1035 J-1

ASSESSMENT REPORTS

April 1968

MAP No. 105J-1 TYPE OF WORK: Geological

REPORT FILED UNDER	Atlas Explorations Ltd.
DATE PERFORMED	June - July, 1967
LOCATION - LAT.	62° 00'N
LONG.	130° 25'W
CLAIM Nos.	PAY 1-16, Y-13133 - Y-13148
WORK DONE BY	Atlas Explorations Ltd., Clyde L. Smith
WORK DONE FOR	Atlas Explorations Ltd.
REMARKS	Mineralization found. Recommend geochemical and geophysical surveys over the area of mineralization.

Geological Report
PAY 1-16 Mineral Claim Group
FORTIN LAKE AREA
Watson Lake Mining Division
Yukon Territory

1050

Lon 1300 25' North
Lat. 62 00 North
by Clyde L. Smith, June 1967

GEOLOGICAL REPORT

on

PAY 1-16 MINERAL CLAIM GROUP

FORTIN LAKE AREA

Watson Lake Mining Division

Yukon Territory

Long. 130° 25' West

Lat. 62° 00' North

GEOLOGICAL SURVEY
DEC 4 1967
Resident Geologist
Whitehorse, Y. T.

by

Clyde L. Smith

Atlas Explorations Limited

June 16 - July 4, 1967

This report has been [illegible] the Geological Evaluation [illegible]
Approved as to technical worth by:
[illegible]
RESIDENT GEOLOGIST

Approved as to cost in the amount of: $ 1050.00
[illegible]
RESIDENT MINING ENGINEER

Accepted as representation work under Section 53(4) Yukon Quartz Mining Act.
[illegible]
COMMISSIONER OF YUKON

$1050

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LIST OF CLAIMS

Claim Number	Grant Number	Date Recorded
PAY 1-16	Y13133-Y13148	July 4, 1966

INTRODUCTION

The Pay 1-16 group was optioned from R. McBean on August 13, 1966, following an examination by Al Kulan and discussions with P. Risby, who made the initial discovery. Payments are due at yearly intervals on September 1 beginning in 1967. G. J. Brown made a brief examination of the property in July 1966.

The Pay 1-16 group consists of 14 contiguous claims, elongate in a northwesterly direction, and two separate claims northwest of the main group, located east of Fortin Lake and about 60 miles east of Ross River.

LOCATION AND ACCESS

The Pay 1-16 group is located about 6 miles east of Fortin Lake and is accessible by Beaver aircraft (Pay Lake and Barry Lake being suitable for landings on floats or skis) or by tote trail. The Atlas tote trail leaves the Watson Lake-Ross River road northwest of Finlayson Lake and after a distance of about 32 miles passes just west of the claim group and east of Pay Lake. The road may be travelled by bombardier in the summer or by 4-wheel drive truck in the winter.

REGIONAL GEOLOGIC SETTING

The region is underlain by a steeply-dipping, northwesterly-striking succession of Devonian and Mississippian cherts, slates, phyllites and quartzites. Southeast of the claims a granitic intrusive crops out; the intrusive appears to plunge beneath the metasediments and perhaps underlies much of the claim area.

Little is known of the structure other than that strong topogfaphic linears are present and suggest that a rhombic fracture pattern exists. Pelly Lakes and Fortin Lake appear to lie within major fractures.

TABLE OF GEOLOGIC FORMATIONS

Devonian and Mississippian:	4	Black carbonaceous slate
	3	Light gray phyllite
	2	Quartzite
	1	Gray chert with interbedded dolomite

GEOLOGY OF NORTH PAY (1-16) GRID AREA

The Pay 1-16 area wasmmapped by R. Darney and W. Roberts on a scale of 1" = 1000 feet during the period June 16 - July 4, 1967. Mapping was done on an air photo blow-up and outcrop stations related to a cut grid. The grid consists of a 6,400 foot base line trending N45°W with 9 cross lines of 2000 feet in length spaced 800 feet apart turned off to the southwest

and 4 cross lines 1200 feet long to the northeast. Total cut line is 27,400 feet.

The grid area is underlain by a steeply-dipping, N50-80°W-striking succession of metasediments. Stratigraphic relations are not known but what appears to be the oldest unit is a light gray to dark gray massively bedded chert locally interbedded with brownish gray dolomite. Apparently overlying to the southwest are narrow members of gray quartzite.and light gray phyllite. Black carbonaceous slates crop out on the southwest side of the succession and dip less steeply to the south than the cherts.

Only one fault was noted cutting the beds. The fault trends north-south and dips steeply displacing the easterly block at least 1200 feet to the south.

The cherts are extensively mineralized in the eastern portion of the grid area. Mineralization occurs in chert breccia as replacement in matrix material. Percentages of minerals vary and grades are generally low. Pyrrhotite and arsenopyrite are abundant with lesser amounts of sphalerite, galena, chalcopyrite, and pyrite. Assay values are shown on the geologic map.

DISCUSSION AND CONCLUSIONS

It has been demonstrated that mineralization of potential importance occurs over a strike length of at least 3000 feet as matrix replacements in cherS breccia. Control of minerali-

nation appears to be a brecciated lithologic unit rather than a secondary structural feature.

Geochemical and geophysical surveys have been run over a portion of the area but the main showings have not been covered. It is recommended that geochemical, magnetic, and electromagnetic surveys be extended to cover the area of mineralization to the east. If significant anomalies can be related to showings, anomalies should be either drilled or trenched.

APPENDIX I

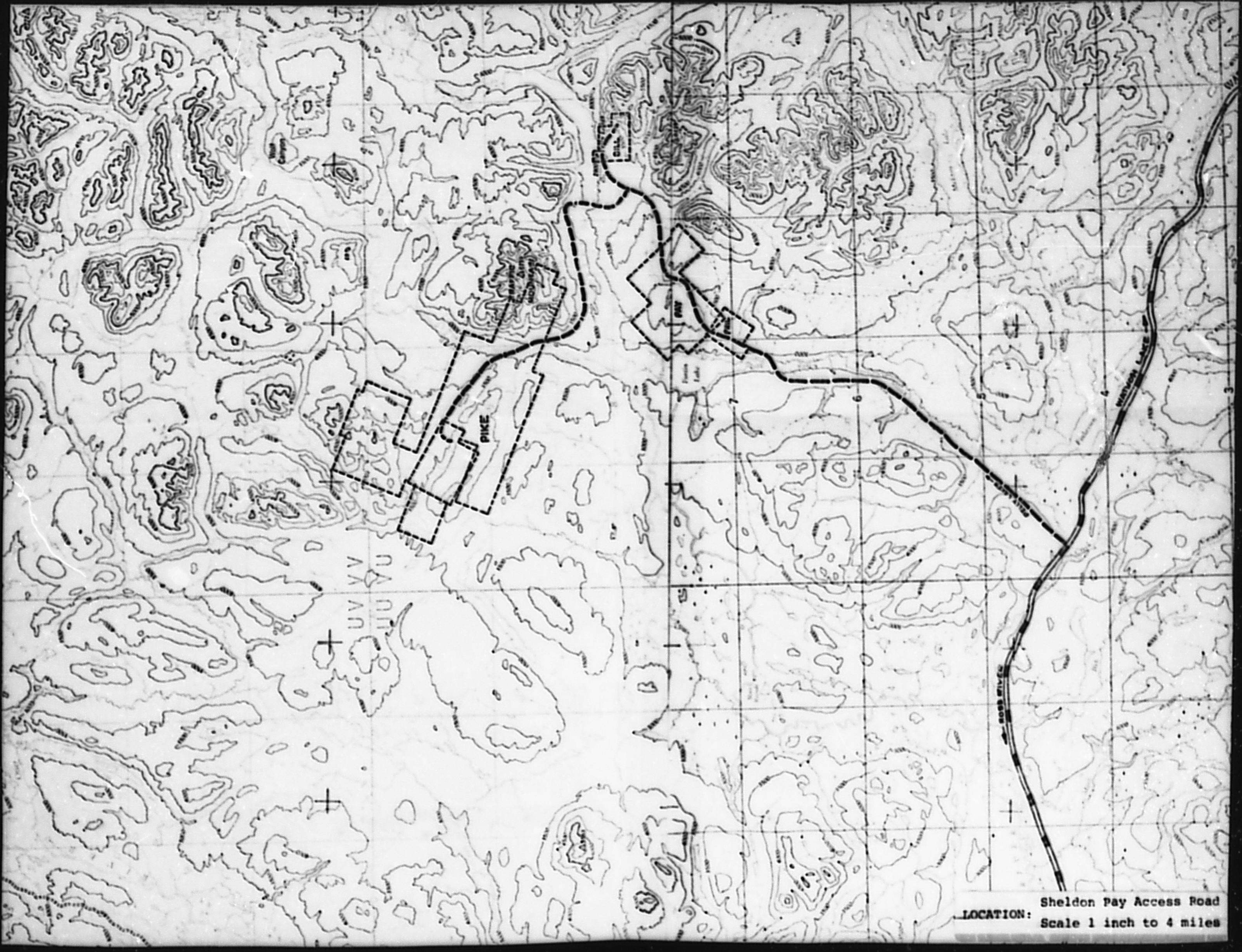
SUMMARY OF COSTS

		Costs
1)	Salaries - 2 geologists for 8 man/days	$ 160.00
	- 1 prospector for 2 man/days	40.00
	- 1 party chief for 4 man/days	100.00
2)	Camp support - total of 20 man/days (including cook, supervisor, bombardier operator)	240.00
3)	Helicopter - 2 hours at $110/hour	220.00
4)	Fixed Wing - ½ of round trip, Ross River to Pay	170.00
5)	Bombardier - 2 days at $35/day	70.00
6)	Equipment	50.00
	TOTAL -	$1,050.00

APPENDIX III

PERSONNEL

Phil Nielsen	Party Chief	1600 Beach Ave. Vancouver, B.C.
Robert Darney	Geologist	2828 West 11th Ave. Vancouver, B.C.
Wayne Roberts	Geologist	6700 N.W. Marine Dr. Vancouver 8, B.C.
Peter Risby	Prospector	Ross River, Y.T.
Pat Lund	Bombardier Operator	Watson Lake, Y.T.


PIKE
PAY
11
ROSS RIVER
LOCATION: Sheldon Pay Access Road
Scale 1 inch to 4 miles

APPENDIX II

A F F I D A V I T

Supporting Summary of Costs

I, Clyde L. Smith, Chief Geologist, Atlas Explorations Limited, of Vancouver, B.C., do hereby state that to the best of my knowledge and belief the statement of costs as presented in Appendix I of this report "Geological Report on Pay 1-16 Mineral Claim Group" is both true and correct.

DATED at Pelly Lakes, Yukon Territory, this 6th day of July, A.D. 1967.

SWORN BEFORE ME at
Pelly Lakes, Yukon
Territory, this 6th
day of ~~July~~ October, A.D. 1967

W. G. Needham

A Commissioner for taking
Affidavits in the Yukon
Territory

Clyde L. Smith

Clyde L. Smith

Clyde L. Smith

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Robert Darney	Geologist	2828 West 11th Ave. Vancouver, B.C.
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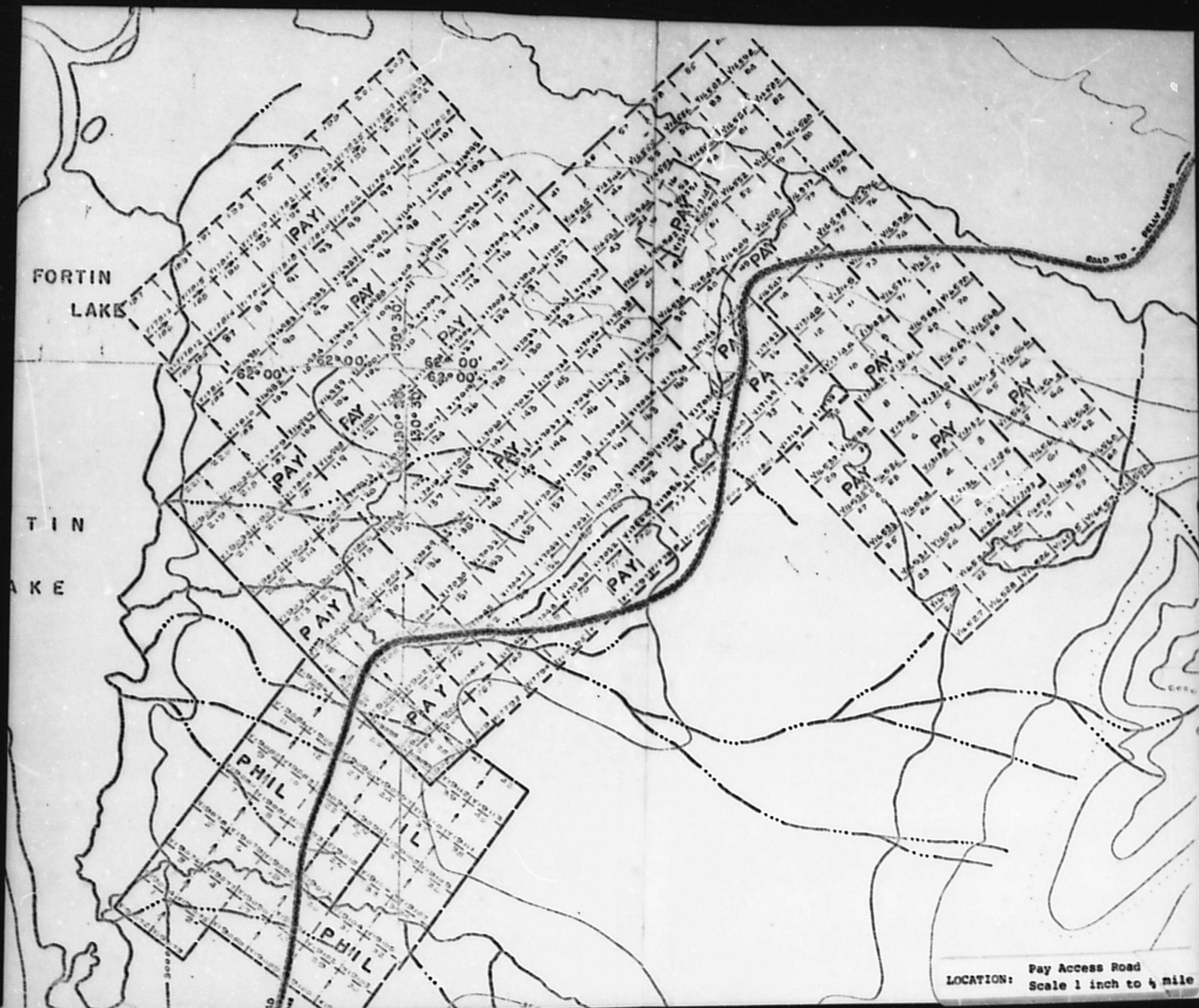
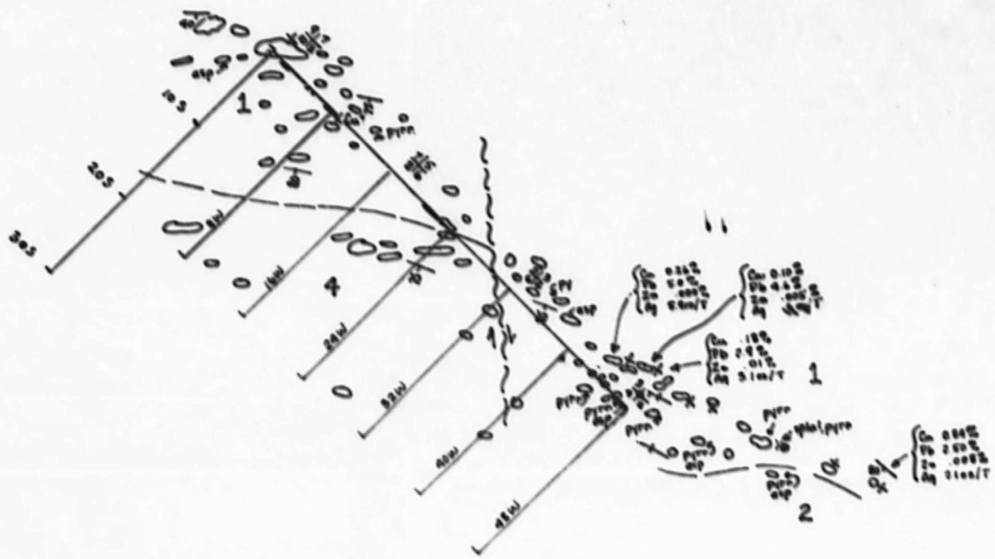

FORTIN
LAKE
TIN
AKE
PAY
PHIL
ROAD TO
LOCATION: Pay Access Road
Scale 1 inch to ½ mile



LEGEND

- 4 — BLACK CARBONACEOUS SLATE
- 3 — LIGHT GRAY PHYLLITE?
- 2 — QUARTZITE
- 1 — GRAY CHERT + INTERBEDDED DOLOMITE
- — VEIN QUARTZ

asp — arsenopyrite
pyrr — pyrrhotite
sphal — sphalerite
gal — galena
py — pyrite

— bedding + foliation

X — mineral showing

— fault

— contact

+ — claim posts locn

ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)

SHELDON REGION

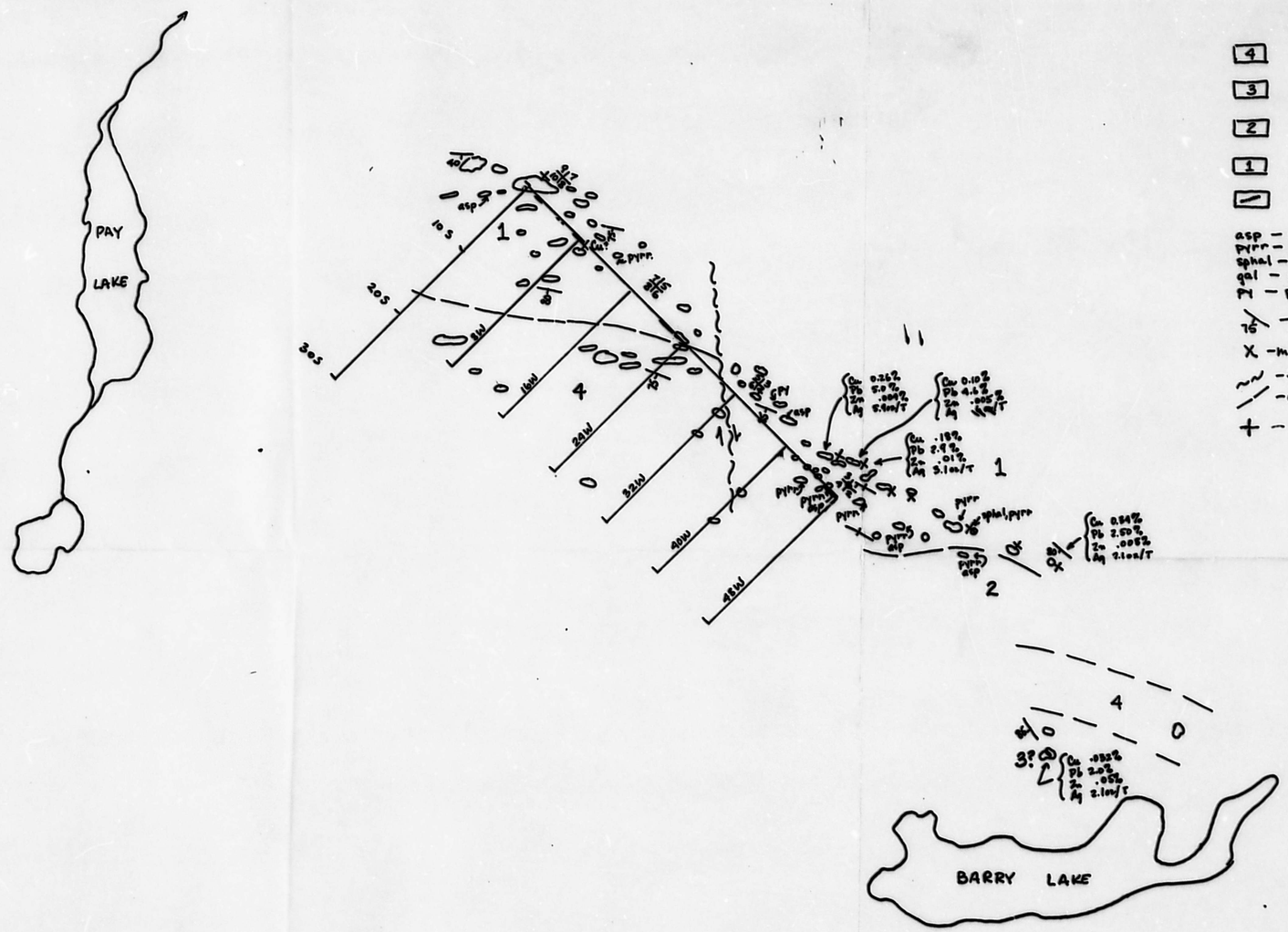
PAY MINERAL CLAIMS

— GEOLOGY —

GEOLOGY: B. DARNEY
W. ROBERTS

DATE: JUNE 1967
DRAWN: P.J.F. VLASVELD

1000 0 1000 2000
scale in feet



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asp — arsenopyrite
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ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)

SHELDON REGION

PAY MINERAL CLAIMS

— GEOLOGY —

GEOLOGY: B. DARNEY
W. ROBERTS

DATE: JUNE 1967
DRAWN: P.J.F. VLASVELD

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scale in feet