

GEOLOGIC REPORT

TOY MINERAL CLAIM GROUP

SHELDON LAKE AREA
Watson Lake Mining Division
Yukon Territory

Lat. 61 deg. 39' North

Long. 128 deg. 49' West

Claim Sheet 105 H 10

by

John S. Brock

Atlas Explorations Limited

GEOLOGICAL SURVEY

DEC 4 1967

Resident Geologist
Whitehorse, Y. T.

July 11, 1967 and August 14-20, 1967

This report has been examined by
the Geological Evaluation Unit.
Approved as to technical worth by:

D.C. Furdley
RESIDENT GEOLOGIST

Approved as to cost in the amount
of: \$11,000.00

R.S. Pedder
RESIDENT MINING ENGINEER

Accepted as representation work
under Section 53(4) Yukon Quartz
Mining Act.

[Signature]
COMMISSIONER OF YUKON

LIST OF CLAIMS

Claim No.

Grant Nos.

Date Recorded

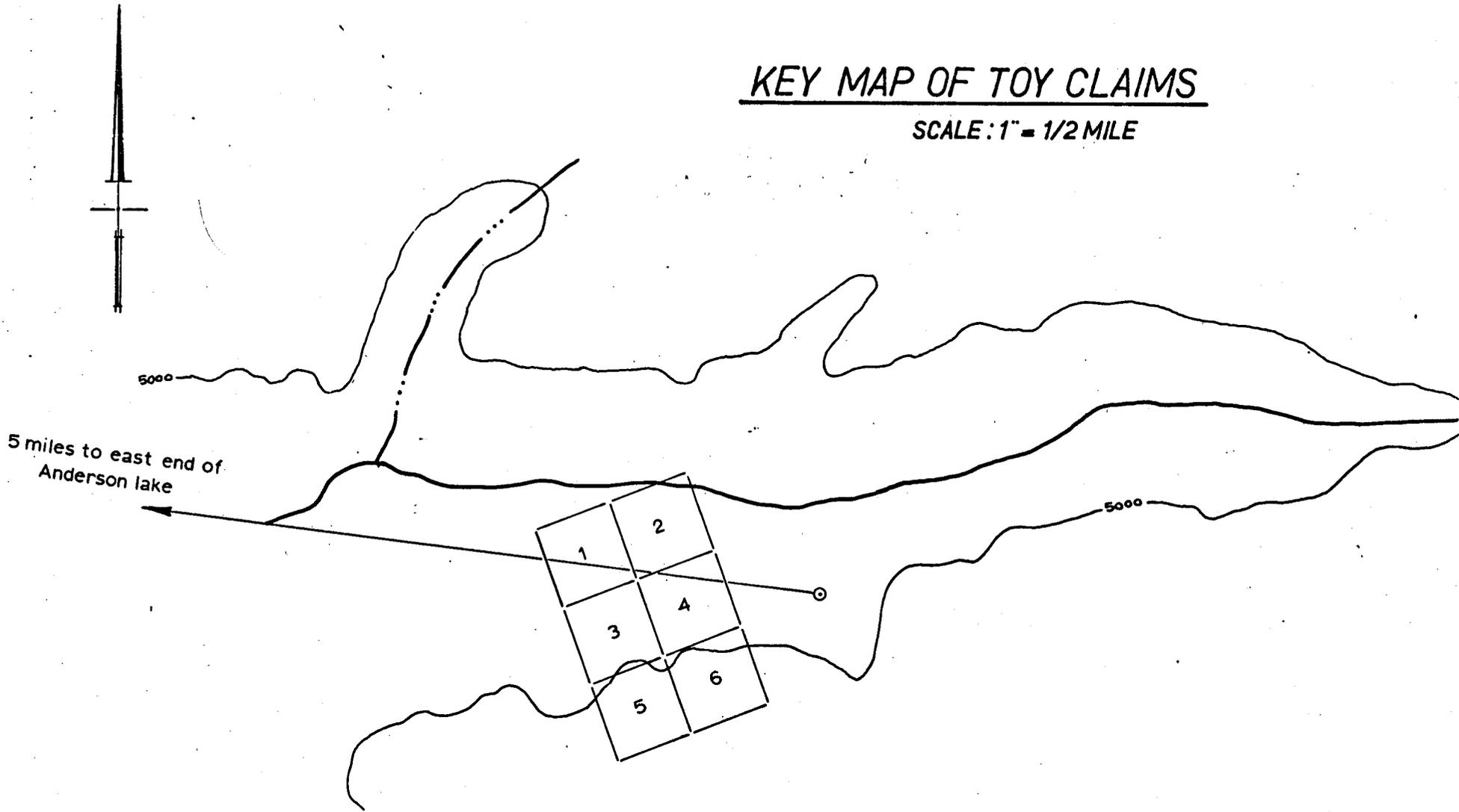
TOY 1 - 6

Y 16366 - Y 16371

September 22, 1966

KEY MAP OF TOY CLAIMS

SCALE: 1" = 1/2 MILE



ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)

drawn: p.v.

GEOLOGIC REPORT
TOY MINERAL CLAIMS

Table of Contents

	<u>Page</u>
KEY MAP	
LIST OF CLAIMS	
INTRODUCTION	1
LOCATION AND ACCESS	1
GEOLOGY	1,2
CONCLUSIONS AND RECOMMENDATIONS	2,3
 <u>APPENDICES</u>	
Summary of Cost	I
Affidavit Supporting Summary of Cost.....	II
Personnel	III
Map Folder	IV
Cross Section - Brodell Showing	V
Assay Certificate	VI

ATLAS EXPLORATIONS LIMITED

(N. P. L.)

330 MARINE BUILDING
355 BURRARD STREET
VANCOUVER 1, B.C.

INTRODUCTION

Through a prospecting program conducted by Atlas Explorations during the late summer and fall of 1966, numerous lead, zinc, and copper showings were discovered and staked. Hugo Brodell, prospector, of Watson Lake, Yukon, brought the Toy Mineral Claims to the attention of Atlas Explorations in September, 1966. The discovery of copper, lead and zinc sulphides by Brodell prompted Atlas to option the Toy Mineral Claims, numbers 1 to 6, from the prospector in order that a detailed examination of the ground could be made.

On July 11, 1967, Brodell accompanied Atlas Exploration's geologist, C. L. Smith to the property for a preliminary examination. From August 14th to August 20, 1967, geologic mapping and geophysical (magnetic) - geochemical investigations were carried out.

LOCATION AND ACCESS

The Toy 1 - 6 Group is located five miles east of the east end of Anderson Lake, about 58 miles southeast of the abandoned Pelly Lakes Trading Post and 12 miles west of the Cantung Road. The claims are situated on the steep south slope of an east-west valley.

Access to the property for the purposes of preliminary examinations was made by helicopter from the Pelly Lake Post. Transportation was later provided by fixed-wing aircraft equipped with floats which were able to land on Anderson Lake.

GEOLOGY

Three days were spent mapping and sampling the Toy Mineral Claims by Atlas Explorations' geologists, T. Adamson and W. Roberts; control was maintained by the use of aerial photographs. In the immediate area of the sulphide occurrence a small grid was laid out. Over this grid, geologic mapping (1:50), soil sampling and a magnetometer survey were carried out.

The rock units in the area of interest consist mainly of granite that has intruded quartz-feldspar-mica gneiss, biotite schist and minor quartz and marble. All that remains of the host are random lenses and inclusions. The contacts between the host and the intrusive are indefinite and transitional because much granitization appears to have occurred. Many of the calcareous members of the host have been altered to skarn.

The mineral occurrence seems to be one small "bleb" of sulphides including sphalerite, galena, and minor chalcopyrite in a lense of grossularite-calcite diopside skarn. This lense, or large inclusion appears to be surrounded on all sides by the granite intrusive.

The sulphide zone, a stratiform replacement body, has a maximum thickness of about ten feet on the western margin, where it passes abruptly into barren calcite-grossularite skarn across a small north-south vertical shear. The direction of movement along this shear could not be determined. The sulphides pinch out into barren skarn 25 feet to the east of the shear.

It is not known whether the sulphide zone has been terminated by the north-south shear, or whether the fault was pre-mineralization, giving access to sulphide bearing solutions. If the later situation was the case, the skarn zone to the east of the fault was only chemically favourable to replacement by the sulphides.

A chip sample (Y 1517) was taken across the widest part of the showing (6 inch chips across 10 feet). Assay results were:

A magnetometer survey was run over the area mapped geologically. The sulphide zone was not detected. A magnetic 'high' to the northwest of the sulphide zone reflects a remnant inclusion of highly altered and granitized gneiss and schist with a high magnetite content (up to 3 percent).

CONCLUSIONS AND RECOMMENDATIONS

The sulphide occurrence on the Toy Mineral Claims, although of good grade, appears to be limited in size and economic potential. Further prospecting and mapping of the surrounding Toy Mineral Claims failed to reveal any other mineral occurrences worthy of

development. It is therefore recommended that the option on the Toy Group be dropped and that the claims be returned in good standing to Brodell.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "John S. Brock".

John S. Brock,
Assistant Exploration Manager,
Atlas Explorations Limited.

TOY MINERAL CLAIM GROUPSUMMARY OF COSTS (GEOLOGIC)

1.	(a)	T. Adamson was Geologist W. Roberts was Geologist's Helper H. Brodell (Prospector) and C. Smith (Geologist) spend 1 day inspecting the property.		
2.	(a)	<u>Wages:</u> 7 man days x \$25.00, daily wage of T. Adamson	\$175.00	
		3 man days x \$16.50, daily wage of W. Roberts	49.50	
		1 man day x \$20.00, daily wage of H. Brodell	<u>20.00</u>	\$ 244.50
	(b)	<u>Helicopter Support:</u>		
		3.2 hours at \$112.00 per hour		358.40
	(c)	<u>Fixed Wing Support:</u>		
		1/2 round trip from Pelly Camp to Anderson Lake = 1/2 x 140 miles at \$.85 per mile = 1/2 x \$119.00		59.50
	(d)	<u>Subsistence Cost:</u>		
		11 man days x \$8.00 per man day		88.00
	(e)	<u>Supplies and Miscellaneous Equipment</u>		100.00
	(f)	<u>Travel from Vancouver and Watson Lake:</u>		
		\$15.00 per man x 3 men		45.00
	(g)	<u>Supervision Cost:</u>		
		\$1.20 per man day x 11 man days		13.20
	(h)	<u>Interpretation and Presentation:</u>		
		Drafting: P. Vlasveld		
		1/2 day x \$30.20 per day	\$ 15.10	
		C. Smith and J. Brock		
		1/2 day x \$75.00 per day	<u>37.50</u>	52.60
	(i)	<u>Overhead;</u>		
		15% of Total = 15% x \$961.20		<u>144.18</u>
		<u>TOTAL COST OF GEOLOGY</u>		\$ 1,105.38

TELEPHONE 685-4331

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(N.P.L.)

330 MARINE BUILDING
355 BURRARD STREET
VANCOUVER 1, B.C.

AFFIDAVIT SUPPORTING SUMMARY OF COSTS:

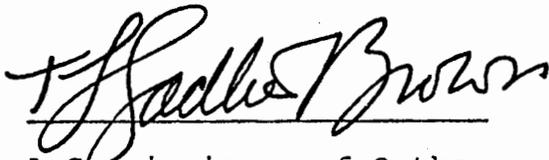
I, John S. Brock, Assistant Exploration Manager of Atlas Explorations Limited, of Ross River, Yukon Territory, do hereby state that to the best of my knowledge and belief the statement of costs as presented in this report "Geologic Report Report - Toy Mineral Claim Group" (Appendix I) is both correct and true.



John S. Brock



Date



A Commissioner of Oaths
in and for the Yukon
Territory

TOY MINERAL CLAIM GROUP

PERSONNEL

T. Adamson	Geologist	302 - 2044 West 3rd Avenue, Vancouver 9, B. C.
H. Brodell	Prospector	Watson Lake, Y. T.
W. Roberts	Geologist's Helper	6700 N.W. Marine Drive, Vancouver 8, B. C.
C. Smith	Geologist	1907 Esquimalt Avenue, West Vancouver, B. C.

ATLAS EXPLORATIONS LIMITED

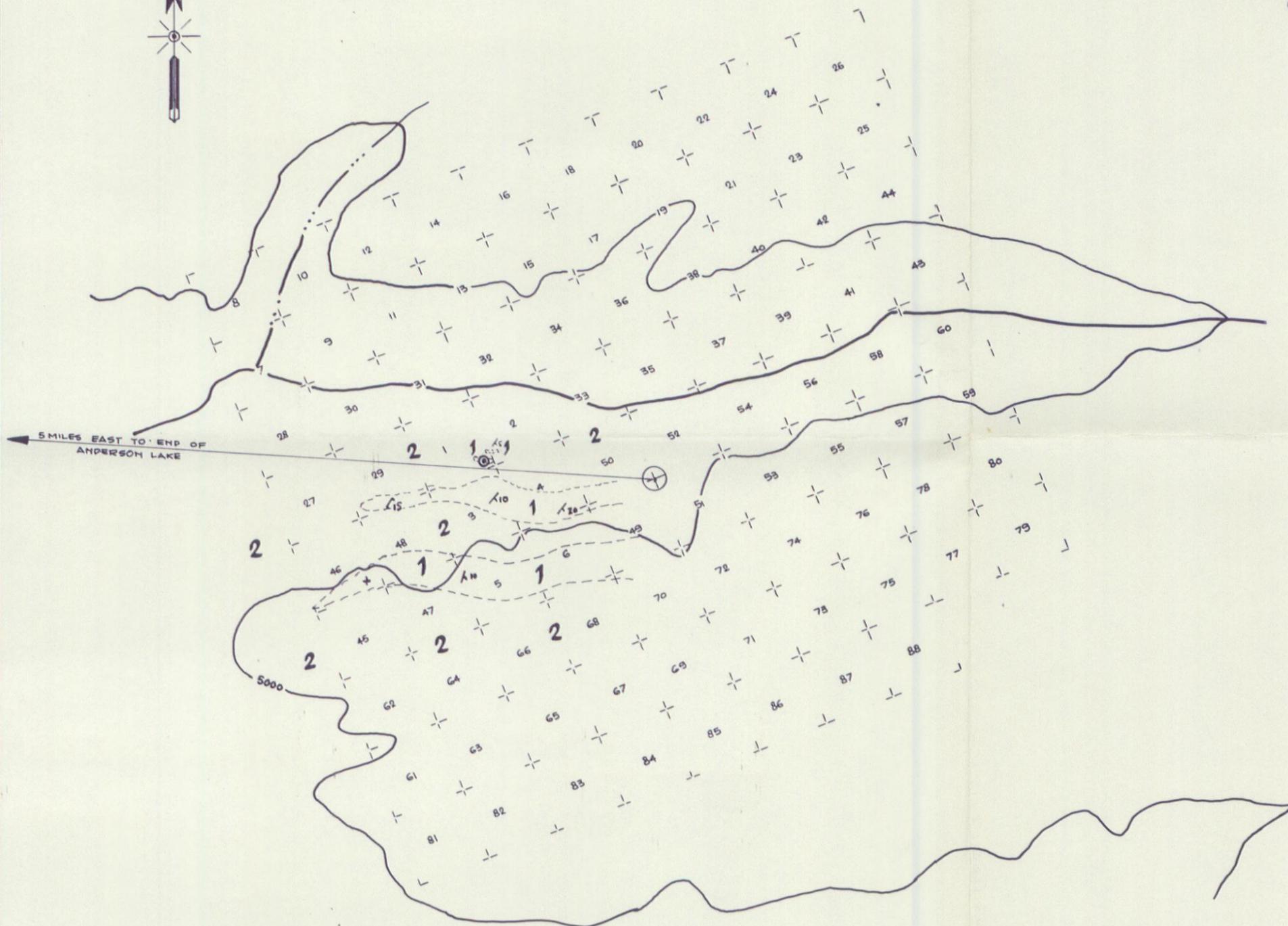
ROSS RIVER (Y.T.)

GEOLOGY AND KEY MAP OF TOY GROUP

SCALE 1" = 1/2 MILE

GEOLOGY : T. ADAMSON

DATE : AUGUST 1967



SYMBOLS :

- CONTACT
- |— BEDDING
- |— FOLIATION

LEGEND :

CRETECEOUS

- 2** GRANITE TO GRANODIORITE, MEDIUM GRAINED BIOTITE RICH.

PROTEROZOIC

- 1** GRANITE GNEISS, BIOTITE SCHIST, MARBLE, CALCITE - GROSSULARITE - DIOPSIDE SKARN, MINOR QUARTZITE.

© TOY Pb-Zn SHOWING (ASSAY #)

ATLAS EXPLORATIONS LIMITED
ROSS RIVER (Y.T.)

TOY GROUP GRID GEOLOGY

SCALE 1"=50'

GEOLOGY: T. ADAMSON

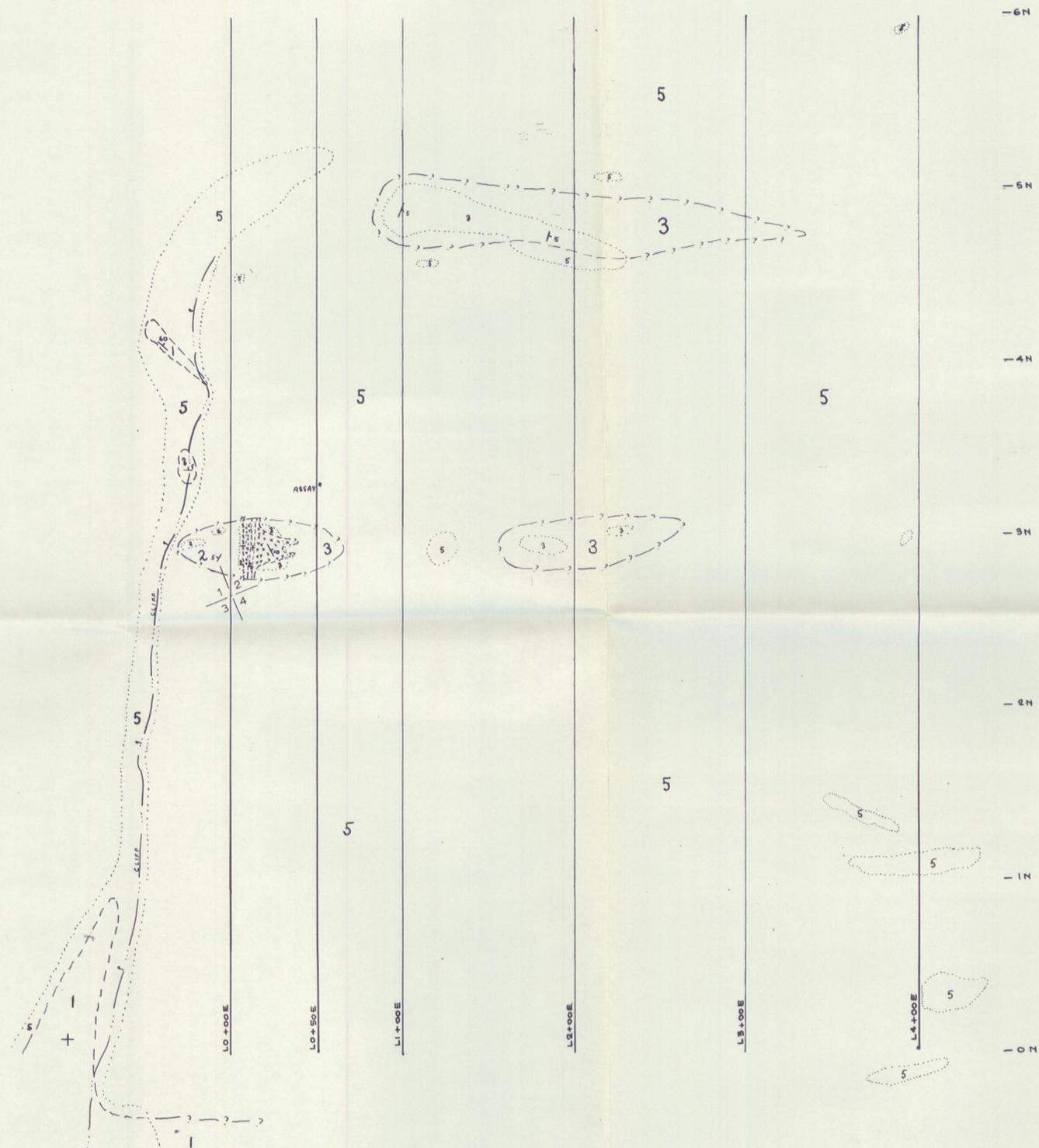
DATE: AUGUST '67

SYMBOLS

- OUTCROP LIMIT
- CONTACT
- - - - - CONTACT (ASSUMED)
- - - - - BEDDING
- |— FOLIATION
- ~~~~~ FAULT

LEGEND

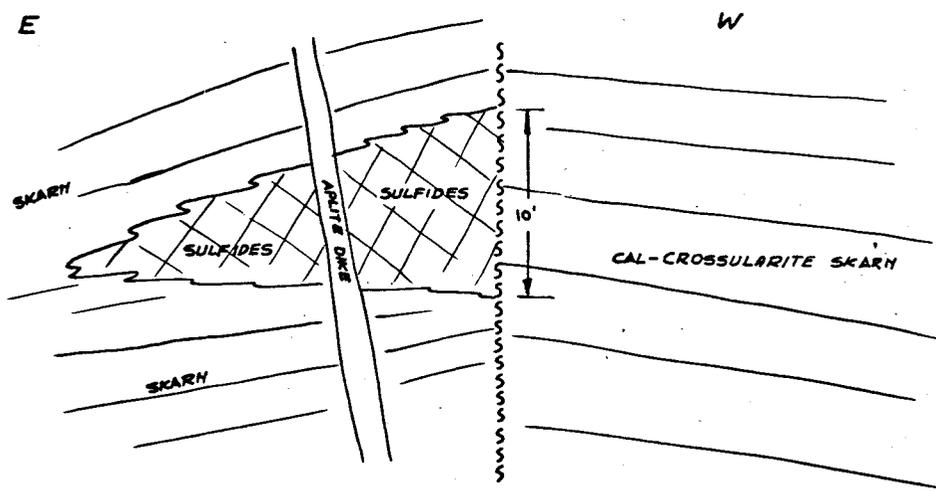
- 5 GRANITE TO GRANODIORITE, MEDIUM GRAINED, BIOTITE RICH
- 4 APLITE (DYKE)
- 3 GROSSULARITE-CALCITE SKARN; MINOR DIOPSIDE & KYANITE
- 2 MARBLE, CLEAN, WHITE, COARSELY CRYSTALLINE
- 1 GRANITIC GNEISS, BIOTITE SCHIST FELDSPATHIC QUARTZITE
- SULFIDES (MAINLY SPHALERITE, GALENA, MINOR CHALCOPYRITE);
- A STRATIFORM REPLACEMENT BODY, IN SKARN.



GEOLOGIC CROSS-SECTION

TOY MINERAL CLAIMS

BRODEL SHOWING



NOTE: NOT TO SCALE

drawn: p.v.

DATE Sept. 26, 1966
FILE NO. 3317-4

ASSAY CERTIFICATE

WHITEHORSE ASSAY OFFICE

P.O. BOX 346. WHITEHORSE. YUKON

RECEIVED FROM Hugo Brodell

SAMPLE NO.	GOLD OZ. PER TON	SILVER OZ PER TON	Lead	Zinc	Copper	Nickel		
Toy #1	Tr	8.00	10.6	9.5	.73	Tr		
Toy #2	Tr	1.00	6.8	9.9	.45	Tr		
Toy #3	.005	13.2	.2	10.5	.39	Tr		
Toy #4	Tr	1.20	14.4	10.9	.37	Tr		

ASSAYER Geo. Spalden