TELEPHONE 685-4331

ATLAS EXPLORATIONS LIMITED
(N.P.L.)
330 MARINE BUILDING
355 BURRARD STREET
VANCOUVER 1, B.C.

GEOPHYSICAL REPORT ON MAGNETOMETER SURVEY OF

NIP MINERAL CLAIM GROUP

GORDON LAKE
NORTHWEST TERRITORIES

Longitude 128° 35'W
Latitude 62° 20'N

NTS 105-I-7

by:

John S. Brock

ATLAS EXPLORATIONS LIMITED

June 26 to July 10
1968

TELEPHONE 685-4331

ATLAS EXPLORATIONS LIMITED
(N.P.L.)
330 MARINE BUILDING
355 BURRARD STREET
VANCOUVER 1, B.C.

GEOPHYSICAL SURVEY OF THE NIP MINERAL CLAIM GROUP

INTRODUCTION

From June 26th to July 10, 1968, a grid was layed out and a magnetometer survey run over the Nip Mineral Claims (105-I-7) in the Gordon Lake area, Northwest Territories. The survey was done in conjunction with geochemical soil sampling and geologic mapping under Party Chief, Ken Kirkland for Atlas Explorations Limited.

The property was previously held by Canex Aerial Explorations (Lened Mineral Claims). During 1960 and 1961 the claims were developed by that company through hand trenching and small diameter core diamond drilling, it was subsequently dropped and re-staked by prospector Hugo Brodell for Atlas Explorations in 1967.

The program carried out by Atlas during late June and early July of 1968 was designed to re-evaluate the tungsten showings in view of a more promising tungsten market.

LOCATION AND ACCESS

The 'NIP' Group is located at longitude 128° 35' west and latitude 62° 20' north, 22 miles east of the Northwest Territories-Yukon border. Access was gained to the claims by float equipped Beaver aircraft from Ross River, Yukon to Gordon Lake, located 3 miles northwest of the property. A helicopter was used to ferry camp and personnel to the claims from Gordon Lake. The property is 128

TELEPHONE 685-4331

ATLAS EXPLORATIONS LIMITED
(N.P.L.)
330 MARINE BUILDING
355 BURRARD STREET
VANCOUVER 1, B.C.

miles east-northeast of Ross River, Yukon and 32 miles northwest of Canada Tungsten Mine.

SURVEY METHOD

Survey Grid: A survey grid was laid out over the claims by pace and compass methods, seven east-west lines of maximum length 6000 feet were established with 800 foot line spacing and 100 foot station intervals.

Magnetometer Survey: A Jaylander hand held magnetometer was used for the survey, the survey was run in a conventional manner with normal precautions taken for control of drift and diurnal variations. Readings were kept on a relative basis by one hour re-reads taken at established control points on the grid. All 100 foot stations were read on the grid

Presentation: Readings in gammas were plotted ona grid plan, to scale 1:200 and profiled to scale 1: 100 gammas. The results were contoured in interpretation for establishment of magnetic trends (map not included in report)

GEOLOGY

See report, "Geology of the Nip Mineral Claims", by K. Kirkland, july 1968.

TELEPHONE 685-4331

ATLAS EXPLORATIONS LIMITED
(N.P.L.)
330 MARINE BUILDING
355 BURRARD STREET
VANCOUVER 1, B.C.

GEOPHYSICAL RESULTS

Background was established as 250 gammas, trend analysis of profiles over 300 gammas was carried out. A well defined elongated low intensity anomaly was defined east of the baseline and striking in a northeasterly direction for the north-south length of the grid. Peak values of 500 gammas above background were obtained in a sharp profile on line 3 , 29+00 East. Within the entire anomaly distinct closures have 'highs' on lines 5,4 and 3 East. Throughout the grid all profiles are of a sharp and erratic nature in spite of low amplitude readings.

GEOPHYSICAL INTERPRETATION

The major magnetic response is coincident with the copper geochemistry obtained through soils analysis (see Geochemical Report, Nip Mineral Claims, 1968 J.S. Brock) The main scheelite occurance is located on the eastern flank of the magnetic anomaly on line 5. Although some pyrrhotite is present with the mineralization it is probably not too magnetic (no susceptibility tests run). The magnetic zone appears to coincide with the skarn and zone of alteration marginal to the intrusive, moreferrous metamorphic minerals found in the altered contact are likely the cause of the magnetics.

CONCLUSIONS AND RECOMMENDATIONS

The magnetics coincide with the geochemical copper anomaly and

TELEPHONE 685-4331

ATLAS EXPLORATIONS LIMITED
(N. P. L.)
330 MARINE BUILDING
355 BURRARD STREET
VANCOUVER 1, B.C.

are thought to express the skarn zone marginal to the intrusive. It is recommended that moredetailed magnetometer surveys be done to aid in establishing the geology of the property and define the location of the host unit in preparation for testing by diamond drilling.

Respectfully submitted,

John S. Brock,
Operations Manager,
Atlas Explorations Limited,
July 15, 1968

TELEPHONE 685-4331

ATLAS EXPLORATIONS LIMITED
(N.P.L.)
330 MARINE BUILDING
355 BURRARD STREET
VANCOUVER 1, B.C.

APPENDIX 1.

Summary of Expenditures June 26 - July 11, 1968

A. Geologic Mapping	Wages	$ 336.00		
	Camp cost	160.00		
	Helicopter	260.00		
	Fixed Wing	152.00	.....	$ 908.00
B. Geochemical Survey	Wages	240.00		
	Camp cost	160.00		
	Helicopter	260.00		
	Fixed Wing	152.00		
	Analysis	1053.00	.....	1865.00
C. Geophysical Survey	Wages	272.00		
	Camp cost	160.00		
	Helicopter	260.00		
	Fixed Wing	152.00		
	Magnetometer Rent	160.00	.....	1004.00

Details of Expenditures

Wages	Kirkland - Geologist	$ 336.00		
	Newsom - Assistant	272.00		
	Harper - Assistant	240.00	.....	$ 848.00
Camp costs	16 days, 48 man days at $10/day			480.00
Helicopter	6 hrs, mob. and demonb. Gordon Lk.to Nip Claims, ferry charges included at $130/hr.			780.00
Fixed Wing	Ross River-Gordon Lk.ret. mob. and demob. 536 miles at 85¢/mile			456.00
Magnetometer rental	16 days at $10/day			160.00
Geochemical analysis	351 samples, 3 determinations at $1 each			1053.00
			TOTAL	$ 3777.00

TELEPHONE 685-4331

ATLAS EXPLORATIONS LIMITED
(N.P.L.)
330 MARINE BUILDING
355 BURRARD STREET
VANCOUVER 1, B.C.

APPENDIX 2.

Affidavit Supporting Statement of Expenditures

I, John S. Brock, Operations Manager for Atlas Explorations Limited, hereby state that to the best of my knowledge and belief, the summary of expenditures as presented in Appendix 1 of this report is both correct and true.

John S. Brock

John S. Brock.

Sworn before me at Whitehorse, Yukon Territory
this 2nd day of August 1968.

Lance McCowan
Commissioner of Oaths in and for
the Yukon Territory.

Atlas Explorations Ltd.

Location of Grid Lines

Nip Mineral Claims (N.W.T.)

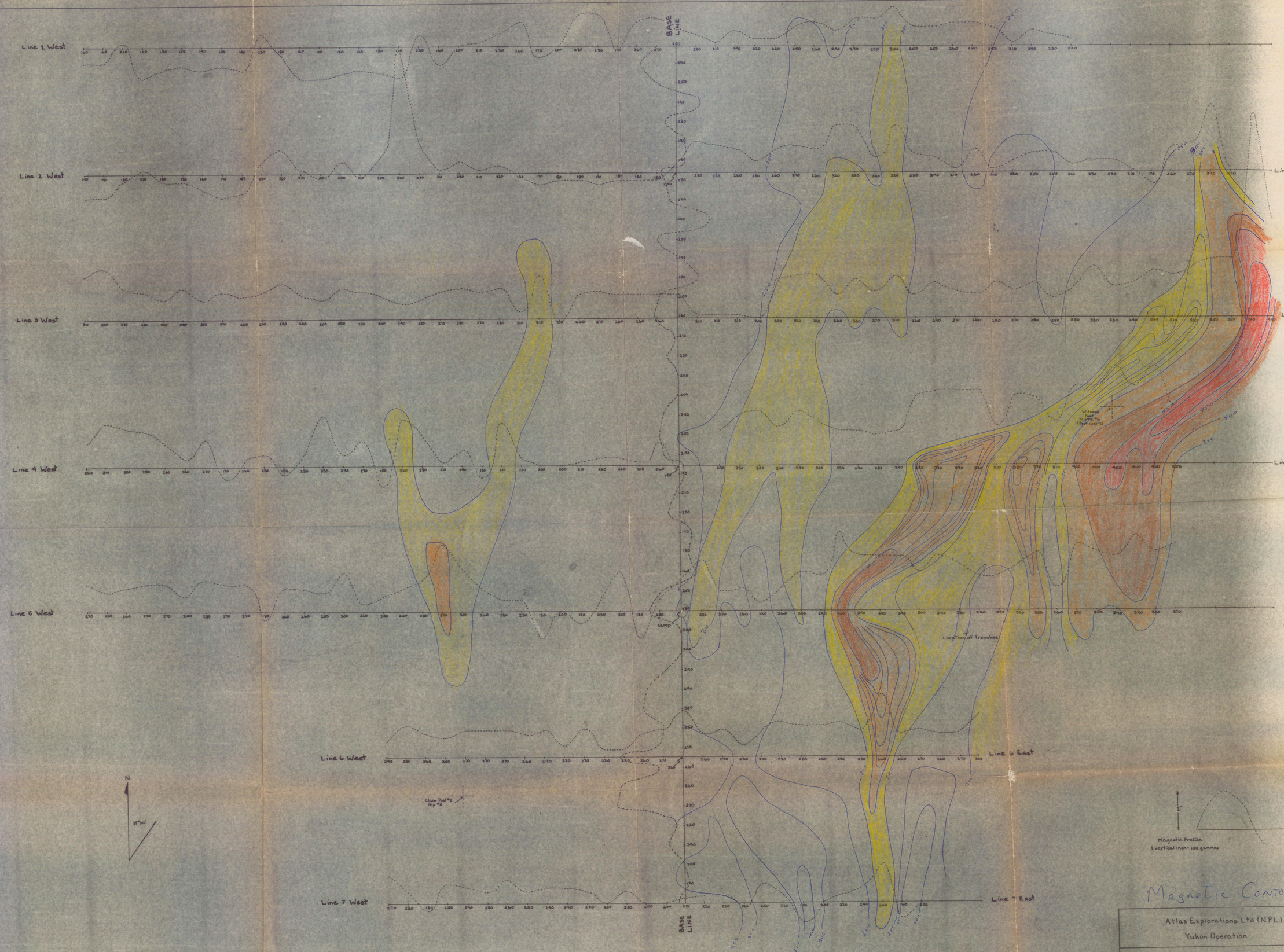
Latitude 62°20' N

Longitude 128° 35W

claim lines (drawn from sketch map)

N.T.S. 105 I 7

scale: 1" = 1000'



Magnetic Contours

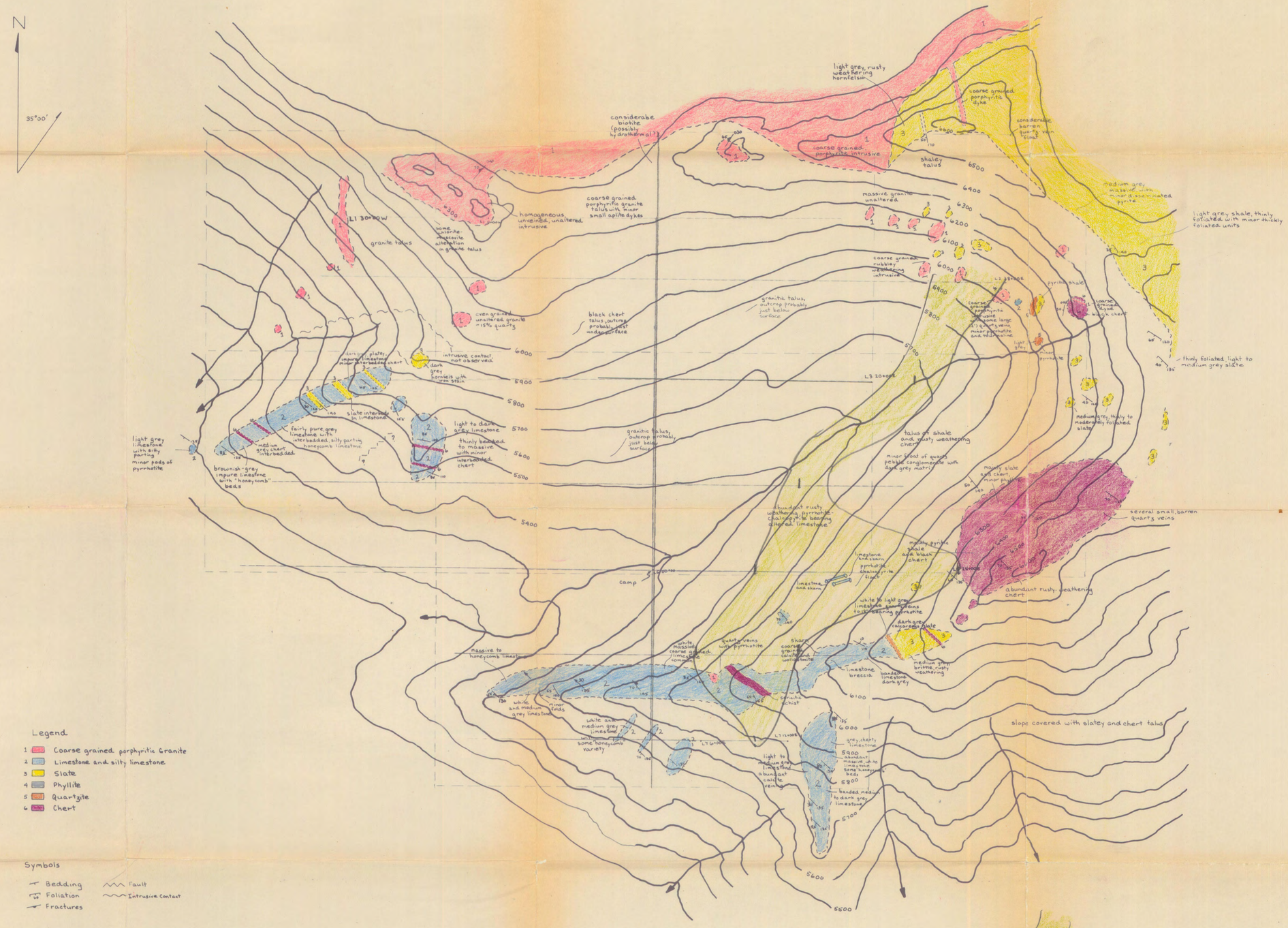
Line 1 is 100' farther south than it should be due to large cliff at North end of Base Line.

Atlas Explorations Ltd (N.P.L.)
Yukon Operation

Nip Mineral Claims (1-10)
Magnetometer Survey

Geophysics by: N. Newsom
Date: July 1- July 6, 1968
Scale: 1" = 200'

N.T.S. 105 I 7
Fig. No.
Drawn by: K. Kirkland



Legend

1. Coarse grained porphyritic Granite
2. Limestone and silty limestone
3. Slate
4. Phyllite
5. Quartzite
6. Chert

Symbols

- Bedding
- Foliation
- Fractures
- Fault
- Intrusive Contact
- Claim Post
- Trench
- Grid Station
- Outcrop
- Survey Lines
- Claim Lines

400 200 0 400 800 1200

Atlas Explorations Limited (N.P.L.)

Yukon Operation

Nip Mineral Claims (1-10)

Geology

Mapped by: K. Kirkland	N.T.S. 105 I 7
Date: July 16, 1968	Figure Number: 1
Scale: 1" = 400'	Drawn by: K. Kirkland