018903

SHELDON O.E.X.

FINAL REPORT

(GEOCHEMISTRY AND GEOLOGY)

Field work done
May - Oct. 1968

By

R. J. DARNEY

ATLAS EXPLORATIONS LIMITED

February, 1969

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ATLAS EXPLORATIONS LIMITED
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VANCOUVER 1, B.C.

SHELDON O.E.X.
FINAL REPORT

INTRODUCTION

During the 1966-67 field season, several areas of interest (including the Pay Claims) were found in the Sheldon Region on the basis of regional geochemical soil sampling, prospecting and geologic mapping. Although a great deal of the Sheldon belt was covered by the end of the 1967 season, six areas remained untouched. These areas provided adequate work to support the budgeting of a 4 man geochem-prospecting party for the 1969 season.

The areas covered are as follows:

(1) Fortin Lake Area
(2) North Traffic Mountain Area
(3) South McEvoy Area
(4) Pike Mountain Area
(5) Wolf Canyon Area
(6) Frances Lake Area

In each area, except for Pike Mountain and Wolf Canyon, the emphasis was placed mainly on geochemical silt sampling, with some prospecting and geologic mapping Follow-up grid pattern soil sampling was done in areas where encouraging silt results were obtained.

Although some silt sampling was done in the Pike Mountain and Wolf Canyon areas, the emphasis was placed on prospecting for old reported mineral occurrences.

METHODS OF SAMPLING

In all areas, the emphasis was placed on silt sampling rather than soil sampling in order to cover a maximum area by taking a minimum number of samples. The samples were obtained from active stream sediments with maximum spacing of 1000 ft. Most major drainages were sampled as well as tributaries and secondary tributaries.

Where large areas existed without sufficient active drainage systems, soil samples were taken to give the area adequate geochemical coverage. All samples were taken from directly beneath the volcanic ash layer, normally 12" - 18" below the surface. This method of sampling was carried out on pace and compass lines or side hill contour lines for control.

METHODS OF ANALYSIS

During the collection of samples, the materials were placed in kraft containers in which they were partially dried in the various field camps. Upon arrival at Atlas Explorations Geochemical Laboratory in Ross River, the samples were hung in their kraft containers for thorough drying.

When dry, the soil samples were screened to -80 mesh and a .2 gram portion weighed out. To the .2 gram portion was added .5 ml. of concentrated hydrochloric acid and 1.5 ml. of concentrated nitric acid. The solution was let stand for one hour to decompose organics and then heated on a sand bath for two hours to complete the digestion. The solution was then diluted to 10 ml. with the addition of 8 ml. of water.

Silt samples were treated in much the same way, the only difference being that sample digestion was in hot hydrochloric acid rather than in hot aqua regia.

All samples were then run on an atomic absorption spectrophotometer unit, using prepared standard solutions for comparison.

TREATMENT OF DATA

The geochemical results were tabulated and by means of the frequency distribution of the concentrations, anomalies were outlined. Because of the positively skewed frequency distributions, the medianwas chosen to be the best measure of geochemical background. The concentrations at 90%, 95% and 98% cumulative frequencies were calculated and are shown on the following Table I. Separate calculations were made for silts, soils and grid soils due to variations involved in sampling and analysis techniques. Only 4 of the 6 areas were done, as Wolf Canyon and Pike Mountain areas were not sampled in enough detail to facilitate an accurate frequency distribution.

Following the calculations of 90%, 95% and 98% cumulative frequencies, overlay anomaly maps were drawn for each element (Cu, Pb, Zn) in each area. The anomalies are shown in the form of "worms" with visual distinction between 90%, 95% and 98% cumulative frequencies.

GEOLOGY

All geologic mapping was done by R. B. Findlay and C. Fipkie on airphoto overlays at 1"= ½ mile scale. However, as both mappers were required to collect geochem samples, the geological data remains incomplete. Descriptions of local geology accompanies the sections on the individual areas in this report.

All prospecting was done by J. Hundere and G. Lishy.

TABLE I

Area		PPM at Median Value	PPM at 90% Cum.Freq.	PPM at 95% Cum.Freq.	PPM at 98% Cum.Freq.
Fortin Lake					
Soils-	Cu	18	41	46	56
	Zn	80	159	195	279
Silts	-Cu	16	40	58	90
	Zn	136	332	411	760
Grid	-Cu	24	4	49	65
Soils	Pb	9	18	21	29
	Zn	123	376	546	
South McEvoy					
Silts	-Cu	21	51	72	106
	Pb	26	64	79	129
	Zn	127	391	560	1000+
	Mo	2	12	14	18+
Grid	-Cu	35	102	149	200+
Soils	Pb	16	44	58	111
	Zn	145	283	596	1000+
Traffic Mtn.					
Silts	-Cu	19	33	39	52
	Pb	23	49	69	133
	Zn	53	125	162	227
Grid	-Cu	15	24	30	60
Soils	Pb	11	19	21	23
	Zn	34	54	64	89
Frances Lake					
Silts	-Cu	23	41	46	53
	Pb	10	19	24	31
	Zn	129	791	990	1061

FORTIN LAKE AREA

Summary

The area west, southwest, south and southeast of Fortin Lake was covered by a five man party during the early part of the 1968 field season. A combination of silt sampling and soil sampling was done to obtain thorough coverage of the area. A total of 572 regional silts and 574 regional soils were collected. High silt values west of Fortin Lake were followed up using a pace and compass grid pattern with 300 ft. sample intervals on 1000 ft. spaced lines. 229 soil samples were collected.

Topography and Ground Conditions

Fortin Lake lies at an elevation of 3400 ft. and is surrounded by an area consisting of marshes and gently rolling hills to an elevation of 4500 ft. Vegetation consists mainly of dwarf birch with stands of spruce and poplar. The drainage is normally sluggish and stream flow is minimal. Ground water level is high and emerges in abundant seepages, swamps and small creeks. Permafrost is present on most north-facing slopes, but is very erratic.

Geology (See Fig.1)

The area west and southwest of Fortin Lake is composed of a sequence of Silurian-Devonian and Mississippian rocks dipping gently to the south. The contact between the metasediments of the Mississippian and the Silurian-Devonian trends approximately east-west and lies west of the southern end of Fortin Lake. Rocks in the Mississippian include mainly cherts and shales with interbedded limestones, argillites and greywackes. These units are underlain by the dolomites, siliceous dolomites and quartzites of the Silurian-Devonian.

No mineral occurrences were reported in this area during the prospecting and mapping program. However, weak copper mineralization southwest of Fortin Lake was reported by an independent Ross River prospector early in 1968. In view of the high Cu geochemistry on one drainage in the vicinity of the reported copper, further prospecting is warranted.

Results

All regional results were plotted on a plan at 1"= ½ mile scale (Fig. 2) and the anomalies at threshold values 90%, 95% and 98% cumulative frequencies are shown in Figs. 3, 4 and 5.

Sample results from the follow-up grid west of Fortin Lake were statistically treated and threshold values for 90%, 95% and 98% cumulative frequency were calculated. Using the 95% cumulative frequency concentration, a contour map was drawn (Fig. 6, values Fig.7) showing the most interesting areas. Although several values above the 95% threshold are present, they appear only as single erratic values which do not appear to be at all continuous on adjacent lines. One area, however, shows coincident anomalous Cu-Zn over an area 900 ft. wide on 1 line.

SOUTH McEVOY LAKE AREA

Summary

The area south and southeast of McEvoy Lake was covered by a geochemical prospecting team during the end of July and early August. The program consisted mainly of silt sampling and prospecting with some geologic mapping. A total of 490 silt samples were taken during this survey.

At the end of August and early September, a pace and compass grid soil sampling program was carried out over an area of

encouraging silt results south of the west end of McEvoy Lake. This grid consisted of 13 lines 1500 ft. apart with 300 ft. sample intervals. A total of 388 soil samples were collected.

Topography and Ground Conditions

Elevations in the South McEvoy region vary between 3500 ft. and 6500 ft. above sea level. The terrain changes abruptly from gentle rolling slopes to high rugged peaks. The vegetation consists mainly of dwarf birch and spruce with some poplar groves below timberline generally at 4500 ft. Above timberline, the vegetation is restricted to moss and lichen with the occasional clump of scrub spruce. Permafrost is present on north-facing slopes but is not pervasive.

Geology (See Fig.8)

The geology of the South McEvoy region consists mainly of Silurian-Mississippian and Cambrian metasediments intruded by a large Cretaceous granodioritic stock.

The majority of the Silurian-Devonian and Mississippian rocks lie south of the east end of McEvoy Lake, while the Cambrian is exposed only on the northwest end of the granodioritic intrusive south of McEvoy Lake.

The Cambrian section is composed of light-medium grey phyllites with interbedded members of dolomites, siliceous dolomite and quartzite. Some minor greenstones and greywackes were reported. The sequence strikes northwest and dips moderatelyto to the northeast. However, some attitudes indicate a slight doming effect over the nose of the intrusive.

The Silurian-Devonian and Mississippian units were encountered southeast of the granodioritic stock. The Silurian-Devonian

is composed mainly of slates, dolomites with interbedded quartzites and limestones while the Mississippian rocks include mainly grey-black fissile and finely bedded shales and slates with some phyllites, minor sandstones and greywackes.

Several mineral showings were reported in the area. The following are descriptions of each:

Showing 1

Sphalerite, lesser galena and minor chalcopyrite occurring in a shear zone trending 115°/85° N. The shear, cutting light grey quartzite, is approximately 6 ft. wide, and the mineralization is only present for about 8 ft. strike length. Assay from selected sample Ag .44 oz. Pb 11.1%, Zn 9.9%.

Showing 2

Mineralization consists of coarsely crystalline sphalerite, galena, arsenopyrite, pyrite and minor chalcopyrite in a pegmatite dyke cutting the host biotized granodiorite. The dyke which trends 110°/85° N. is 3 ft. wide and exposed for 25 ft. along strike. No assay.

Showing 3

Galena and pyrite as breccia filling in a narrow shear zone. Mineralization was exposed for approximately 5 ft. and was also coarsely disseminated in the wall rock to a depth of about 5 inches. The shear which had an attitude of 260°/70° S. was traced for some distance along strike with no indications of further mineralization. No assays.

Showing 4

Minor sphalerite and lesser galena occurring as fine disseminations in a light coloured limestone. All

mineralization closely associated with narrow quartz veinlets.

Showing 5

A system of discontinuous quartz veins ($090^{o}/80^{o}$ S.) up to 6 inches in width cutting an unaltered granodiorite. The veins, approximately 70 ft. long, contain molybdenite, arsenopyrite, pyrite with minor sphalerite and galena. MoS_2- .2%.

Showing 6

A system of irregular quartz veins carrying minor amounts of molybdenite exposed over an area 20 ft. by 100 ft. The molybdenite occurs mainly as coarse, flaky disseminations in the quartz veins, although some fine disseminations were observed in the granodioritic host close to the vein contacts. Assays from four selected grabs ran .047%, .45%, .9% and 2.12% MoS_2.

Showing 7

Molybdenite mineralization occurring in an 18 inch wide quartz vein, poorly exposed in a mass of talus and overburden. Fine grained molybdenite disseminations occur to a depth of 2 inches in the granodiorite wall rock. Grab sample assayed .45% MoS_2.

Showing 8

Refers to several small lead-zinc showings discovered south of the west end of McEvoy Lake. The mineralization which is generally weak, appears mainly in narrow shear zones or where silicification of the dolomite host is found. The abundance of showing in an area approximately 300 ft. wide by 1000 ft. long lead to the soil sampling of a pace and compass grid which has outlined several anomalous areas.

One small molybdenite occurrence was found approximately 1½ miles south of the middle of McEvoy Lake. This showing consists of coarse grained molybdenite with minor scheelite in a greenish coloured altered dolomite. Limited outcrop prevented proper evaluation of this showing.

Geochemical Results

Background and threshold values for Cu, Pb, Zn were calculated for all silt samples collected in the South McEvoy region. Using the values at the 90%, 95% and 98% cumulative frequencies, maps showing anomalous area were drawn (Figs. 9, 10, 11, Values Fig.12).

Coincident anomalous Cu, Pb, Zn results occur in two areas. The first, southeast of the granodioritic intrusive in Silurian-Mississippian rocks. The results were obtained in six creeks draining opposite sides of a narrow divide. Several small showings in the area could be the cause of the anomalies. However, the area was thoroughly prospected and no showings of immediate interest were discovered.

The second area of coincident Cu, Pb, Zn results is northwest of the granodiorite intrusive within an area of Cambrian metasediments. Follow-up grid soil sampling of this area has outlined several areas of anomalous results above the 95% threshold value (Figs. 13 and 14). These anomalies can be divided into two types both having apparent east-west trends. The first, mainly coincident Pb-Zn with associated copper lies downslope and approximately 3000 ft. from the second which is mainly anomalous copper with associated zinc. The lateral extent of these anomalies are not known as the line spacing is 1500 ft. However, in both cases values on single lines indicate widths up to 1500 ft.

NORTH TRAFFIC MOUNTAIN

Summary

During the first two weeks of August, a four man crew carried out a reconnaissance silt sampling and prospecting program with limited geologic mapping.

Favourable lead results led to the soil sampling of a pace and compass grid during the early part of September. This grid consisted of 8 soil lines 3000 ft. apart with 300 ft. sample intervals. A total of 210 soil samples were collected.

Topography and Ground Conditions

The steep north slopes of Traffic Mountain, elevation 6739, give way to a rolling plateau at approximately 4000 ft. This plateau, slightly below timberline, is covered by thick stands of spruce with dwarf birch undergrowth. Several creeks flowing north from Traffic Mountain form sharp cuts in the rolling topography.

Permafrost is quite extensive throughout most of the area.

Geology (See Fig.15)

Geologic mapping was concentrated mainly at the lower elevations in the Proterozoic section. Due to heavy overburden cover in this area, the completion of a geologic map was impossible. However, the major rock types, including shales, sandstones and cherts, are shown on the accompanying outcrop map.

Geochemical Results

All silt sample results were plotted on a 1"= ½ mile plan map (Fig.16) and overlays showing the anomalous area were drawn. Figs. 17, 18, 19. The most interesting values were obtained in the western part of the area on three creeks draining the north slope of Traffic Mountain. These lead values range from

50 ppm to 400 ppm and on one creek increase steadily from 123 ppm to 400 ppm towards the headwaters.

Results from the follow-up soil grid are plotted in Fig. 20 and anomalous values above the 95% cumulative frequency are contoured in Fig. 21. These anomalous results are scattered erratically over the entire grid area, and no definite trends or patterns are apparent. Lines in the vicinity of the high lead silt results show no favourable anomalous areas.

OTHER AREAS

Frances Lake

A reconnaissance silt sampling program turned up an anomalous belt of geochemistry trending NW-SE across the area (Fig.22). The anomalous values were obtained in two streams draining the SE slope and in two streams draining the NW slope. These values which range from 310 ppm to 1070 ppm zinc are surprisingly consistent on all four streams. No mineralization was reported in the immediate area of this anomaly.

Detailed sampling in an area of reported minor sphalerite mineralization failed to show any anomalous results.

Pike Mountain

During mid-August, a 2 man party spent 6 days investigating a reported occurrence of chalcopyrite float on the northwest side of Pike Mountain. Silt samples were collected on all major drainages on the NW side of the mountain. However, no interesting results were obtained and no mineralization was discovered (Silt sample results Fig. 23).

Wolf Canyon

During late August, a 3 man party spent 6 days silt sampling and prospecting an area north of Wolf Canyon on the Pelly River. Prospecting and silt sampling of major drainages failed to reveal a reported copper occurrence in the area (Silt sample results Fig. 24).

CONCLUSIONS

The statistical treatment of geochemical data has outlined several areas of interest. Follow-up work has been done in three of these areas, North Traffic Mountain, Fortin and South McEvoy. The South McEvoy follow-up work is the most interesting and requires further work, while the others show nothing of immediate importance.

Other interesting areas with no follow-up work which still warrant further investigation are:

(1) Area of coincident Cu, Pb, Zn, SE of the granodiorite intrusive south of McEvoy.
(2) Anomalous Zn NW of Frances Lake.

RECOMMENDATIONS

Follow-up geochemical soil sampling, prospecting, and geologic mapping should be done in the two areas mentioned in the conclusions. This work could be done by a 3 man party consisting of geologist, prospector and geochemical soil sampler. One week should be adequate for initial follow-up in each area.

The highest priority area, south of McEvoy Lake, is now at the stage where further information can be obtained only by soil sampling on a cut grid for control. Detailed prospecting and geology should be done over the grid and surrounding areas especially to the east. Hand trenching of favourable geochemical highs should follow. A budget for the program above is given on the following page.

Respectfully submitted,

Feb. 1969

R. J. Darney

PROPOSED BUDGET

Area	Job	Expenditure	Amount	Job Total	Area Total
McEvoy OEX	Claim Staking	Salaries	200		
		Travel & Accom.	50		
		Maps, References	10		
		Record. Fees	450		
		Fixed-Wing	100	810	810
'Sak'	Line-cutting	Salaries	1,000		
		Supplies & Misc.	100	1,100	
	Geochem	Salaries	600		
		Travel & Accom.	50		
		Assaying	3,000		
		Supplies & Misc.	100		
		Maps, References	50		
		Fixed-Wing	200	4,000	
	Geophysics	Salaries	550		
		Rental - Equipment	400		
		Travel & Accom.	50		
		Supplies & Misc.	100		
		Maps, References	50		
		Fixed-Wing	200	1,350	
	Prospecting	Salaries	600		
		Travel & Accom.	50		
		Assaying Costs	200		
		Supplies & Misc.	100		
		Fixed-Wing	200	1,150	
	Geology	Salaries	700		
		Travel & Accom.	50		
		Assay Costs	100		
		Supplies & Misc.	100		
		Fixed-Wing	200	1,150	

Area	Job	Expenditure	Amount	Job Total	Area Total
'Sak'	Field Supervision	Salaries	800		
		Travel & Accom.	50		
		Supplies & Misc.	50		
		Fixed-Wing	200		
		Helicopter	800	1,900	
	Expediting	Ross River	1,000		
		Whitehorse	1,000	2,000	
	Camp Support	Fixed-Wing	400		
		Helicopter	800		
		Camp Costs	2,100	3,300	
	Admin. Costs	H.O.Overhead		1,670	17,620
				TOTAL	$18,430

PELLY RIV

4a

5b

6c

7d

CREEK

FORTIN

LEGEND

- MASSIVE TO THIN-BEDDED CHERT WITH INTERBEDDED SHALES
- INTERBEDDED CALCAREOUS SHALES, LIMESTONES WITH MINOR CHERT
- MASSIVE TO FINELY BEDDED LIMESTONE, MINOR DOLOMITE
- CALCAREOUS SHALES, SILTSTONES WITH INTERBEDDED PLATY DOLOMITES MINOR GREYWACHES.
- DOLOMITE, SILICIFIED DOLOMITES AND SANDY DOLOMITES WITH INTERBEDDED CALCAREOUS SHALES, MINOR QUARTZITE

SYMBOLS

- GEOLOGIC BOUNDARY
- OUTCROP LIMITS
- BEDDING

ATLAS EXPLORATIONS LIMITED
ROSS RIVER (Y.T.)
SHELDON REGION
FORTIN LAKE AREA
GEOLOGY

FIG. 1

½ 0 ½ 1
SCALE IN MILES

105-G-16

FORTIN

LAKE

CREEK

FORTIN

ATLAS EXPLORATIONS LIMITED
ROSS RIVER (YT)
SHELDON O.E.X. PROJECT (1968)
SOIL & SILT SAMPLE LOCATIONS & RESULTS
105 G-16

FIG. 2

PARTY CHIEFS
K. KIRKLAND
B. FINLAY

JULY 6, 1968

scale 1in = ½ mile

cu, pb, zn
silt X
soil •

PELLY RIVER

FORTIN LAKE

FORTIN CREEK

SYMBOLS

ON THE BASIS OF CUMULATIVE FREQUENCY DISTRIBUTION, THE FOLLOWING CONCENTRATION RANGES WERE DISTINGUISHED.

Σ % LIMITS	30	35	38
P.P.M. CU.	40	58	80
MAP SYMBOL			

ATLAS EXPLORATIONS LIMITED
ROSS RIVER (YT)
SHELDON REGION
FORTIN LAKE AREA
COPPER GEOCHEMICAL ANOMALIES

FIG. 3

½ 0 ½ 1
SCALE IN MILES

105-G-15&16

PELLY RIVER

FORTIN CREEK

SYMBOLS

ON THE BASIS OF CUMULATIVE FREQUENCY DISTRIBUTION, THE FOLLOWING CONCENTRATION RANGE WERE DISTINGUISHED.

Σ % LIMITS	90	95	98
P.P.M. Zn.	312	411	760
MAP SYMBOL			

ATLAS EXPLORATIONS LIMITE
ROSS RIVER (Y.T.)
SHELDON REGION
FORTIN LAKE AREA
ZINC GEOCHEMICAL ANOMALIES

FIG. 5

½ 0 ½
SCALE IN MILES

10

PELLY RIVER

3500

3500

3000

4000

4000

4000

SYMBOLS

COPPER

LEAD

ZINC

ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)

SHELDON REGION

WEST FORTIN LAKE AREA

GEOCHEMICAL CONTOURS Cu,Pb,Zn.

FIG.6

DRAWN BY : P.V.
FEBR. 13/1969

1/2 0 1/2 1

SCALE IN MILES

105-G-15

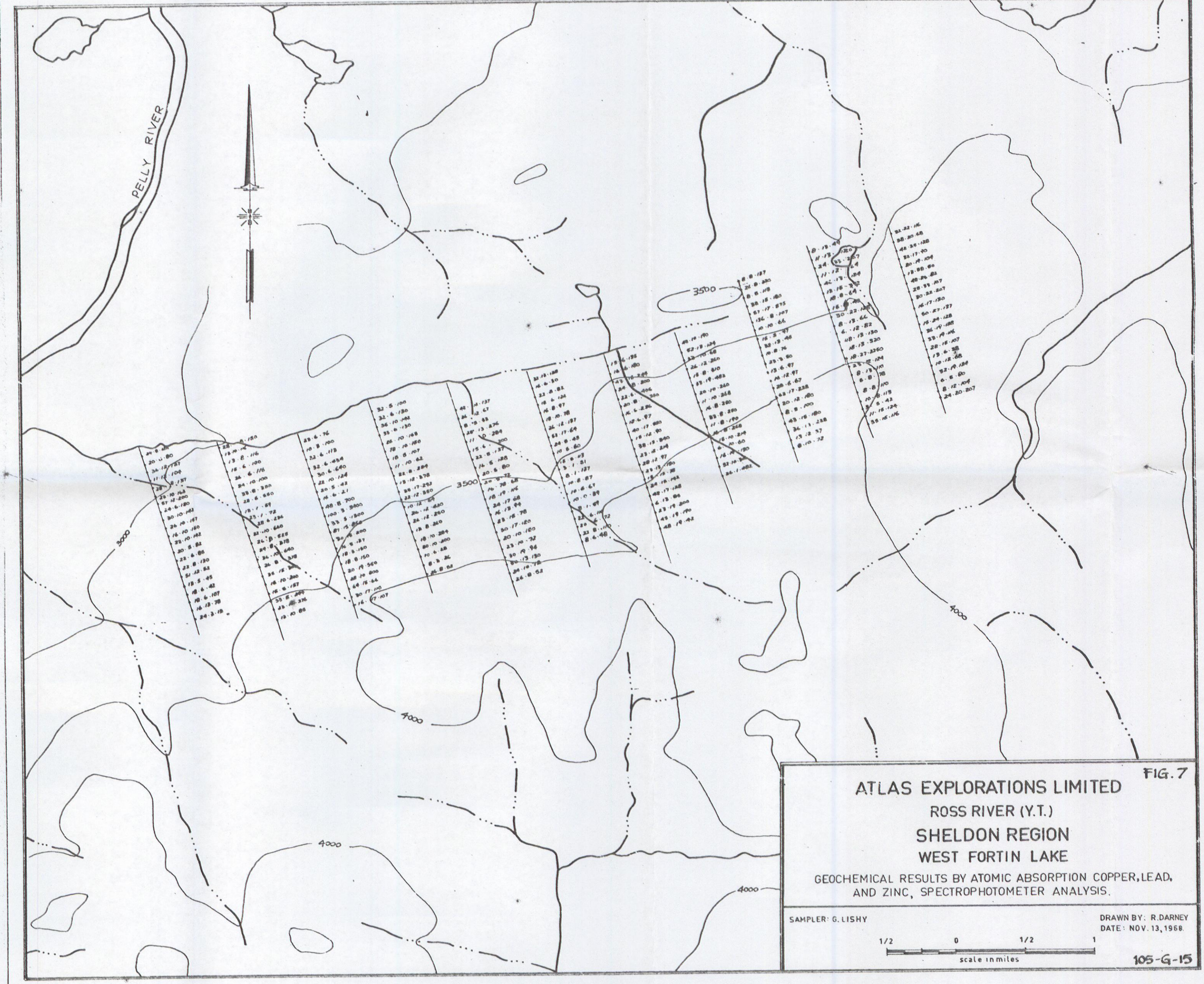


FIG. 7

ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)

SHELDON REGION

WEST FORTIN LAKE

GEOCHEMICAL RESULTS BY ATOMIC ABSORPTION COPPER, LEAD, AND ZINC, SPECTROPHOTOMETER ANALYSIS.

SAMPLER: G. LISHY

DRAWN BY: R. DARNEY
DATE: NOV. 13, 1968.

1/2 0 1/2 1
scale in miles

105-G-15

Mc EVOY LAKE

SHOWING #8

SHOWING #7

SHOWING #6

SHOWING #5

SHOWING #2

SHOWING #3

SHOWING #4

SHOWING #1

LEGEND

CRETACEOUS		GRANODIORITE
MISSISSIPPIAN	4c	MAINLY SLATE, SHALES WITH MINOR PHYLLITES AND ARGILLITES.
	4b	INTERBEDDED SHALES, ARGILLITES AND SANDSTONES
	4a	INTERBEDDED SANDSTONES, SILTSTONES AND MINOR GREYWACHES.
SILURIAN DEVONIAN	3b	INTERBEDDED DOLOMITE, QUARTZITE AND MINOR SHALE.
	3a	MAINLY BLACK SLATES WITH INTERBEDDED DOLOMITE AND QUARTZITE.
CAMBRIAN	2	LIGHT-MEDIUM GREY PHYLLITES WITH INTERBEDDED DOLOMITE AND QUARTZITE, MINOR GREENSTONES.

SYMBOLS

- FAULT
- GEOLOGICAL CONTACT
- OUTCROP LIMITS
- BEDDING

ATLAS EXPLORATIONS LIMITED
ROSS RIVER (YT)
McEVOY LAKE AREA
SHELDON REGION
GEOLOGY
FIG. 8

Mc EVOY LAKE

McEVOY CREEK

FINLAYSON RIVER

SYMBOLS

ON THE BASIS OF CUMULATIVE FREQUENCY DISTRIBUTION, THE FOLLOWING CONCENTRATION RANGES WERE DISTINGUISHED

Σ % LIMITS	90	95	98
P.P.M CU.	51	72	106
MAP SYMBOL			

ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)
McEVOY LAKE AREA
SHELDON REGION

COPPER GEOCHEMICAL ANOMALIES

FIG. 9

105-G-9&16

MCEVOY LAKE

MCEVOY CREEK

FINLAYSON RIVER

SYMBOLS

ON THE BASIS OF CUMULATIVE FREQUENCY DISTRIBUTION,
THE FOLLOWING CONCENTRATION RANGES WERE DISTINGUISHED

Σ % LIMITS	90	95	98
P.P.M. Pb.	64	79	129
MAP SYMBOL			

ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)
McEVOY LAKE AREA
SHELDON REGION

LEAD GEOCHEMICAL ANOMALIES

FIG. 10

105-G-9&16

LAKE

McEVOY

McEVOY CREEK

FINLAYSON RIVER

SYMBOLS

ON THE BASIS OF CUMULATIVE FREQUENCY DISTRIBUTION,
THE FOLLOWING CONCENTRATION RANGES WERE DISTINGUISHED

£ % LIMITS	90	95	98
P.P.M. Zn.	301	560	1000
MAP SYMBOL			

ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)
McEVOY LAKE AREA
SHELDON REGION

ZINC GEOCHEMICAL ANOMALIES

FIG. 11

105-C-9&16

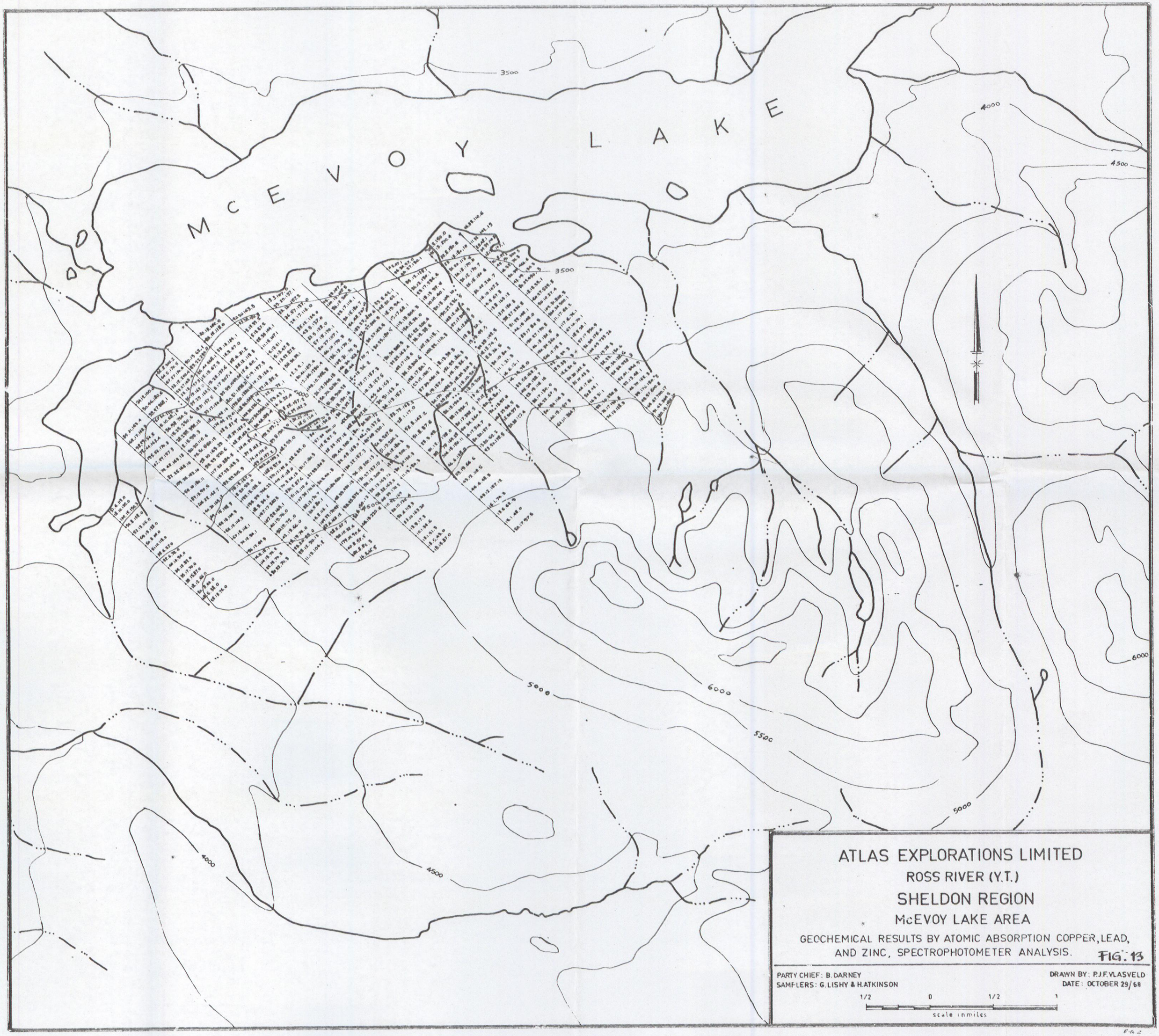
McEVOY LAKE

ATLAS EXPLORATIONS LTD.
ROSS RIVER(YT)
SHELDON OEX PROJECT(1968)
SOIL & SILT SAMPLE LOCATIONS & RESULTS
105 G-

FIG. 12

PARTY CHIEF
B. FINLAY

JULY 31,1968



ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)

SHELDON REGION

McEVOY LAKE AREA

GEOCHEMICAL RESULTS BY ATOMIC ABSORPTION COPPER, LEAD, AND ZINC, SPECTROPHOTOMETER ANALYSIS.

FIG. 13

PARTY CHIEF: B. DARNEY
SAMPLERS: G. LISHY & H. ATKINSON

DRAWN BY: P.J.F. VLASVELD
DATE: OCTOBER 29/68

1/2 0 1/2 1
scale in miles

F62

LAKE

McEVOY

SYMBOLS

COPPER
LEAD
ZINC

ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)

SHELDON REGION

McEVOY LAKE AREA

GEOCHEMICAL CONTOURS

FIG. 14

DRAWN BY: P.J.F.VLASVELD
DATE: FEBRUARY 1969

1/2 0 1/2 1

scale in miles

PELLY RIVER

WOODSIDE RIVER

TRAFFIC MOUNTAIN

PTARMIGAN CREEK

PELLY - LAKES

LEGEND

11	GRANODIORITE
3	SHALES, PHYLLITES AND ARGILLITES
2	INTERBEDDED SILTSTONES AND SHALES
1	QUARTZITE WITH INTERBEDDED PHYLLITE.

SYMBOLS

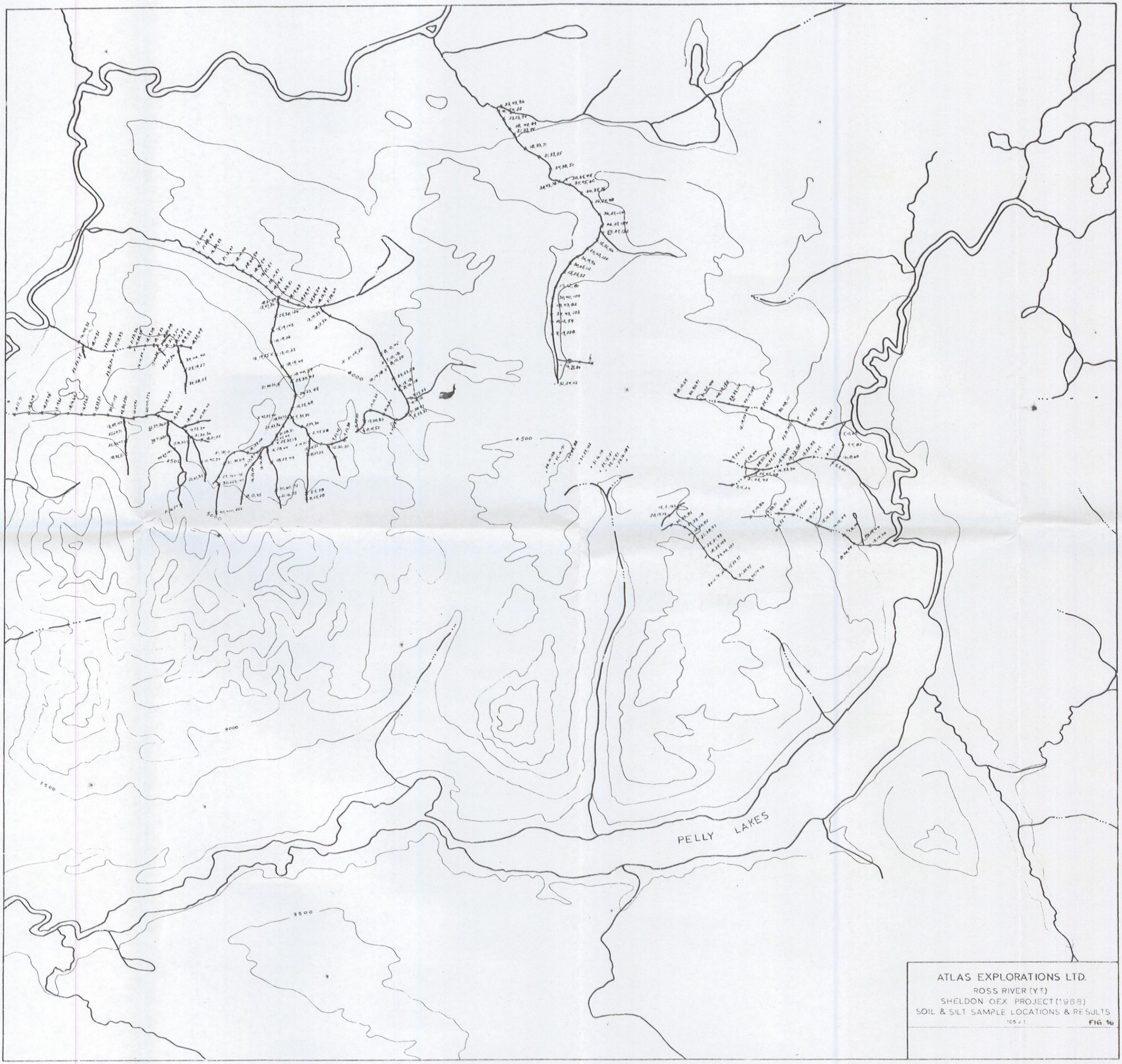
- FAULT
- GEOLOGIC CONTACT
- OUTCROP LIMITS
- BEDDING

ATLAS EXPLORATIONS LIMITED
ROSS RIVER (Y.T.)
SHELDON REGION
NORTH TRAFFIC MOUNTAIN AREA
GEOLOGY

FIG. 15

SCALE IN MILES

105-G-16



ATLAS EXPLORATIONS LTD.

ROSS RIVER (Y.T.)

SHELDON OEX PROJECT (1968)

SOIL & SILT SAMPLE LOCATIONS & RESULTS

105 J/1

FIG. 16

PELLY RIVER

WOODSIDE RIVER

PELLY

LAKES

PTARMIGAN CREEK

SYMBOLS

ON THE BASIS OF CUMULATIVE FREQUENCY DISTRIBUTION, THE FOLLOWING CONCENTRATION RANGES WERE DISTINGUISHED.

± % LIMITS	90	95	98
P.P.M. Cu	33	59	92
MAP SYMBOL			

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SHELDON REGION
TRAFFIC MOUNTAIN AREA
COPPER GEOCHEMICAL ANOMALIES

FIG. 17

SCALE IN MILES

105-J-1

PELLY RIVER

WOODSIDE

RIVER

PTARMIGAN

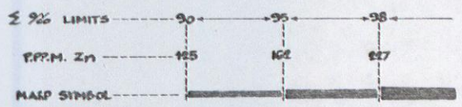
CREEK

PELLY

- LAKES

SYMBOLS

ON THE BASIS OF CUMULATIVE FREQUENCY DISTRIBUTION,
THE FOLLOWING CONCENTRATION RANGES WERE DISTINGUISHED.



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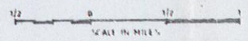
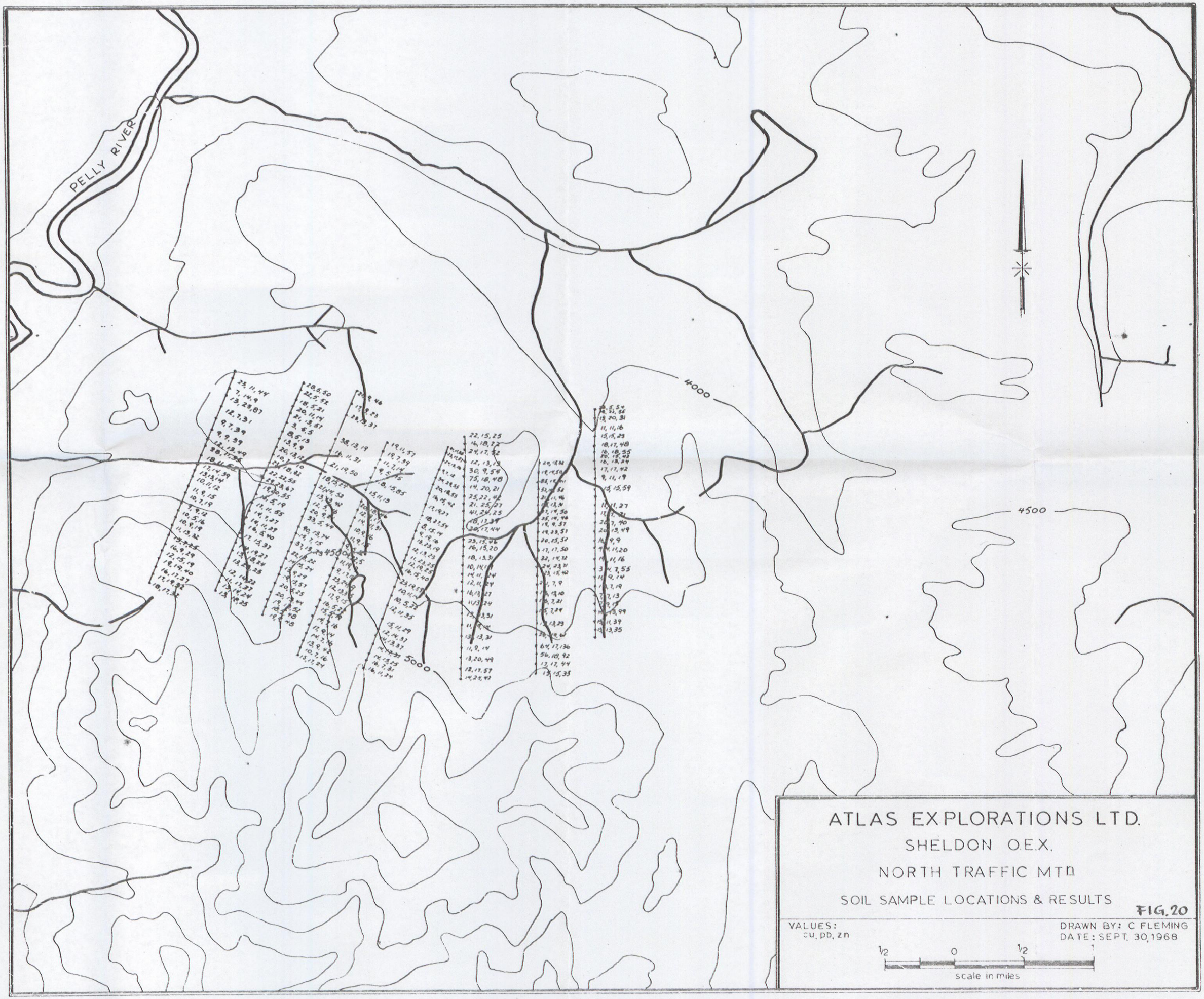
TRAFFIC MOUNTAIN AREA
ZINC GEOCHEMICAL ANOMALIES

FIG. 19



105-J-1



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SHELDON O.E.X.

NORTH TRAFFIC MTD

SOIL SAMPLE LOCATIONS & RESULTS

FIG. 20

VALUES: cu, pb, zn

DRAWN BY: C FLEMING

DATE: SEPT. 30, 1968

½ 0 ½ 1

scale in miles

PELLY RIVER

SYMBOLS

COPPER
LEAD
ZINC

ATLAS EXPLORATIONS LIMITED
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SHELDON REGION
TRAFFIC MOUNTAIN AREA
COPPER GEOCHEMICAL CONTOURS

FIG. 21

DRAWN BY: P.J.F. VLASVELD
DATE: FEB., 1969

50 0 50 100
SCALE IN FEET

FRANCES
LAKE

ATLAS EXPLORATIONS LIMITED
ROSS RIVER (Y.T.)
SHELDON REGION
FRANCES LAKE AREA
GEOCHEMICAL SILT SAMPLE RESU

SCALE IN MILES

Fig 22

FIG. 23

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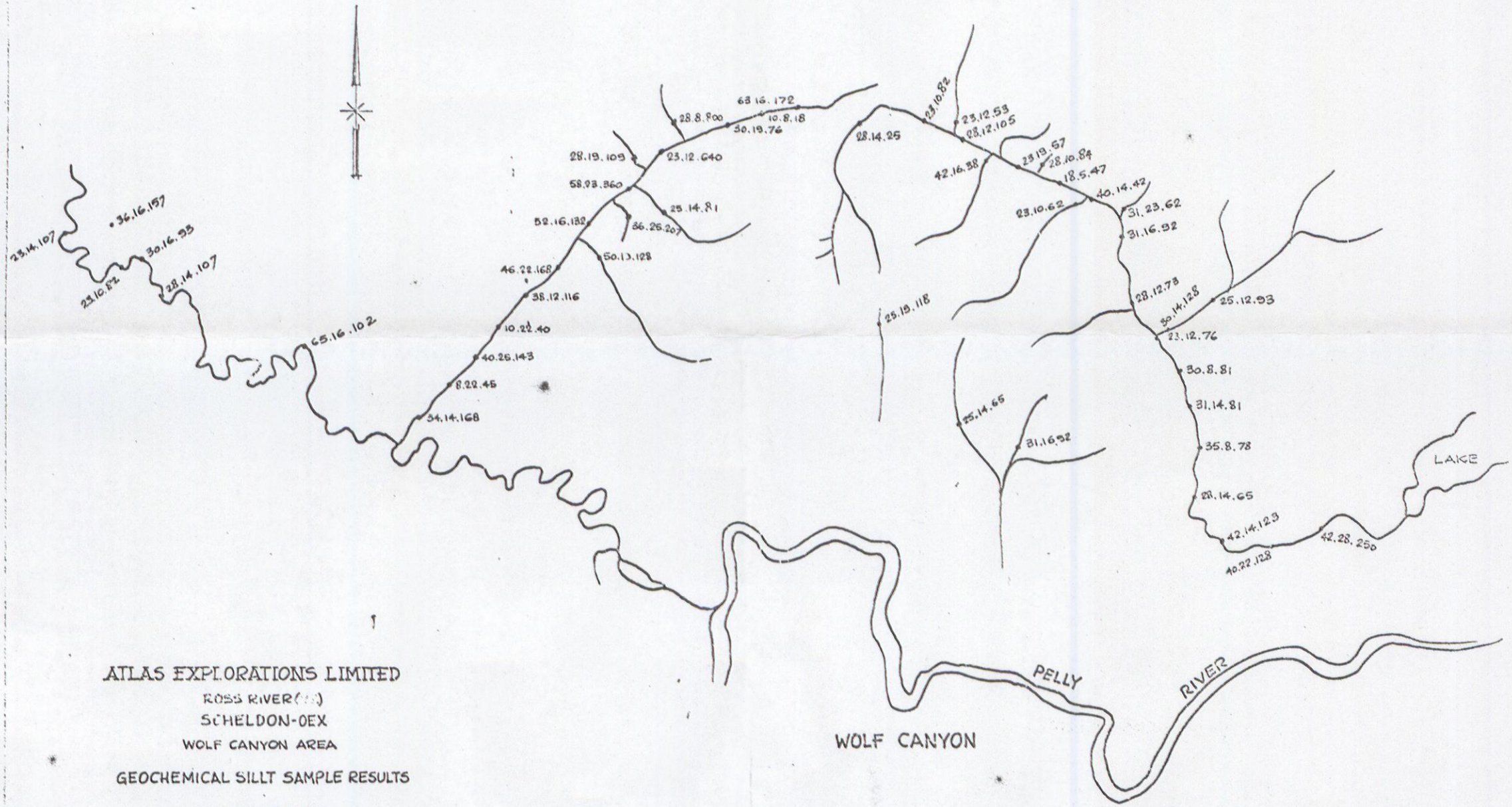
SHELDON QEX PROJECT (1968)

SOIL & SILT SAMPLE LOCATIONS & RESULTS

105-I-4

1/2 0 1/2 1 MI



ATLAS EXPLORATIONS LIMITED

ROSS RIVER(YT)

SCHELDON-OEX

WOLF CANYON AREA

GEOCHEMICAL SILLT SAMPLE RESULTS

SCALE 1"=½ MI

FIG. 24