

84-#333 - 12634

GEOLOGICAL AND GEOPHYSICAL REPORT
ON THE ARTY #1 AND #3 CLAIM GROUPS
REVELSTOKE MINING DIVISION

NTS: MAP 82M/8E

LATITUDE: 51°20'N

LONGITUDE: 118°05'W

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,634

Owner: Pivak Explorco Limited
Operator: BP Exploration Canada Limited

R. Pegg, B.A.Sc., P.Eng
For: BP Exploration Canada Limited
700 - 890 West Pender Street
Vancouver, BC
V6C 1K5

May, 1984

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INTRODUCTION

During the period of August 26th to 28th, BP Exploration Canada Limited completed a preliminary geological and geophysical survey of the Arty #1 and Arty #3 claim groups.

The exploration target is economic lead-zinc-gold-silver mineralization.

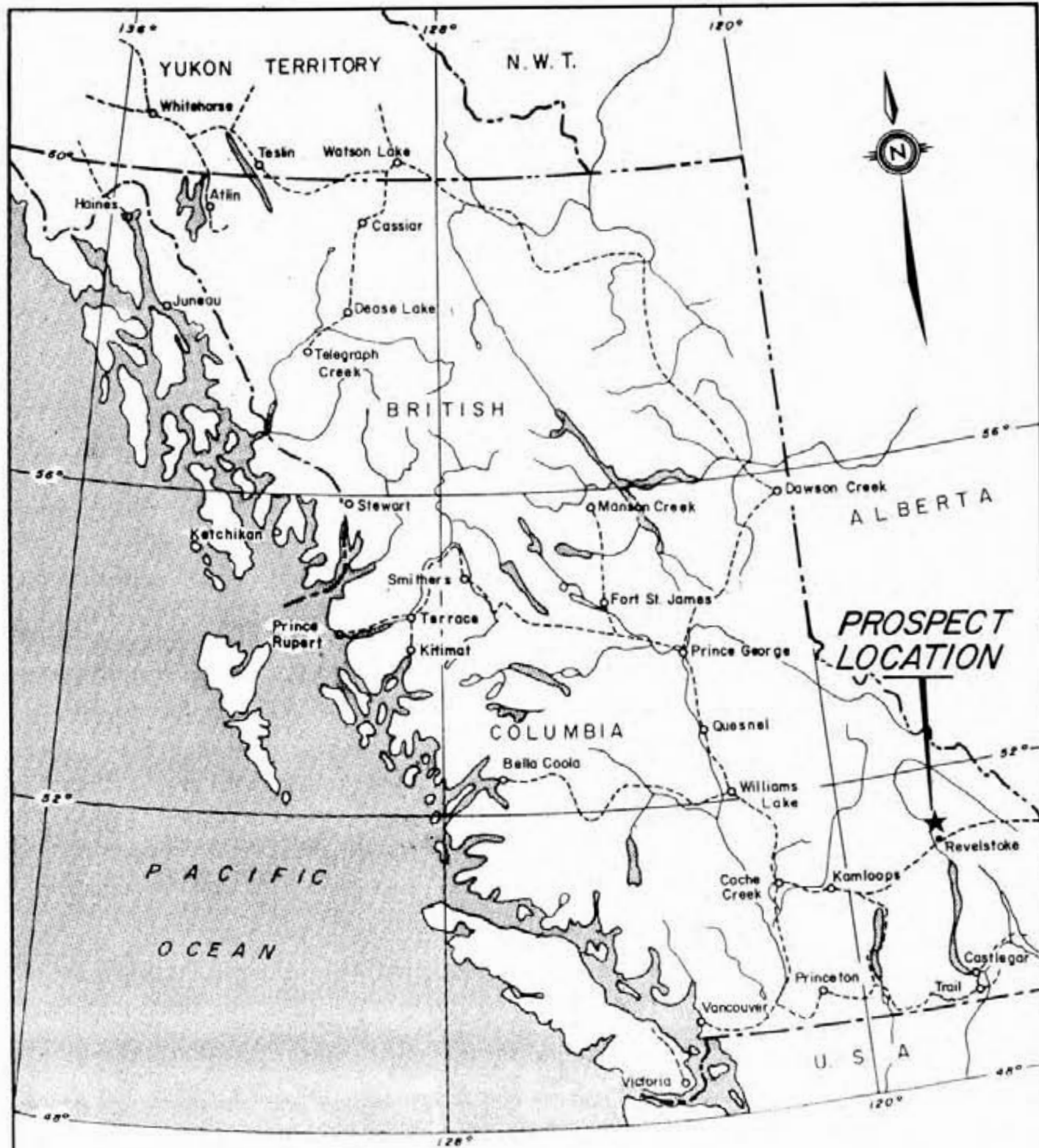
LOCATION, ACCESS, PHYSIOGRAPHY AND CLIMATE



The claim groups are located at the headwaters of Burke and McKinnon Creeks (See Figure 3), approximately 33 air km north of the town of Revelstoke (See Figures 1 and 2), at latitude 51°20'N and longitude 118°05'W.

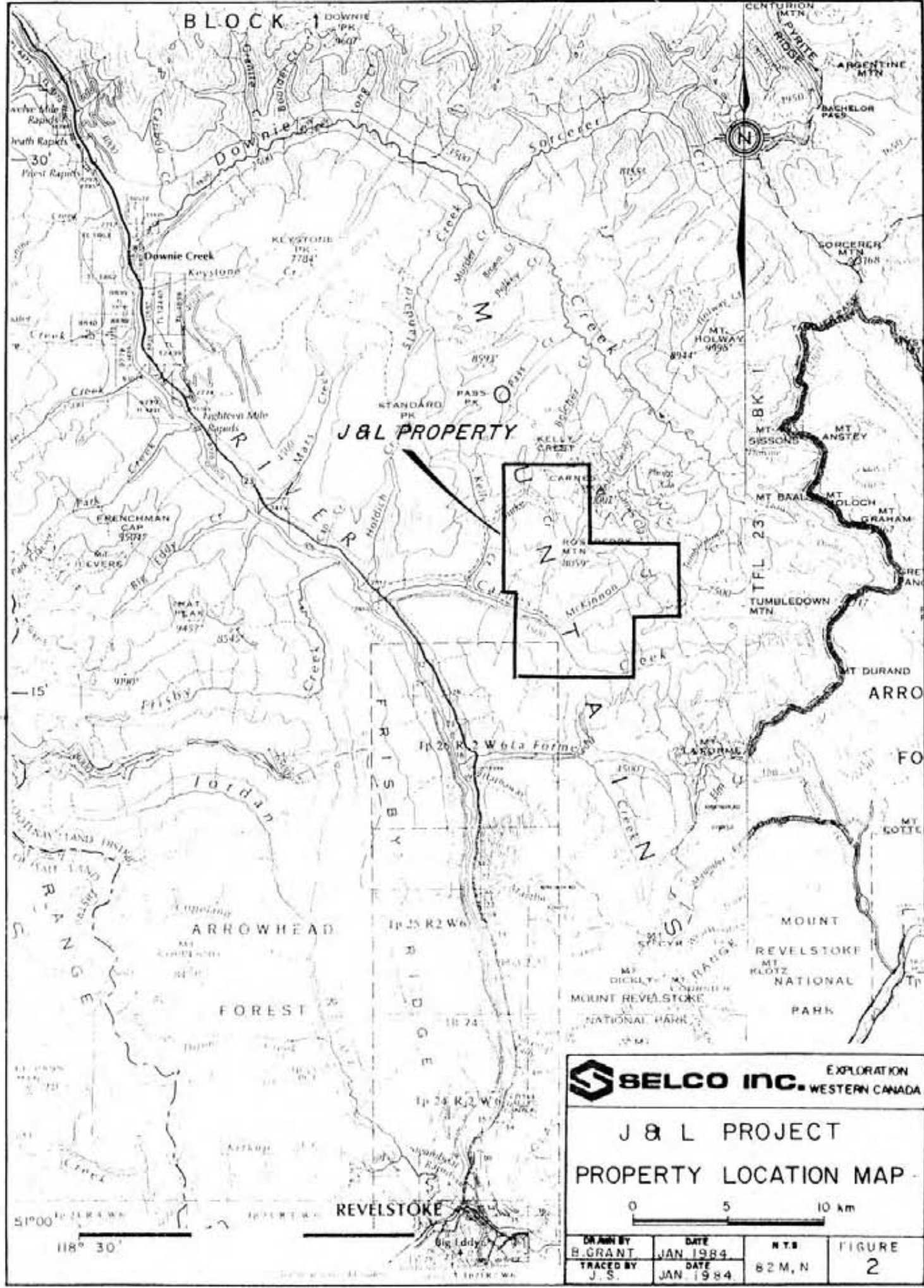
Access to the claim groups is by helicopter from Revelstoke.

Maximum relief in the claim areas is approximately 910 metres with a maximum elevation of 3070.9 metres. Access throughout these claims is very difficult and slow as glaciers and very rugged topography are abundant.

Climatic conditions at these elevations dictate a July to September field season.



 SELCO INC.		EXPLORATION	
		WESTERN CANADA	
J & L PROSPECT LOCATION MAP			
			
DRAWN BY H. PEGG	DATE DEC. 1982.	FIGURE 1	
TRACED BY J. S.	DATE DEC. 1982		



SELCO INC. EXPLORATION
WESTERN CANADA

**J & L PROJECT
PROPERTY LOCATION MAP**

0 5 10 km

DRAWN BY B. GRANT	DATE JAN 1984	NTS 82 M, N	FIGURE 2
TRACED BY J. S.	DATE JAN 1984		

PROPERTY STATUS

The claims have been placed into 2 mineral claim groups and they consist of the following:

Arty #1 Group

<u>Name</u>	<u>Record No.</u>	<u>Date Recorded</u>	<u>No.of Units</u>
Arty 1	1219	June 10, 1981	12
Arty 2	1220	June 10, 1981	20

Arty #3 Group

<u>Name</u>	<u>Record No.</u>	<u>Date Recorded</u>	<u>No.of Units</u>
Arty 3	1221	June 10, 1981	20
Arty 4	1222	June 10, 1981	20

HISTORY OF EXPLORATION

During 1982, Selco Inc. had 2 airborne geophysical surveys completed which covered the area of the Arty claims. No other work on these areas has been noted.

1983 WORK PROGRAM SUMMARY

During the period of August 26th to 28th, BP Exploration Canada Limited completed a preliminary geological and geophysical survey of part of the Arty #3 claim and a geological survey of the Arty #1 claim.

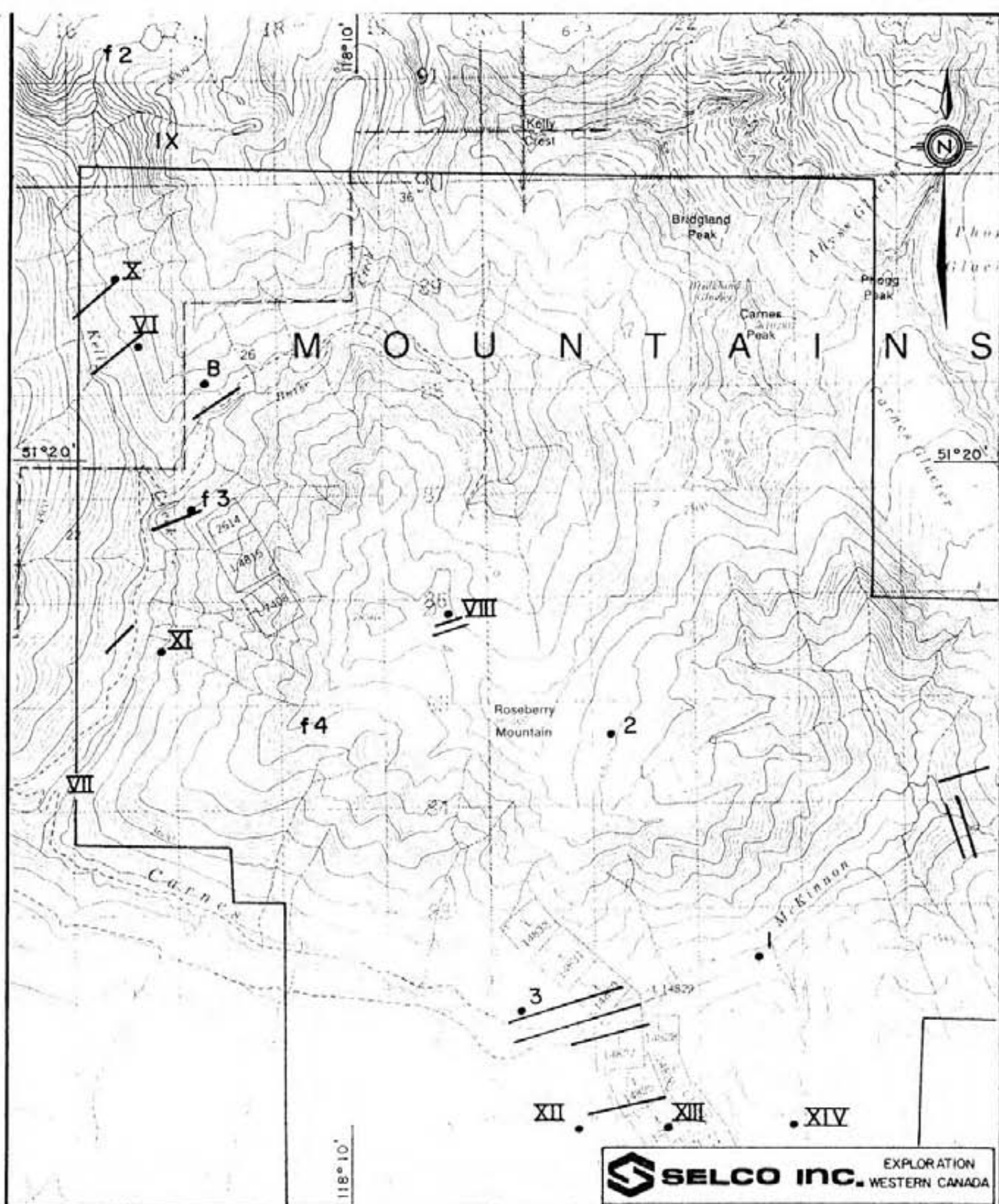
GEOPHYSICS AND GEOLOGY

Three geophysics-geology lines, totalling approximately 1.88 km, were flagged within the Arty #3 group.

The two south-east lines produced no conductive response with either the magnetometer or the EM. The only outcrops are found along McKinnon Creek and are comprised of chlorite-quartz-sericite phyllites, grey to white carbonate, chlorite phyllite and calcareous and quartzose meta-sandstones of the Mohican(?) Formation. The carbonates display moderate intensity isoclinal folding, while the metasandstones show possible remnant crossbedding (overturned(?)). The foliation of these calcareous phyllites and sandstones strikes between 320° and 326° and dips 65° - 71° NE.

The north-east line produced a small conductive response where outcropping consists of a brecciated grey banded limestone which contains interstitial graphite. Coarse-grained limestone, magnetiferous chlorite-quartz phyllite and quartzite outcrop at the end of the line. The foliation of these rocks strikes at 144° and dips at 62° NE.

The traverse within the Arty #1 claim encountered calcareous phyllites of the Mohican Formation, chloritic and graphitic phyllites of the Lardeau group and abundant grey limestone of the Badshot Formation. No mineralization was observed.



LEGEND

- J & L CLAIM AREA BOUNDARY
- 3 ELECTROMAGNETIC ANOMALY
- GROUND GEOPHYSICS LINE

Scale 1:50,000

Metres 1000 0 1000 2000

SELCO INC. EXPLORATION
WESTERN CANADA

J & L PROJECT AIRBORNE ELECTROMAGNETIC ANOMALY & GROUND GEOPHYSICAL SURVEY LOCATIONS

DRAWN BY A. WYNNE	DATE SEPT. 1983.	N.T.S.	FIGURE
TRACED BY J.S.	DATE OCT. 1983.	82M/P	4


SUMMARY AND CONCLUSIONS

Calcareous and dirty metasediments of the Hamill, Mohican, Badshot and Lardeau groups cover most of the Arty #1 and #3 claim groups. No significant geophysical response was obtained and no mineralization was observed.

Due to the extremely steep terrain within the claim groups, it appears that further geophysics is futile and that geological mapping and prospecting will be the best exploration tool.

Respectfully submitted,




Rex Pegg, B.A.Sc., P. Eng

APPENDIX I

STATEMENT OF QUALIFICATIONS

I Rex S. Pegg of 700-890 West Pender Street, in the City of Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

1. That I am an exploration geologist employed by BP Exploration Canada Limited, which has its office located at 700-890 West Pender Street, Vancouver, BC V6C 1K5.
2. That I am a graduate of the University of Toronto, located in Toronto, Ontario, where I obtained a Bachelor of Applied Science degree in Geological Engineering (Exploration Option) in 1976.
3. That I am a registered member, in good standing, of the Association of Professional Engineers of the Province of British Columbia.
4. That I have practised my profession as a geologist for the past eight years.
5. That I have supervised the geological and geophysical field work.
6. That I have no direct, or indirect, interests in any of the mineral claims, or in any of the securities held by BP Exploration Canada Limited, nor do I expect to receive any.


Rex Pegg, BASC., P.Eng

Dated this 1st day of May, 1984

APPENDIX II

STATEMENT OF EXPENDITURES

a) Arty #1 Claim Group

Dave Safton (Student), 1 day @ \$110/day	\$ 110.00
Rex Pegg (Project Geologist), 1 day @ \$160/day	160.00
	<hr/>
Total wages (includes room and board)	\$ 270.00
 Truck rental, 1 day @ \$45/day	 45.00
Helicopter, 1 hour @ \$415/hour + fuel	474.00
Part of report writing, drafting, printing, etc	500.00
	<hr/>
TOTAL	\$1,289.00

b) Arty #3 Claim Group

Matt Johnston (Geophysical Operator), 2 days @ \$150/day	\$ 300.00
Bob Somerville (Geophysical Operator), 2 days @ \$150/day	300.00
Rick Zuran (Geophysical Operator), 2 days @ \$150/day	300.00
Luke Burlet (Geology Student), 2 days @ \$110/day	220.00
	<hr/>
Total wages (includes room and board)	\$1,120.00
 Truck rental, 2 trucks for 2 days @ \$45/day	 180.00
Helicopter, 1.9 hours @ \$415/hour + fuel	900.00
Part of report writing, drafting, printing, etc	500.00
	<hr/>
TOTAL	\$2,700.00



APPENDIX III: GEOPHYSICAL METHODS

Geophysical survey method and instrumentation

"Genie electromagnetics and magnetics was run on selected lines. Readings were taken at intervals of 25 meters along the lines. Coil separation for the EM survey was 100 meters.

SE-88 Genie portable electromagnetic system

"Genie" is an acronym for Geometry normalized Electromagnetic system. The GENIE system, comprising transmitter and receiver consoles, is designed for rapid two person operation. The measurement is based on the simultaneous transmission of two pre-selected, amplitude stabilized, well separated frequencies and the comparison of the amplitudes of the two signals at the receiver. The two transmitted frequencies are picked up by a single receiving coil, amplified and noise filtered.

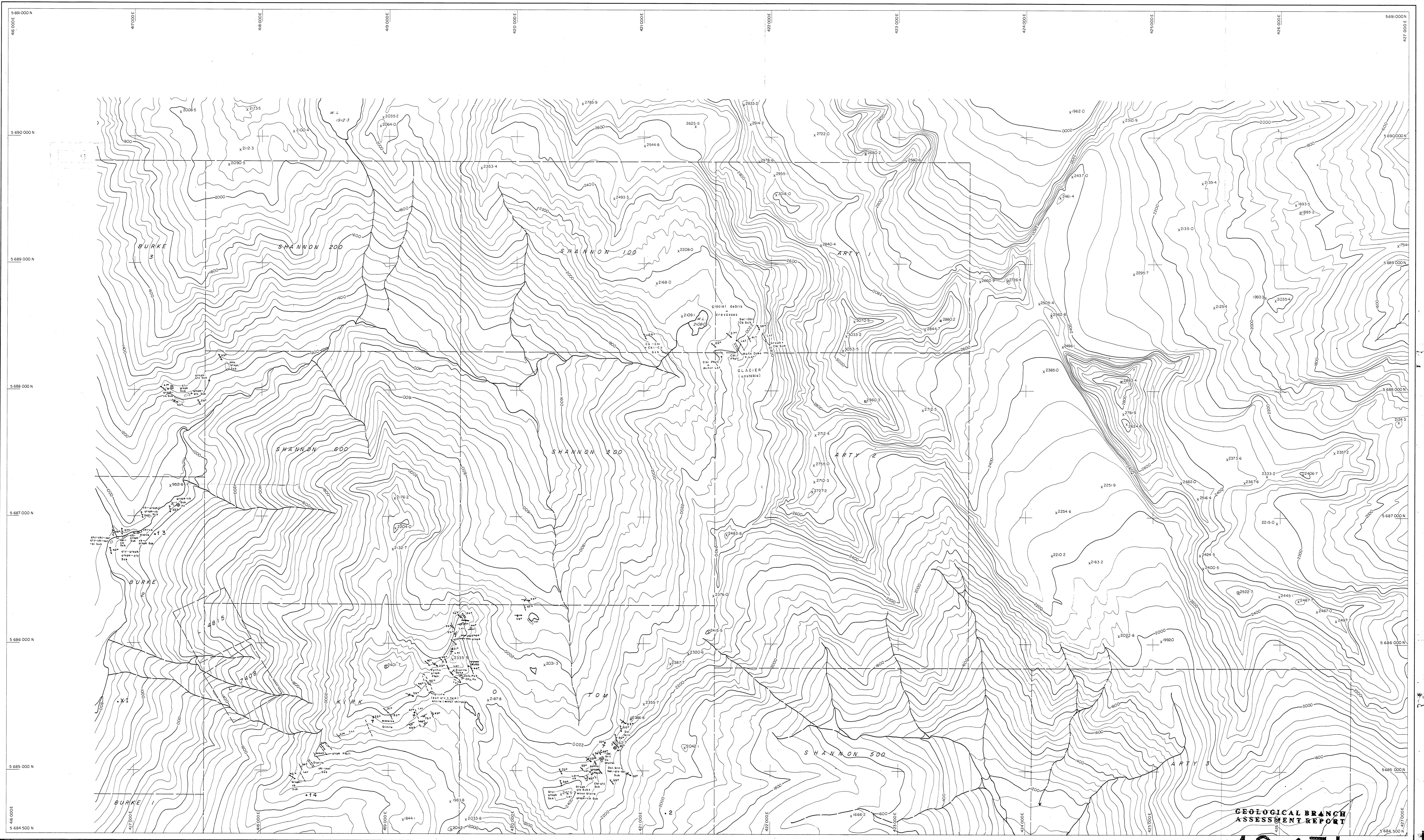
A proportional DC voltage (V signal for the higher frequency, V reference for the lower frequency) is obtained from each signal, averaged over a selectable time period and then the computed result $(V \text{ signal} / V \text{ reference} - 1) \times 100$ is displayed in percent on the digital display with a resolution of 0.1%.

Under most field conditions the system, whose sensitivity and repeatability are basically only limited by atmospheric noise,

can detect amplitude ratio changes to better than 0.5 percent. Useful measurements may be made to a transmitter-receiver separation of up to 200 metres.

EDA ppm 350 & ppm 375 magnetometers

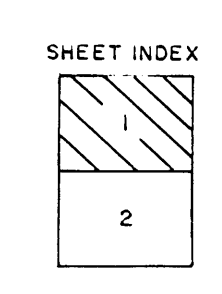
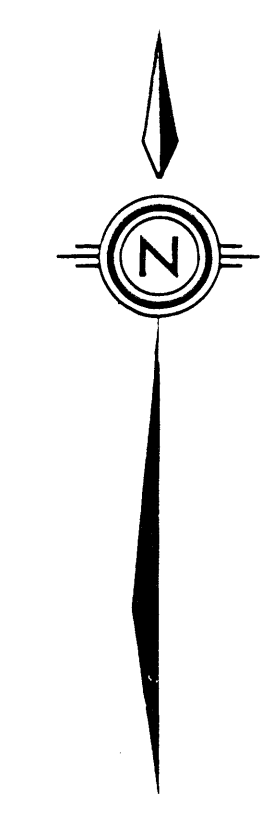
The EDA 350 and 375 magnetometers are micro processor controlled total field magnetometers. The field and base magnetometers are synchronized and all corrections done automatically, and downloaded onto a thermal printer or mini-computer. Further information can be obtained from EDA Instruments Inc, 1 Thorncliffe Park Drive, Toronto, Ontario, M4H 1G9.



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- LEGEND**
- | | | |
|--------------------------------|------------------|---------------|
| • Airborne Geophysical Anomaly | Lst Limestone | Po pyrrhotite |
| ○ Outcrop (large, small) | Qtzite Quartzite | Mt magnetite |
| ~ Fault | Phyll. Phyllite | |
| ~ Bedding | Sch Schist | |
| ~ Foliation | Dol Dolomite | |
| ~ Fold | graph graphite | |
| ~ Mineral Occurrence | qtz quartz | |
| ~ Trench | cb carbonate | |
| ~ Geological Contact | chl chlorite | |
| ~ Claim Boundary | ser sericite | |
| | bi biotite | |
| | calc calcareous | |
| | Cu copper | |
| | ZnS sphalerite | |
| | PbS galena | |
| | Cpy chalcopyrite | |



NOTE: Compiled from aerial photography at a scale of 1:75,000 flown in Aug. 1970. Contour interval 40 metres. Sheet No. 1 of 2.

0 100 200 300 400 500 600 700 800 900 1000 metres

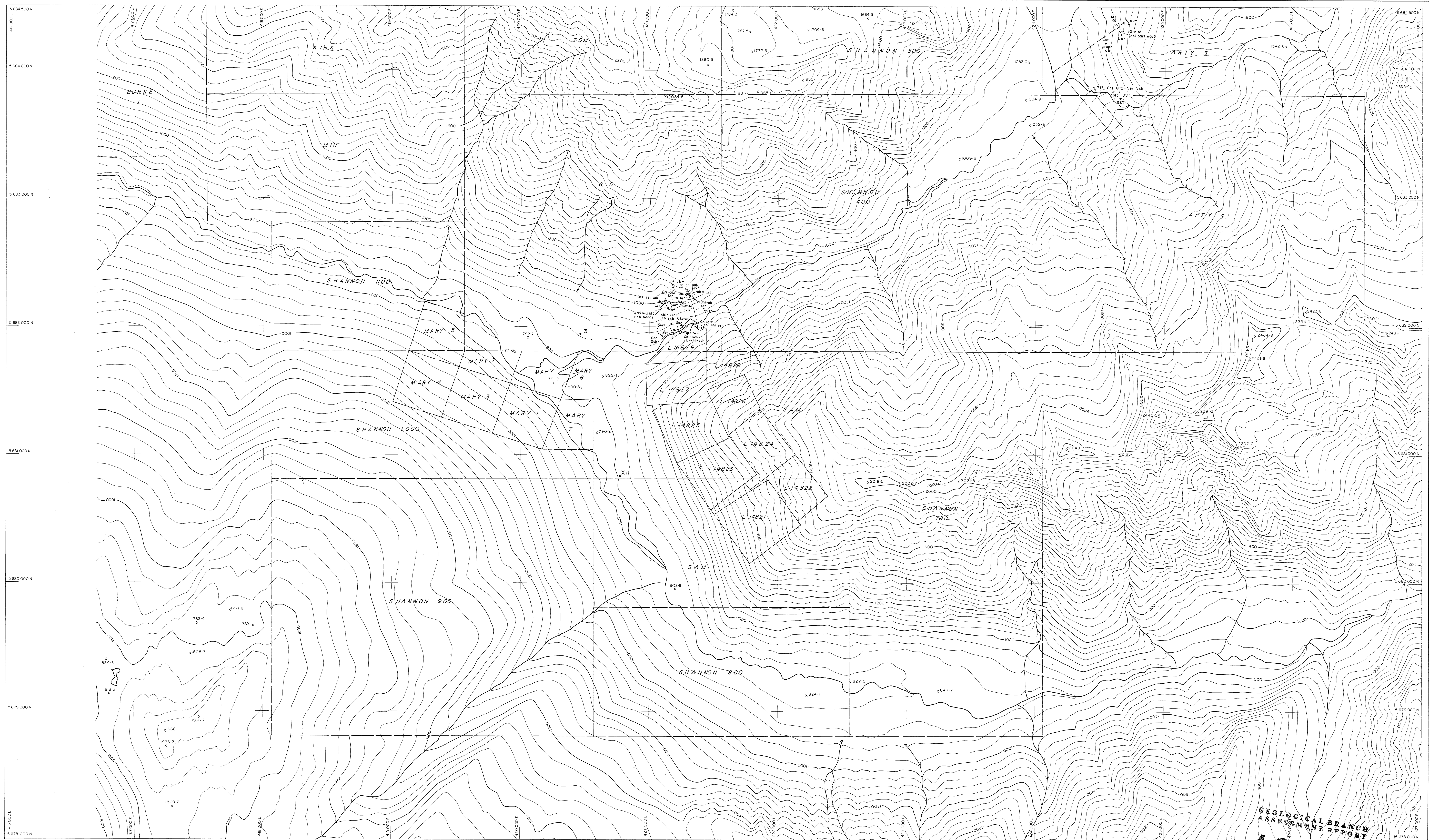
0 1070 2070 3070 feet

Scale 1:110,000

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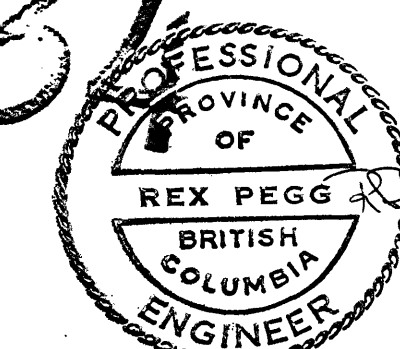
**J & L PROJECT
GEOLOGY**

DRAWN BY R. PEGG	DATE MAY, 1984	N.T.S. 82M/8E	PLAN 1
TRACED BY J. S.	DATE MAY, 1984		



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12.63



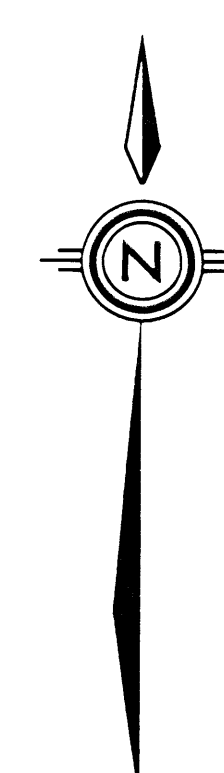
SELCO INC. EXPLORATION
WESTERN CANADA

J & L PROJECT
GEOLOGY

DRAWN BY R.PEGG	DATE MAY, 1984.	N.T.S.	PLAN
TRACED BY J.S.	DATE MAY, 1984	82 M / 8E	2

LEGEND

- | | | | |
|---------|------------------------------|-------|----------------------------|
| • XII | Airborne geophysical anomaly | _____ | Claim Boundary |
| Δ | Float | _____ | Geophysical line (flagged) |
| ○ X | Outcrop (large, small) | | |
| ↔ | Foliation | | |
| ↔ | Fold | | |
| - - - - | Geological contact | | |
| Cb | Carbonate | | |
| Chl | Chlorite | | |
| Lst | Limestone | | |
| Qtz | Quartz | | |
| Qtzite | Quartzite | | |
| Sch | Schist | | |
| Ser | Sericite | | |
| SST | Sandstone | | |
| graph | Graphite | | |
| Mt | Magnetite | | |
| Calc | Calcareous | | |



SHEET INDEX

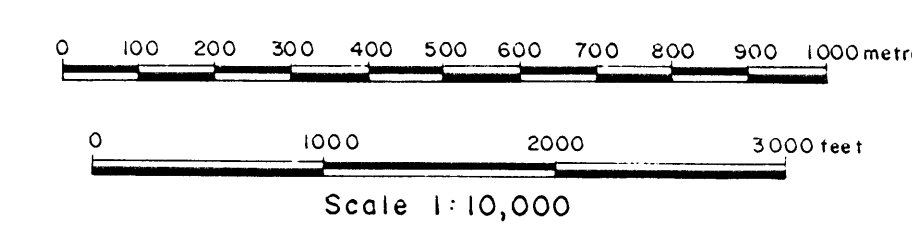
1
2

NOTE: Compiled from aerial photography at a scale of
1:75,000 flown in Aug. 1970.
Contour interval 40 metres.
Sheet No. 2 of 2.

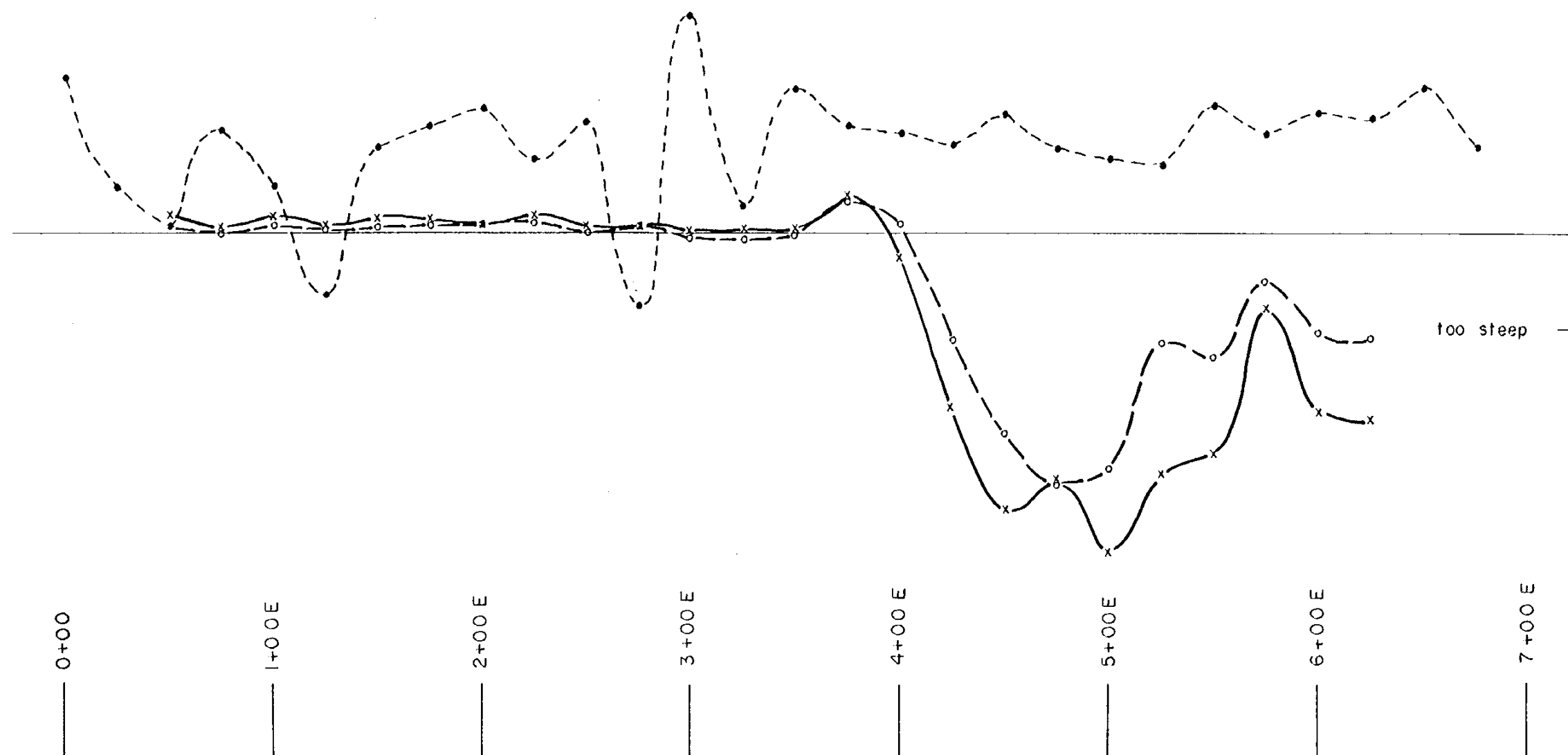
Sheet No. 2 of 2.

Sheet No. 2 of 2.

Sheet No. 2 of 2.



LINE AT 56°



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ELECTROMAGNETICS

+10 %
0
-10 %

x—x 112 / 3037

o—o 112 / 1012

COIL SEPARATION = 100 m

MAGNETICS •-•-•

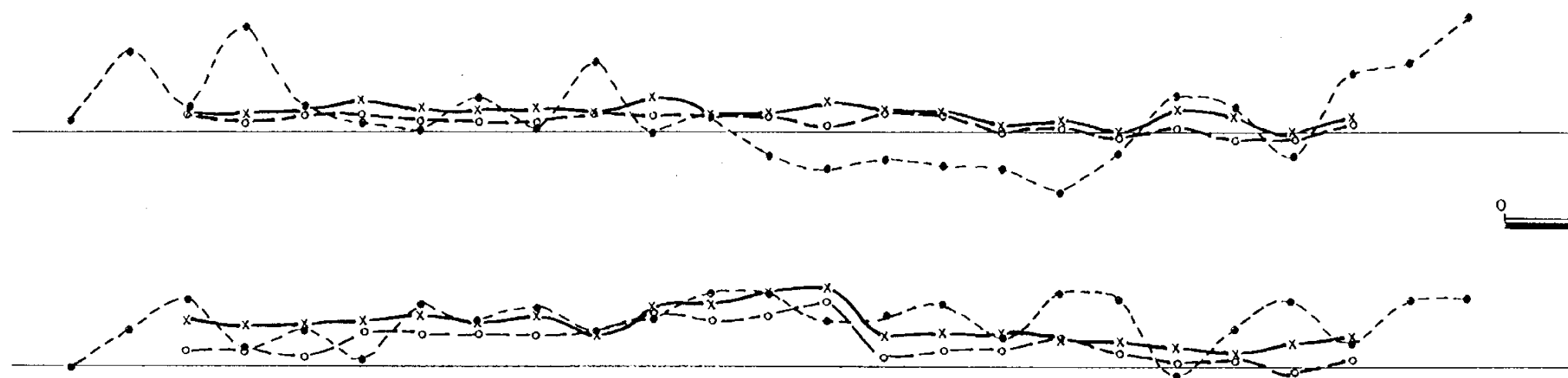
BASE = 60,050 V

1 cm = 25 V



L IN

L O



0 100 200 metres
1: 2500

SELCO INC. EXPLORATION
WESTERN CANADA

J & L PROJECT
ARTY CLAIMS

ELECTROMAGNETICS (GENIE)
AND MAGNETICS

DRAWN BY A. WYNNE	DATE AUG. 1983.	N.T.S.	PLAN
TRACED BY J. S.	DATE SEPT. 1983.	82 M / 8 E	3