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ATLAS EXPLORATIONS LIMITED

REPORT ON GEOLOGY OF SHELDON REGION BETWEEN PELLY LAKES AND McEVOY LAKE

November 24, 1967

by

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Chief Geologist

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9	" " " Sheet 105-J-2:	1" = ½ mile
10	" " " Sheet 105-J-7:	1" = ½ mile

A) INTRODUCTION

History and General Nature of Program

In June, 1966, Atlas Explorations Limited began a two-man prospecting program near Pike Lake, about 60 miles east of Ross River, Yukon Territory. As a result of encouraging discoveries of copper-silver in the Pike Lake area, a regional exploration program was initiated in early August, 1966. The regional project began as a prospecting venture, but soon evolved into an extensive program of reconnaissance, geochemical surveying, geologic mapping, and aeromagnetic surveying. The discovery of mineralization in many areas, the recognition of favorable geologic structures, and the location of numerous geochemical and aeromagnetic anomalies prompted the staking of over 1400 claims in nine claim groups within the Sheldon region.

During the winter of 1966, Atlas made the decision to conduct a program of follow-up evaluations on the Sheldon claim groups as well as to do more outside exploration in the region. The program was to have an estimated budget of $230,000.00 and consist of detailed geological, geochemical, and geophysical surveys, as well as surveying, trenching, and diamond drilling where warranted. Between 30 and 40 men were employed for a period of about 3 months between June 1 and August 31, 1966. Field work was done under the supervision of C.L. Smith, Chief Geologist, and J.S. Brock, Operations Manager.

All significant prospecting discoveries, geochemical anomalies, and airborne anomalies were examined, geologically mapped, and the type of follow-up work required was planned. Where required, grids were cut (either 400 or 800 foot line

spacing), and geochemical soil sampling, magnetic and electromagnetic surveys conducted. Important targets were either diamond drilled (with a Winkie drill), hand trenched, or bulldozer trenched.

General Results

Of the nine claim groups evaluated during the 1967 season, one (Pay group) was found to have good potential for large tonnage, low-grade Zn-Pb, one (Bill group) to have some potential for moderate tonnage, low-grade Zn-Pb, one (Nar group) to have some potential for small tonnage, high-grade Zn-Pb-Ag, and six (Jake, Pike, Ris, Spud, Ted, and Toy groups) were found to be of limited potential and the claims were allowed to lapse. In addition, a new group was staked (Tim group) and additional claims were attached to the Pay group (Pay 167 - 221, and Phil group). Regional geologic mapping was completed over a large part of the Sheldon region, from which important concepts of geologic controls of mineralization were postulated.

The description of the Pay group is contained in a separate report by C.L. Smith dated November 15, 1967.

B) GEOLOGY

General

The Sheldon region, as here defined, extends from the area of Traffic Mountain (Pike group area) and Pelly Lakes to south of McEvoy Lake (Jake group area). The western limit is west of Fortin Lake (Pay group area), and the eastern limit is east of Ptarmigan Mountain and Nar Mountain. The total area is about 500 square miles.

The Sheldon region is underlain by a moderately- to tightly-folded, northwesterly-striking succession of Proterozoic (?) to Upper Devonian metasedimentary rocks. These rocks have been intruded by Cretaceous (?) granitic bodies along two general northwesterly trends: one underlies Fortin Ridge and extends south of McEvoy Lake; the other is the northwestward extension of the Logan batholith and crops out as small plutons on Ptarmigan, Nar, Bill, and Traffic mountains; minor granitic plutons also occur south of Pelly Lake.

Structure consists of isoclinal to moderately-tight folds plunging gently in a direction about N70°W. Faulting is extensive, and major displacements occur along a N70°E trending set and a N70°W trending set - latter faults closely parallel formational trends. A northerly set is expressed mainly in topographic linears, such as the Fortin Lake trend.

Stratigraphy

Four main stratigraphic groups have been recognized in the Sheldon region. These are tentatively correlated with age groups mapped in surrounding areas by the Geological Survey of Canada as Proterozoic (?), Middle-Upper Cambrian, Silurian-Devonian, Upper Devonian.

Proterozoic (?): The Proterozoic (?) of the Sheldon region crops out on Ptarmigan and Nar Mountains north of Pelly Lakes and within a broad anticline underlying Fleming Ridge. Four formations have been defined (1a, 1b, 1c, 1d) for the purposes of geologic mapping.

Unit 1a is a composite formation consisting of white-light grey, granular quartzite interbedded with numerous members of massively-bedded white chert and minor light grey phyllite and limestone. Unit 1b is characterized by alternate beds of pale tan, yellow, light green, or grey colored phyllites and white to grey, massively-bedded limestones. Numerous varieties of limestone occur and some appear to be fossiliferous. Unit 1c is a distinct quartzite or feldspathic quartz sandstone unit with recognizable clastic textures and interbedded congomeritic members. This unit closely resembles quartzites in the Fairweather Lake area of the Hess River region. Unit 1d is a clean, massive, light grey, yellow, pale green quartzite exposed east of Fleming Ridge.

Middle-Upper Cambrian: The Cambrian phyllites are exposed in a broad anticline which stretches from the northeast end of Fortin Lake, through Fortin Ridge, and southeast of McEvoy Lake; in a smaller anticline south of the Pelly Lakes trading post; and on Ptarmigan Mountain. The phyllites are similar in appearance throughout the region. They are dark grey, well foliated and cleaved, and are distinguished by a Gleitbrit structure made up of microfolds separated by minor fractures along the limbs. In places, quartz content reaches 50 percent. The quartz bodies are elongate lenses or pods

and appear to have originated by metamorphism of interbedded chert laminae. In the Pay area, three varieties have been noted: spotted phyllite, dark grey phyllite, and sericitic phyllite. The spotted variety is characterized by cordierite and andalusite (?) crystals peppered through typical phyllite. The sericitic variety is lustrous and appears to have a high percentage of sericite.

Silurian-Devonian: The Silurian-Devonian sequence appears to be restricted to a belt which forms the southwest margin of the Sheldon region extending from Fortin Lake to south of McEvoy Lake. The sequence consists of interbedded dolomite, limestone, and quartz sandstone formations, best exposed along Dolomite Ridge where 10 mappable units have been defined.

The lowermost formation (3a) is a platy to massive bedded, dark grey, locally carbonaceous dolomite which may be traced from the east slope of Dolomite Ridge into the Pay group; it is this unit within which the host dolomite (3a) of the Pay mineralized zone is interbedded. Dolomites higher in the section are massive and lack platy bedding as well as significant carbonaceous content.

Limestones (3b, f, i, j) are light grey to white in color, massive bedded, and fossiliferous. Corals and bryozoans may be clearly recognized in numerous exposures. Four units of quartz sandstone (3d, g, h, k) have been recognized. These rocks are white to light grey, massively bedded, very pure quartz sandstones or orthoquartzites. The occurrence of these rocks with dolomites and fossiliferous limestones is believed characteristic of the Silurian-Devonian.

A strong unconformity separates the Silurian-Devonian from overlying Upper Devonian rocks. Best evidence for this unconformity occurs along the Fortin Ridge trend; the thick carbonate sequence west of the ridge has been completely removed by erosion on the east side of the ridge where Upper Devonian lies directly on Cambrian. No Silurian-Devonian is known east of this point within the Sheldon region.

Upper Devonian: Upper Devonian rocks are exposed along the northeast side of the Pay group, on the far west and east sides of Fortin Ridge, and between Fleming Ridge and Pelly Lakes. The Upper Devonian is characterized by black cherts and black slates, with interbeds of dark brown dolomite and a thick chert pebble conglomerate unit.

Black cherts and slates are commonly interbedded, although one or the other predominates in a given unit; cherts are massively bedded, homogeneous appearing, and high in carbonaceous content; slates are highly foliated and cleaved to rarely massive and carbon is commonly so abundant as to soil the fingers. Dolomites are dark brownish-grey, massively bedded, and have a homogeneous, microcrystalline texture. Dolomites usually occur as distinct mappable units rather than as minor interbeds. Along the northeast side of Fleming Ridge, a thick bed of chert pebble conglomerate is exposed. The rock type is distinctive, being made up of pebbles and cobbles of black to light grey chert, rare phyllite and quartzite; bedding is seldom recognizable except where minor slates are interbedded.

Intrusive Rocks

Two distinct intrusive belts appear to converge in the Sheldon region. The Fortin and McEvoy stocks trend about N35°W and consist of granodiorite and quartz monzonite The stock underlying Bill Mountain is the largest of a belt of small intrusives which occur on Traffic Mountain, south of Bill Mountain, and on Nar and Ptarmigan Mountains. These bodies appear to be northwesterly extensions of the Logan batholith. Most are granodiorite bodies,but in the Traffic Mountain and Nar Mountain studies, porphyritic granite has been noted.

Structure

The Sheldon region lies along the northeastern margin of an extensive, elongate, northwest-southeast trending sedimentary basin of Lower Paleozoic, low grade metasediments which is flanked to the northeast and southwest by Proterozoic (?) medium to high grade metasediments. The general shape of this basin, from Finlayson Lake to northeast of Pelly Lakes, is arcuate with the convex side to the northeast. Northeasterly - trending structural features are expressed by strong topographic linears; cross structures with northeasterly and north-south trends are likewise expressed topographically.The Logan batholith borders the sedimentary basin on the east. The batholith is a complex body plunging gently to the northwest; in the southeast, it has been extensively unroofed. In the Sheldon region, intrusives are small and many have high level and passive emplacement characteristics.

The structure of the Sheldon region is dominated by broad, open to moderately-tight folds whose axes trend from N45°W to N70°W and plunge gently to the northwest. A geologic cross-section from Dolomite Ridge to Bill Mountain clearly shows the style of folding. As traced from the southwest to the northeast, the following major features occur: a broad anticline cored by the Fortin stock, a narrow syncline between Fortin Ridge and Fleming Ride, a moderately tight anticline under Fleming Ridge, which has been breached by a graben of strong displacement, and a broad intrusive cored syncline beneath Bill Mountain.

The broad folding of the Sheldon region appears to be a second period of deformation, probably related to Laramide (?) orogeny and plutonisn which has been superimposed on an older period of post-Middle-Upper Cambrian folding and metamorphism. This older period is evidenced in the Gleitbrit structure of the Cambrian phyllites; two lineations in the phyllites clearly attest to two periods of folding.

Laramide (?) orogeny appears to have been accompanied by extensive faulting along northwesterly trends - either of a reverse or wrench fault type. Fold trends closely parallel faults which have arcuate traces, convex to the northeast. In the Pay area, east of Fortin Lake, it is notable that displacements are down on all sides of a synclinal core of Cambrian phyllite, suggesting that this structural high originated by upward movement relative to its surroundings.

A still later period of normal (?) faulting has caused large displacements, many along directions which transgress older structures. This faulting is best evidenced along Fleming Ridge where a block of Upper Devonian has been dropped into the axial area of a Proterozoic (?) cored anticline; displacement across the graben is in the order of several thousand feet.

The Middle-Upper Cambrian appears to thin towards the northeast and the Silurian-Devonian has been completely removed by erosion between Dolomite Ridge and the east side of Fortin Ridge. The northeastward thinning and removal of thicknesses of major stratigraphic units substantiates the theory that the Sheldon Region lies near the northeast margin of a Lower Paleozoic sedimentary basin.

Mineralization

Mineralization is widespread in the Sheldon region. The following is a brief listing of the important types of mineralization known (in order of probable econimic importance):

1) Replacement, breccia-filling, and disseminated Zn - minor Pb deposits in hydrothermally altered dolomite (Pay, Bill, Spud (?) groups).

2) Replacement Zn-Pb-Ag deposits in diopside-pyrrhotite skarn (Nar, Tim (?) groups).

3) Porphyry Cu-Ag deposits in hydrothermally altered granitic intrusive (Pike group).

4) Vein and shear zone Pb-Zn-Cu-Ag, Cu and Au bodies - nowhere found to be of economic importance (east Pay, Ris, Jake, numerous showings).

The description of the above types is included in detailed reports on the claim groups noted.

C) GEOCHEMISTRY

The Sheldon region has been extensively covered by reconnaissance geochemical soil sampling. Enclosed maps show all results. The following is a brief description of anomalous geochemical areas located outside of claim group boundaries.

Sheet 105-G-15: A line of 1966 soil samples along the south bank of the Pelly River gave Zn values up to 690 ppm. The area is swampy, values are not high, and nearby lines did not detect anything. The area is too difficult to work in geochemically to evaluate significance of results. No reccy samples west and south of Fortin Lake (Pay area) gave high results.

Sheet 105-G-16: Spot highs were located in the Ris and Spud group areas, but prospectors found several vein showings which are the probable causes. A small area of disseminated Pb-Zn in fresh granodiorite on north end of Fortin Ridge gave local highs. The area is probably of no economic importance. North of the McEvoy Lake on the south end of Dolomite Ridge, a cluster of high Zn values was located. Minor Zn mineralization in altered host dolomite was found to be the probable cause. The entire area was not thoroughly prospected, however, and warrants more careful examination.

Sheet 105-J-1: The area of the cluster of geochemical highs east of the Bill group was carefully prospected and only narrow Pb-Zn veins and thin Pb-Zn-Cu skarn zones were found. Spot highs west of the Bill group are not high enough to warrant follow-up. Spot highs on Traffic Mountain were found to occur in areas of veins - the mountain was carefully prospected in 1966.

Sheet 105-J-2: Only spot highs - mainly in Zn - were located south of the Pike group and northwest of Pay. Although these may represent mineralization, it is probably very minor compared to the Pay area itself.

D) EXPLORATION GUIDES

The first step in attempting to work out exploration guides is to define the type and economic potential of deposits which are to be pursued through an exploration program. Types (2) and (3) of the above described mineralization types in the Sheldon region have, in all localities examined, been found to be either of small size or low grade. Type (1) appears to have significant economic potential, as at the Pay group, and therefore further exploration for this type of deposit will probably be warranted.

The Zn-minor Pb mineralization at the Pay group appears to have five main features of possible exploration significance:

1) Strict lithologic control;
2) Associated hydrothermal alteration of the host rock;
3) Proximity to the plunging nose of a granitic pluton;

4) Occurrence in an area of intense faulting along three main directions;
5) Proximity to Cambrian phyllites.

These are all obvious exploration guides; it is notable that the Bill group occurs in a very similar environment, although at an apparently different stratigraphic level.

The above features take on varying degrees of importance depending on one's views on the genesis of such deposits. Secondary structural features, such as nearby granite and complex faulting, appeal to the hydrothermalist as important exploration guides and, indeed, in the Pay area, these features seem to be of prime importance. However, the lithologic control as well as the proximity of Cambrian metasediments (shown to be important host rocks in several parts of the Yukon) may be used as syngenetic arguments. The only safe course of exploration to pursue is one of attempting to duplicate as many of the known features as possible when looking for other deposits.

In the Pay area, geologic mapping and reccy geochemical soil sampling have been found to be the best means of preliminary exploration. An extensive area northwest and southeast of the Pay group has been covered with these methods and no significant results have been obtained.

In summary, it is believed that the preliminary exploration of the Sheldon region has been sufficiently extensive and thorough and that further preliminary work is probably not warranted. If, however, it should develop that the Pay situation becomes of greater importance, more outside work should be considered.

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FIGURES FOR

REPORT ON GEOLOGY OF SHELDON REGION BETWEEN PELLY LAKES AND McEVOY LAKE

November 24, 1967

by

Clyde L. Smith,
Chief Geologist

x CA

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

REGIONAL GEOLOGY

SCALE 1" = ½ MILE

GEOLOGY BY:

M. SAKURAI, C.L. SMITH, R. DARNEY, W. ROBERTS

T. ADAMSON AND R. DUNSMORE

DATE : AUGUST 1967

This reference scale has been drawn to the same scale as the original scale of the base map. Therefore, this scale can be used as a reference for the original size.

LEGEND:

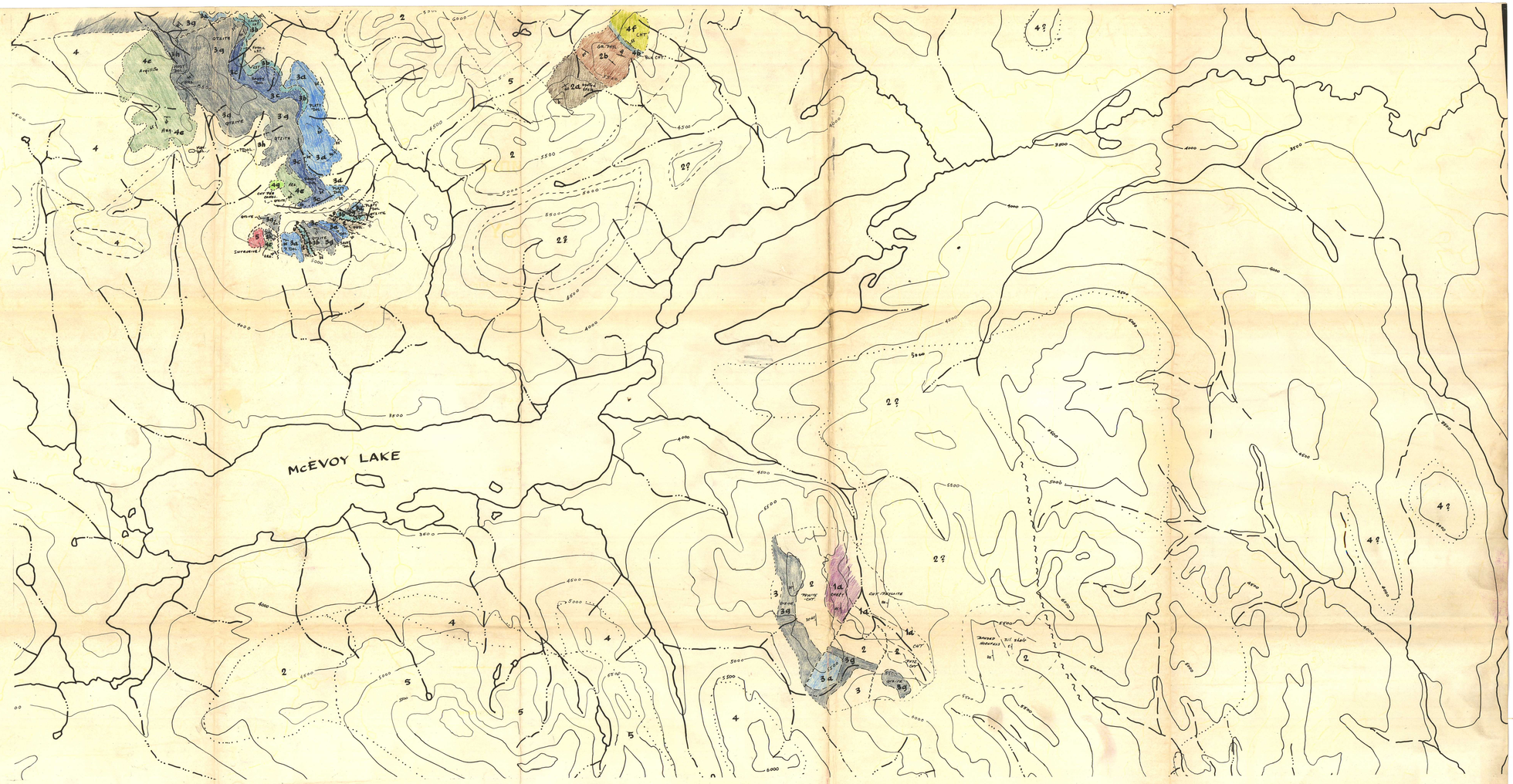
CRETACEOUS(?)
- 5b GRANODIORITE
- 5a BIOTITE QUARTZ MONZONITE PORPHYRY
- 5 GRANITIC INTRUSIVES

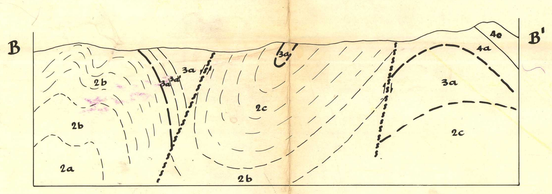
UPPER DEVONIAN
- 4h BLACK CHERT, MINOR CHERT PEBBLE CONGLOMERATE.
- 4g CHERT PEBBLE CONGLOMERATE.
- 4f BLACK CHERT, BLACK PHYLLITE, GREY CHERT.
- 4e BLACK PHYLLITE - BLACK CHERT.
- 4d BLACK CHERT, CHERT-DOLOMITE.
- 4c DOLOMITE
- 4b BLACK CHERT, MINOR CHERT-DOLOMITE AND ARGILLITE
- 4a BANDED CHERT

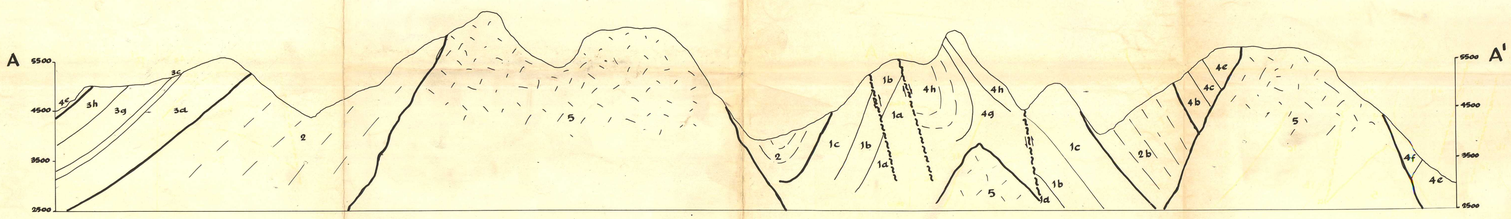
SILURIAN DEVONIAN
- 3k QUARTZ SANDSTONE
- 3j BEDDED LIMESTONE
- 3i MASSIVE LIMESTONE
- 3h QUARTZ SANDSTONE
- 3g QUARTZ SANDSTONE (ORTHOQUARTZITE)
- 3f LIMESTONE
- 3e DOLOMITE
- 3d QUARTZ SANDSTONE
- 3c MASSIVE DOLOMITE
- 3b LIMESTONE
- 3a PLATY DOLOMITE, GRAPHITIC DOLOMITE, HOST DOLOMITE (3a)

M-U CAMBRIAN
- 2c SERICITIC PHYLLITE
- 2b GRAY PHYLLITE
- 2a SPOTTED PHYLLITE

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







NOTE : HORIZONTAL SCALE 1"=1000'

105 G.
Geology
Fig 2.

PELLY RIVER
PELLY
LAKES
PELLY LAKES CAMPSITE
PTARMIGAN
CREEK
FORTIN LAKE
FLEMING RIDGE
FORTIN RIDGE
BILL MOUNTAIN
NAR MOUNTAIN
PTARMIGAN LAKE
PTARMIGAN MOUNTAIN
MARCHILLA BROOK
A
A'
B
B'
1 and 4
2 and 4
1+4
1 and 4 ?
1,2 and 4
4?
3 in part
PYRITIC ALTERATION HALO
GRANODIORITE
QUARTZITE
LIMESTONE
DOLOMITE
SKARN
GNEISS
SCHIST
CONGL.
LAVA
TUFF
PYROX.
PORPH.
LST.
SED.
VOLC.
BLK. CRY.
GRN. CRY.
WHT. CRY.
SER. PHYL.
CHL. SCHIST
SILICIFIED
BRECCIA
SILTY
SHALE
ARK.
SS.
CONG.
GTE.
GTZITE
LS.
SILTSTONE
ARGILLITE
CHERT
PHYL.
SLATE
GRAPHITIC
CALCAREOUS
CARBONACEOUS
FELDSPATHIC
QUARTZOSE
MICACEOUS
CHLORITIC
SERICITIC
ANDESITIC
RHYOLITIC
DACITIC
BASALTIC
FELSITIC
AMYGDULOIDAL
VESICULAR
FLOW
AGGLOMERATE
PYROCLASTIC
INTRUSIVE
EXTRUSIVE
VOLCANIC
SEDIMENTARY
METAMORPHIC
IGNEOUS
GEOLOGICAL SURVEY

Fig. 3

105-G-15

Fig 3

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ROSS RIVER, YUKON
GEOLOGIC, GEOCHEMICAL SHOWINGS ASSAY AND CLAIM GROUP MAP OF SHEET 105-G-15

SCALE

ONE INCH TO ½ MILE

62° 00' N

131° 00' W

130° 30' W

61° 45' N

PELLY RIVER

FORTIN LAKE

FORTIN CREEK

CAMPBELL CREEK

105-G-15

105-J-3	105-J-2	105-J-1
105-G-14	105-G-15	105-G-16
105-G-11	105-G-10	105-G-9

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ROSS RIVER YUKON

GEOLOGIC, GEOCHEMICAL, SHOWINGS, ASSAY AND CLAIM GROUP MAP OF SHEET 105 H 13

SCALE

½ 0 ½ 1 1½

1" = ½ MILE

---- = PROSPECTED TRAVERSES

105-J-2 | 105-J-1 | 105-I-4
105-G-15 | 105-G-16 | 105-H-13
105-G-9 | 105-G-8 | 105-H-12

105-G-16

61° 45' N

130° 30' W

130° 00' W

62° 00' N

Fig. 5

ATLAS EXPLORATIONS LIMITED

ROSS RIVER, YUKON

GEOLOGIC, GEOCHEMICAL SHOWINGS, ASSAY AND CLAIM GROUP MAP OF SHEET 105-H-12

SCALE

½ 0 ½ 1 1½

ONE INCH TO ½ MILE

inches 0 1

centimetres 0 1 2

This reference scale for the original image. It will change if the image is on the image, therefore it is only to be used as a reference for the original size

105-H-12

61°45' N

130°00' W

129°30' W

TILLEI LAKE

RIVER

YUSEZYU

FRANCES LAKE

FINLAYSON

RIVER

105-H-12

61°30' N

TED

BARITE VEIN

BARITE SHOWINGS

105-G-14 | 105-H-13 | 105-H-14

105-G-9 | 105-H-12 | 105-H-11

105-G-7 | 105-H-5 | 105-H-6

FIG. 6

105 H-13

130° 00' N — 129° 30' N — 62° 00' W — 61° 45' W

TIM — DON — NARCHILLA BROOK — STANKOVSKY LAKE — MCPHERSON LAKE — TILLEI LAKE — YUSEZYU RIVER

DISSEM CU IN PYRRHOTITE SKARN ZONE.

DISSEM. CU-PB-ZN IN PYRRHOTITE SKARN ZONE 4-10' WIDE

1627. Tr. Au; 0.16 opt/Gn Ag; Tr. Pb; 0.97% Zn; 1.48% Cu.
1628. Tr. Au; 0.24 opt/Gn Ag; 2.0% Pb; Tr. Zn; 0.01% Cu.
1629. Tr. Au; 0.86 opt/Gn Ag; 5.1% Pb; 2.0% Zn; 0.01% Cu.
1630. 0.005 opt/Gn Au; 2.72 opt/Gn Ag; Tr. Pb; Tr. Zn; 0.60% Cu.
1631. Tr. Au; 8.22 opt/Gn Ag; 1.5% Pb; 2.3% Zn; 0.46% Cu.

1623 — 110 opt/Gn Ag; 2.4% Pb; Tr. Zn.

1637 — Tr. Au; 0.44 opt/Gn Ag; Tr. Zn; 0.22 % Cu.

1, 1a, 1b, 12, 13, 15

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ROSS RIVER, YUKON

GEOLOGIC, GEOCHEMICAL SHOWINGS, ASSAY AND CLAIM GROUP MAP OF SHEET 105-H-13

SCALE

ONE INCH TO ½ MILE

----- = PROSPECTED TRAVERSES

105-J-1 | 105-I-4 | 105-I-3
105-G-16 | 105-H-13 | 105-H-14
105-G-9 | 105-H-12 | 105-H-11

105 H-13

Fig. 7

105 I-4

62° 15' N

130° 00' W

125° 00' W

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ROSS RIVER, YUKON

GEOLOGIC, GEOCHEMICAL, SHOWINGS, ASSAY AND CLAIM GROUP MAP OF SHEET 105 I 4

inches 0 1 0 1 2 centimetres

This reference scale bar has been added to the original image. It will print correctly only as the image. therefore it can be used as a guide for other than original size.

GEOLOGICAL SURVEY

SCALE

½ 0 ½ 1 1½

1 INCH TO ½ MILE

WOODSIDE

RIVER

BYRON

DOLOMITE

NAR

NARCHILLA BROOK

LIMESTONE

105-3-8 | 105-2-5 | 105-1-6

105-3-1 | 105-2-4 | 105-1-3

105-6-8 | 105-4-1 | 105-6-4

62° 00' N

130° 00' W

125° 00' W

62° 00' N

105 I-4

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ROSS RIVER, YUKON

GEOLOGIC GEOCHEMICAL, SHOWINGS ASSAY AND CLAIM GROUP MAP OF SHEET 105-J-1

SCALE
ONE INCH TO ½ MILE

105-J-1

FIG. 8

62° 15' N

130° 30' W

130° 00' W

62° 00' N

1c, 1d

15 b

1a

5c

5b

3

11

PELLY RIVER

TRAFFIC MOUNTAIN
Δ 6739'

TRAFFIC MT. FAULT

PIKE

GENTLE

PELLY LAKES

WOODSIDE RIVER

PTARMIGAN CREEK

SWAMP

BASE CAMP

CAMP A. LAKE

BILL

ABO

PAY

0.76 OZ/T AU (RISBY)
CU, PB, ARSENOPYRITE IN QUARTZ VEIN.

PB, ZN, ARSENOPYRITE, PYRRHOTITE IN VEINS UP TO 15' WIDE (RISBY)

----- = PROSPECTED TRAVERSES

Fig. 9

105-J-2

ATLAS EXPLORATIONS LIMITED

ROSS RIVER, YUKON

GEOLOGIC, GEOCHEMICAL SHOWINGS, ASSAY AND CLAIM GROUP MAP OF SHEET 105 J 2

SCALE

½ 0 ½ 1 1½

ONE INCH TO ½ MILE

inches 0 1 2 centimetres 0 1 2 3 4 5

This reference scale bar has been added to the original image. It will therefore change as the image is reproduced, therefore it can be used as a reference for the original size.

YUKON GEOLOGICAL SURVEY

105-J-6	105-J-7	105-J-8
105-J-3	105-J-2	105-J-1
105-G-14	105-G-15	105-G-16

62° 15' N

62° 00' N

130° 00' W

131° 00' W

130° 30' W

CREE (RACICOT)

OXO (POLI)

STAR (RACICOT)

PIKE

PELLY RIVER

FORTIN LAKE

ZONE 1 CHERT SLATE GRANITE QUARTZITE

ZONE 2 QUARTZITE GRANITE

EM-EMU

DISSEM. CU-ZN. IN INTRUSIVE

Buff chert, Graphitic Sh. n. Schist. Some Pyritization Fossil-Maculose Replacement.

Limey Shale Calcite Stringers

Shearing

Black Chert n. Shale, Buff Pyrite Graphitic Shale n. Schist. Some Pyritization Shearing

Rust Seepage

Graphitic Sh. n. Schist Ply 110 Blach n. Grey banded Shales

Porphyritic Andesite

Chert pebble conglomerate

Zone Sampling and Assay sample

Pyrrhotite Pyrite Epidote

Pyroclastic n. Limestone

Greywacke Seds.

Diorite

Granite

Seds

Sediments

Shearing

FOR GEOLOGICAL INFORMATION REF. MAP NR T/105 J/16

105-J-2

62° 30' N

131° 00' W

105-J-7

130° 30' W

62° 15' N

1c, 1d

3

1

OTTER CREEK

1d

OTTER CREEK

1c, 1d

3

3

3

1d

1c, 1d

3

3

55

ATLAS EXPLORATIONS LIMITED
ROSS RIVER, YUKON

GEOLOGIC, GEOCHEMICAL SHOWINGS ASSAY AND CLAIM GROUP MAP OF SHEET 105-J-7

SCALE

1/2 0 1/2 1 1 1/2

1 INCH TO 1/2 MILE

inches 0 1 2

0 1 2 3 4 5 centimetres

This reference scale bar has been added to the original drawing. Set to the same scale as the image, therefore it can be used as a reference for the original size.

YUKON GEOLOGICAL SURVEY

FIG. 10

105-J-11	105-J-10	105-J-9
105-J-6	105-J-7	105-J-8
105-J-3	105-J-2	105-J-1

105-J-7

62° 15' N

131° 00' W

130° 30' W