

A SUMMARY OF EXPLORATION  
TO SEPTEMBER 30, 1967

SHELDON AREA

FYRE LAKE

Yukon Territory

by

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Vancouver, B. C.

Atlas Explorations Limited

October 15, 1967

# ATLAS EXPLORATIONS LIMITED

(N. P. L.)

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

## INTRODUCTION

### FYRE LAKE

During 1966 and 1967, two main regions of the southeastern Yukon were explored and developed by Atlas Explorations. Within the Fyre Lake area, about 86 miles southeast of Ross River, are the DUB Mineral Claims, staked over known copper mineralization. Extensive geologic, geophysical and geochemical surveys coupled with an airborne magnetic and electromagnetic survey program led to the acquisition of the Dub Property and its subsequent development. Diamond drilling of two copper geochemical-magnetic, electromagnetic anomalies commenced in the fall of 1966 and was completed in late April, 1967.

Further diamond drilling is planned in the Fyre Lake area at a later date.

### SHELDON AREA

#### Geological Setting

The Sheldon region is a northwesterly-trending geological province of about 60 miles in length and 25 miles in width located 75 miles east of Ross River and 190 miles northeast of Whitehorse.

The dominant geological feature is the Traffic Mtn. fault which trends northwesterly through the entire region and across which displacement in the order of thousands of feet has occurred. This fault lies 50 miles northeast of and parallel to the well known Tintina Trench and appears to be one of a set of major wrench faults in the Yukon. Northeast of the Traffic Mtn. fault the terrain is rugged and mountainous and underlain by tightly-folded Precambrian metasediments intruded by granitic rocks of the Logan batholith. The Logan batholith extends into the Sheldon region from as far south as Watson Lake and appears to reach its terminus at the northwest end of the region where it is expressed as a series of small aligned granitic stocks. Southwest of the Traffic Mtn. fault the terrain is mostly gently rolling with scattered mountainous areas, and underlain by moderately-folded Paleozoic metasediments and volcanics locally intruded by granitic stocks.

Base metal indications have been found in many parts of the Sheldon region so far investigated and consist of the following three major types: (1) skarn or bedded replacement zinc-copper-lead-silver with arsenopyrite and pyrrhotite in calcareous host rocks near granitic contacts; (2) porphyry-copper types containing copper-silver or lead-zinc-silver with arsenopyrite and pyrrhotite in hydrothermally altered granitic rocks; and (3) vein and shear-zone replacement copper-lead-zinc-silver with arsenopyrite occurring near granitic contacts.

Similarities between the Sheldon region and the Dynasty-Vangorda district are striking. In both cases mineralization occurs in folded Paleozoic metasediments near granitic intrusive rocks and within a short distance of major northwesterly-trending wrench faults. It is notable that although lead-zinc replacements occur in both districts, important copper-silver bodies have been located in the Sheldon region.

Work within the Sheldon region (see map, Claim Group Location Map), has been brought to a Phase III stage. In brief, airborne geophysical programs, prospecting and geologic mapping have been completed.

Ground of economic potential and significance has been acquired and detailed investigation of such ground carried out. Of all claim groups held, the Pay Mineral Claims and surrounding area, appear to warrant more exploration. To date, September 30, 1967, bulldozer trenching, light diamond drilling geophysical, geochemical and geologic techniques have been used to develop ground held by Atlas in the Sheldon Area.

SUMMARY, WORK COMPLETED

I SHELDON AREA (See Appendices)

- I Geochemical Soil Sampling Surveys, Pike Mineral Claim Group.
- II Geophysical Surveys - Pike Mineral Claim Group
- III Geological Report - Pike Mineral Claim Group
- IV Report on Bulldozer Trenching, Engineering Evaluation and Diamond Drilling - Pike Mineral Claim Group
- V Geological Report, Pay 1 - 16 Mineral Claim Group
- VI Evaluation and Recommendations, Geochemical and Geophysical Survey, Pay Mineral Claims
- VII Tote Trail Construction
- VIII Pay Claim Group Maps
- IX Geologic Report, Nar Mineral Claim Group
- X Geochemical Soil Sampling Survey Nar Mineral Claim Group
- XI Magnetic and E.M. Geophysical Survey, Nar Mineral Claim Group
- XII Geological Report, Bill-Pelly Mineral Claims
- XIII Geochemical Soil Sampling Survey, Bill-Pelly Mineral Claims
- XIV Geologic Report, Toy Mineral Claim Group
- XVI Geophysical Magnetic and E.M. Surveys, Bill-Pelly Claims

## PIKE GROUP

These properties consist of three claim groups with a total of 794 claims located west and northwest of Traffic Mtn. and about 55 miles northeast of Ross River. Most of the area consists of moderate slopes covered with thin soil.

### Geology:

The Pike Lake properties lie immediately north of the Traffic Mtn. fault and cover a succession of tightly-folded Precambrian and early Paleozoic quartzites, cherts, and slates which have been intruded by a granite porphyry stock of probable Cretaceous age. The stock appears to be the westernmost exposure of the Logan batholith and it is represented by an area of relatively high aeromagnetics. The area of the properties appears to be intensely faulted, particularly in an east-west direction near the Traffic Mtn. fault. It is notable that one of these faults coincides with an intense 8-mile long aeromagnetic anomaly, portions of which are in turn anomalous in airborne electromagnetics, in an area of copper-silver showings; the anomaly may represent an important mineralized zone and will be investigated early this coming season.

Copper-silver, and minor lead-zinc mineralization, occurs disseminated in a hydrothermally altered granite porphyry dyke of over two miles in length. The mineralized zone is indicated by an intense geochemical soil anomaly within which the following peak values occur: copper, 2,000 ppm; lead, 1200 ppm; zinc, 6200 ppm. The western end of the zone lies on higher ground and has been exposed by a series of closely-spaced bulldozer trenches for a length of 615 feet and width of 46 feet. Average grade over this area is 0.61% copper and 2.44 oz/ton silver with minor lead and zinc sections. At current metal prices this would give the ore a value of about \$9.00/ton. Depth of mineralization is not known but drilling

is planned this coming year.

Several other geochemical highs and aeromagnetic anomalies were located on the Pike group late in 1966 and received detailed follow-up this year.

Work Done:

Following initial prospecting and hand trenching of reported float north of Pike Lake, an intensive program of geophysical, geochemical and geological surveys, as well as bulldozer trenching was instigated in the area. Aeromagnetic surveys, under contract to Lockwood Surveys Corp. were done over an area of 380 square miles; 35 square miles of which was also flown with electromagnetics. Ground magnetic and electromagnetic follow-up was done over three grids totalling about 9 square miles and soil geochemical surveys on both detailed and reconnaissance scales were conducted over much of the Pike group and adjoining areas. Grid areas were geologically mapped. Thirteen bulldozer trenches across high geochemical zones exposed mineralized bedrock and trenches were geologically mapped in detail and sampled by the continuous chip method in five foot sections.

Further survey work during the 1967 season was discouraging. Magnetics appeared to reflect basic dykes as well as magnetite content in graphitic and conductive units. To the west, only insignificant mineralization was found by prospectors or geologists. In general, the area to the west of the Pike group is underlain by a tightly-folded N. 70 deg. W. striking, gently plunging succession of black slates, black limestones, shales, and cherts cut locally by biotite quartz monzonite porphyry cupolas. The only mineralization occurs as disseminations and veinlets in altered porphyry. Only pyrrhotite, arsenopyrite, magnetite and pyrite have been noted, however.

A Total of 87,100 feet of magnetics were completed over grid extensions to the main Pike grid. Anomalies occur at the north margin of the grid, are long and narrow and rise above 2500 gammas in a background of 500 gammas. They appear to accurately represent aeromagnetic anomalies in shape and orientation. A total of 47,400 feet of electromagnetic survey using a Ronka EM 16 Unit were completed. Large scale interference from graphite hindered detailed interpretation. Geochemical soil sampling, 1400 samples taken, did not prove conclusive in outlining new areas of interest.

PAY GROUP (See Appendix V - Geological Report, Pay 1 - 16 Mineral Claim Group.

VI - Evaluation and REcommendations, Geochemical and Geophysical Survey, Pay Mineral Claims.

VII - Tote Trail Construction

VIII - Pay Claim Group Maps

The Pay Property consists of 221 mineral claims located east of Fortin Lake, about 60 miles east of Ross River.

Geology:

The Pay Property is underlain by a steeply-dipping, northwest-southeast striking succession of Precambrian-Cambrian quartzites, cherts, and arillites locally metamorphosed to hornfels. An elongate, 10 mile long granitic body occurs at the eastern end of the properties and appears to plunge beneath the area of the claims. The northwesterly-striking Traffic Mtn. fault lies about 4 miles to the northeast and major parallel as well as cross-cutting faults cut the Pay group area. Several showings of lead-zinc-copper-silver bedded replacements and arsenopyrite veins carrying gold and silver values occur just north of the nose of the granite

body. The base metals occur in thin leases as replacements of calcareous units in argillite; few assays were taken but one ran 0.16 oz/ton gold, and silver values ranged from 0.14-3.88 oz/ton. Two assays from separate arsenopyrite veins ran 0.76 oz/ton gold and 20 oz/ton silver.

A geochemical soil survey conducted in the area during September 1966 resulted in the location<sup>of</sup> a large zinc geochemical anomaly about two miles west of the known showings. Subsequent detailed work revealed an area 3 miles long by 1-1/2 miles wide within which all values are greater than 500 ppm; background ranges from 0 - 250 ppm. Seven peaks of over 1000 ppm occur, two of which are each about one mile long and maximum values are over 4,000 ppm. An elongate northwesterly-striking aeromagnetic anomaly lies along the up-slope side of the geochemical anomaly and appears to reflect the mineralized source. A dolomite bed crops out south of the properties and strikes toward the anomalous zones; it is notable that dolomite is a common host rock for base metal replacement deposits.

#### Work Done:

Intensive follow-up on the Pay Group began about May 12, 1967 when linecutting was started on a grid laid out to cover the magnetic and geochemical anomalies on the claims as outlined during the 1966 field season.

### 1. Geochemical Surveys

#### (a) Geochemical Environment and Soil Types

Topography is gently-rolling with local relief up to 50 feet between northwesterly-trending elongate depressions and irregular elongate ridges. Drainage is sluggish and stream flow is minimal. Ground water level is high and emerges in abundant seepages, swamps and small creeks. Perma frost is erratic in distribution but occurs over about 70 percent of the area. Vegetation consists mainly of dwarf birch with stands of spruce, poplar, and tamarack (?).

Glacial striations are clearly recognizable in the field and on air photos: the direction of glacial movement was clearly east-west. It is believed that a piedmont glacier moved westerly through the Pelly Lakes valley and was fed by tributary glaciers entering from the southeast and north. Glacial erratics may be found on the highest mountain peaks and remnants of lateral morain up to 5,000 feet elevation.

Seventeen hand trenches and pits have been sampled and logged in an orientation survey between L40W and L56W in the easterly geochem zone. Typical soil profiles consist of: 2-4" decayed organic material ( $A_1$ ), 1-2" white volcanic ash, 2-18" coarse light gray-brown coloured sandy soil (locally has small clay percentage) ( $A_2$ ), 2-36" dark gray-brown clay (locally silty or pebbly, with up to 60% phyllite chips), ( $B_1$ ), 0-36" dark gray-brown sandy clay (with up to 60% phyllite chips) ( $B_2$ ), parental ground morain material of 95+% phyllite chips and rubble with rare granitic erratics and up to 5% mineralized dolomite (C). The soil is relatively mature for tundra types for a fairly distinct B horizon with ferruginous content can be recognised.

Immaturity is suggested however, by rapid changes in profiles over short distances. Also, the abundance of phyllite in parent material has no doubt contributed to rapid development of a clay rich B horizon. Furthermore, sluggish drainage, high water table and abundant clays suggest that soils developed under conditions of limited aeration.

(b) Secondary Dispersion

Dispersion of Zn is believed to be mainly glacial for the following reasons. 1) Where pits have been sunk in anomalous areas mineralized dolomite has been found in glacial material. 2) Zn results in pit profiles are erratic, do not show a definitive relation to the B horizon, and are highest in parental morain where mineralized material is observable. 3) Anomalies commonly lie on ridges and not in adjacent depressions where ground water emerges (if dispersion were largely chemical precipitation would normally occur where ground water emerges).

4) Soils consist mainly of weathered phyllite; drilling in anomalous areas shows carbonaceous dolomite - soils are clearly transported. 5) The only logical means of depositing the blanket of phyllite on dolomite is by glacial action; the soils are not colluvial or alluvial. 6) Phyllite crops out immediately east (up the glacial direction) from the anomalies and is the most logical morainal material (glacial studies commonly show that the bulk of morain is made up of material derived within 1-2 miles of deposition). 7) Oxidation is minimal (except for sphalerite) because pyrite, chalcopyrite, and galena are fresh and because no high values are found associated with ground water emergence areas. 8) The abundance of carbonate in host rocks and lack of oxidation in soils would logically lead to limited chemical dispersion.

(c) Dispersion Pattern

The anomalous pattern consists of a series of elongate anomalies which stretch for a distance of about 3 miles in a direction about N. 60 deg. W. Anomalies rise gradually from a regional threshold of below 300 ppm Zn through a gradually increasing (over distances of 1-500 feet) local background between 300-1000 ppm Zn. Above 1000 ppm anomalies rise to sharp peaks of 3,000-20,000 ppm.

Accepting glacial transport as the means of dispersion it is notable that patterns are not more fan-like and diffuse. Because anomalies are intense, linear, and show highest peaks in the northeast side (up-glacier) and because glacial directions are at an angle of about 30 deg. to continuous anomaly trends it is believed that the source of the anomalies lies nearly beneath or a short distance east of the northeastern edge of the anomalies. This conclusion is further suggested by the close relation between mineralization and anomaly at the discovery outcrop as well as the local presence of anomalous Pb values along the northeast side of the anomaly.

For accompanying maps, see Appendix (VIII)

## 2. Geology

A hypothetical geologic cross-section map is enclosed.  
(See Appendix VIII)

Structure consists of three structural blocks separated by two steeply southwesterly-dipping normal faults. The northeasterly block consists of an open, 20 deg. northwesterly-plunging, anticline cored by banded chert which is locally brecciated and mineralized along the axis.

Style of folding changes to the southeast and is expressed by a tight isoclinal fold plunging 20 deg. northwesterly within the central block. This fold is cored by dolomite and has broad limbs of phyllite.

Southeast of the Boundary Fault the isoclinal style is apparently retained but folds are of lesser amplitude and appear to have responded with greater incompetence for minor folds appear in sericitic phyllite in an anticlinal core. Outcrops in this southwesterly block are very rare and contacts of carbonaceous dolomite are plotted at points of 20 deg EM dips, values between 20 deg. dip points are greater and exceed 40 deg. The host dolomite appears to be interbedded in the carbonaceous dolomite sequence; the only reliable exposure gives a dip of 50 deg. southwest. Zones of major geochemical importance developed to date occur mainly over the northeasterly syncline, south of the Boundary Fault. Smaller anomalies to the southwest may indicate location of the host rock in the southwesterly syncline. Most of the anomalous area outlined by the reccy survey of 1966 has been enclosed (lines are now being extended to Fortin Lake) and the correspondence between anomaly outlines is very close. The dual, bifurcating character of anomalies in the northeasterly limb suggests that both limbs of the tight structure are mineralized. It appears that the mineralization cuts out to the northwest and southeast along strike but 1966 reccy lines were so widely spaced that this is not definite. Reccy lines have been done in both directions but no anomalous geochemical values have been located yet.

3. Geophysics

( See Appendix VI) - Evaluation and Recommendations, Geochemical and Geophysical Survey, Pay Mineral Claims.

4. Physical Work:

Numerous hand trenches, light diamond drill holes and several bulldozer trenches were placed on the Property. For locations of pits, drill holes, and trenches, (see Appendix VI )

Most diggings located zinc mineralization in dolomite float but few actually reached bedrock,<sup>a</sup> chip sample of all bedrock rubble (typical mineralized host dolomite) over a five foot width in trench #2 (L40W, 47S) ran 8.4% Zn with minor Cu and Pb. This material was felt to be representative of much seen within the geochemical zinc zone. Degree of oxidation to limonite - smithsimite (?) was moderate but significant enough that some Zn has definitely been leached out. For other trench assays, (see Appendix VIII.)

5. Diamond Drilling

As overburden depths prevented adequate bulldozer trenches, a large scale diamond drill program is planned for 1968 in order that the zinc geochemical anomaly, related geophysics and known sulphide occurrences be tested. Contracts will be released for total footages in excess of 10,000 feet.

6. Access Road

See Appendix VII Tote Trail Construction

BILL GROUP

This Property consists of 94 claims located about one mile south of Pelly Lakes and 75 miles east of Ross River. The Group was staked as a result of reconnaissance geochemical silt and soil sampling traverses carried out late in 1966.

The geochemical anomalies occur in mountain contry of moderate slopes, underlain by quartzite and hornfels, which strike northwesterly and are steeply dipping, near the nose of northwesterly plunging linear granitic stock.

During the 1967 season, investigation of the Property consisted of prospecting, geological mapping and detailed soil geochemistry plus electromagnetic-magnetic surveys.

(See Appendix XII - Geological Report, Bill-Pelly Mineral Claims  
XIII - Geochemical Soil Sampling Survey, Bill-Pelly Mineral Claims

XVI - Geophysical Magnetic and Electromagnetic Surveys, Bill-Pelly Mineral Claims.

NAR GROUP

The Nar Group of 72 claims is located near the top of a prominent mountain, about 9 miles southeast of Pelly Lakes and 85 miles east of Ross River.

The area is underlain by a steeply-dipping east-west striking succession of metasediments and metavolcanics intruded and locally contact metamorphosed to skarn and hornfels by a granite porphyry stock which crops out near the peak of the mountain. The area appears to have been domed up by the forcefully intruded granite stock. Four categories of mineralization have been recognized in outcrop:

(1) Pyrrhotite skarn with disseminated copper and arsenopyrite; (2) pyrrhotite skarn with disseminated lead-zinc-copper; (3) lead-zinc-copper disseminated or as massive replacements in hydrothermally altered granite porphyry; (4) lead-zinc-silver shear zone replacements. Three assays of pyrrhotite skarn ran 1.9, 2.0, and 2.5% copper. Samples assayed for lead-zinc-silver ranged from 6.6 to 38.9% combined lead-zinc and from 0.91 to 118.9 oz/ton silver.

Showings were discovered late in 1966 at which time only prospecting and reconnaissance geochemical sampling were done.

Work during the 1967 season consisted of linecutting, geochemical and geophysical surveys, and geologic mapping, see Appendix IX,X,XI. Diamond drilling is being considered in 1968.

#### JAKE GROUP

The Jake Property consists of 80 claims, lying in rugged mountainous country about 3 miles southeast of McEvory Lake, 80 miles southeast of Ross River.

#### Geology:

Bedrock in the Jake group area consists of massively-bedded quartzites, chert, limestone, and hornfels striking northerly and dipping moderately eastward. Small outcrops of granitic rock have been noted and it appears that a stock underlies the area. Over 20 showings of base metal mineralization occur within the property; most consist of disseminated copper, lead, and zinc in altered granitic rocks or in quartzite and chert. Talus cover is thick in the area and few showings could be traced for any distance. Selected assays gave following range of values: 2.4 - 14.3 oz/ton silver, 0.18 - 16.2% copper; 0.2 - 9.2 % lead, Tr - 3.6% zinc. All geochemical silt samples taken were highly anomalous, peak values being 3,000 ppm for copper, 10,000 ppm for lead, 7,000 ppm for zinc. A prominent one-mile long aeromagnetic anomaly occurs in the area of the showings and may reflect a buried mineralized zone of which showings are only a surface expression.

Work carried out during the 1967 season consisted of linecutting and follow-up detailed geologic, geophysical and geochemical techniques. A geochemical anomaly, elongate in an east-west direction and reaching peak values of 7600 ppm lead and 2000 ppm zinc was traced for 1500 feet. Minor lead-zinc replacement in quartzite to the west of the anomaly was located. In general, results proved inconclusive and the property will be dropped.

### SPUD GROUP

This Property is a 32 claim group located on the east slope of a prominent mountain ridge of granite about 9 miles south of Pelly Lakes and 75 miles east of Ross River.

#### Geology:

No outcrop is known to occur within the claims but immediately to the west of the group is a steeply-dipping northwesterly striking succession of Lower Paleozoic hornfelsic phyllites intruded by a major northwesterly-trending granitic stock. A dolomite unit makes up part of the stratigraphic sequence and crops out south of the group, it is notable that the strike of the dolomite would appear to carry the unit beneath the SPUD claims. The group lies over a peak on the crest of an extensive linear aeromagnetic anomaly.

A geochemical soil survey in October of 1966 located an anomalous zone over the aeromagnetic peak. Values were high mainly in zinc and copper with peak values of 11,800 ppm for zinc and 1,560 ppm for copper.

Further prospecting and a geochemical soil survey across the Spud anomaly showed no significant values, the claims will be allowed to lapse.

### TOY GROUP

The Toy Property consists of 88 claims located 4 miles southeast of the east end of Anderson Lake, 120 miles east of Ross River. Six claims were optioned in October 1966 and 82 claims were staked to cover related known showings.

#### Geology:

The Toy group covers tightly-folded, northwesterly-striking granitic gneisses and marbles lying along the south contact of a large granitic mass. A major east-west striking fault cuts through the center of the property. The main showings on the property consists of an eight-foot wide, steeply-dipping zone of massive sulfides across which

the following ranges in assays were obtained: Tr. - 0.3 oz/ton gold; 1.00 - 44.5 oz/ton silver; .2 - 78.0% lead; 9.5 - 10.9% zinc; .37 - .73% copper. Several other showings of massive sulfides have been reported on the claims.

Work Done:

See Appendix XIV Geologic Report Toy Mineral Claim Group.

RIS GROUP

The Ris Group consists of 24 claims located 10 miles southeast of Fortin Lake and 70 miles east of Ross River.

Geology:

The claims were staked to cover several northwesterly-striking copper-bearing quartz veins, which range from 5 - 15 feet in width and may be traced for about 200 feet along strike, within a moderately-dipping hornfelsic phyllite sequence on the west side of a major linear granite stock. An assay of the vein material ran .005 oz/ton gold; .72 oz/ton silver; and 2.6% copper. Geochemical soil surveys in the area revealed an extensive anomalous copper zone in which values reach 2200 ppm.

Work Done:

Only preliminary prospecting and geochemical soil sampling have been done on the property. However, data obtained to date shows the property does not warrant further investigation.

TIM GROUP

The Tim Group of 49 mineral claims is located about 10 miles southeast of the Pelly Lakes Post near Ptarmigan Lake. The property was staked in July, 1967 to cover geochemical soil anomalies obtained in proximity to a magnetic anomaly and known mineralization.

A grid was cut over the group and saturation prospecting techniques applied. Results have not been fully evaluated however,

a geochemical-geophysical (electromagnetic-magnetic-zinc-copper) anomaly has been located and will be tested by diamond drilling.

#### SHELDON AREA - SUMMARY

Intensive exploration has been carried out in the Sheldon Area during 1966 and 1967. Results are encouraging as the object of the program was accomplished - to locate areas of potential economic mineralization. Within the overall area the NAR, BILL and PAY Groups appear to be the most significant. The PAY mineral claims hold the highest priority for further exploration and diamond drilling is planned for 1968 as well as further geochemical and geophysical surveys in the Pay Area. The NAR and BILL Groups will also be investigated by light diamond drill programs in 1968.

#### SUMMARY WORK COMPLETED

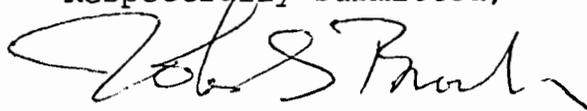
#### II FYRE LAKE

Within the Fyre Lake Area, situated some 86 miles southeast of Ross River on N.T.S. sheet 105, G 1 & 2 is located the DUB mineral claim group of some 167 claims. The DUB group was staked in early 1966 as a result of known copper mineralization in the area plus airborne geophysical (electromagnetic and magnetic) data obtained by Atlas during surveys conducted in March of 1966. Ground follow-up consisting of the application of conventional saturation techniques completed a Phase II stage of exploration by early September of 1966. A Phase III program was initiated in October of 1966 to carry out a diamond drill program designed to test two anomalous areas within the Dub Group. This program was completed by April, 1967 after a period of no drilling between December and February due to severe climatic conditions. See Appendix XV and XVI. Further diamond drilling may be planned at a later date when exploration commitments in other areas of the Yukon have been completed.

CONCLUSIONS

This report and appendices represents a summary statement of work completed to September 30, 1967 by Atlas Explorations Limited in the Fyre Lake and Sheldon areas of the Yukon Territory. At this time compilation of exploration data from all areas and phases of operation has not been completed, however, details of such will be provided as and when final compilation has been carried out.

Respectfully submitted,

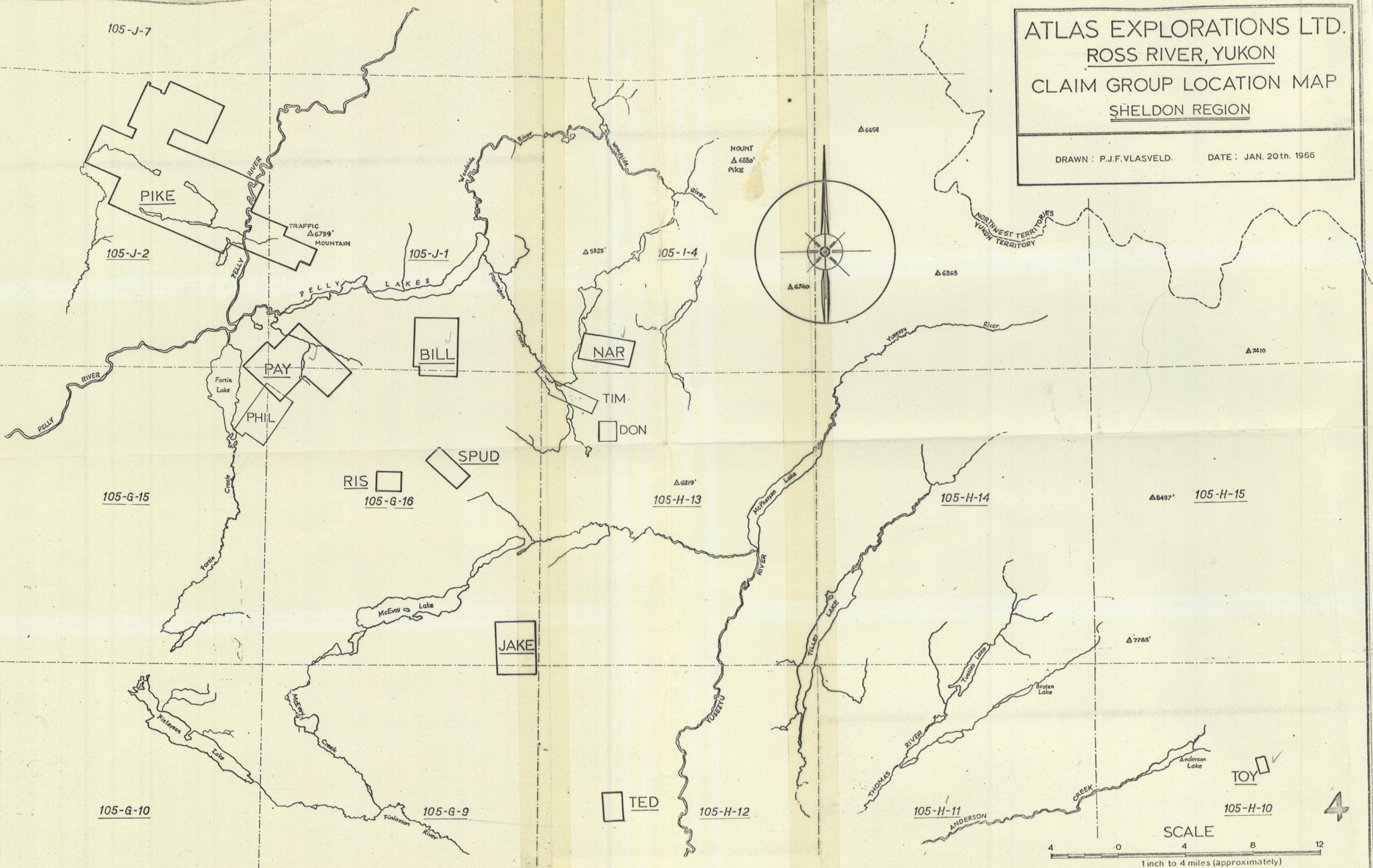
A handwritten signature in dark ink, appearing to read "John S. Brock", written in a cursive style.

John S. Brock,  
Operations Manager,  
Atlas Explorations Limited.

October 15, 1967,  
Vancouver, B.C.

ATLAS EXPLORATIONS LTD.  
ROSS RIVER, YUKON  
CLAIM GROUP LOCATION MAP  
SHELDON REGION

DRAWN: P.J.F. VLASVELD DATE: JAN. 20th. 1966



105-J-7

PIKE

105-J-2

TRAFFIC  
Δ6739'  
MOUNTAIN

105-J-1

BILL

Δ5825'

105-I-4

NAR

TIM  
DON

SPUD

RIS  
105-G-16

Δ6219'  
105-H-13

105-H-14

Δ8437'  
105-H-15

105-G-15

McEvoy Lake

JAKE

Δ7785'

105-G-10

105-G-9

TED

105-H-12

105-H-11

TOY  
105-H-10

SCALE

4 0 4 8 12  
1 inch to 4 miles (approximately)





File  
019772  
002551

**ATLAS EXPLORATIONS LIMITED**  
**ROSS RIVER (Y.T.)**  
**SHELDON AREA**

**REGIONAL GEOLOGY**

SCALE 1" = 1/2 MILE  
GEOLOGY BY:

M. SAKURAI, C.L. SMITH, R. DARNEY, W. ROBERTS  
T. ADAMSON AND R. DUNSMORE  
DATE: AUGUST 1967

LEGEND:

- █ CRETACEOUS (?)
  - 5b GRANODIORITE
  - 5a BIOTITE QUARTZ MONZONITE PORPHYRY
  - 5 GRANITIC INTRUSIVES

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- █ UPPER DEVONIAN
  - 4h BLACK CHERT, MINOR CHERT PEBBLE CONGLOMERATE.
  - 4g CHERT PEBBLE CONGLOMERATE.
  - 4f BLACK CHERT, BLACK PHYLITE, GREY CHERT.
  - 4c BLACK PHYLITE - BLACK CHERT.
  - 4d BLACK CHERT, CHERT-DOLOMITE.
  - 4c DOLOMITE
  - 4b BLACK CHERT, MINOR CHERT-DOLOMITE AND ARGILLITE
  - 4a BANDED CHERT

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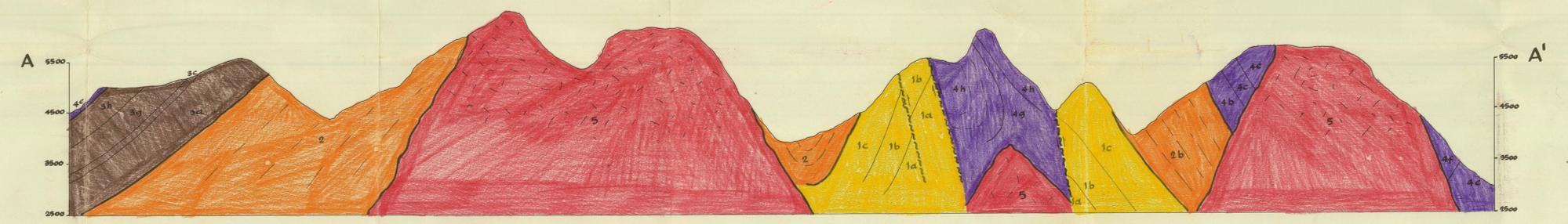
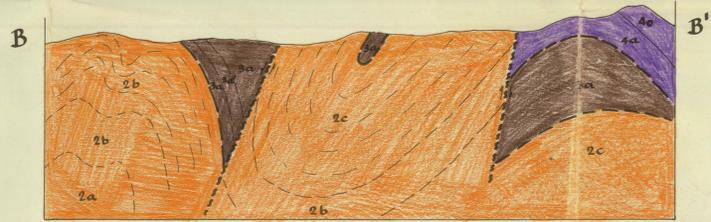
- █ SILURIAN DEVONIAN
  - 3k QUARTZ SANDSTONE
  - 3j BEDDED LIMESTONE
  - 3i MASSIVE LIMESTONE
  - 3h QUARTZ SANDSTONE
  - 3g QUARTZ SANDSTONE (ORTHOQUARTZITE)
  - 3f LIMESTONE
  - 3c DOLOMITE
  - 3d QUARTZ SANDSTONE
  - 3c MASSIVE DOLOMITE
  - 3b LIMESTONE
  - 3a PLATY DOLOMITE, GRAPHITIC DOLOMITE, HOFT DOLOMITE (3d)

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- █ M-U CAMBRIAN
  - 2c SERICITIC PHYLITE
  - 2b GRAY PHYLITE
  - 2a SPOTTED PHYLITE

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- █ PROTEROZOIC (?)
  - 1d QUARTZITE
  - 1c QUARTZ SANDSTONE
  - 1b PHYLITE, LIMESTONE, MINOR WHITE CHERT
  - 1a QUARTZITE, WHITE CHERT, MINOR PHYLITE AND LIMESTONE



NOTE: HORIZONTAL SCALE 1" = 1000'