

1988 DETAILED WORK PROGRAM

020320

FOR

YUKON CONCENTRATORS LTD.

by

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and

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Whitehorse, Yukon

February, 1988

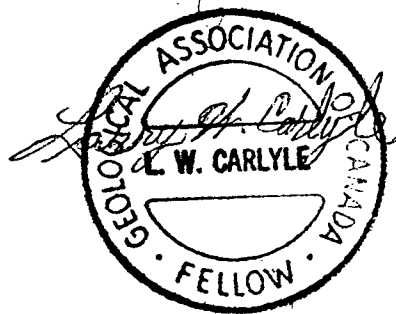


TABLE OF CONTENTS

	Page
PREAMBLE	1
PROGRAM SCHEDULING	Schedule A
<u>PRIORITY 1</u>	
BM CLAIMS	2
FIGURE A1	
FIGURE A2	
FIGURE A3	
TABLE A1	
QUIET PROSPECT	4
APPENDIX B1	
APPENDIX B2	
FIGURE B1	
FIGURE B2	
FIGURE B3	
FIGURE B4	
FIGURE B5	
FIGURE B6	
FIGURE B7	
FIGURE B8	
FIGURE B9	
FIGURE B10	
FIGURE B11	
<u>PRIORITY 2</u>	
PGMB PROSPECT	5
FIGURE C1	
FIGURE C2	
FIGURE C3	
FIGURE C4	
FIGURE C5	
FIGURE C6	
TOWER PROSPECT	8
APPENDIX D1	
FIGURE D1	
FIGURE D2	
FIGURE D3	
BOT PROSPECT	9
FIGURE E1	
FIGURE E2	
FIGURE E3	

TABLE OF CONTENTS CONT'D

	Page
<u>PRIORITY 3</u>	
PGMA PROSPECT	11
FIGURE F1	
FIGURE F2	
SQUANGA PROSPECT	13
FIGURE G1	
FIGURE G2	
FIGURE G3	
GREY COPPER HILL	14
APPENDIX H1	
FIGURE H1	
FIGURE H2	
DAWSON PROSPECT	15
FIGURE I1	
FIGURE I2	

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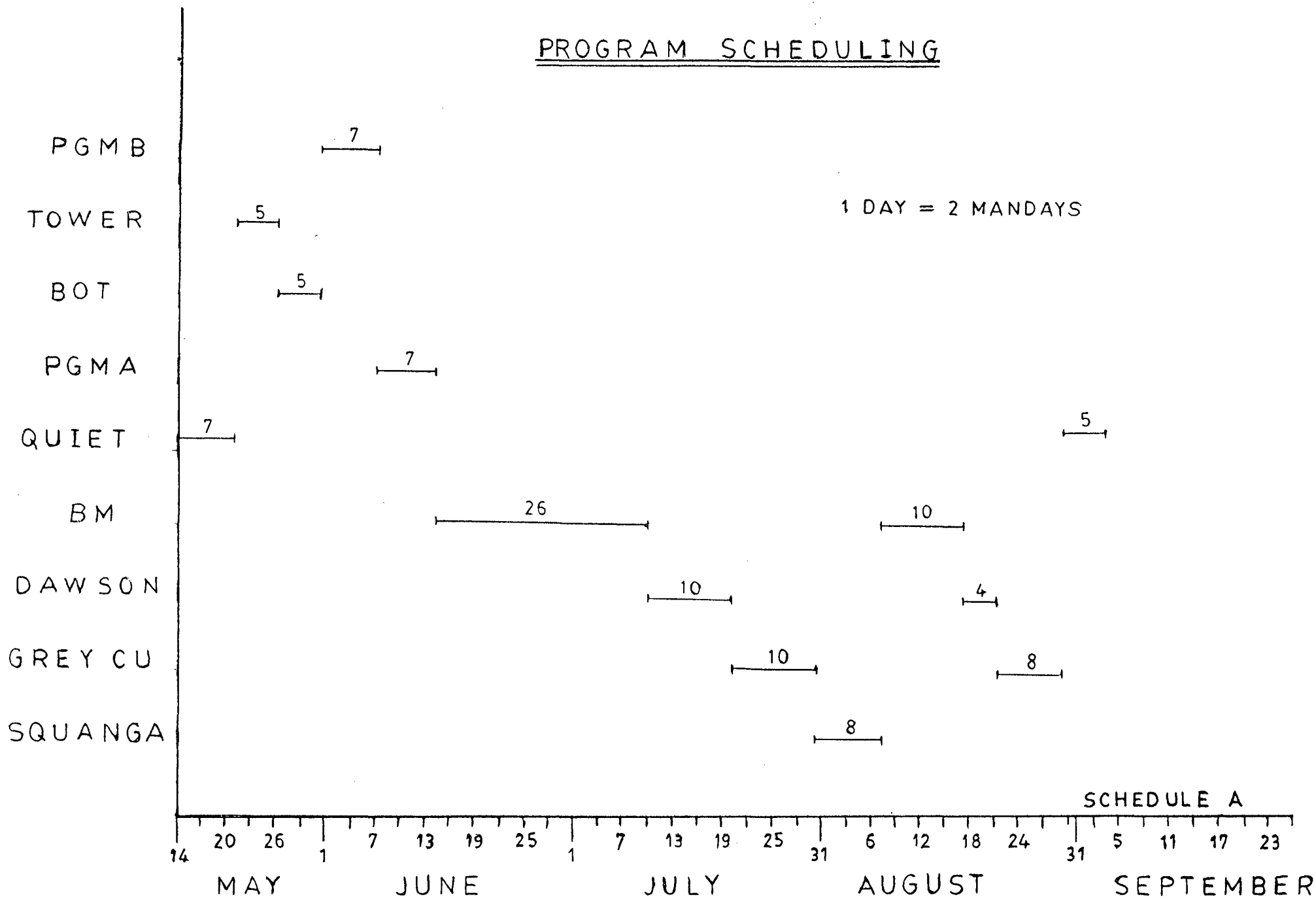
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PREAMBLE

The Yukon is a relatively under explored portion of Canada, with geology which is largely an extension of B.C. geology. The Territory has well developed transportation and communication systems. Recent interest in precious metals and the attraction of flow-through shares has resulted in a record \$40 to \$45 million being spent on Yukon mineral exploration in 1987.

Recent developments have seen the re-opening of the Faro Mine by Curragh Resources at 10,000 tons/day and the opening of Mt. Skukum Gold Mines at 300 tons/day. In the near future, Canamax Resources will be starting production at its Ketz River gold property at a rate of 350 tons/day. Preproduction studies are presently being conducted by Omni Resources on its Skukum Creek gold property, by Archer, Cathro/All North Resources on their Wellgreen nickel, copper, platinum property in the Kluane Range, and by Silver Hart on their silver, lead, zinc property near Rancheria. The Noranda/Golden Nevada joint venture at Grew Creek, Chevron Resources at Mt. Nansen, and Canamax at Mt. Hundere have outlined significant reserves on their properties, while the veteran producer United Keno Hill Mines at Elsa has significantly increased its ore reserves.

PROGRAM SCHEDULING



PRIORITY 1

BM CLAIMS

Yukon Concentrators Ltd. holds six claims on a copper - gold showing in the Mount Byng - Sheldon Creek area. This area has seen sporadic activity concentrated in the search for lode gold and uranium as well as placer gold. The only geological mapping in the area was done by Wheeler in 1961 (GSC Memoir 312). Minor geological and float mapping, soil sampling and trenching has been done on 2060 metres of grid lines on 50 metre spacings centered on the main showing.

Copper-gold mineralization has been found in two - 1 1/2 to 2 foot wide compact and vuggy quartz veins striking 320° Azimuth and dipping 5° to the southwest (Fig. A3). A sample from one of these veins assayed 0.13 opt. Au, 6.4 ppm Ag, and 82.0 ppm Cu. These veins cut fine grained limonitic rhyolite and quartzite dykes which appear to emanate from a small dioritic or gabbroic intrusive which penetrates the basaltic Hutshi Volcanics (J.O. Wheeler, 1961). A sample of oxidized material taken from the main showing returned an assay of 0.967 opt Au, 4.07 opt. Ag and 6.53 % Cu (Table A1). Preliminary soil sampling shows coincident Au-Ag-Cu values over a 100 metre strike length. Approximately 1 mile to the southeast, a chip sample of quartz-calcite vein material containing disseminated pyrite-arsenopyrite returned an assay of 1.70 opt Au. This sample was taken from an outcrop which may be a part of the source of an extensive arsenic stream sediment anomaly on the Sheldon Creek drainage.

We believe that this prospect can be brought to the advanced exploration stage by:

- (1) Staking an additional 30 claims.
- (2) Extending the present grid to allow additional soil sampling, geological mapping and to do VLF and magnetometer surveys to extend the strike of the known veins and locate new veins.

Access to this property can be improved by upgrading the cat road to 4-wheel capability. This cat road leaves the Michie Creek road and comes up Byng Creek into the Sheldon Creek drainage approximately 3 miles from the property (Fig. A1).

COST ESTIMATES

PHASE ONE

Helicopter	4.0 hrs. @ \$625/hr	\$ 2,500.00
Soil Samples	720 @ \$15.50/sample	\$ 10,908.00
Rock Samples	20 @ \$15.00/sample	\$ 300.00
Magnetometer	12 days @ \$120.00/day	\$ 1,440.00
EM	12 days @ \$ 20.00/day	\$ 240.00
Food	54 days @ \$ 25.00/day	\$ 1,350.00
Fuel		\$ 50.00
Staking	2 days @ \$ 170.00/day	\$ 340.00
Miscellaneous		\$ 250.00
Labour	52 days @ \$ 170.00/day	\$ 8,840.00

Total		\$ 26,218.00

PHASE TWO

Trenching	100 hrs @ \$ 80.00/hr	\$ 8,000.00
Sampling	200 @ \$15.00/sample	\$ 3,000.00
Food	30 days @ \$25.00/day	\$ 750.00
Labour	20 days @ \$170.00/day	\$ 3,400.00
Helicopter	4.5 hrs @ \$625.00/hr	\$ 2,820.00

Total		\$ 17,970.00

Totals Phases 1 & 2		\$ 44,188.00

4° 30'

25'

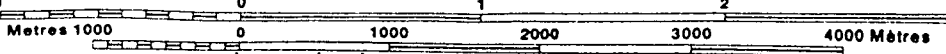
SHEET 105 D-16

20'

Joins Map 1368 C

Scale 1:50 000 Échelle

FIGURE A2



Byng

LEGEND

BM PROSPECT

GEOLOGY

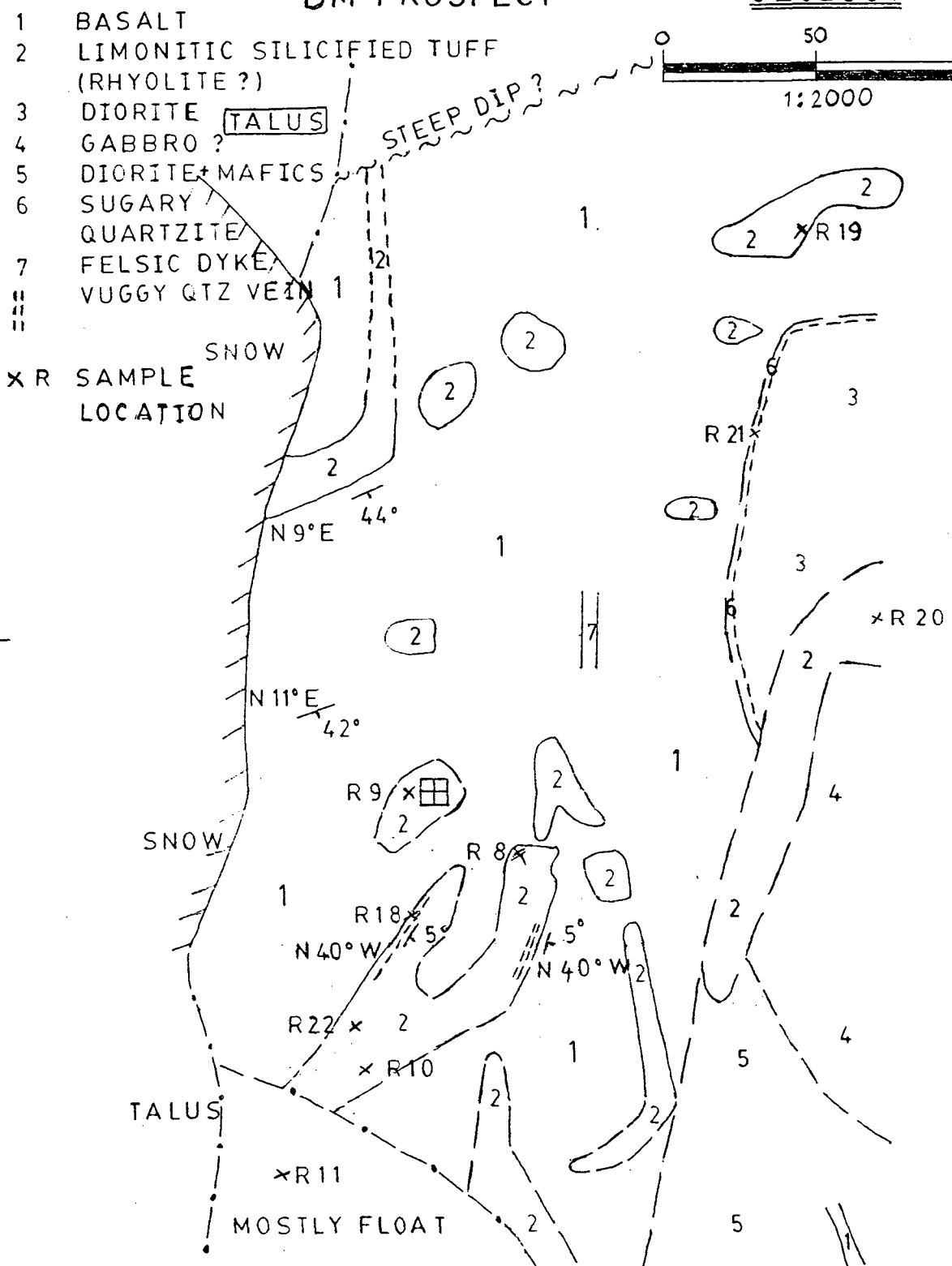


FIGURE A3

SAMPLE DESCRIPTION

<u>SAMPLE #</u>	<u>ASSAYS</u>			<u>DESCRIPTION</u>
	Au	Ag	Cu	
R 7	840 PPb	3.2 PPM	340 PPM	Sample of limonitic qtz stringers in tuff with Tr Py and malachite. NW end of BM Claims.
R 8	<5 PPb	2.3 PPM		Sample of limonitic silicified rhyolitic or tuffaceous material with Tr Py. Just west of R 9.
R 9	.967 opt	4.07 opt	6.53 %	Highly gossaned and wad stained qtz + tuff (?). Strong malachite + azurite fracture fillings.
R 10	4000 PPb	3.52 opt	4.62 %	Float of qtz vein with strong wad, limonite, malachite + azurite fracture fillings. Tr bornite + Py.
R 11	130 PPb	2.3 PPM	340 PPM	Float of silicified tuff (?), limonitic, Tr Py + malachite (?) diopside (?).
R 12	1.70 opt	5.00 PPM		Sample of qtz - calcite veinlet with strong limonite + Tr Py. SE edge of BM Claims.
2-2-1	40 PPb	14 PPM		Sample of limonitic shale + Tr Py. NE of BM Claims.
R 16	10 PPb	0.4 PPM		Limonitic dk. green-black basalt cut by secondary white qtz stringers + Tr Py.

TABLE A1

<u>SAMPLE</u> #	<u>ASSAYS</u>			<u>DESCRIPTION</u>
	Au	Ag	Cu	
R 17	15 PPb	0.6 PPM		Vuggy limonitic tuff cut by 2 phases of qtz + chalcedony. NW of BM Claim block.
R 18	4500 PPb	6.4 PPM	82 PPM	Sample of limonitic to fresh qtz vein material from Trench # 3. Tr malachite.
R 19	75 PPb	0.8 PPM		Limonitic silicified and bleached basalt. Tr Py.
R 20	85 PPb	0.3 PPM		Consolidated tuff cut by secondary qtz + weak limonite in fractures.
R 21	780 PPb	5.8 PPM	48 PPM	Pyritized meta-basalt from near diorite contact on BM Claims.
R 22	35 PPb	0.8 PPM	68 PPM	Probable sample of diorite thought to be a Cu mineral from the BM Claims.

Sample numbers missing from this list represent samples taken during prospecting in the area but not associated with the BM Claims.

Soil samples taken on the BM Claims were assayed for Au, Ag and Cu. These assays have been plotted and contoured and are available at request.

QUIET PROSPECT

The principals of Yukon Concentrators Ltd. staked two full and two partial claims in early November, 1987 at the south end of Quiet Lake. These claims were staked to partially cover a band of ultramafic rocks bounded on both sides by quartz-sericite schist. This area has seen extensive work done from the late 1960's to the mid 1970's. The first work was done to test the extent of lead-zinc mineralization in the area of a cool spring. Later work, based on a GSC air mag anomaly, was concentrated in the search for copper-nickel mineralization. This previous work included line cutting, soil sampling, E.M., magnetometer and I.P. surveys. This work outlined many strong copper-nickel soil anomalies which are coincident with magnetic highs (Figs. B5, 6, 9 & 10). Several of these soil-mag anomalies have coincidental E.M. and/or I.P. anomalies. There are some soil-mag anomalies which still require testing by E.M. or I.P. methods (Fig. B2 & 3). These data on the property convince Yukon Concentrators Ltd. that this is a good place to find platinum group mineralization. Only a small amount of work is needed to bring this property to the advanced exploration stage. This work would include a small amount of geochemical, VLF and magnetometer surveys to enable the previous surveys to be tied together (Figs. B4 to 11).

COST ESTIMATES

EM	6 days @ \$20.00/day	\$ 120.00
Magnetometer	6 days @ \$120.00/day	\$ 720.00
Assays	399 @ avg. \$6.71/sample	\$ 2,685.00
Food	24 days @ \$25.00/day	\$ 600.00
Fuel		\$ 100.00
Labour	24 days @ \$170.00/day	\$ 4,080.00

Total		\$ 8,305.00

PREVIOUS WORK

The area was first staked to cover an isolated magnetic high detected on a government airborne magnetic survey in 1961 (Maps 7002 G and 1345 G). This area coincided with several patches of transported gossans in which recent gravels have been cemented together by iron and manganese bearing solutions derived from local springs.

NEWMONT GEOCHEMICAL AND MAGNETIC SURVEY

The property was optioned in 1966 to the Newmont Mining Corporation of Canada, who carried out limited geochemical (Pb and Zn) and ground magnetometer surveys.

They concluded from a study of the combined information that there was a possibility of zinc-bearing mineralization occurring at depth, and recommended a furam survey on a more closely spaced line grid for 1967. However in the following year they failed to exercise their option.

WATERTON AIRBORNE GEOPHYSICAL SURVEY

On the recommendation of P.H. Sevensma Ph.D., P. Eng. (Report dated November 20th, 1967), Waterton Aeronautics and Exploration Limited were contracted to carry out a combined airborne electromagnetic, magnetic and radiometric survey over the claim group in January 1968.

With the system readings are recorded at five hundred foot intervals on flight paths recoverable by photography.

The magnetometer survey showed the rough outline of the ultrabasic intrusive, but no fault structure or well defined contacts could be observed due to herringboning of the magnetic data obtained from non-compensation for the orientation of the instrument.

The electromagnetic survey results showed several wide spread anomalies and a few small isolated ones. The wide spread anomalies appeared as two bands striking northeast on either side of the intrusive. These were, in the opinion of the writer, reflections of changes in overburden and/ or bedrock conductivity and considered of secondary importance in any planned ground follow-up.

Ground follow-up should have been carried out on the small isolated anomalies occurring at or near the boundary of the interpreted intrusive.

The radiometric survey detected numerous small isolated anomalies in no way connected with the E.M. or magnetic anomalies.

GROUND FOLLOW-UP - P.H. SEVENSMA CONSULTANTS and ACE R. PARKER & ASSOCIATES

In May 1968 ground follow-up work was initiated on the results of the fore-mentioned airborne surveys. Two grids were laid out on the large northeasterly trending airborne E.M. anomalies with baseline bearings of N 40°E.

Ace R. Parker & Associates Limited carried out geochemical, magnetic and electromagnetic surveys on lines 800 feet apart on these grids. The results were essentially negative.

P.H. Sevensma Consultants Limited carried out geological mapping on the grids and discovered no visible sulphide mineralization except for occasional flecks of pyrite in the limited rock outcroppings.

TRANS-YUKON MAGNETOMETER AND GEOCHEMICAL SURVEY

In March 1969 Trans Yukon Exploration Limited themselves undertook a magnetometer survey over three isolated airborne E.M. anomalies on the west side of the interpreted intrusive.

Unfortunately the lines were cut parallel to the strike of the contact but nonetheless the magnetic survey outlined the intrusive - schist contact and indicated the presence of faulting coinciding with linears on the aerial photographs.

On the recommendation of P. H. Sevensma, P. Eng. a new grid was laid out at right angles to the previous one, and Eagle Geophysics Limited were contracted to carry out a limited Induced Polarization and magnetometer survey, the results of which will be discussed in the next section.

In the meanwhile Trans Yukon carried out a geochemical survey (Ni, Cu) on the new grid, and in a report on this survey, after doing a statistical study on the data, R. Hilker noted a predominant NW-SE nickel trend and NE-SW and NW-SE copper trends. He concluded that (1) as copper is a highly mobile element and nickel a generally immobile one, the NE-SW copper trend is superimposed on the NW-SE trend by hydrology (stream flow in this area being NE-SW) and the overall trend is NW-SE, and (2) in his opinion geochemistry is usable in this area as an aid in exploring for mineralized zones.

SECTION B

INDUCED POLARIZATION AND MAGNETOMETER SURVEY

April - May, 1969

INTRODUCTION

Between April 29th and May 18th, 1969, Eagle Geophysics Limited carried out an Induced Polarization (I.P.) and ground magnetometer survey over part of the property held by Trans Yukon Exploration Limited in the Quiet Lake area.

The survey was carried out over N 45°E bulldozed lines which were turned off every 200 feet from a N 45°W baseline, and which were chained and picketed at 100 foot intervals.

Readings on the magnetic survey were taken every 100 feet along the picket lines using a Sharpe M.F.1 fluxgate magnetometer with additional readings at 50 foot intervals in area of steep magnetic gradients.

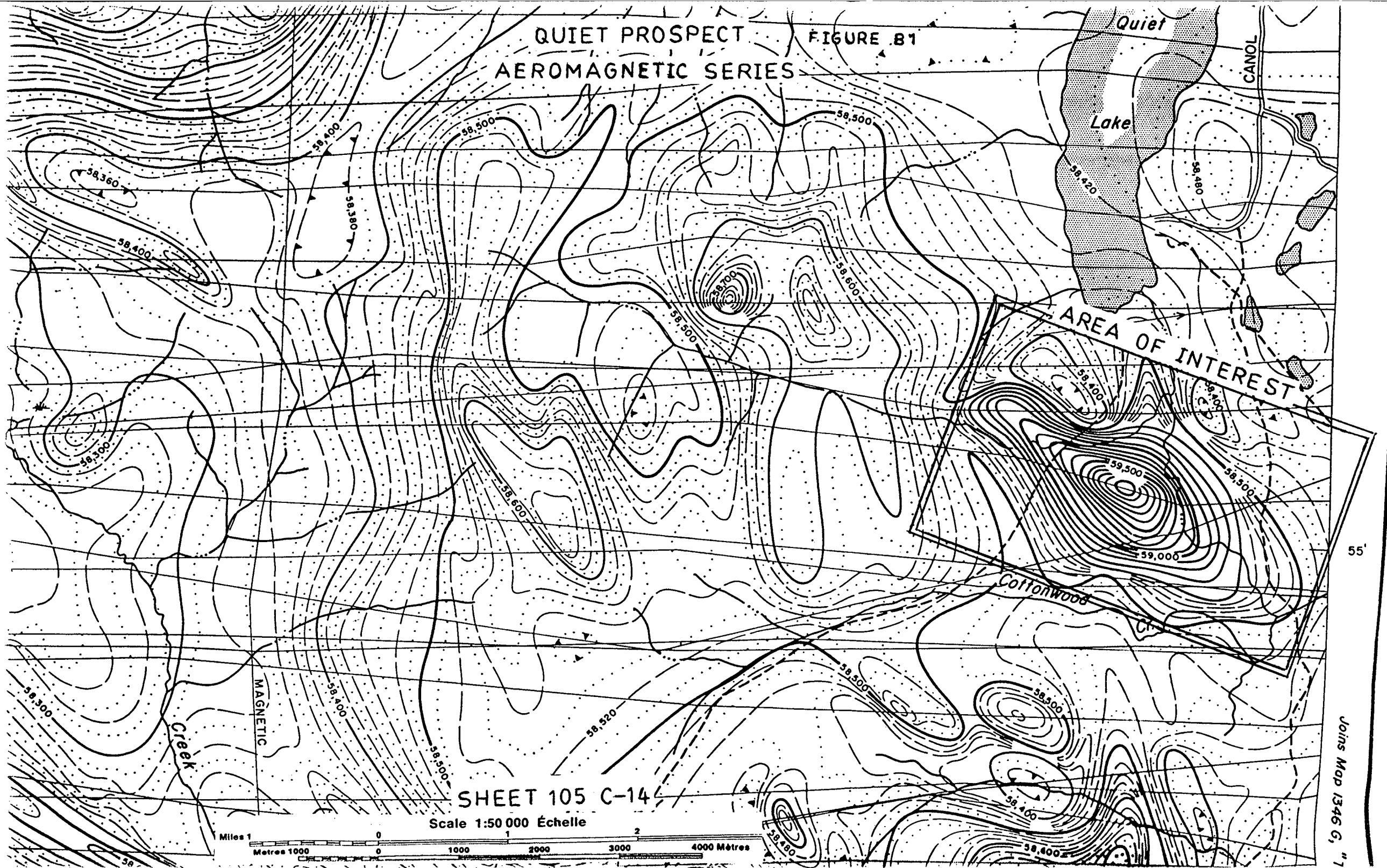
Measurements of apparent chargeability (the I.P. response parameter) were made over the entire line grid using the "three electrode array" method with an electrode separation of 300 feet and a station interval of 100 feet. Simultaneous measurements of apparent resistivity were also made.

In addition, measurements of apparent chargeability and resistivity were made over interpreted anomalous areas using electrode separations of 100 and 500 feet respectively and appropriate station intervals.

As the survey was initiated at the start of winter break-up it was cut short by flooding before the detail work could be completed.

The data are presented on plan maps of the line grid, Maps E-149, 1 to 4, at a scale of 1 inch equals 200 feet. The chargeability and resistivity readings are presented in profile form on Maps E-149, 1 and 2

QUIET PROSPECT FIGURE B1
AEROMAGNETIC SERIES



Creek

MAGNETIC

SHEET 105 C-14

Scale 1:50 000 Échelle



AREA OF INTEREST

Cottonwood

Quiet
Lake

CANAL

55'

Joins Map 1346 G, "1"

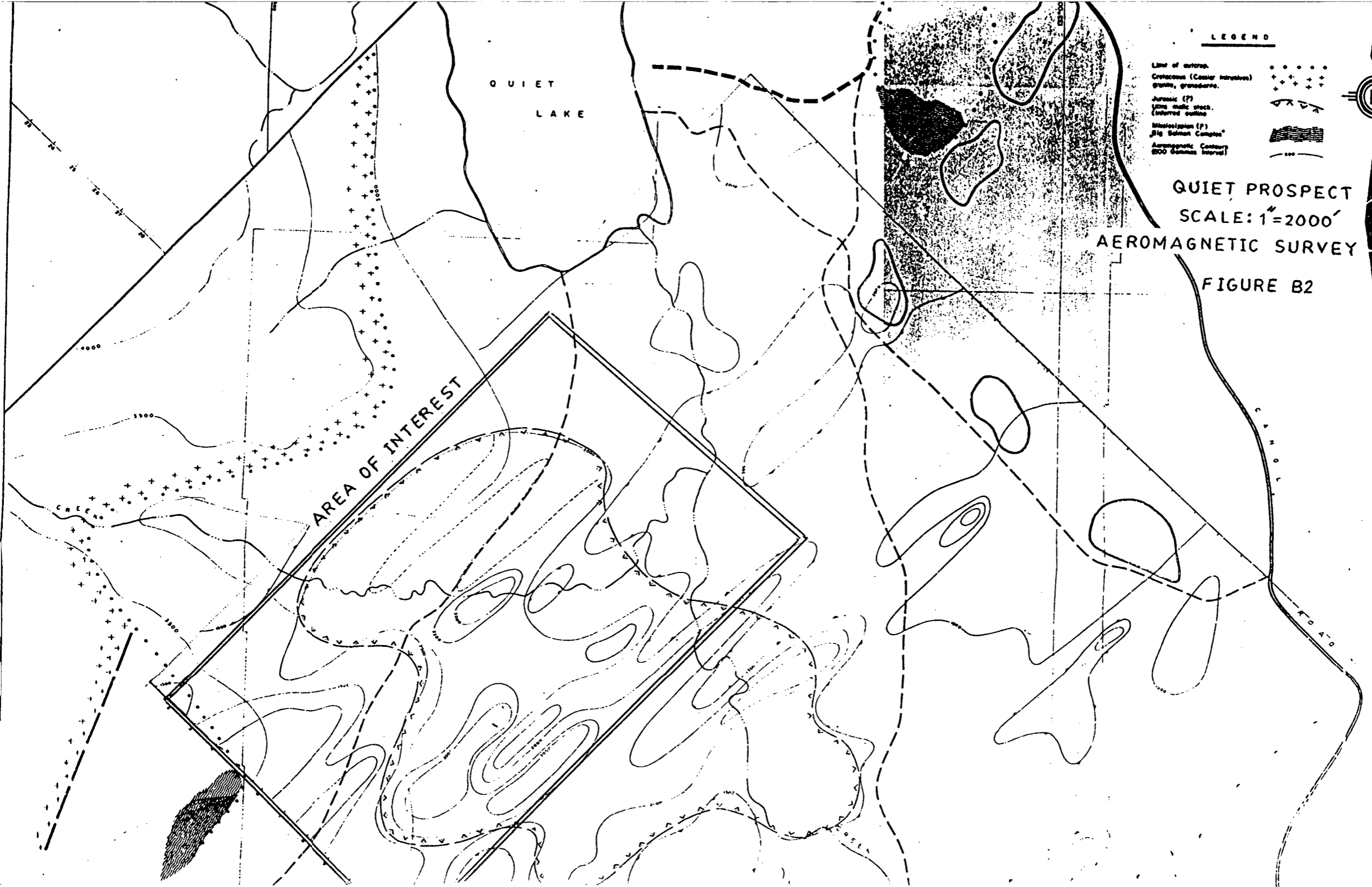
LEGEND

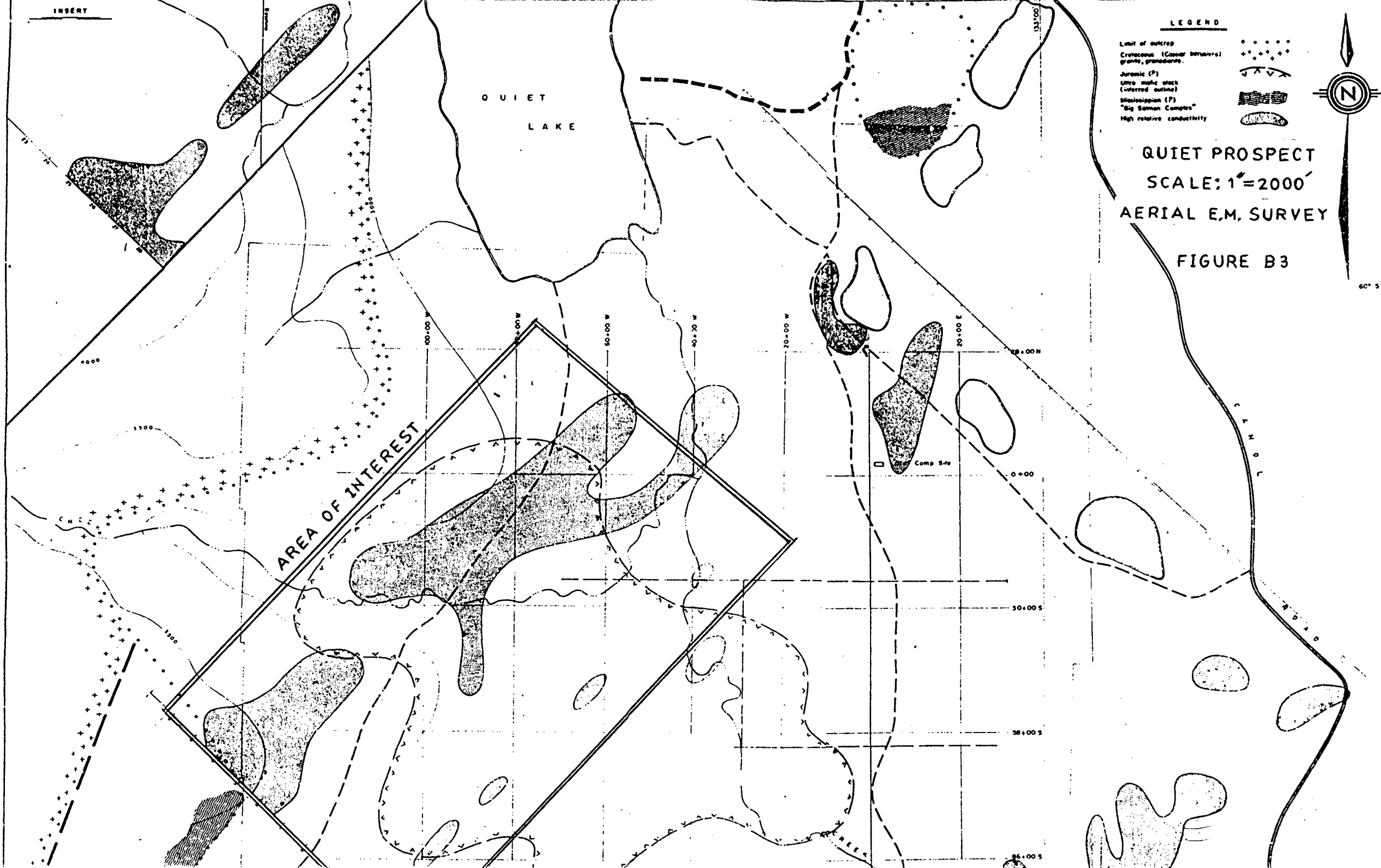
- Line of aurores
- Cretaceous (Cassiar intrusives)
granite, gneiss, etc.
- Jurassic (?)
igneous rocks
(inferred outline)
- Interception (?)
Big Salmon Complex
- Aeromagnetic Contour
(500 Gamma Interval)



QUIET PROSPECT
SCALE: 1"=2000'
AEROMAGNETIC SURVEY
FIGURE B2

60° 57'





INSERT

QUIET
LAKE

AREA OF INTEREST

Comp Site

LEGEND

- Limit of outcrop
- Cretaceous (Cassiar terranes):
granite, granodiorite
- Jurassic (?)
- Ultra mafic stock
(inferred outline)
- Mississippian (?)
- "Big Salmon Complex"
- High relative conductivity



QUIET PROSPECT
SCALE: 1"=2000'
AERIAL E.M. SURVEY

FIGURE B3

1000

1500

1500

100+00

100+00

100+00

100+00

20+00

30+00

00+00N

0+00

30+00S

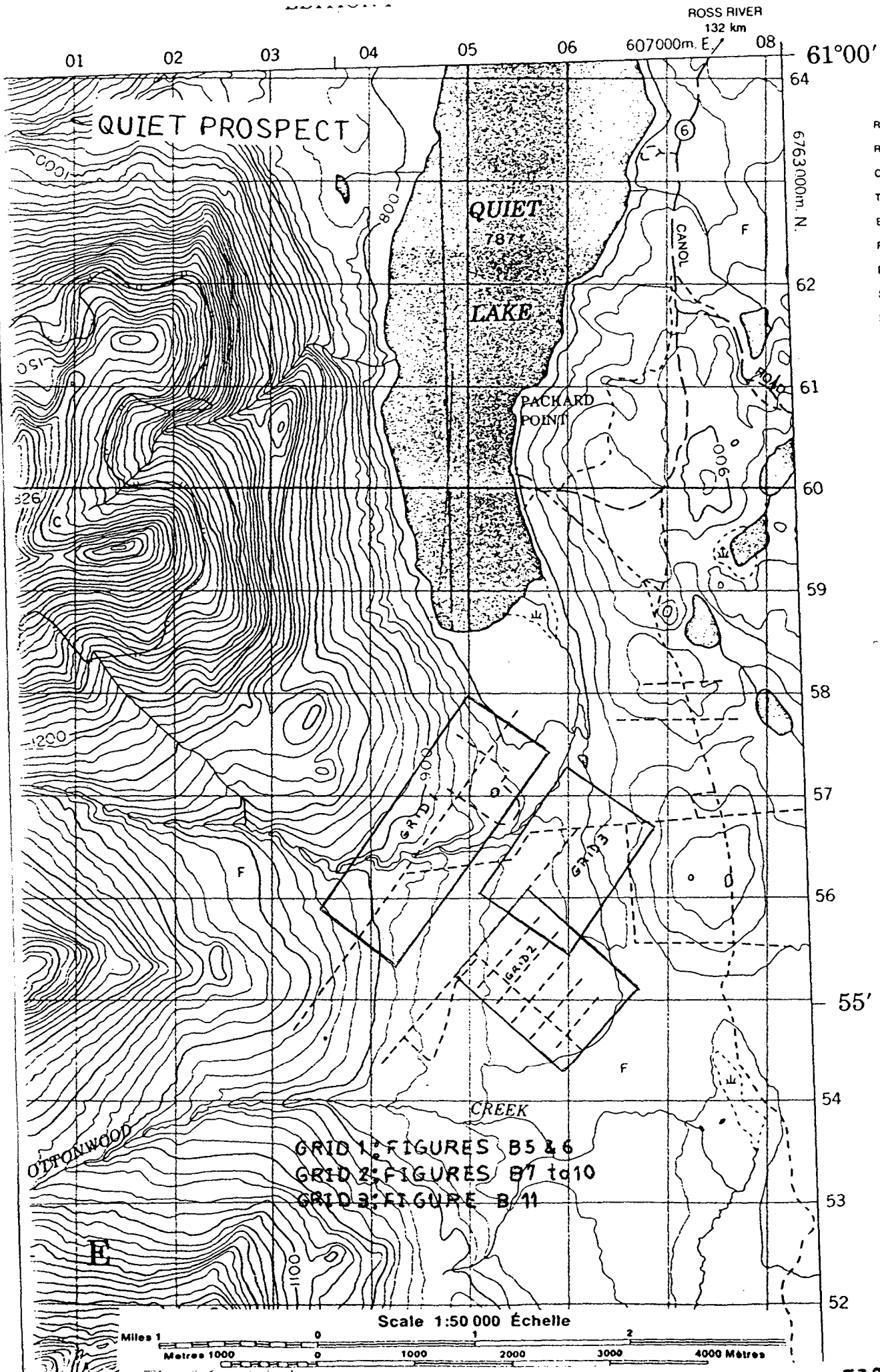
50+00S

85+00S

C
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M
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E
X

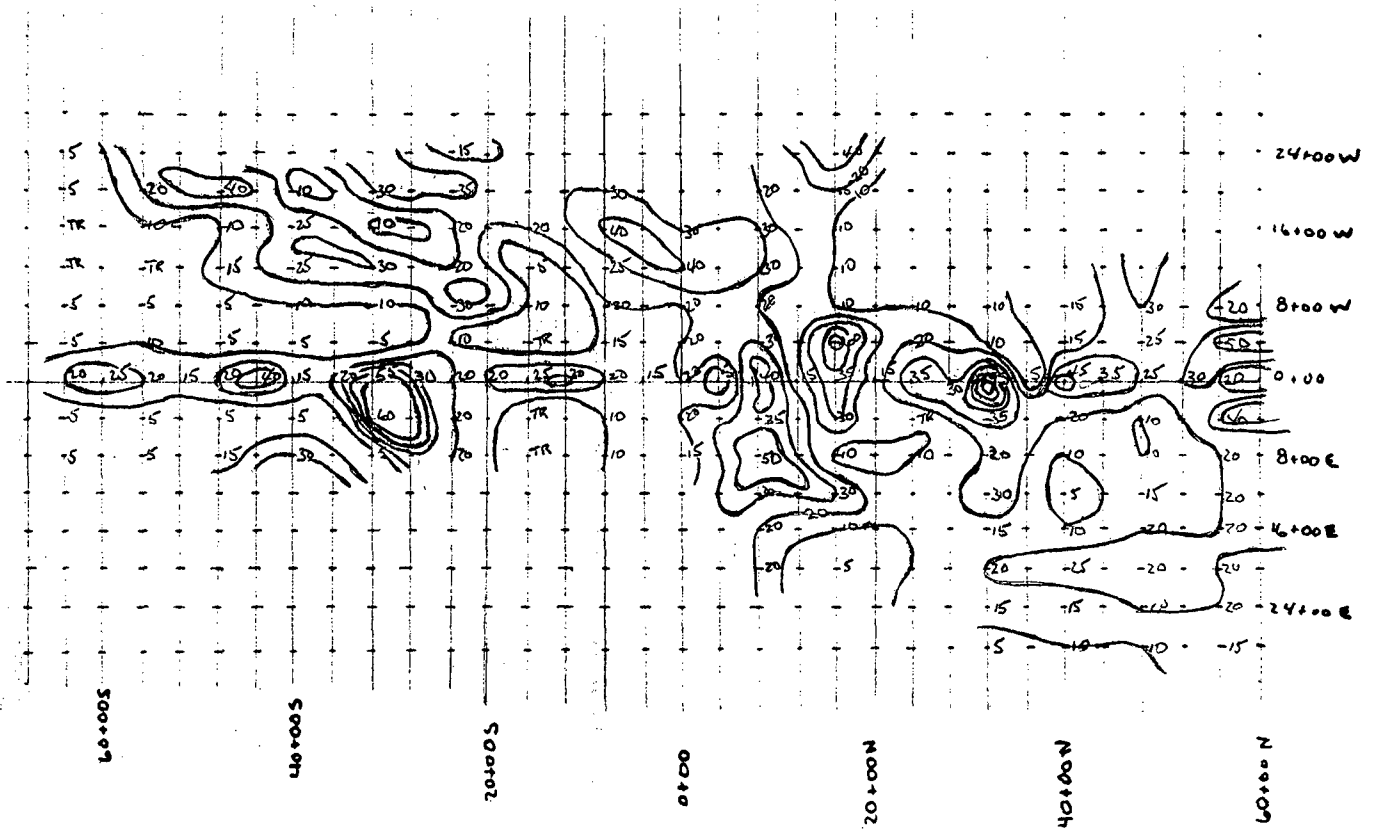
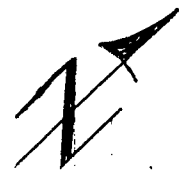
R
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N



- ROAD, HARD SURFACE
- ROAD, LOOSE SURFACE
- CART TRACK, WINTER TRAIL, CUT LINE, PORT
- BUILT-UP AREA
- RAILWAY: SIDING: STAT BRIDGE
- SEAPLANE BASE: SEA HOUSE: BARN
- CHURCH: SCHOOL: POSTOWER: FIRE, COMMUN
- WELL: OIL, GAS, TANK, POWER TRANSMISSION
- MINE: GRAVEL PIT
- CUTTING; EMBANKMENT
- INTERNATIONAL, PROVINCIAL BOUNDARY WITH M
- PROVINCIAL BOUNDARY
- COUNTY, DISTRICT BOUNDARY
- TOWNSHIP, PARISH BOUNDARY
- MUNICIPALITY BOUNDARY
- RESERVE, SANCTUARY, OUTLINED LANDMARK
- D.L.S. TOWNSHIP CORNER
- D.L.S. SECTION CORNER
- HORIZONTAL CONTROL
- BENCH MARK WITH ELEVATION
- SPOT ELEVATION, PRECISE
- STREAM OR SHORELINE
- LAKE; INTERMITTENT LAKE
- FLOODED LAND
- MARSH; SWAMP (WOOD)
- DRY RIVER BED WITH RAPIDS; FALLS; RAPIDS
- FORESHORE FLATS, SAND
- TUNDRA; LAKES IN TUNDRA
- PALSA BOG
- DAM; WHARF
- ICEFIELD (GLACIER); MOUND
- PINGO
- DITCH
- CONTOURS
- APPROXIMATE CONTOUR
- DEPRESSION CONTOUR
- CLIFF
- SPOT ELEVATION, APPROXIMATE
- ESKER
- SAND, SAND DUNES, SAND
- HISTORIC SITE
- WOODED AREA, FOREST

FIGURE B4



SCALE: 1 cm = 800 ft
FIGURE B 5

Cu IN SOILS (PPM)
~ 10 PPM CONTOUR
GRID 1
QUIET LAKE

14+00 S 12+00 10+00 8+00 6+00 4+00 2+00 0+00 2+00 4+00 6+00 8+00 10+00 12+00 14+00

E-LINE
14+00 E
12+00 E
10+00 E
8+00 E
6+00 E
4+00 E
2+00 E
0+00 E
2+00 E
4+00 E
6+00 E
8+00 E
10+00 E
12+00 E
14+00 E
16+00 E
18+00 E
20+00 E
22+00 E
24+00 E
26+00 E
28+00 E
30+00 E
32+00 E
34+00 E
36+00 E
38+00 E
40+00 E

QUIET PROSPECT
SCALE: 1" = 200'

UNIT M₁

MAGNETOMETER SURVEY

LEGEND

CONTOUR INTERVAL 100 GAMMAS




-  500 GAMMA CONTOUR
-  INTERPRETED MAGNETIC CONTACT
-  INTERPRETED FAULT

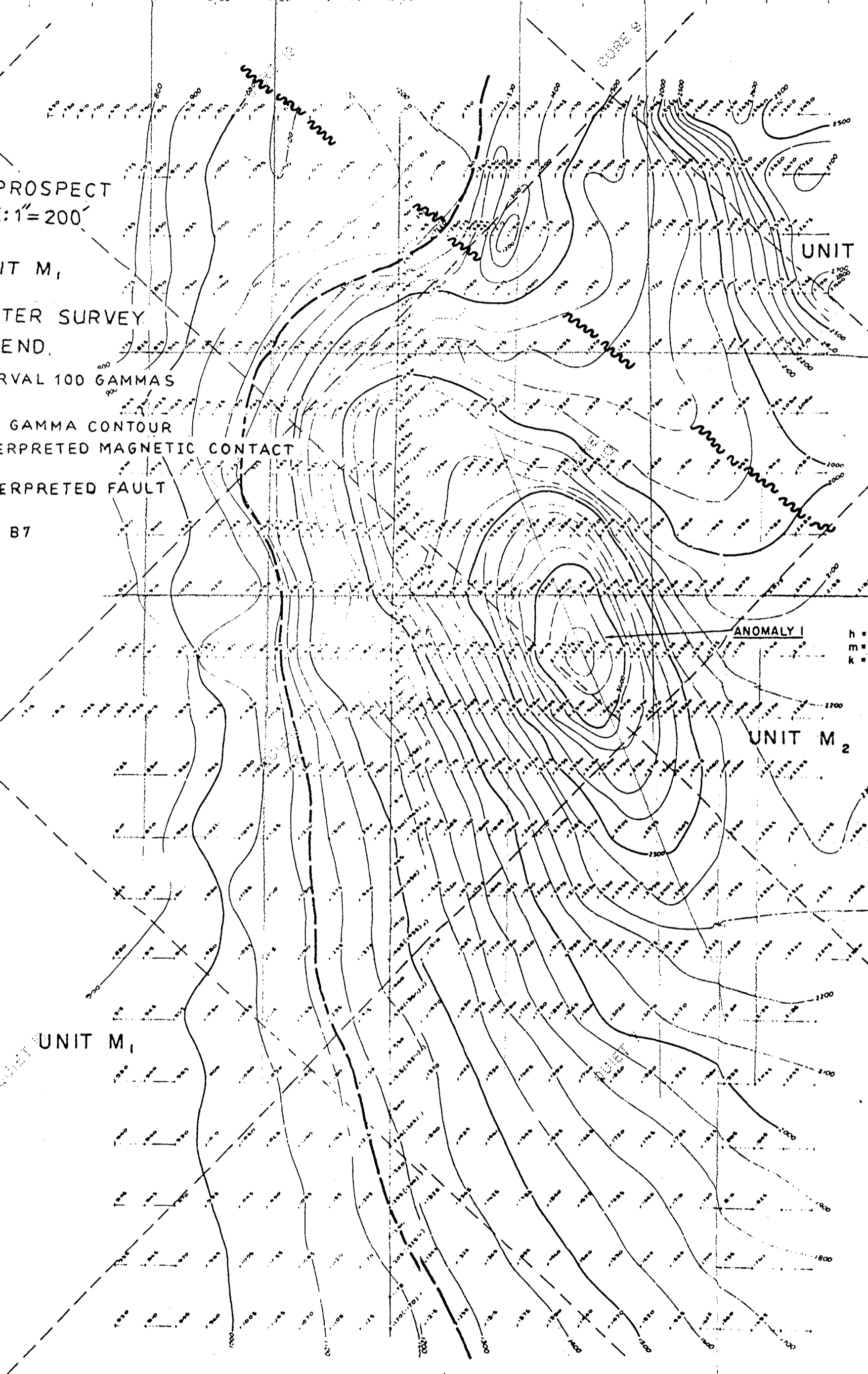
FIGURE B7
GRID 2

ANOMALY I

h = 8
m = 16
k = 6

UNIT M₂

UNIT M₁



14+00S 12+00 10+00 8+00 6+00 4+00 2+00S 0+00 2+00N 4+00 6+00 8+00 10+00 12+00

QUIET PROSPECT

SCALE: 1"=200'

BASE-LINE

L 2+00 E

L 4+00 E

L 6+00 E

L 8+00 E

L 10+00 E

L 12+00 E

L 14+00 E

L 16+00 E

L 18+00 E

L 20+00 E

L 22+00 E

L 24+00 E

L 26+00 E

L 28+00 E

L 30+00 E

L 32+00 E

L 34+00 E

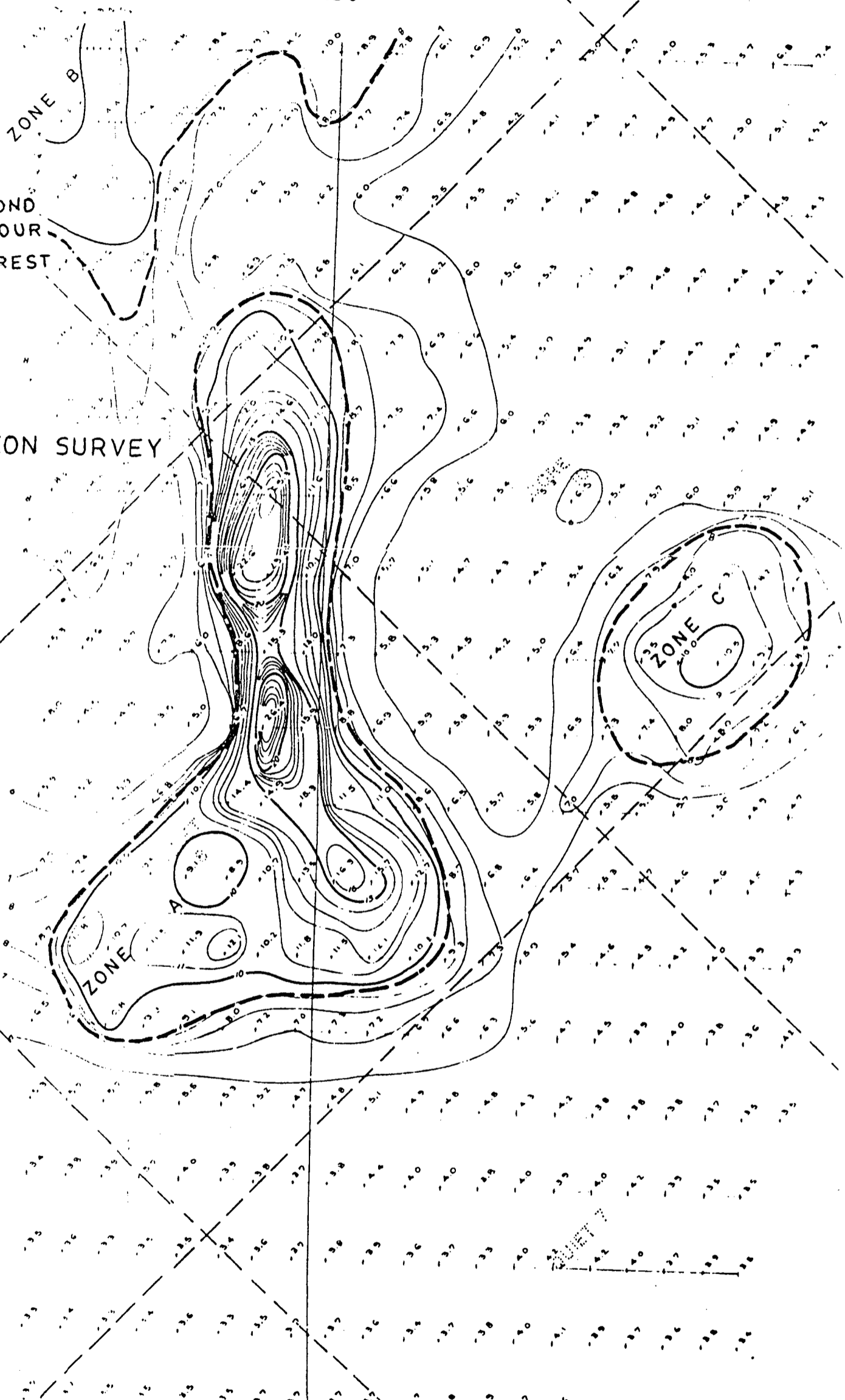
L 36+00 E

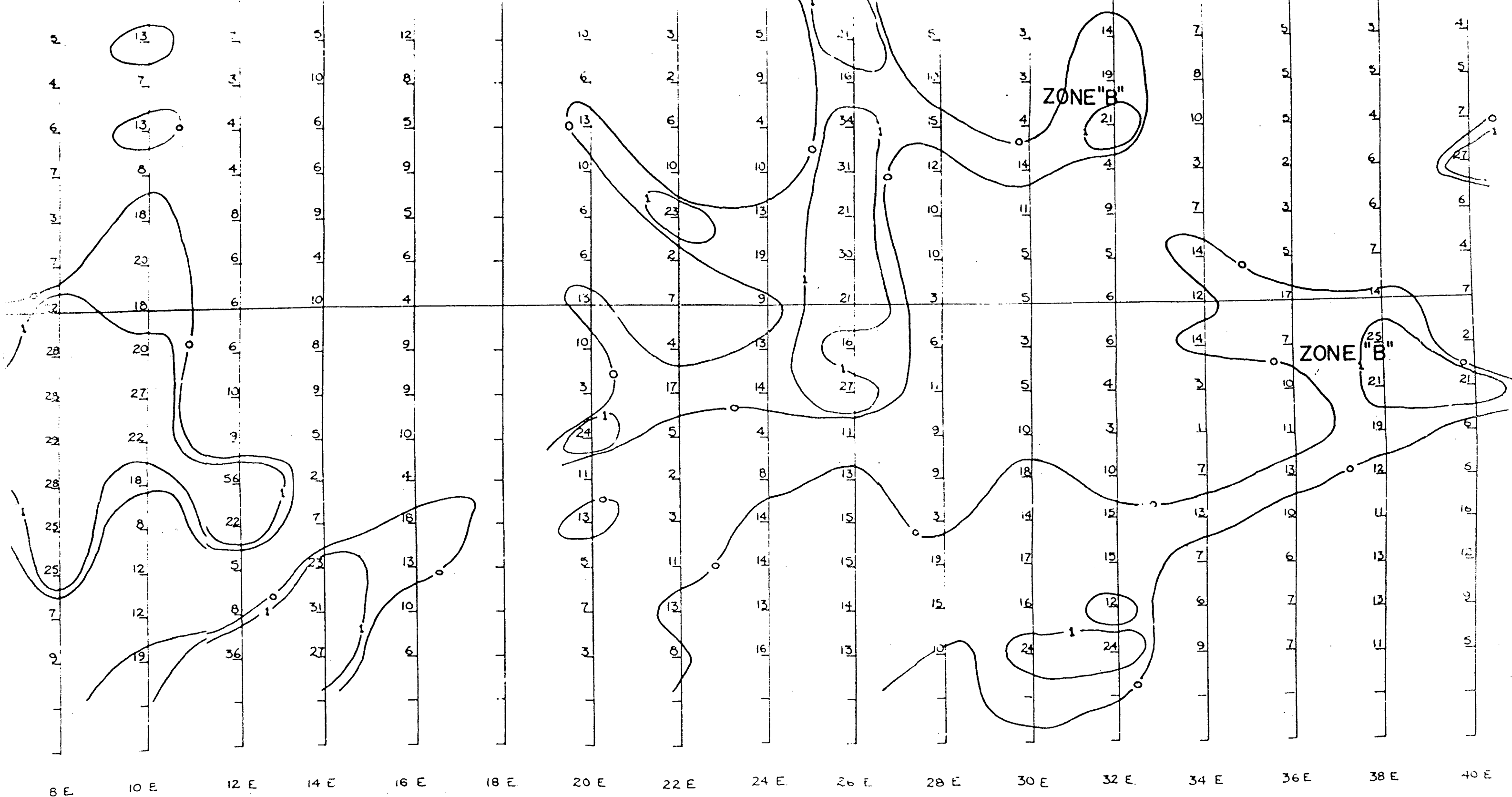
LEGEND

CONTOUR INTERVAL 1 MILLISECOND
5 MILLISECOND CONTOUR
ZONE OF INTEREST

INDUCED POLARIZATION SURVEY

FIGURE B8
GRID 2





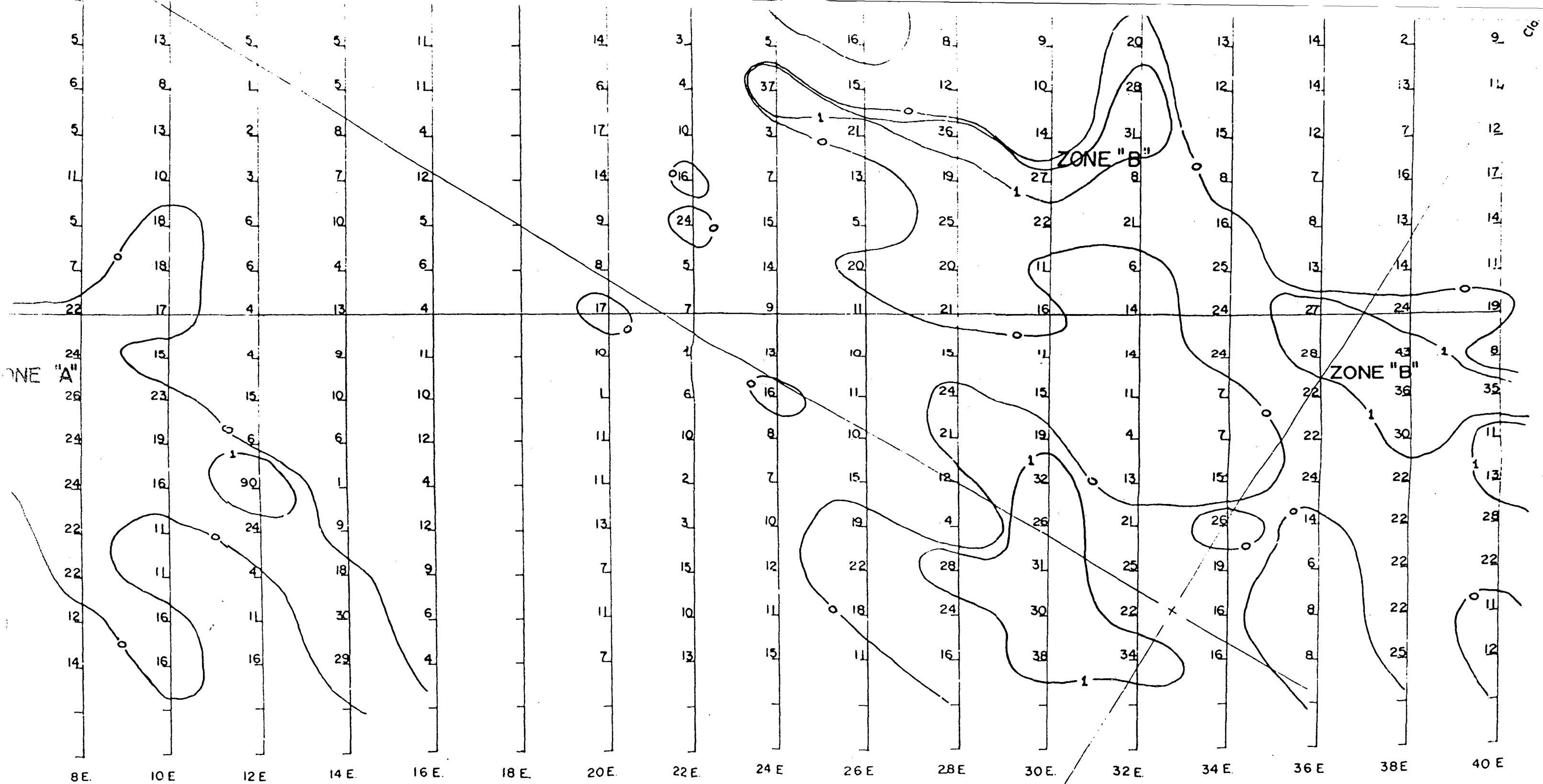
Contours: O is 13 ppm Cu.
 1 is 20 ppm Cu.

QUIET PROSPECT

FIGURE B9
 GRID 2

SCALE: 1" = 200'

TRANS YUKON EXPLORATION		
-QUIET LAKE GEOCHEMISTRY		
COPPER DETERMINATIC		
DR BY - RC	APP'D - R. HILKER	REVIS



Contours - "O" is 16 p.p.m. Ni.
 "1" is 26 p.p.m. Ni.

SCALE: 1" = 200'

QUIET PROSPECT

FIGURE B10
 GRID 2

TRANS YUKON EXPLORATION		
- QUIET LAKE GEOCHEMISTRY NICKEL DETERMINATION		
DR BY - R.C.	APP'D - R. HILKER	REVI
DATE - 11-6-69	SCALE - 1" = 200 ft	

--- ASSUMED GEOLOGICAL CONTACT

— 500 GAMMA CONTOURS

● ULTRA BASIC ROCKS

GROUND MAGNETOMETER SURVEY

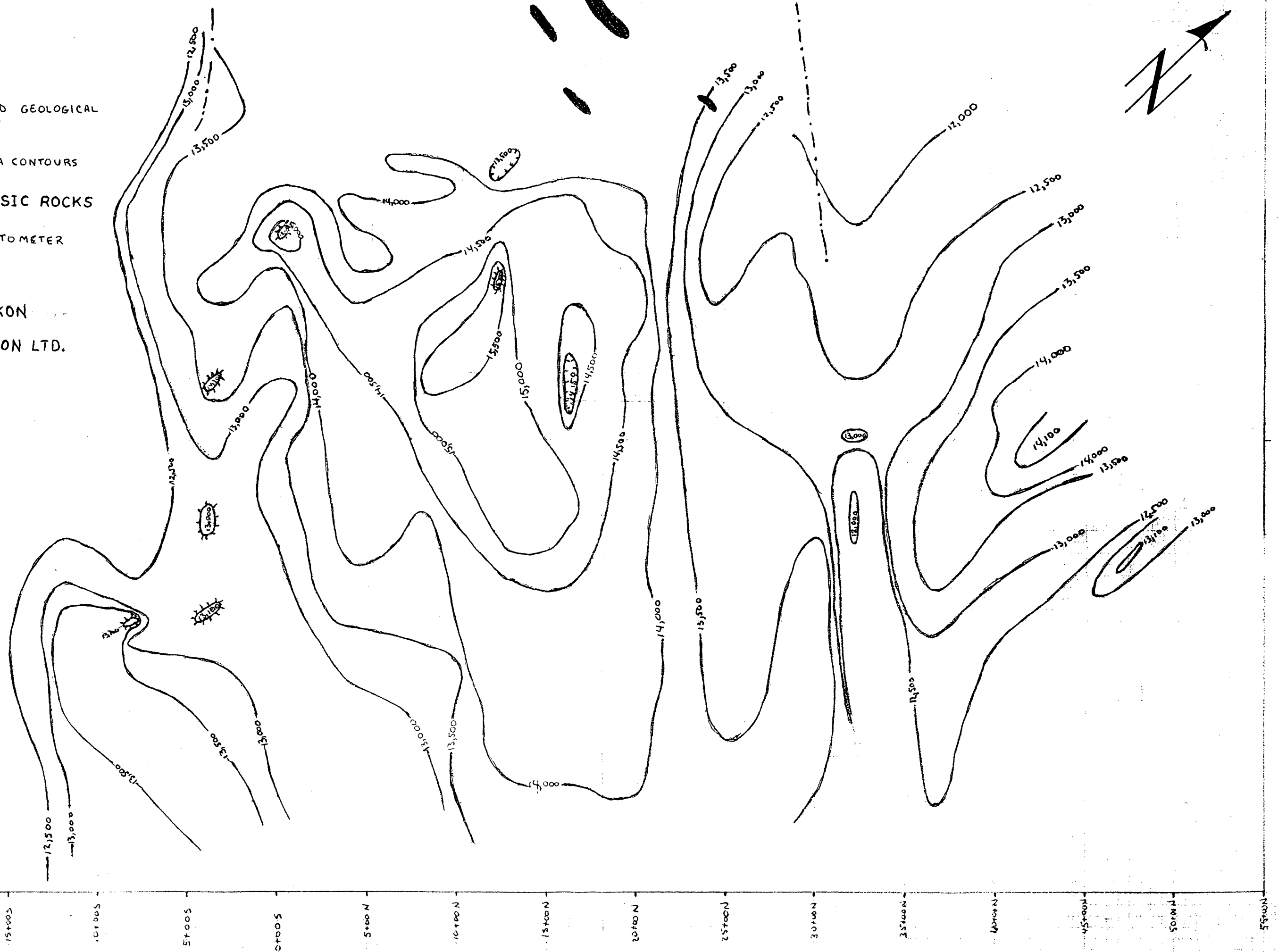
BY TRANS YUKON EXPLORATION LTD.

QUIET LAKE

GRID 3

SCALE 1" = 500'

FIGURE B11



PRIORITY 2

PGMB PROSPECT

The proposed PGMB Prospect lies south of a 6310 ft. peak east of Moose Creek on map sheet 115 F-15 (Fig C1). Access is by helicopter from Koidern 15 miles to the northwest. The prospect lies in the Duke River Depression, a NE/SW trending geosyncline, bounded on the north by the Denali Fault and on the south by the Duke River Fault. The region has been subjected to several episodes of volcanic activity and periods of intense shearing and faulting.

The area was originally staked as the LEP Claims on the basis of a zinc stream sediment anomaly found in a regional survey carried out by Imperial Oil Enterprises Ltd. in June, 1969. This company conducted geological mapping and geochemical, magnetic and induced polarization surveys (Figs. C 3&4). Six diamond drill holes, totalling 106 ft., were drilled on specific showings.

The prospect area is underlain by volcanics and sediments of probable Permian - Triassic age. These have been intruded by ultrabasic/ basic and diorite dykes(?). The volcanics are composed of rhyolites, andesites and basalts. Overlying these are limestones (marble in areas of mineralization); cherts; siltstones and shales; and quartzites (Fig. C2). To the south, there are fine to medium grained pyroxenite-gabbro intrusives that host numerous small copper showings. To the north, there are massive and coarse grained diorites. The sediments generally strike NW/SE and dip steeply to the NE. The basic intrusives are concordant to the layering in the sediments, while the diorites tend to cross-cut the units.

The magnetometer survey outlined five NW/SE trending anomalies. Two of these are quite strong, and coincide with the pyroxenite - gabbros. The I.P. survey was conducted on the southern portion of the ground covered by the magnetometer survey and extended past it to the south. It outlined three anomalous zones that appear to be a continuation of structures/units outlined in the magnetometer survey. One of which is open to the south and may be the edge of an ultrabasic/basic intrusive plug.

The grid used for the magnetometer survey was also used for the geochemical survey. Samples were assayed for Cu, Ni, and Co. Seven copper anomalies and five Ni-Co anomalies were outlined. Of these, four were anomalous for both Cu and Ni-Co (Figs. C 5 & 6). Of those, two were coincidental with the magnetometer anomalies, and on trend with the I.P. anomalies.

Six diamond drill holes totalling 106 feet were completed. Of these, two are of interest.

D.D.H. = 4

0" - 5"	Medium grained basic intrusive
2' - 3'	Mineralized, highly chloritized zone chalcopryrite: est. 2 % - 3 %
3'6" - 4'	Chalcopryrite

D.D.H. = 5

0" - 2'10"	Fine grained basic intrusive
6" - 17"	Disseminated sulphides chalcopryrite: est. 1 % - 2 % pyrrhotite: trace
2'3" - 3'2"	Sulphides chalcopryrite: est. 5 % pyrrhotite: trace
3'10" - 5'4"	Trace disseminated sulphides chalcopryrite: est. 1 % - 2 %

Sphalerite, chalcopyrite, pyrite, pyrrhotite and magnetite mineralization occur on the property. Chalcopyrite occurs as massive mineralization in the marbles, and as disseminations and stringers in the basic intrusive near the contact(chill margins?). Estimated copper values run from trace to 3 %. Sphalerite occurs with pyrite in an irregular pod about 30 ft. long in a siliceous marble, and is a replacement body conformable with the host rock. Pyrite occurs with both the sphalerite and the chalcopyrite. Pyrrhotite is found with the magnetite and chalcopyrite.

A small program of E.M., magnetometer and soil surveys to extend the work to the southeast and to confirm previous work is required.

COST ESTIMATES

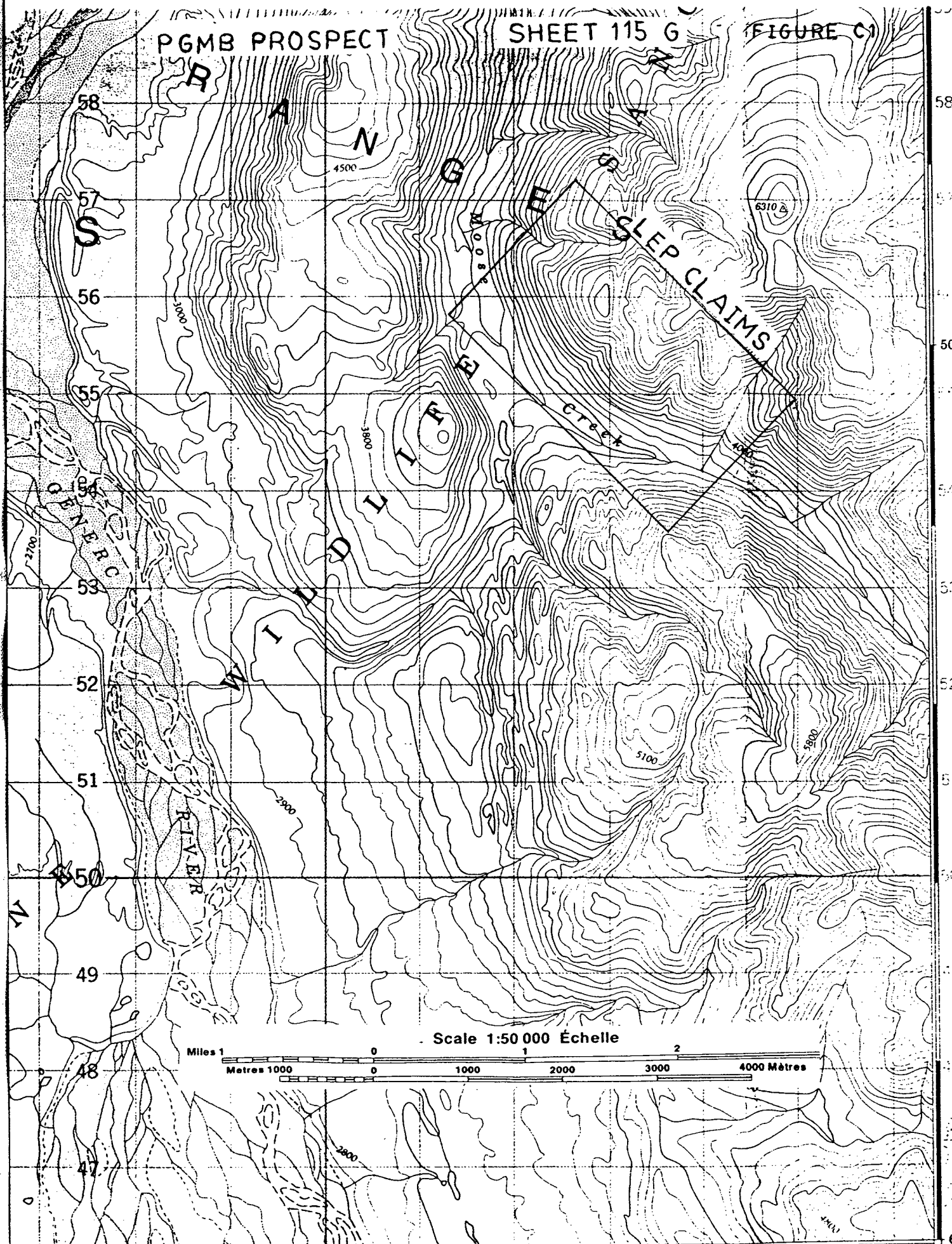
EM	5 days @ \$20.00/day	\$ 100.00
Magnetometer	7 days @ \$120.00/day	\$ 840.00
Assays	205 @ avg.\$6.81/sample	\$ 1,395.50
Food	14 days @ \$25.00/day	\$ 350.00
Fuel		\$ 100.00
Helicopter	1.5 hrs @ \$625.00/hr	\$ 937.50
Labour	14 days @ \$170.00/day	\$ 2,380.00

Total		\$ 6,103.00

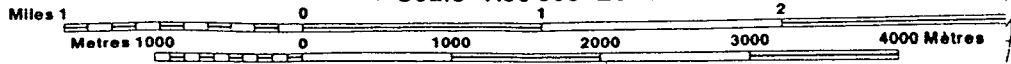
PGMB PROSPECT

SHEET 115 G

FIGURE C1



Scale 1:50 000 Échelle



61°45'

17 40' 18 19 20 21 35' 23 24 5250' W 26 140' 30'

QUATERNARY

PLEISTOCENE AND RECENT

Qs

URN

Qs undivided surficial deposits: incl. glacial deposits, alluvium, and colluvium.

CRETACEOUS

Kg

"KLUANE RANGES INTRUSIONS":

mainly granodiorite, qtz. diorite and diorite; rarer qtz. monzonite; fairly high-level intrusions; incl. elongate batholiths and stocks, and "plugs"; locally incl. younger intrusions: C. meta. effects range (1) to (2).

Kg undivided "Kluane Ranges Intrusions"; mainly multiphase intrusions.

PALEOZOIC AND/OR MESOZOIC

JKD

meta. basic volcanics, schist, marble; minor granitic rocks and granitoid gneiss: may in part be equiv. to Pv, Pc, Ps, PRub, URN, URC; (?) loc. may incl. older or younger: (115F/9,16).

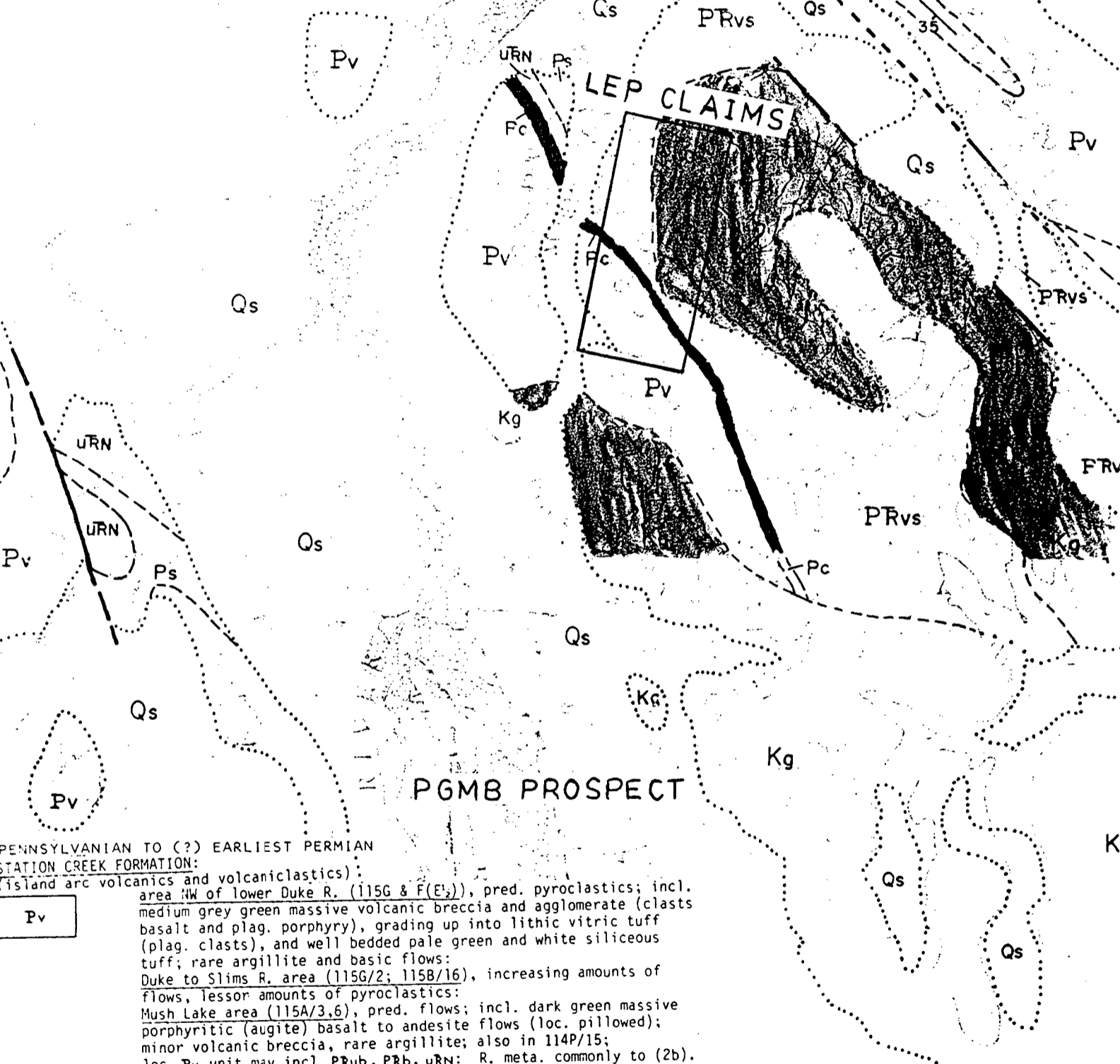
PRvs

(?) LATEST PENNSYLVANIAN TO LOWER PERMIAN

HASEN CREEK FORMATION:

Ps thin bedded siliceous argillite, siltstone, minor greywacke and conglomerate; loc. thin basaltic flows (some pillowed), breccia and tuff: (marine: 0 to 800 m.); may loc. incl. Pv, Pc, PRub, PRb: R. meta. to (2); may incl. M. and U. Trias., JKD in 114P/15. Rvs buff bioclastic limestone, calcarenite; local conglomerate at base: (0 to 100 m.) equiv. to Golden Horn Limestone, McCarthy Quad. Alaska. R. meta. to (2).

Qs



PENNSYLVANIAN TO (?) EARLIEST PERMIAN

STATION CREEK FORMATION:

(island arc volcanics and volcanoclastics):

area NW of lower Duke R. (115G & F(E₂)), pred. pyroclastics; incl. medium grey green massive volcanic breccia and agglomerate (clasts basalt and plag. porphyry), grading up into lithic vitric tuff (plag. clasts), and well bedded pale green and white siliceous tuff; rare argillite and basic flows: Duke to Slims R. area (115G/2; 115B/16), increasing amounts of flows, lesser amounts of pyroclastics:

Mush Lake area (115A/3,6), pred. flows; incl. dark green massive porphyritic (augite) basalt to andesite flows (loc. pillowed); minor volcanic breccia, rare argillite; also in 114P/15; loc. Pv unit may incl. PRub, PRb, URN: R. meta. commonly to (2b).

GEOLOGY S.W. KLUANE LAKE MAP AREA

FIGURE C2

Miles 5



Kilometers 5

Scale 1:25,000

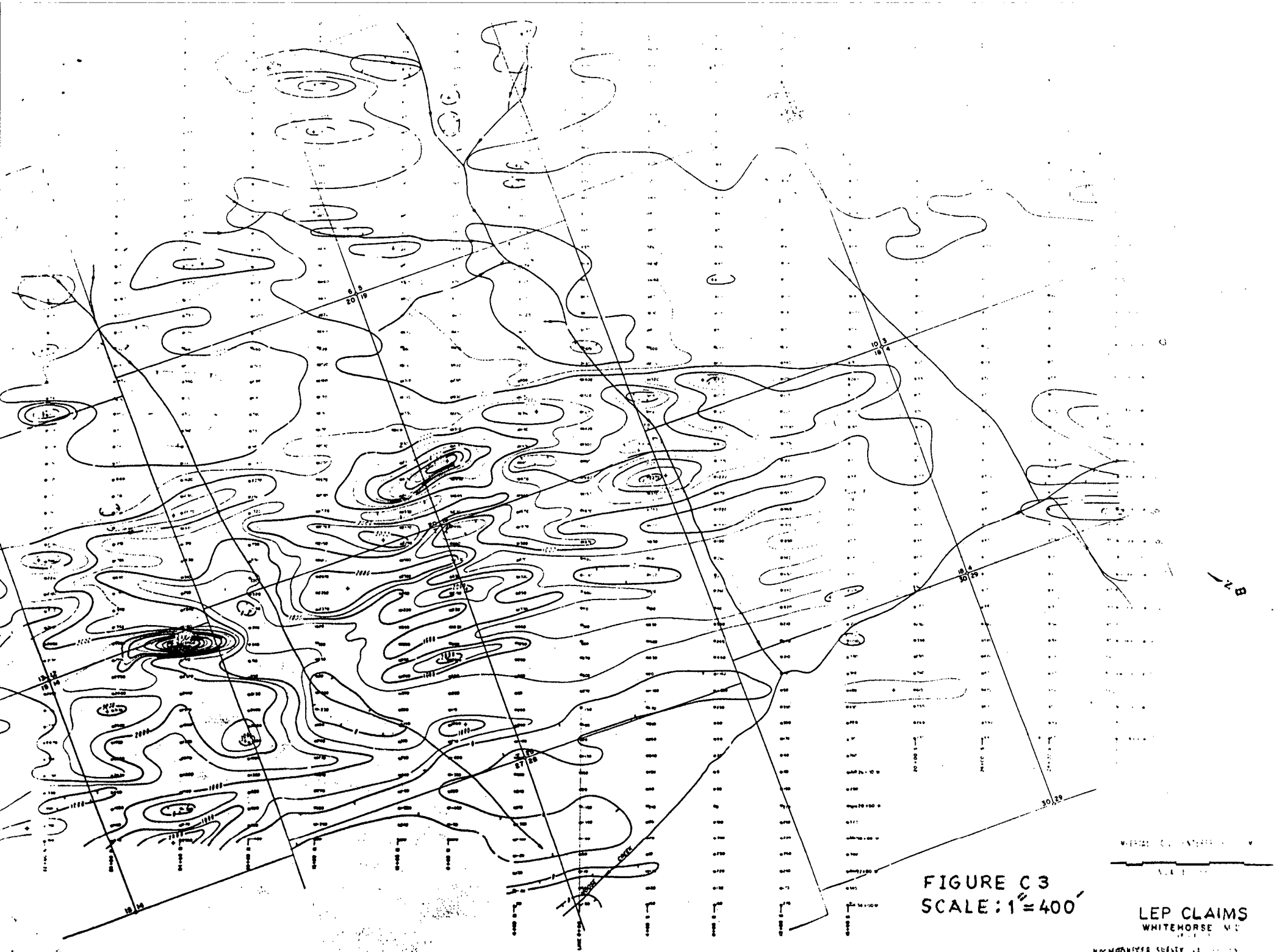
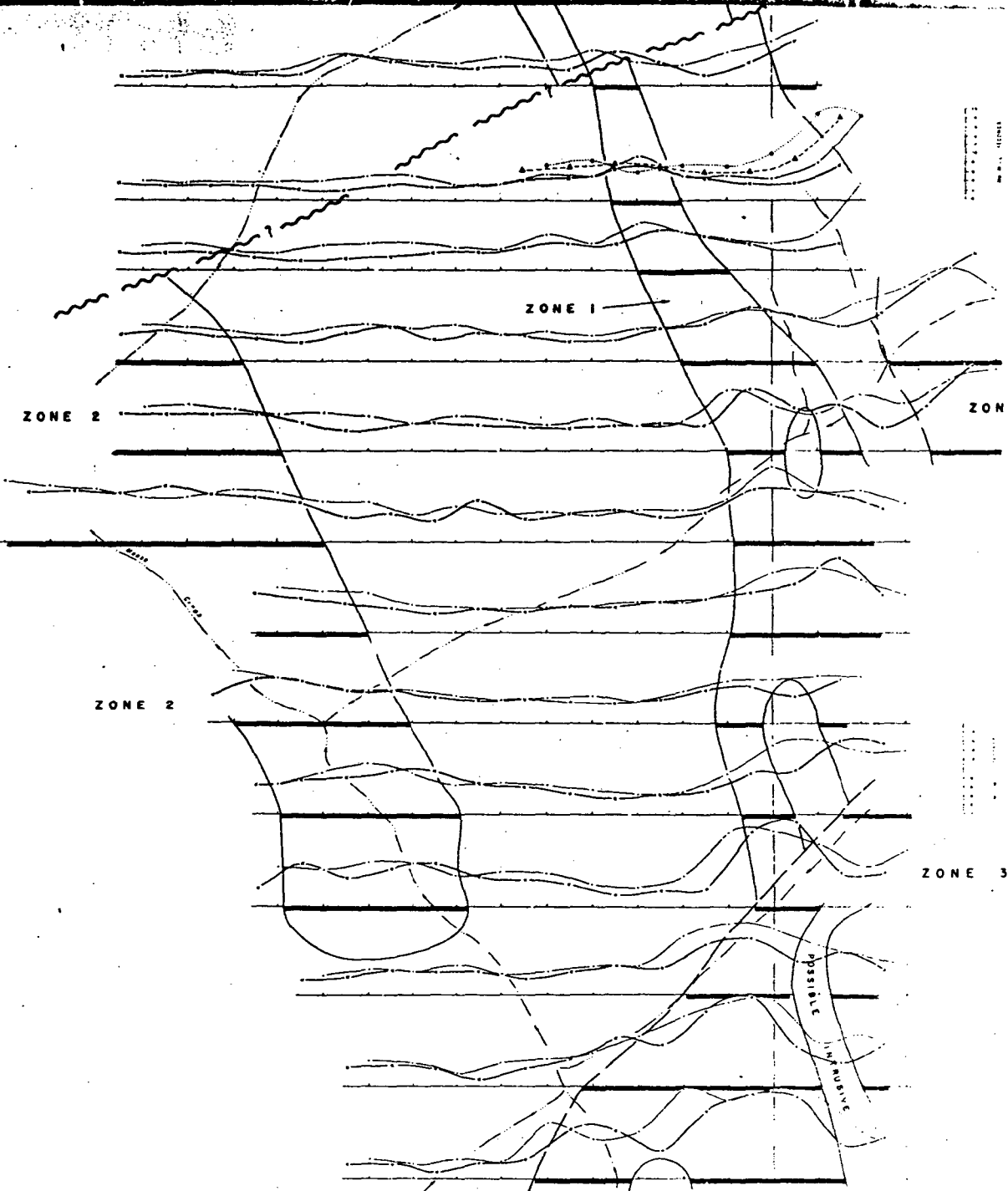


FIGURE C 3
SCALE: 1" = 400'

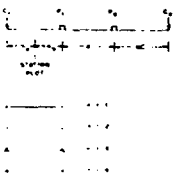
MAP OF THE DISTRICT OF YUKON
SCALE 1" = 400'
LEP CLAIMS
WHITEHORSE, Y.T.
MAGNETIC SURVEY
CONT'D

27B

L 18 N
L 11 N
L 8 N
L 4 N
L 0
L 4 S
L 8 S
L 12 S
L 16 S
L 20 S
L 24 S
L 28 S
L 32 S



POLE - DIPOLE ARRAY 4-200'



LEGEND

- CREEK
- 10 ANOMALOUS ZONE
- OUTLINE OF 10 ANOMALOUS ZONE
- INTERPRETED CONTACT
- INTERPRETED FAULT

FIGURE C 4
SCALE: 1" = 400'

IMPERIAL OIL ENTERPRISES LIMITED

LEP CLAIMS, MOOSE CREEK AREA

INDUCED POLARIZATION SURVEY

PROFILES OF ZONES 1, 2, & 3

DATE: _____

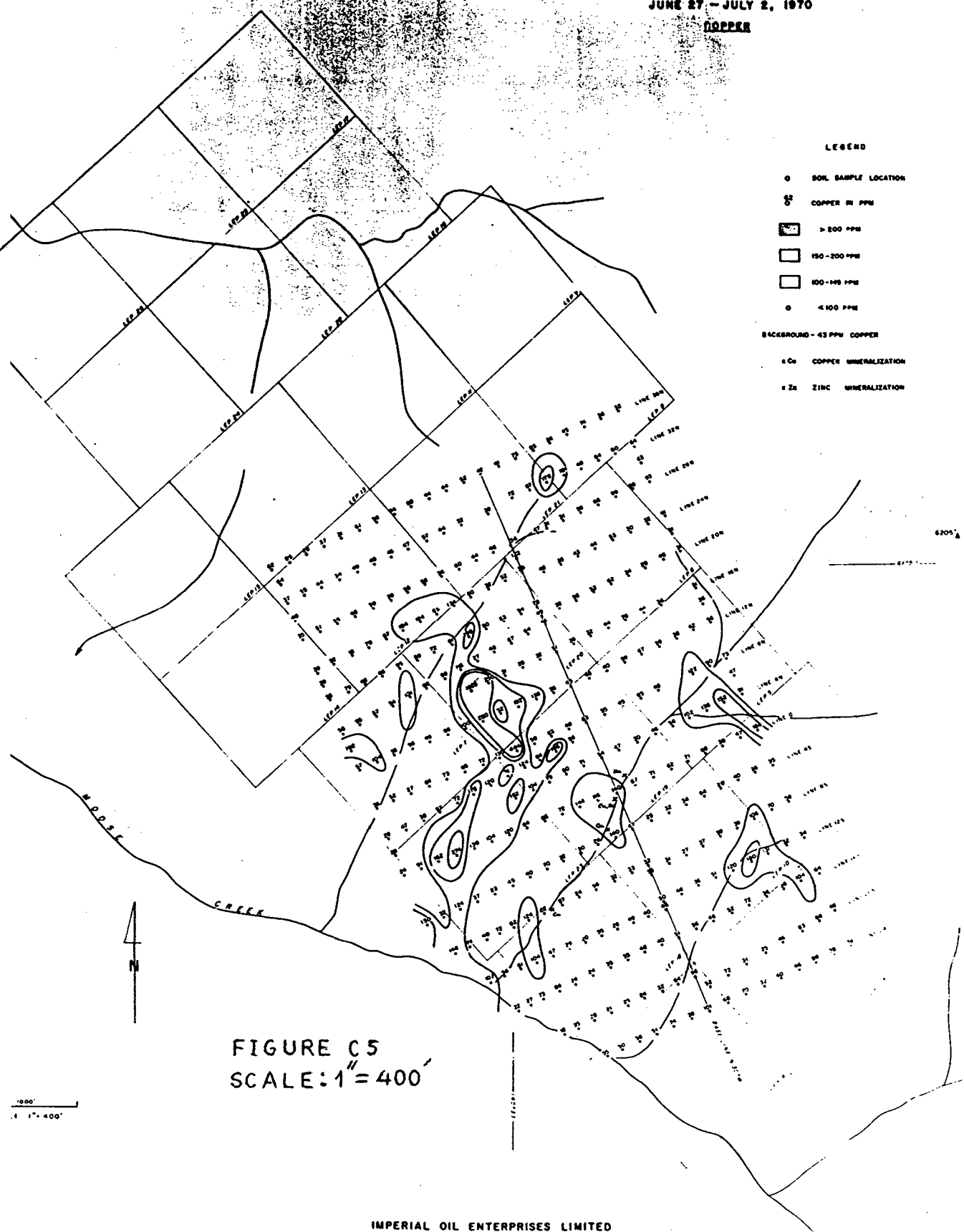
MAP BY: _____

FIELD SUPERVISOR: _____

INTERPRETER: _____

DATE: _____

LEP CLAIMS 1-26
 WHITENORSE MD.
 GEOCHEMICAL SOIL SURVEY
 JUNE 27 - JULY 2, 1970
 COPPER

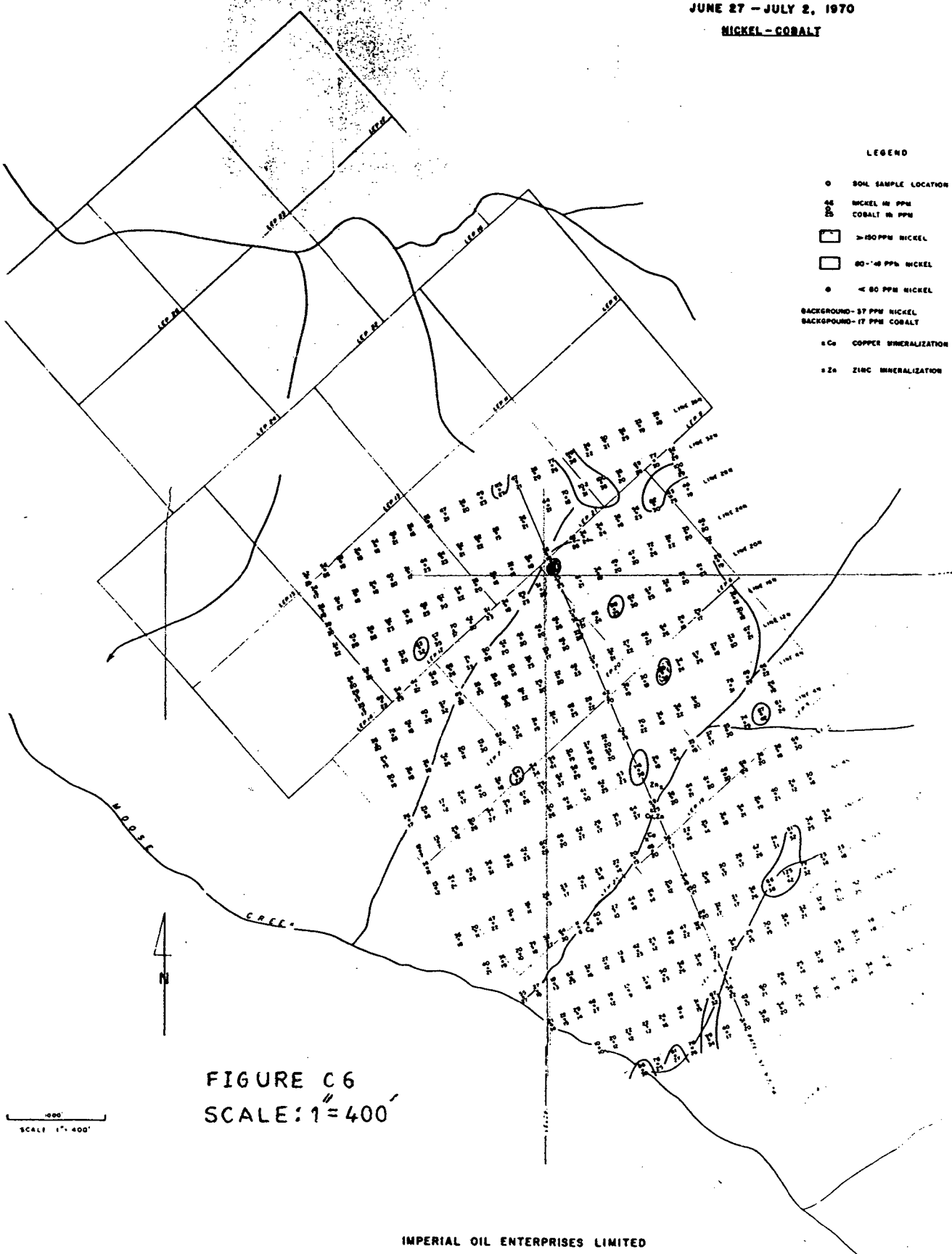


LEGEND

- SOIL SAMPLE LOCATION
- S COPPER IN PPM
- > 500 PPM
- 150-500 PPM
- 100-150 PPM
- < 100 PPM
- BACKGROUND - 45 PPM COPPER
- * Cu COPPER MINERALIZATION
- * Zn ZINC MINERALIZATION

FIGURE C5
 SCALE: 1" = 400'

LEP CLAIMS 1-26
 WHITEHORSE M.D.
 GEOCHEMICAL SOIL SURVEY
 JUNE 27 - JULY 2, 1970
 NICKEL-COBALT



LEGEND

- SOIL SAMPLE LOCATION
- ⊕ NICKEL IN PPM
⊕ COBALT IN PPM
- ◻ >150 PPM NICKEL
- ◻ 50-149 PPM NICKEL
- < 50 PPM NICKEL
- BACKGROUND- 37 PPM NICKEL
BACKGROUND- 17 PPM COBALT
- Cu COPPER MINERALIZATION
- Zn ZINC MINERALIZATION

FIGURE C6
 SCALE: 1" = 400'

SCALE 1" = 400'

TOWER PROSPECT

This prospect is known as the Tower Peak asbestos showing. It is located north of Quiet Lake on map sheet 105 F-6 (Fig. D1). This prospect was first located by a GSC airborne magnetic survey which had peak values of 60,280 gammas which is approximately 2,000 gammas above background (Fig. D2).

The property is situated on a narrow northwest trending belt of late Paleozoic volcanics and sediments. Both sides of the belt are bordered by granitic intrusives. Ultramafic bodies having asbestos mineralization occur in the Paleozoic rocks.

The Asbestos Corporation (Explorations) Limited staked the ground in the early 1950's as the Rex Property. This company did extensive ground magnetic surveying and geological mapping to follow-up the airborne magnetic survey. Significant asbestos mineralization was located but was considered to be uneconomic so the property was dropped (Appendix D1).

Several other operators, such as Cassiar Asbestos Corporation, have done work on the property. Numerous magnetometer surveys and considerable amounts of trenching and geological mapping have been performed; even an access road has been built. A recently released GSC sponsored stream sediment survey of the area has returned an extensive area with anomalous nickel-cobalt values (Fig. D3).

COST ESTIMATES

Assays	59 @ avg. \$7.91/sample	\$ 466.50
Food	10 days @ \$25.00/day	\$ 250.00
Fuel		\$ 50.00
Labour	10 days @ \$170.00/day	\$ 1,700.00

Total		\$ 2,416.50

Rex Brook in claim 8. The only fresh peridotite outcrops in the area are situated one mile to the southwest or down the Caribou valley. Many well-rounded boulders of fresh peridotite were seen along the banks and in the bed of the portion of Caribou Creek which crosses the Rex claims. No such rock type outcrops upstream nor does there seem much likelihood that the valley is underlain by it. It seems probable that these boulders have been transported for some distance and for some reason were moved up the valley.

STRUCTURAL GEOLOGY

Little is known concerning the structure of the intruded rocks which consist of the Yukon Series (1) of volcanics, quartzite and slate which have dips ranging from flat to steep. There is however, a suggestion that the intrusive rocks occupy the axis of an anticline, and that they represent a normal series derived from the gravitational differentiation of a basic magma. This differentiation resulted in an overlying facies of gabbro and gabbro-diorite with an underlying facies of peridotite and dunite, with minor amounts of pyroxenite occurring between these two main groups.

The peridotite, dunite, and pyroxenite, have been almost entirely serpentinitised. The serpentinitised peridotite, which is such the most abundant of the three types, is almost everywhere heavily shattered and sheared. In all probability this widespread shattering contributed to the extensive carbonatization of the serpentine rock.

(1) E.D. Kindle, G.S.C. Paper 45 - 22, 1945.

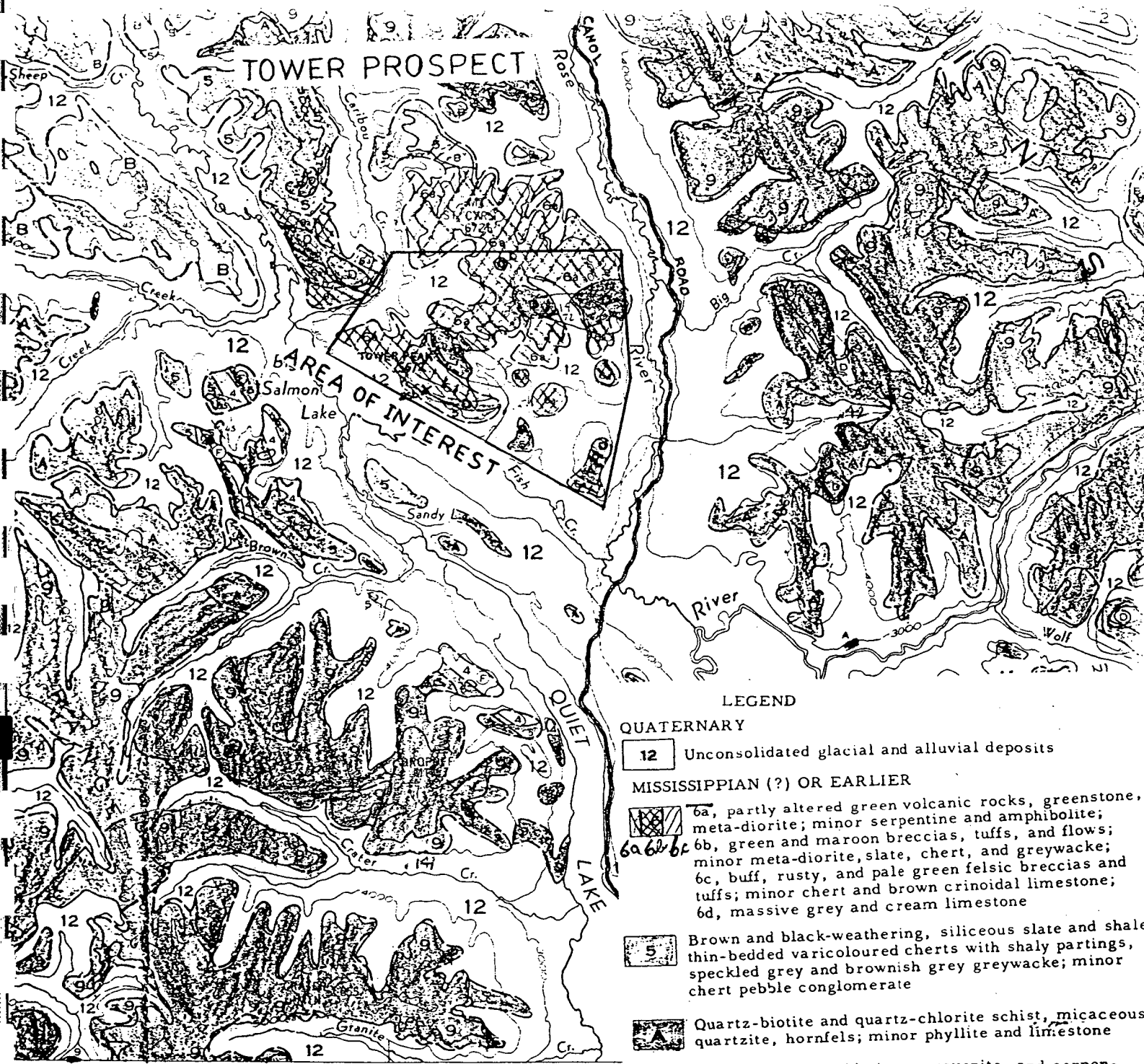
ECONOMIC GEOLOGY

Other than one 3/16 of an inch cross-fibre asbestos vein in one of the large peridotite boulders in claim 8, nothing more than fine fibre lines were observed. The most favourable host rock, peridotite, probably underlies only the south corner of the Rex claims, and in this region of no outcrops the morainal deposition appears to be particularly heavy. Outcrops to the immediate south and east are completely barren, the nearest occurrence of fibre being at least half a mile to the east of the claims. To the west, a broad zone of carbonate lies between the asbestos occurrence here and the Rex claims, a distance of three quarters of a mile.

At the end of July I revisited the property. After reviewing the work carried out it was decided that any further surface exploration would be of little value, and the crew was moved out on August 1st.

P.H. Kiordon, Ph.D., B. Eng.
Chief Geologist,
Asbestos Corporation (Explorations) Limited.

Thatford Mines,
September 12th, 1955.

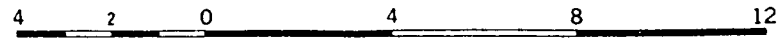


- LEGEND
- QUATERNARY**
- 12 Unconsolidated glacial and alluvial deposits
- MISSISSIPPIAN (?) OR EARLIER**
- 6a 6a, partly altered green volcanic rocks, greenstone, meta-diorite; minor serpentine and amphibolite;
 - 6b 6b, green and maroon breccias, tuffs, and flows; minor meta-diorite, slate, chert, and greywacke;
 - 6c 6c, buff, rusty, and pale green felsic breccias and tuffs; minor chert and brown crinoidal limestone;
 - 6d 6d, massive grey and cream limestone
 - 5 Brown and black-weathering, siliceous slate and shale thin-bedded varicoloured cherts with shaly partings, speckled grey and brownish grey greywacke; minor chert pebble conglomerate
 - Adjoir Quartz-biotite and quartz-chlorite schist, micaceous quartzite, hornfels; minor phyllite and limestone
 - Adjoir Dunite; minor peridotite, pyroxenite, and serpentinized equivalents; gabbro and diorite

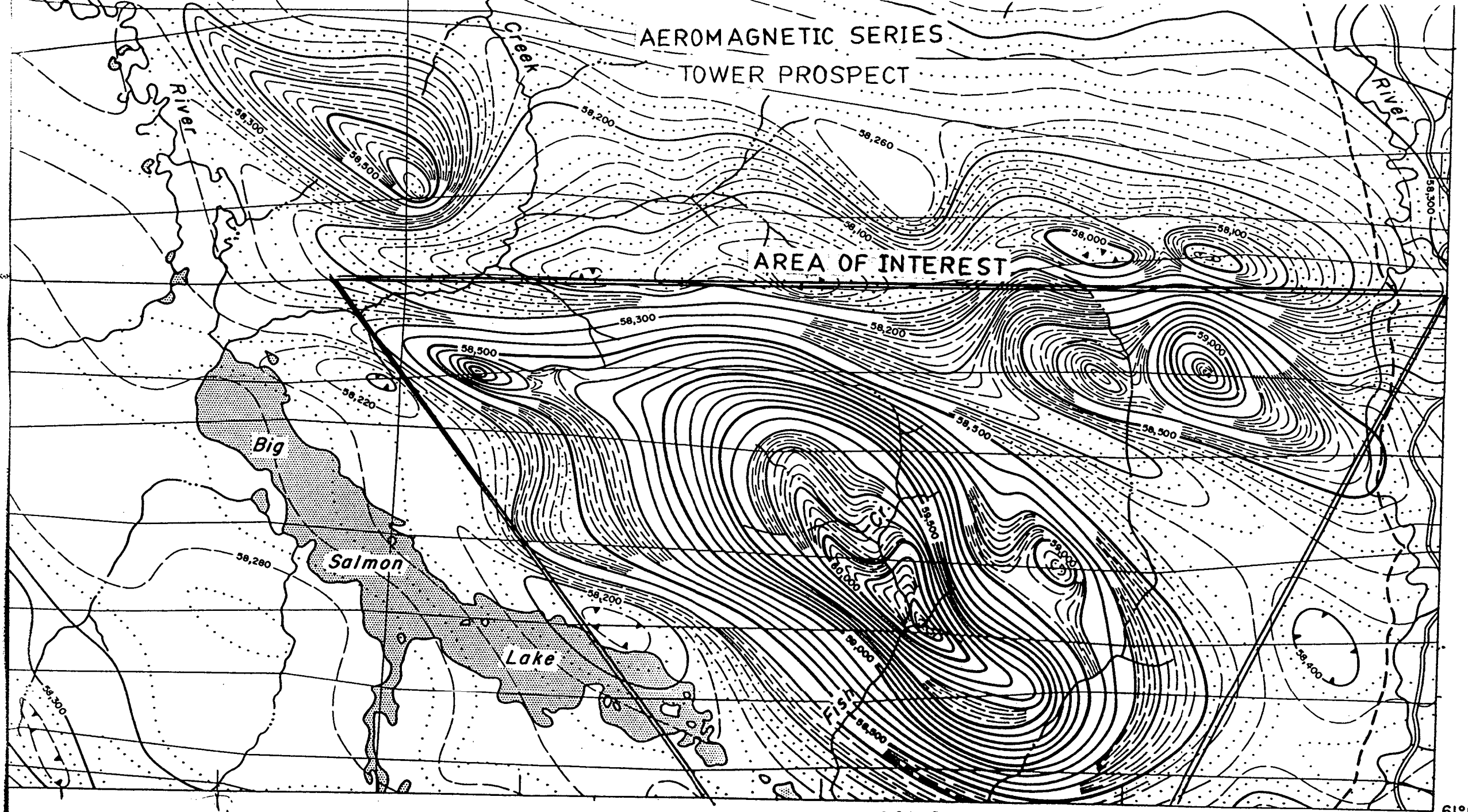
MAP 7-1960
GEOLOGY
QUIET LAKE
YUKON TERRITORY
SHEET 105 F

FIGURE D1

Scale: One Inch to Four Miles = $\frac{1}{253,440}$
Miles



AEROMAGNETIC SERIES
TOWER PROSPECT



AREA OF INTEREST

Big

Salmon

Lake

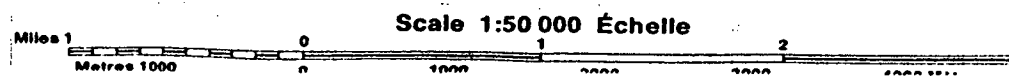
Joins Map 1366 G, "Quiet Lake"

10' FIGURE D 2

05'

61°15'

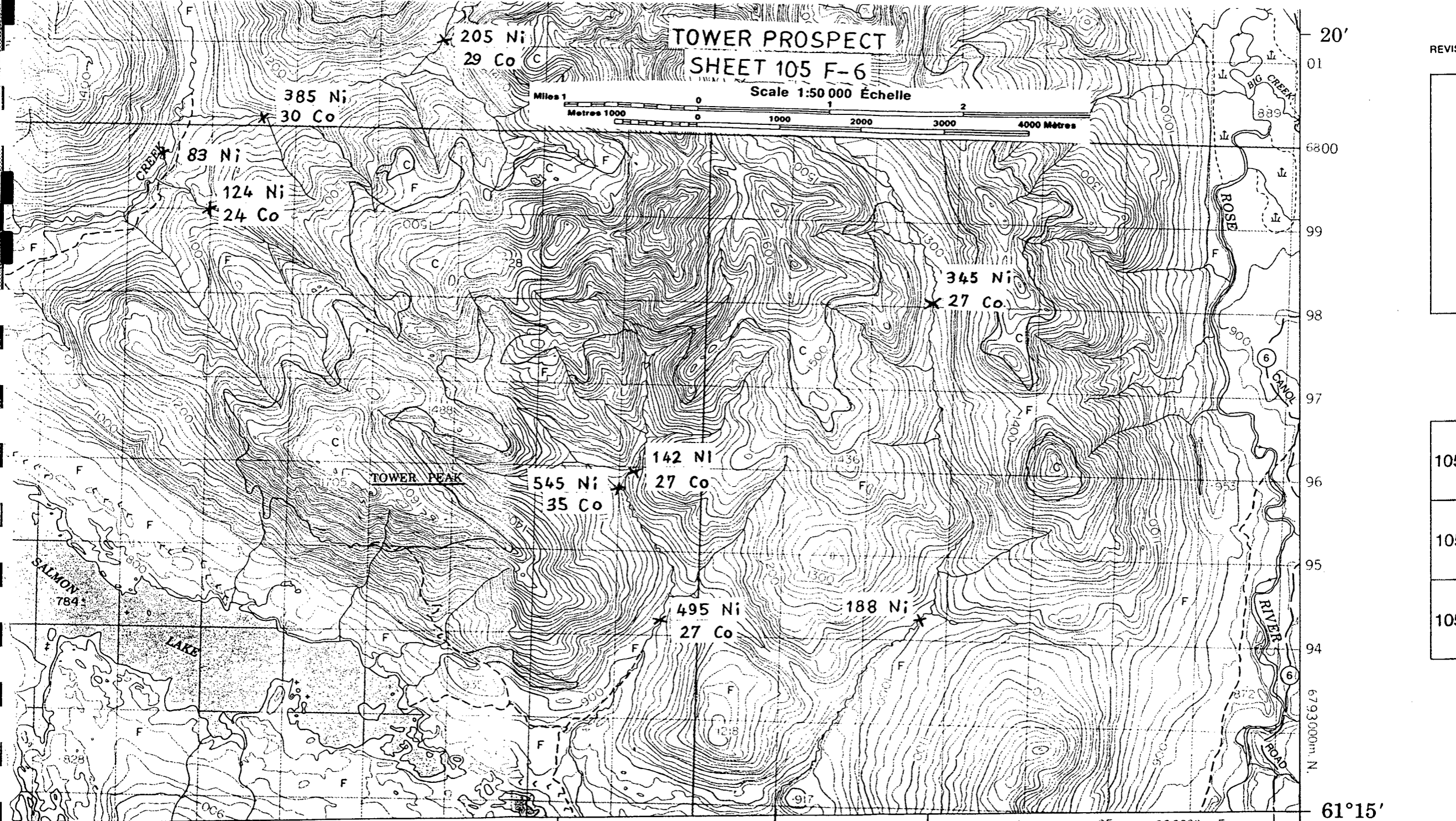
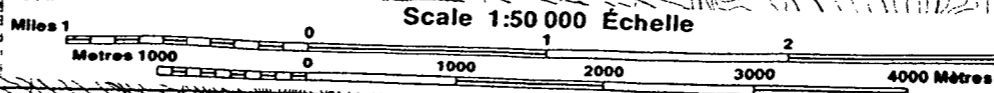
133°00'



105 F-6

TOWER PROSPECT

SHEET 105 F-6



15' x GEOCHEM STREAM SAMPLE 10' (PPM)

* 128 Ni

FIGURE D 3

JOHNSONS CROSSING 112 km

REVISION

105

105

105

Metres

Feet

BOT PROSPECT

The BOT showing is on Big Campbell Creek located on the Finlayson map sheet, 105 G-10 (Fig. E1). The showing was originally staked in 1969 by Atlas Explorations Ltd., who performed line cutting, magnetic surveys and geological mapping. The property was dropped when it was determined that the asbestos mineralization was uneconomic.

The property was restaked in August of 1977 by Cyprus Anvil. A small magnetic survey was performed on the old Atlas lines to confirm the results, then a program of geological mapping and bulldozer trenching was performed (Fig. E3). This work demonstrated that chrysotile asbestos fibre is located within a serpentine dyke which strikes $N 70^{\circ} W$ and dips steeply north. This dyke is offset by at least four $N 60^{\circ} E$ striking faults which are seen in the field and on aerial photographs.

This mapping and trenching demonstrated the existence of several quartz-carbonate veins in the Mississippian graphite-sericite-chlorite schists. These veins are reported to contain minor amounts of chalcopyrite, pyrite and stibnite (Fig. E2). Not only has the property got good potential for platinum mineralization but it may also have good potential for gold mineralization. It has relatively good access but is hampered by limited outcrop exposure.

A program of sampling of the ultramafics and quartz-carbonate vein systems followed up by an E.M. survey should confirm the existence of platinum and/or gold-silver mineralization.

COST ESTIMATES

EM	2 days @ \$20.00/day	\$ 40.00
Assays	44 @ avg.\$9.23/sample	\$ 406.00
Food	10 days @ \$25.00/day	\$ 250.00
Fuel		\$ 25.00
Helicopter	3 hrs @ \$625.00/hr	\$ 1,875.00
Labour	10 days @ \$170.00/day	\$ 1,700.00

Total		\$ 4,296.00

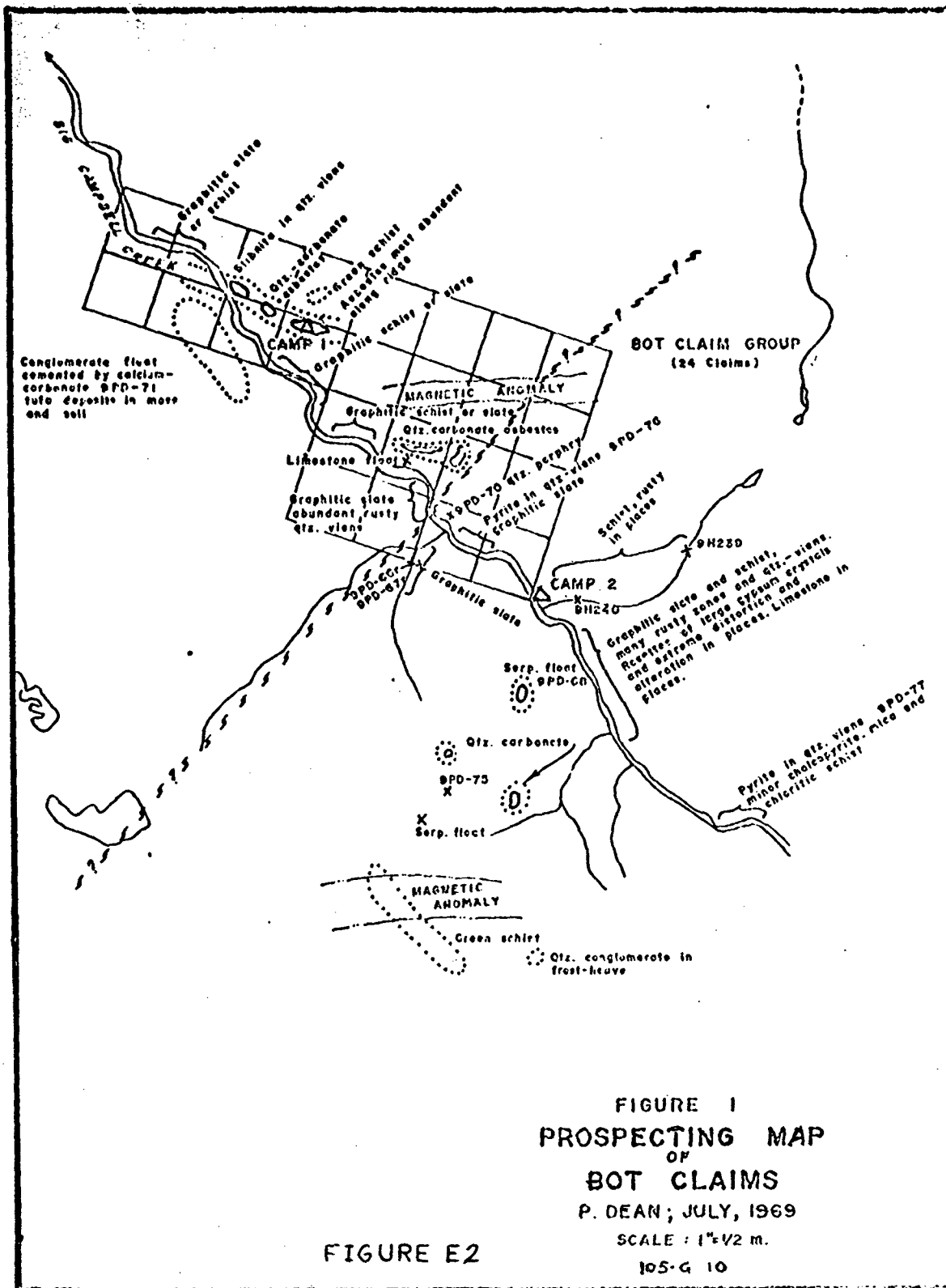
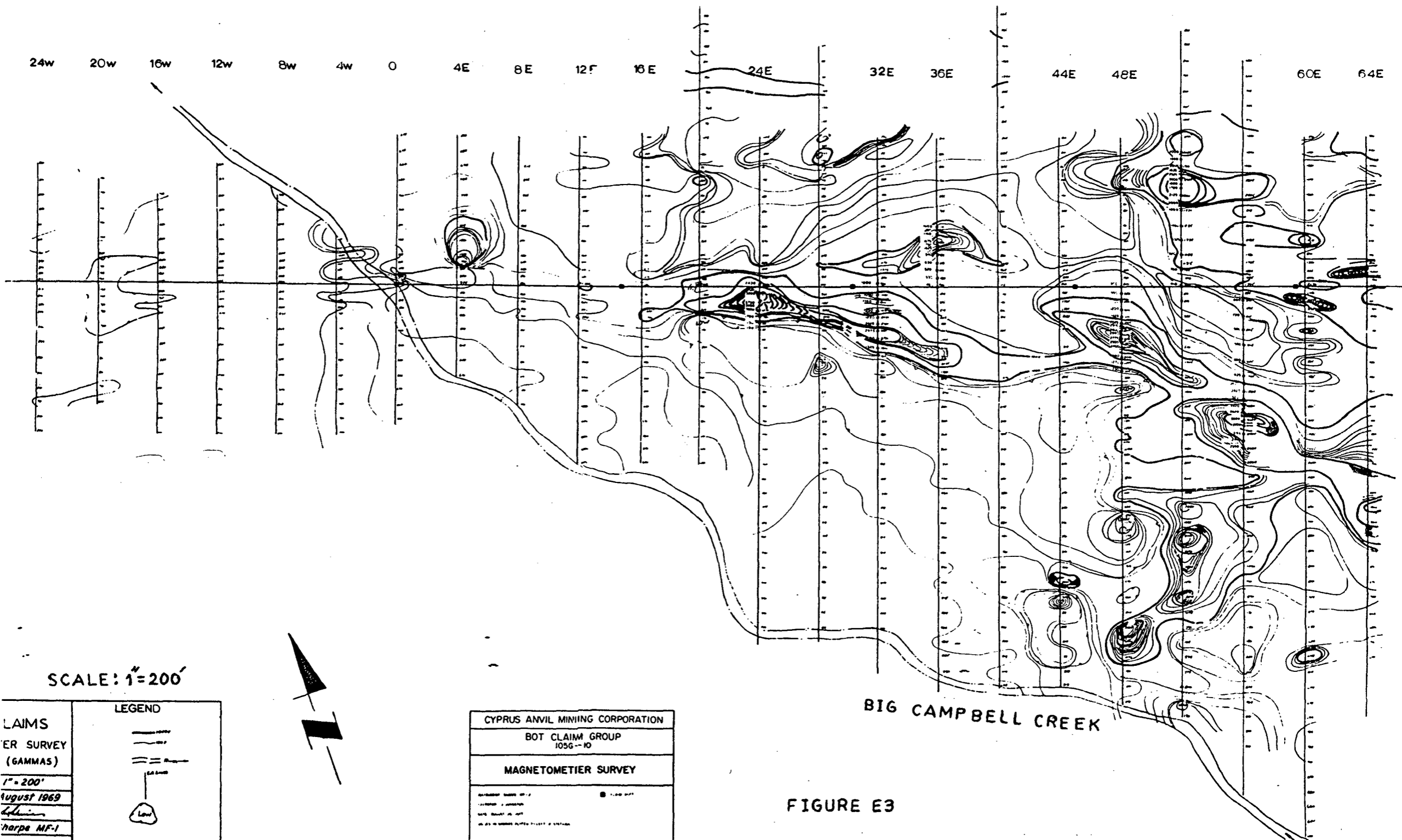


FIGURE 1
 PROSPECTING MAP
 OF
 BOT CLAIMS
 P. DEAN; JULY, 1969

SCALE : 1"=V2 m.
 105-G 10

FIGURE E2

24w 20w 16w 12w 8w 4w 0 4E 8E 12E 16E 24E 32E 36E 44E 48E 60E 64E



SCALE: 1" = 200'



LEGEND	
CLAIMS	
ROAD SURVEY (GAMMAS)	
1" = 200'	
AUGUST 1969	
Harpe MF-1	

CYPRUS ANVIL MINING CORPORATION	
BOT CLAIM GROUP 1056--10	
MAGNETOMETRIER SURVEY	
<small> SURVEYOR: HARPE DATE: AUGUST 1969 BY: HARPE MF-1 </small>	<small> 1:200 SCALE 1056--10 </small>

BIG CAMPBELL CREEK

FIGURE E3

PRIORITY 3

PGMA PROSPECT

The proposed PGMA Prospect lies north of Steele Creek and west of the Donjek River on map sheet 115 G-5 (Fig. F1). Access is by helicopter from Burwash Landing 35 miles to the northeast.

The prospect lies on an anticline and is bounded on the north by a major thrust fault and to the south by the Duke River Thrust Fault. The claims are composed of Permian-Triassic sediments; argillites, sandstone, grit, conglomerate, limestone and chert; these are intruded by peridotites and gabbros. Younger sediments, Paleocene latites, trachytes, rhyolites and gabbros partially overlie these rocks.

A regional geochemical survey conducted by Energy, Mines and Resources produced nickel - cobalt stream sediment anomalies in three streams draining the area (Fig. F2). Cu/Cu + Ni; Ni/Co ratios based on values from stream sediment data conform closely to ratios found in data from streams draining the Wellgreen - Canalask areas.

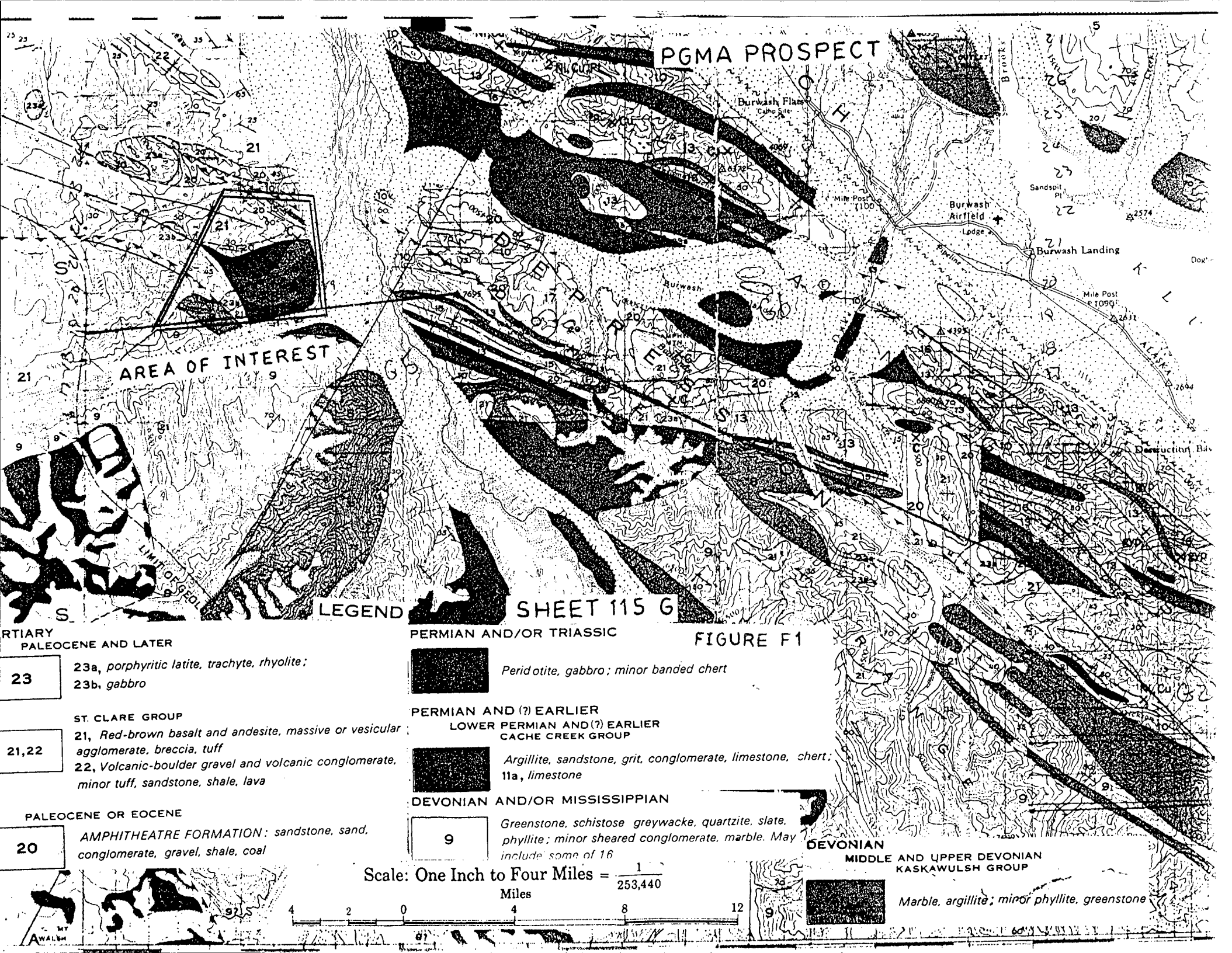
The PGMA and the previously mentioned PGMB Prospect have the geological, geophysical, geochemical and structural characteristics of world class platinum deposits. An extensive program is recommended for this area consisting of magnetometer and geochemical surveys followed up with additional sampling and an E.M. survey.

COST ESTIMATES

EM	8 days @ \$20.00/day	\$ 160.00
Magnetometer	8 days @ \$120.00/day	\$ 960.00
Assays	124 @ avg. \$9.50/sample	\$ 1,178.50
Food	34 days @ \$25.00/day	\$ 850.00
Fuel		\$ 100.00
Helicopter	5 hrs @ \$625.00/hr	\$ 3,125.00
Labour	34 days @ \$170.00/day	\$ 5,780.00

Total		\$ 12,153.50

PGMA PROSPECT



AREA OF INTEREST

LEGEND SHEET 115 G

FIGURE F1

TERTIARY
PALEOCENE AND LATER

23 23a, porphyritic latite, trachyte, rhyolite;
23b, gabbro

ST. CLARE GROUP

21, 22 21, Red-brown basalt and andesite, massive or vesicular
agglomerate, breccia, tuff
22, Volcanic-boulder gravel and volcanic conglomerate,
minor tuff, sandstone, shale, lava

PALEOCENE OR EOCENE

20 AMPHITHEATRE FORMATION: sandstone, sand,
conglomerate, gravel, shale, coal

PERMIAN AND/OR TRIASSIC

Peridotite, gabbro; minor banded chert

PERMIAN AND (?) EARLIER
LOWER PERMIAN AND (?) EARLIER
CACHE CREEK GROUP

Argillite, sandstone, grit, conglomerate, limestone, chert;
11a, limestone

DEVONIAN AND/OR MISSISSIPPIAN

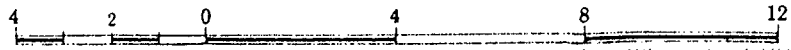
9 Greenstone, schistose greywacke, quartzite, slate,
phyllite; minor sheared conglomerate, marble. May
include some of 16

DEVONIAN

MIDDLE AND UPPER DEVONIAN
KASKAWULSH GROUP

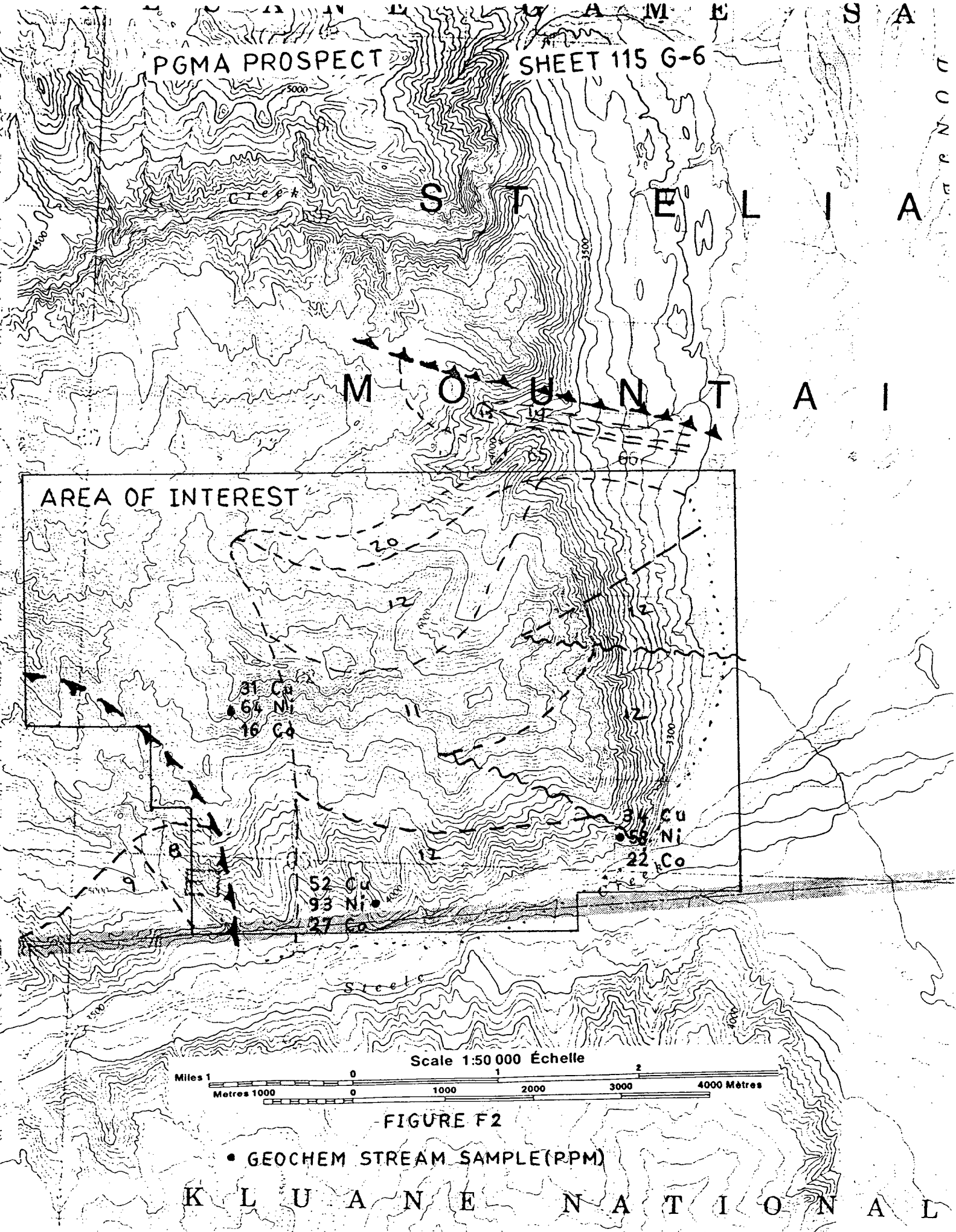
Marble, argillite; minor phyllite, greenstone

Scale: One Inch to Four Miles = $\frac{1}{253,440}$
Miles



PGMA PROSPECT

SHEET 115 G-6



Scale 1:50 000 Échelle

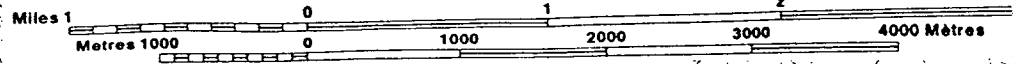


FIGURE F2

• GEOCHEM STREAM SAMPLE (PPM)

K L U A N E N A T I O N A L

SQUANGA PROSPECT

This prospect is west of Squanga Lake on map sheet 105 C-5(Fig G1)
This area contains numerous outcrops of basaltic and andesitic volcanics intruded by bodies of ultramafic or granitic composition. A recently released GSC stream sediment survey reveals significant nickel and cobalt values in many of the streams draining the area(Fig. G3). In addition, most of the areas containing anomalous values are underlain by distinct aerial magnetic anomalies (Fig. G2). Volcanic rocks in this area may have a similar age to those in the earlier mentioned Mt. Byng property.

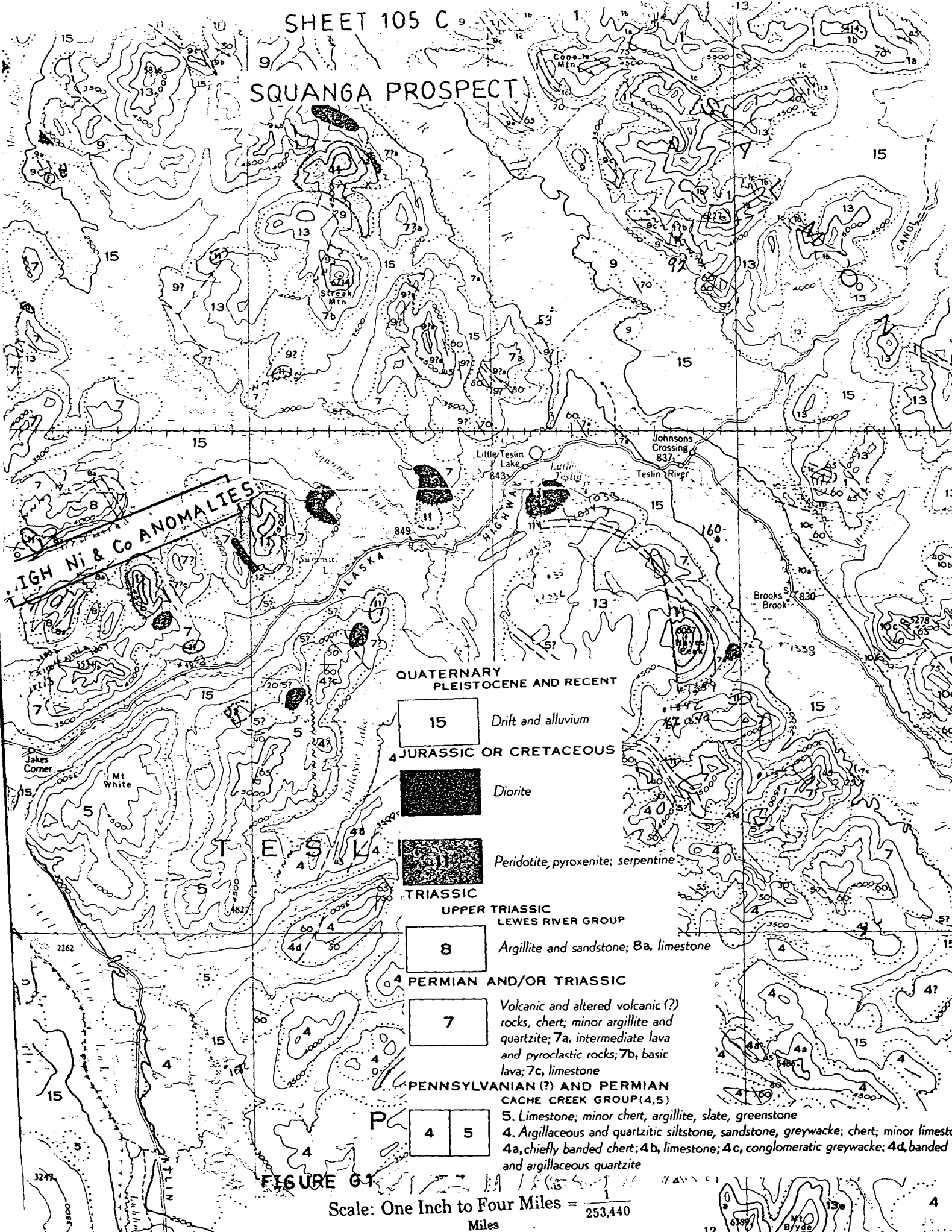
Prospecting in this area using stream sediment sampling to better locate the source of these anomalous Ni/Co values and followed up by ground magnetometer and VLF-E.M. surveys should find any platinum group elements as well as any gold and silver mineralization. The ease of access to this area is an added benefit.

COST ESTIMATES

EM	3 days @ \$20.00/day	\$ 60.00
Magnetometer	3 days @ \$120.00/day	\$ 360.00
Assays	64 @ avg.\$7.91/sample	\$ 506.00
Food	16 days @ \$25.00/day	\$ 400.00
Aircraft	4 hrs @ \$150.00/hr	\$ 600.00
Labour	16 days @ \$170.00/day	\$ 2,720.00

Total		\$ 4,646.00

SQUANGA PROSPECT



HIGH Ni & Co ANOMALIES

QUATERNARY
PLEISTOCENE AND RECENT

15 Drift and alluvium

4 JURASSIC OR CRETACEOUS

Diorite

Peridotite, pyroxenite; serpentine

TRIASSIC

UPPER TRIASSIC
LEWES RIVER GROUP

8 Argillite and sandstone; 8a, limestone

4 PERMIAN AND/OR TRIASSIC

7 Volcanic and altered volcanic (?) rocks, chert; minor argillite and quartzite; 7a, intermediate lava and pyroclastic rocks; 7b, basic lava; 7c, limestone

PENNSYLVANIAN (?) AND PERMIAN
CACHE CREEK GROUP (4,5)

5. Limestone; minor chert, argillite, slate, greenstone

4. Argillaceous and quartzitic siltstone, sandstone, greywacke; chert; minor limestone
4a, chiefly banded chert; 4b, limestone; 4c, conglomeratic greywacke; 4d, banded argillaceous and argillaceous quartzite

FIGURE G-1

Scale: One Inch to Four Miles = $\frac{1}{253,440}$

Miles

8

12