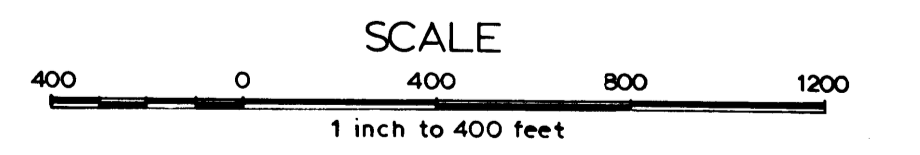
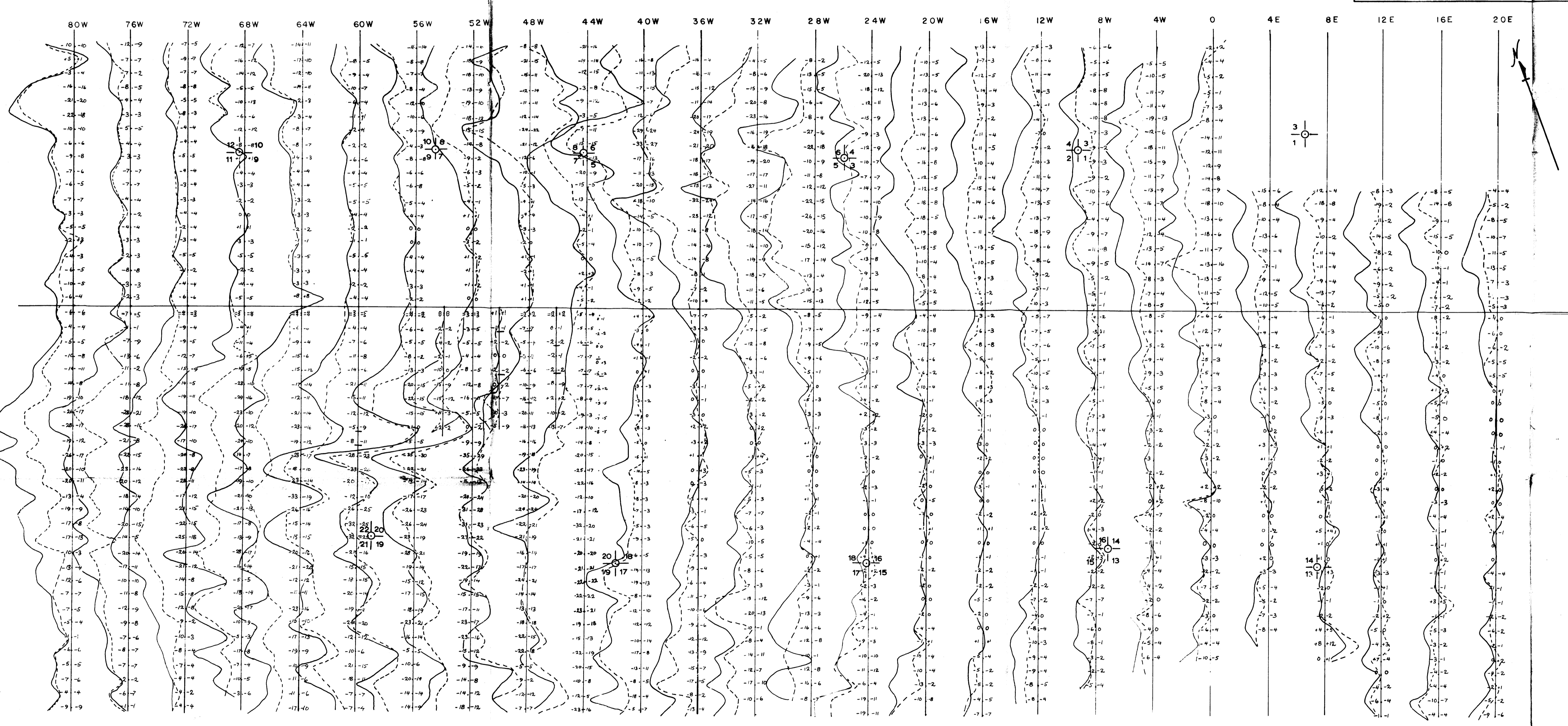


APPENDIX (vi)

GRID 1 Electromagnetic and IP Survey

ATLAS EXPLORATIONS LTD
 VANCOUVER, B. C.
 PIKE MINERAL CLAIMS
 GROUND ELECTROMAGNETIC SURVEY
 HIGH AND LOW FREQ PROFILES

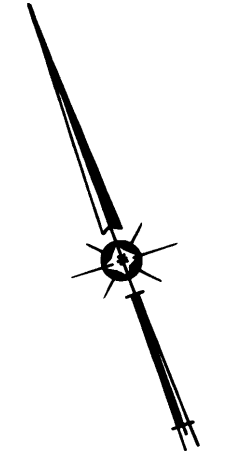
INSTRUMENT : CRONE JEM
 OPERATORS : P DEAN D PRESTON
 PROFILE ORIENTATION : -L ; I=20° DIP
 SCALE : 1"=400' HIGH
 DATE : JULY, 1966 LOW
 DRAWN BY : JNB.



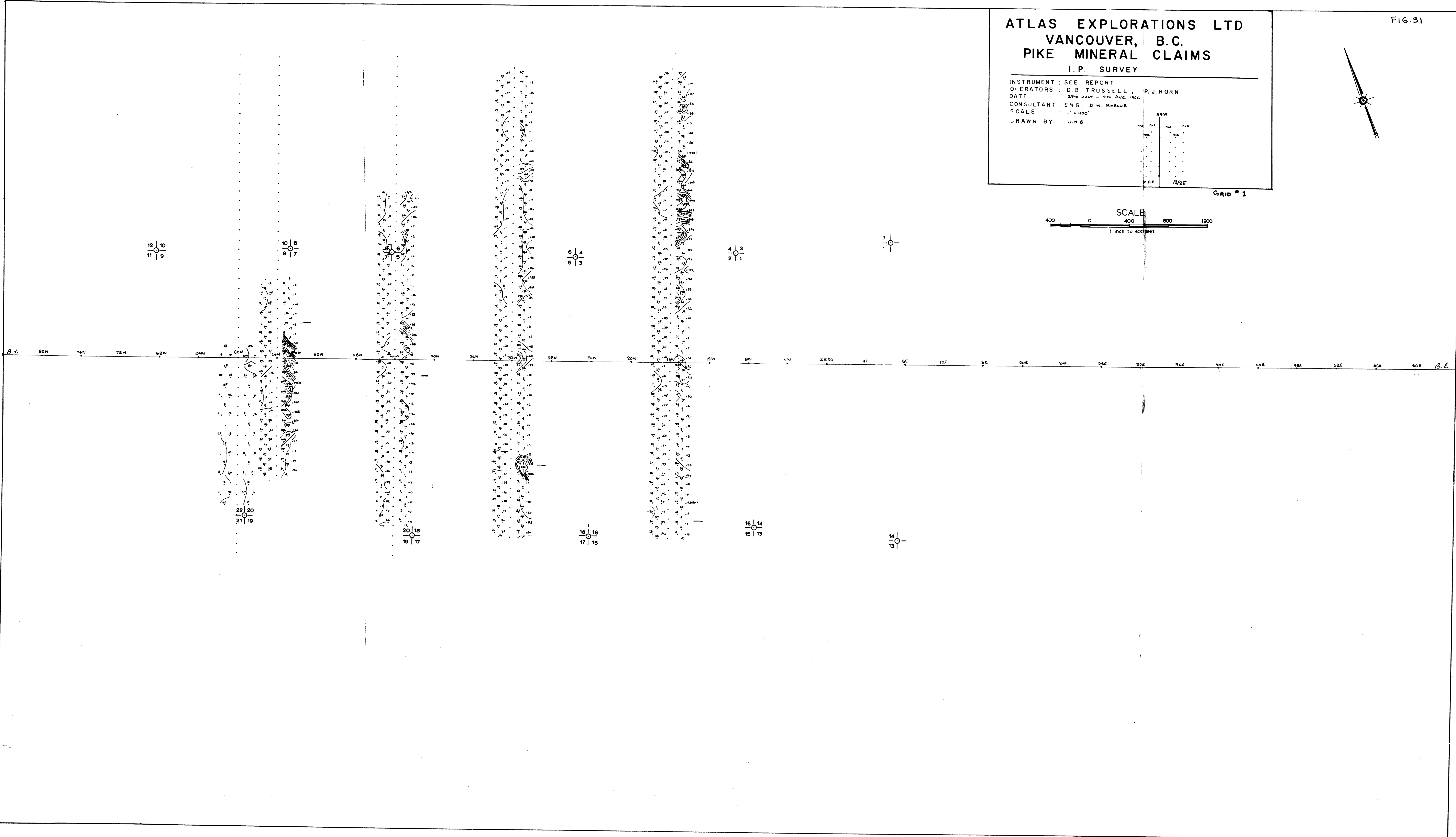
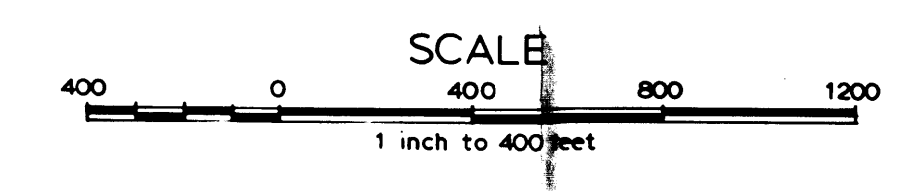
ATLAS EXPLORATIONS LTD
 VANCOUVER, B.C.
 PIKE MINERAL CLAIMS
 I.P. SURVEY

FIG. 31

INSTRUMENT : SEE REPORT
 OPERATORS : D.B. TRUSSELL, P.J. HORN
 DATE : 29th JULY - 4th AUG 1966
 CONSULTANT : ENG. D.W. SMELLIE
 SCALE : 1" = 400'
 DRAWN BY : J.M.B.



GRID # 1



12 | 10
11 | 9

10 | 8
9 | 7

6 | 4
5 | 3

4 | 3
2 | 1

3 |
1 |

22 | 20
21 | 19

20 | 18
19 | 17

18 | 16
17 | 15

16 | 14
15 | 13

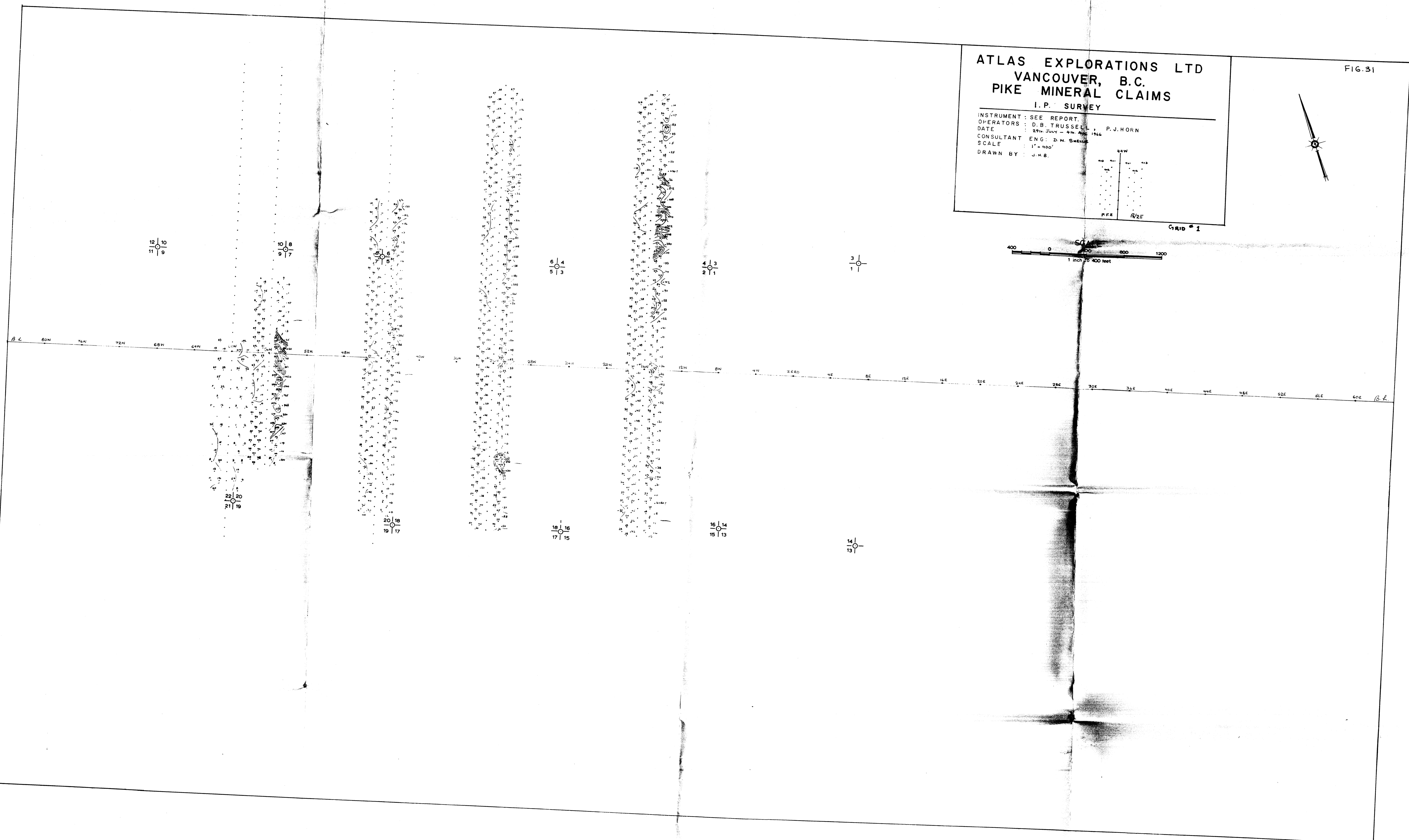
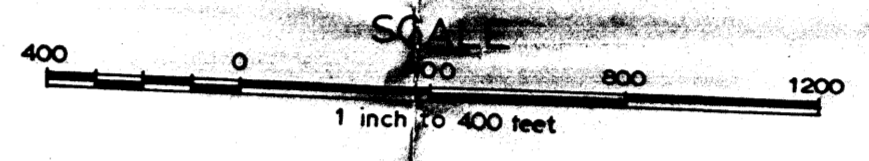
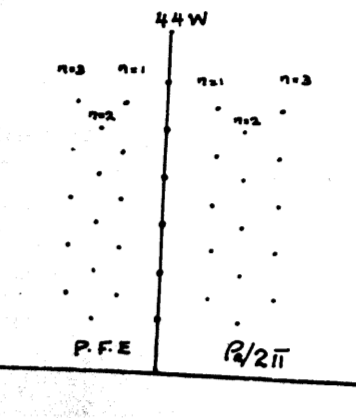
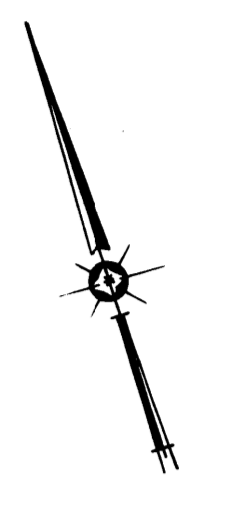
14 |
13 |

B.L. 60W 76W 72W 68W 64W 60W 56W 52W 48W 44W 40W 36W 32W 28W 24W 20W 16W 12W 8W 4W ZERO 4E 8E 12E 16E 20E 24E 28E 32E 36E 40E 44E 48E 52E 56E 60E B.L.

ATLAS EXPLORATIONS LTD VANCOUVER, B.C. PIKE MINERAL CLAIMS

I. P. SURVEY

INSTRUMENT : SEE REPORT.
OPERATORS : D. B. TRUSSELL, P. J. HORN
DATE : 27th JULY - 4th AUG. 1966
CONSULTANT ENG. : D. W. SHELL
SCALE : 1" = 400'
DRAWN BY : J. N. B.



12 | 10
11 | 9

10 | 8
9 | 7

8 | 6
7 | 5

6 | 4
5 | 3

4 | 3
2 | 1

3 |
1 |

22 | 20
21 | 19

20 | 18
19 | 17

18 | 16
17 | 15

16 | 14
15 | 13

14 |
13 |

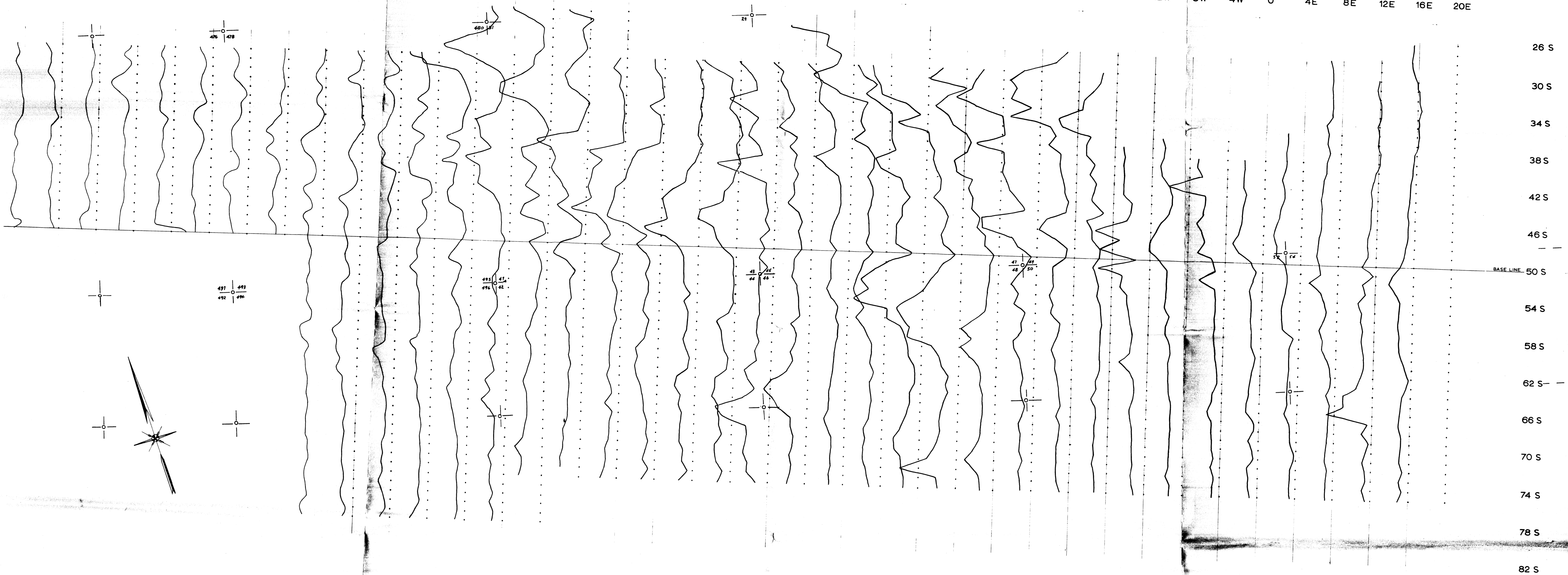
B.L.

APPENDIX (vii)

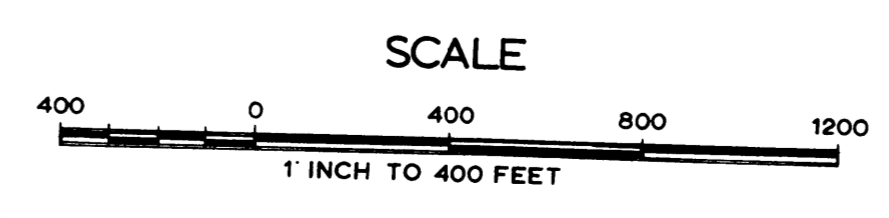
GRID 2

Magnetometer Survey

132 W 128 W 124 W 120 W 116 W 112 W 108 W 104 W 100 W 96 W 92 W 88 W 84 W 80 W 76 W 72 W 68 W 64 W 60 W 56 W 52 W 48 W 44 W 40 W 36 W 32 W 28 W 24 W 20 W 16 W 12 W 8 W 4 W 0 4 E 8 E 12 E 16 E 20 E



NOTE: A) BACKGROUND DETERMINED AS 1500 GAMMA'S.
 B) ALL VALUES REPRESENTATIVE OF VERTICAL MAGNETIC FIELD COMPONENT.
 C) MAGNETIC INCLINATION 80° N AT 62° 10' N LAT.
 D) TOTAL ABSOLUTE FIELD APPROX. 58000 GAMMA'S.
 E) ALL VALUES CORRECTED FOR DRIFT AND DIURNAL VARIATIONS.



GRID 2

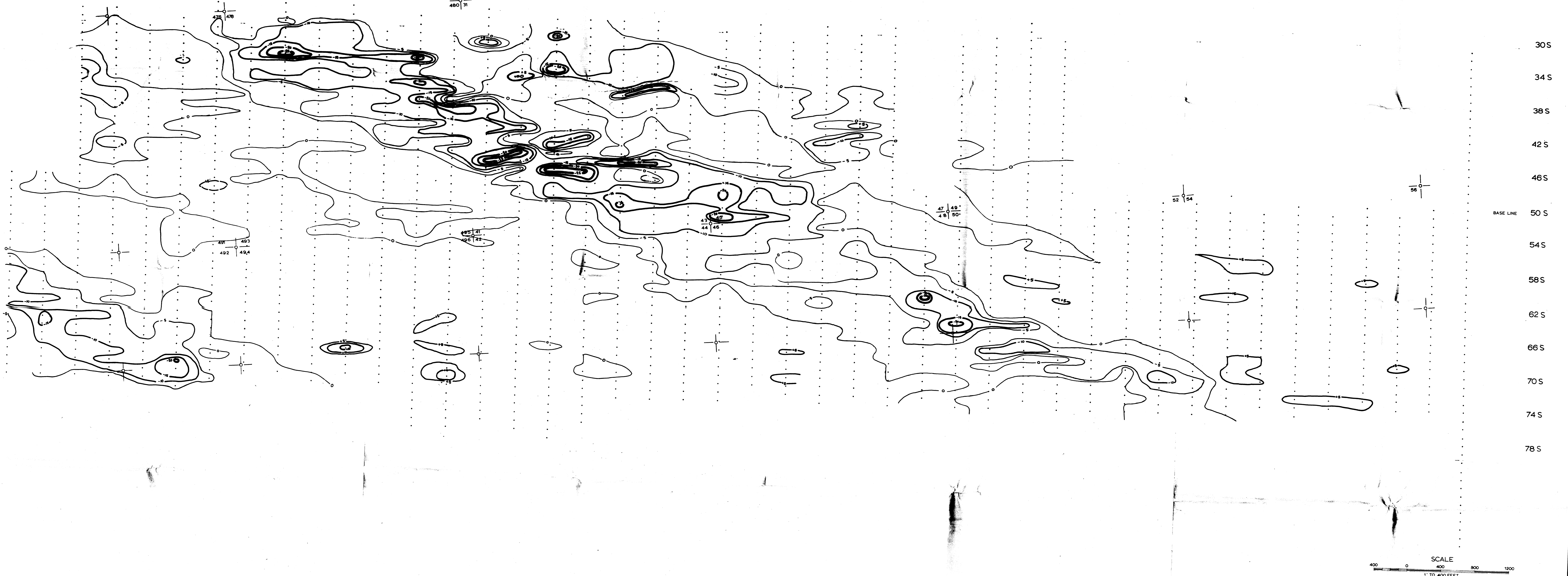
ATLAS EXPLORATIONS LTD.
ROSS RIVER, YUKON
 SHELDON AREA
 PIKE MINERAL CLAIMS
RECONNAISSANCE GROUND MAGNETOMETER SURVEY PROFILES

PROFILE SCALE: 1" = 1000 GAMMA'S FROM A BASE OF 500 GAMMA'S
 INSTRUMENT..... JALANDER
 OPERATORS..... M. CURRY AND M. SMITH
 SUPERVISOR..... J.S. BROCK
 DATE..... NOVEMBER 1966
 DRAWN BY..... P.J.F. VLASVELD

APPENDIX (viii)

GRID 2 Electromagnetic Survey

144W 140W 136W 132W 128W 124W 120W 116W 112W 108W 104W 100W 90W 92W 88W 84W 80W 76W 72W 68W 64W 60W 56W 52W 48W 44W 40W 36W 32W 28W 24W 20W 16W 12W 8W 4W 0 4E 8E 12E 16E 20E 24E 28E



SCALE
0 400 800 1200
1" TO 400 FEET
GRID 2

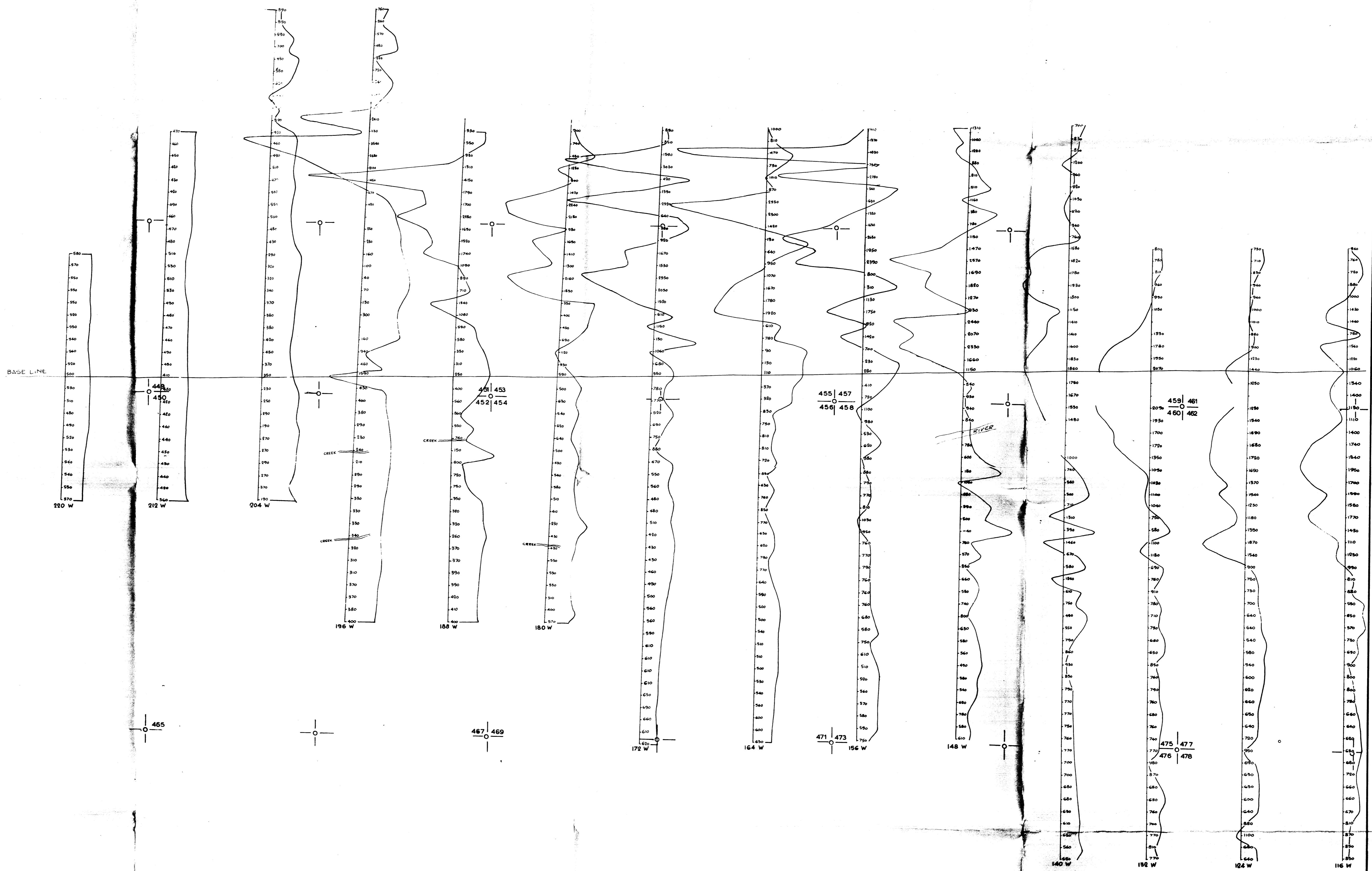
ATLAS EXPLORATIONS LIMITED
ROSS RIVER, YUKON
SHELDON REGION
PIKE MINERAL CLAIMS
GROUND ELECTROMAGNETIC SURVEY
JEM HORIZONTAL LOOP
CONTOUR MAP

INSTRUMENT: CRONE
CONTOUR INTERVAL: 5"
COIL SPACING: 300'

OPERATORS: M. CURRIE and M. SMITH
PARTY CHIEF: J.S. BROCK
DATE: NOVEMBER 1966
DRAWN BY: P.J.F. VLASVLE

APPENDIX (ix)

GRID 3 Magnetometer Survey



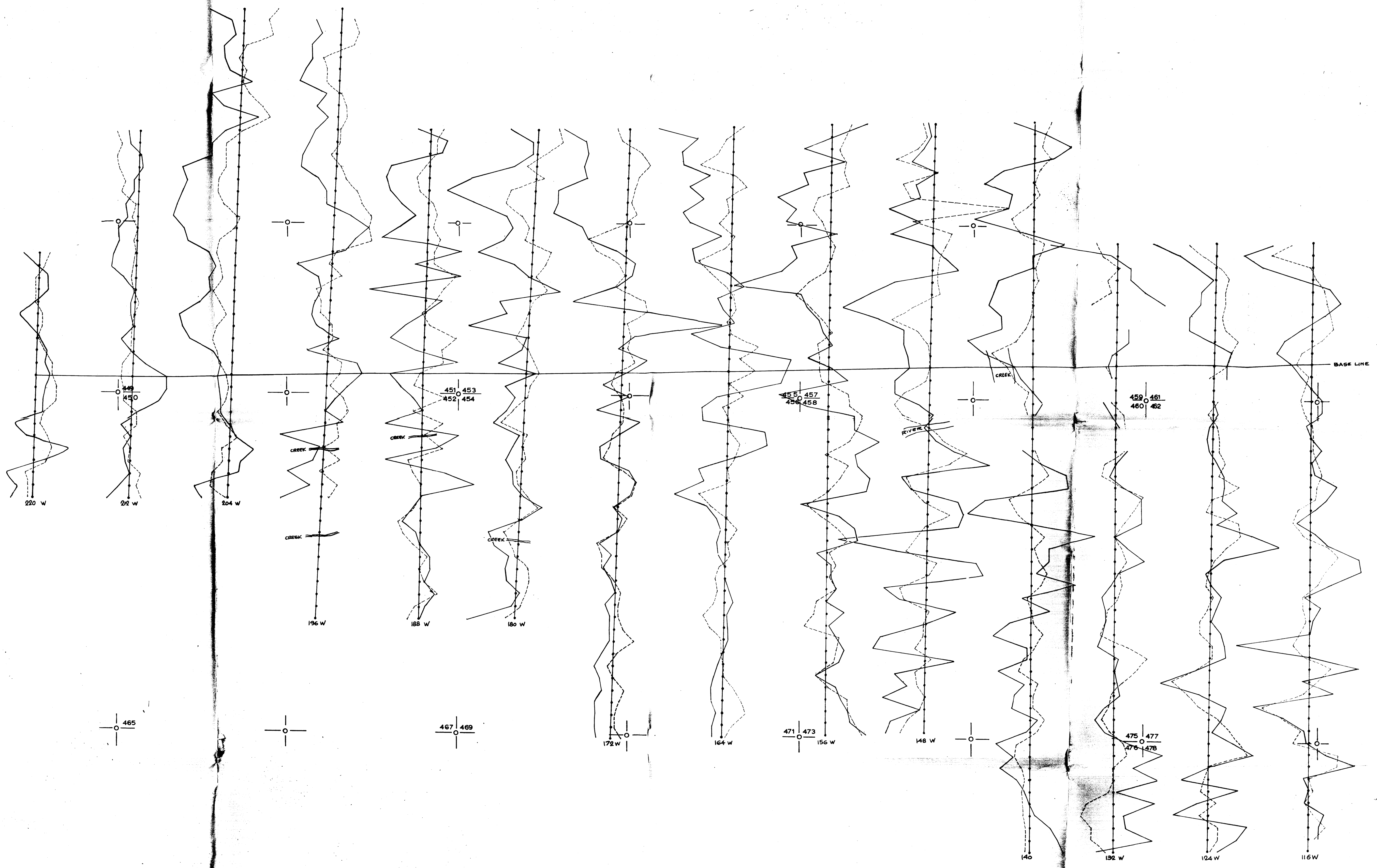
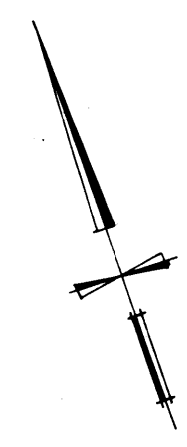
GRID 3

ATLAS EXPLORATIONS LIMITED
 ROSS RIVER (Y.T.)
 SHELDON REGION
 PIKE MINERAL CLAIMS
 GROUND MAGNETOMETER SURVEY
GAMMA VALUES (WESTERN PART)
 INSTRUMENT: JALANDER PROFILE SCALE: 1/10" = 100' DATE: JUNE 1967
 OPERATOR: C. WICKS DRAWN BY: P. J. EVLASVELD



APPENDIX (x)

GRID 3 Electromagnetic Survey



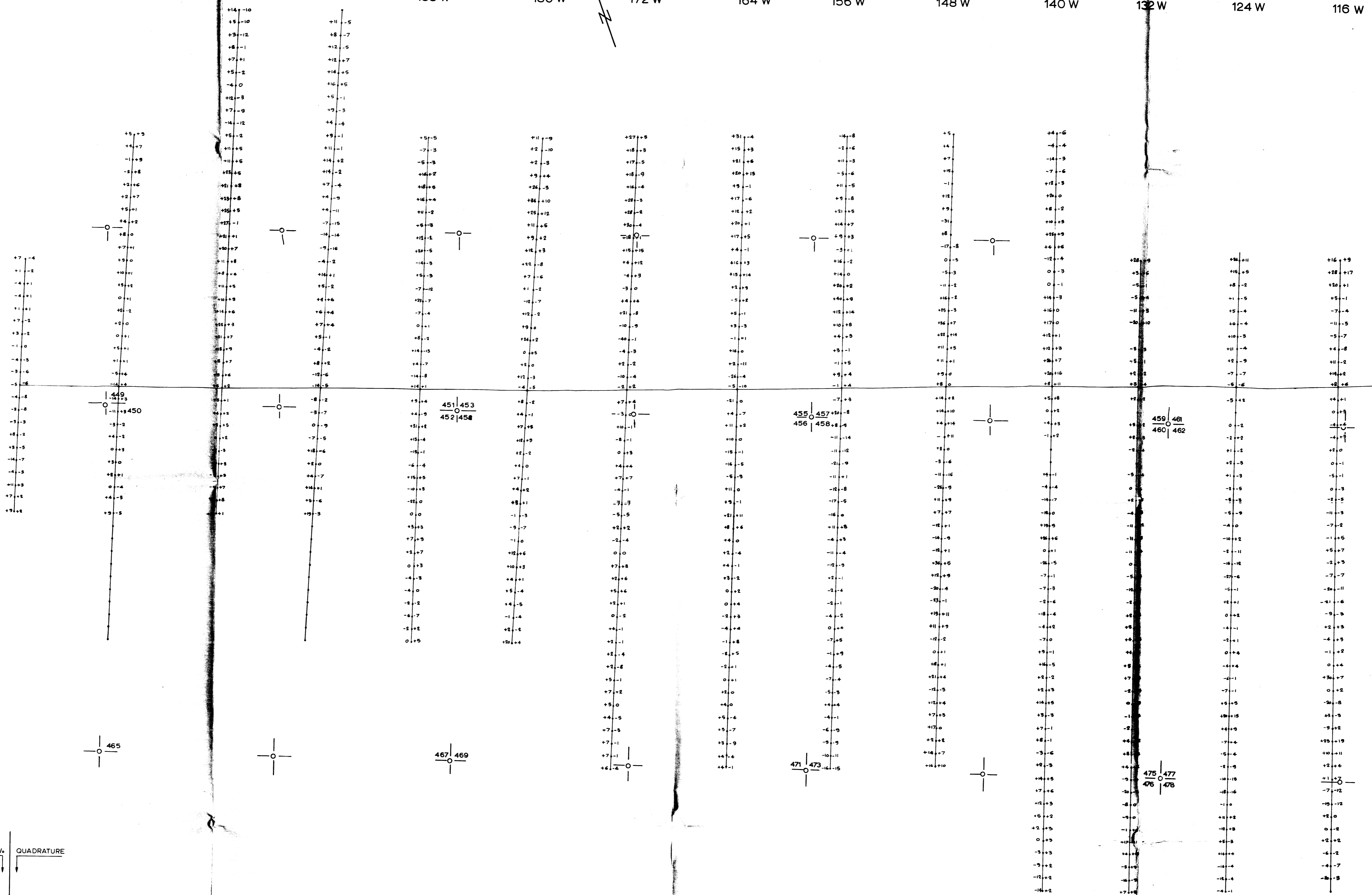
GRID 3

ATLAS EXPLORATIONS LIMITED
ROSS RIVER (Y.T.)
SHELDON REGION
PIKE MINERAL CLAIMS
GROUND E.M. SURVEY
PROFILE MAP

INSTRUMENT: RONKA E.M. 16 PROFILE SCALE: 1/10" = 2' DATE: JUNE 1967
OPERATOR: V. PRATICO DRAWN BY: P.J. FVLASVELD

400 0 400 800
scale in feet

220 W 212 W 204 W 196 W 188 W 180 W 172 W 164 W 156 W 148 W 140 W 132 W 124 W 116 W



IN PHASE % QUADRATURE

BASE LINE

GRID 3

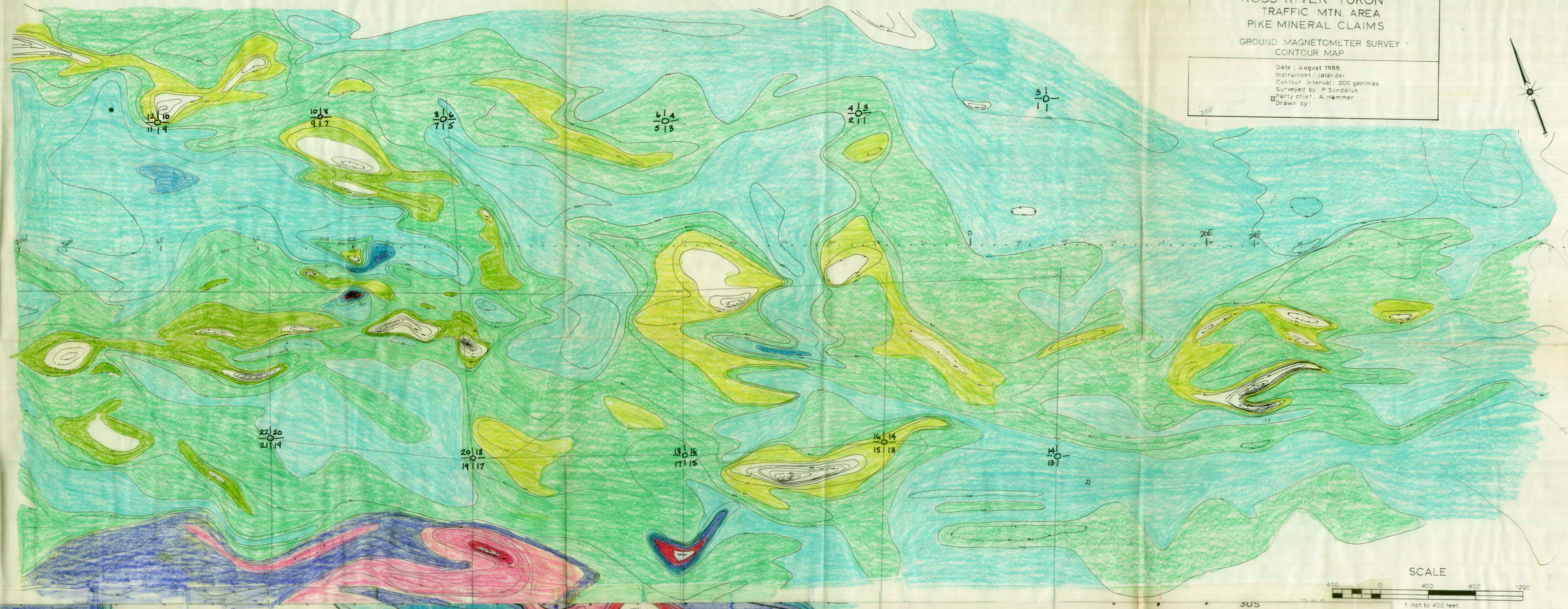
ATLAS EXPLORATIONS LIMITED
 ROSS RIVER (Y.T.)
 SHELDON REGION
 PIKE MINERAL CLAIMS
 GROUND E.M. SURVEY
 -VALUES-

INSTRUMENT: RONKA E.M. 16 DATE: JUNE 1967
 OPERATOR: V.PRATICO DRAWN BY: P.J.F. VLASVELD

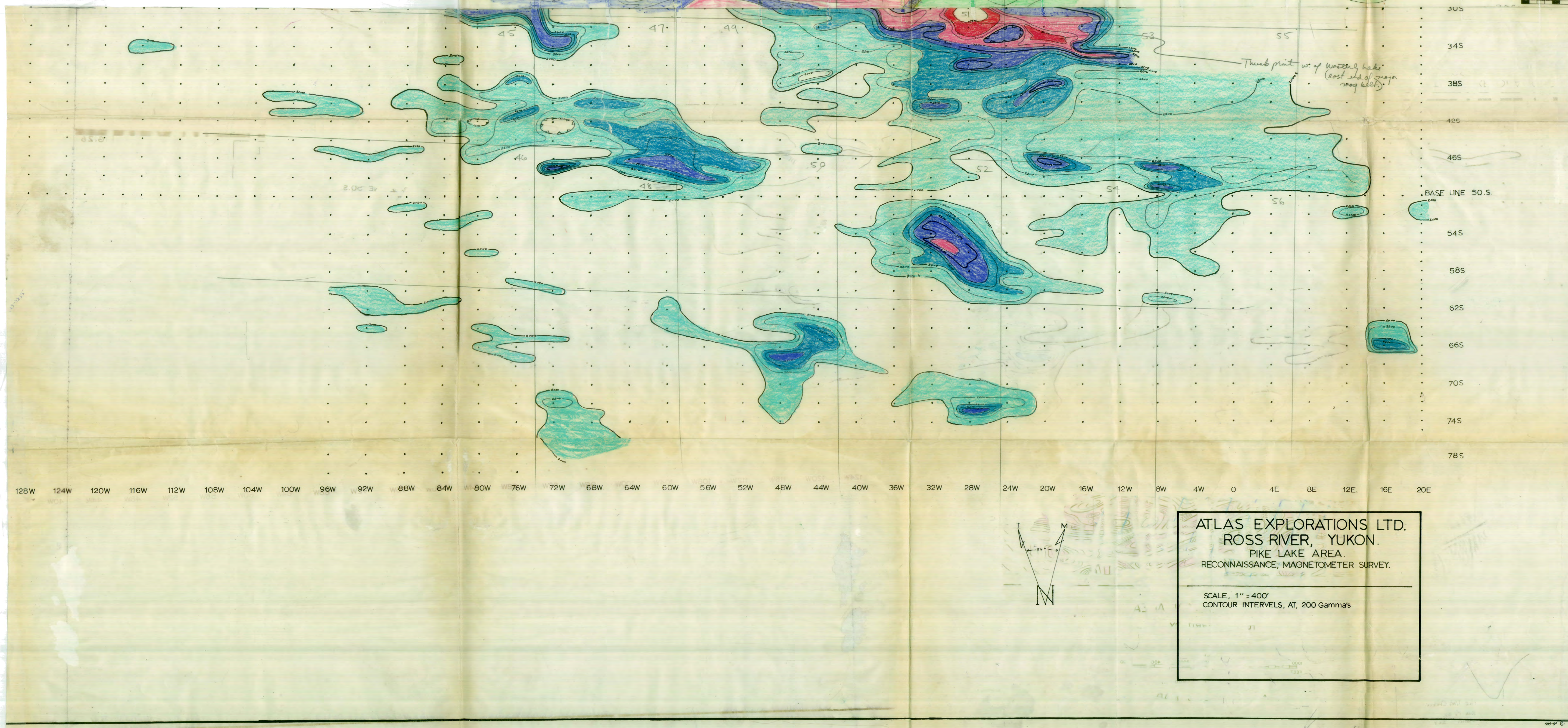
400 0 400 800
 Scale in feet

ATLAS EXPLORATIONS LTD.
 ROSS RIVER YUKON
 TRAFFIC MTN AREA
 PIKE MINERAL CLAIMS
 GROUND MAGNETOMETER SURVEY
 CONTOUR MAP

Date: August 1966
 Instrument: Jaiside
 Contour Interval: 200 gamma's
 Surveyed by: R. Sordal
 Party Chief: A. Hammer
 Drawn by:



SCALE
 1 inch to 400 feet



ATLAS EXPLORATIONS LTD.
 ROSS RIVER, YUKON.
 PIKE LAKE AREA.
 RECONNAISSANCE, MAGNETOMETER SURVEY.

SCALE, 1" = 400'
 CONTOUR INTERVALS, AT, 200 Gamma's