

PROSPECTUS
March 28, 1984.
062180

GEOLOGICAL REPORT
MOON CLAIMS
RANCHERIA AREA, YUKON TERRITORY
WATSON LAKE MINING DISTRICT

LOCATION

N.T.S. 105-B-1
LATITUDE: 60 Degrees 01' 32"
LONGITUDE: 130 Degrees 19' 26"

FOR

OROTEK RESOURCES CORP.
1520-625 HOWE STREET,
VANCOUVER, BRITISH COLUMBIA
V6C 2T6

BY

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FEBRUARY 15, 1983



Peter A. Christopher

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Summary:

The Moon Claims are situated in an active exploration area near the recently discovered Midway silver-lead-zinc-barite deposit. The proximity of a significant new discovery in a similar structural and stratigraphic setting is a strong incentive for initiating a basic exploration program of mapping, rock and soil geochemistry, geophysics and trenching. This Stage I exploration program is recommended and is estimated to cost about \$60,000.

If Stage I is successful in defining strong anomalies or mineralization, then a Stage II, diamond drilling program will be warranted. An initial drilling program of 500 meters is estimated to cost \$110,000. If broad or weak anomalies result from Stage I, then re-evaluation of Stage II will be necessary and a percussion drilling program should be considered.

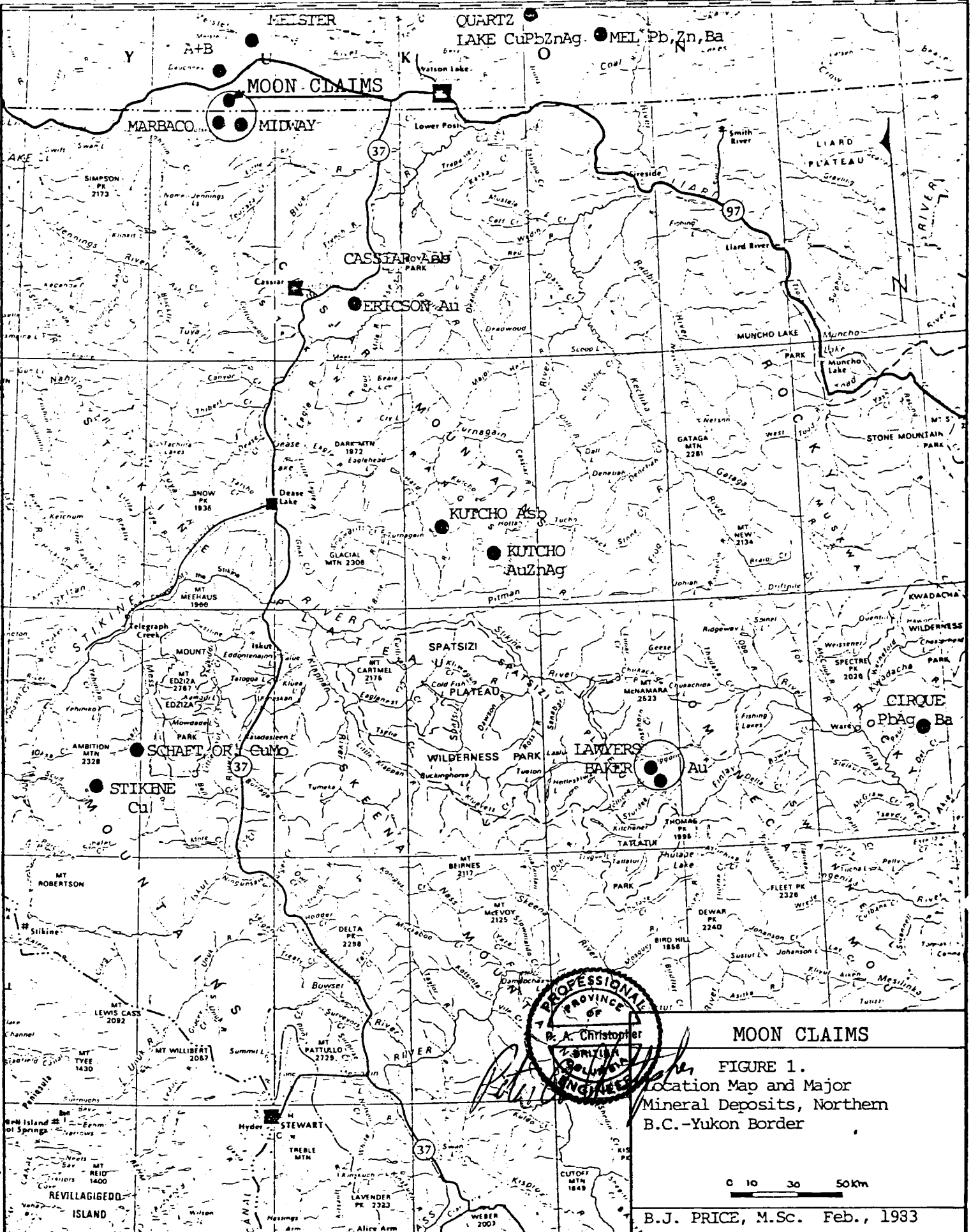
Introduction:

The Moon 1 to 28 mineral claims are situated seven miles north and along geological strike from the Midway silver-lead-zinc deposit. Discovery of the Midway stratiform deposit in 1981 by Regional Resources Ltd. has encouraged re-evaluation of adjacent areas with similar geology for lead-zinc-silver-barite deposits. Figure I compiled by B. J. Price, (1983) shows the location of the Moon property with respect to the Midway and other significant deposits in Northern B.C. and the Yukon Territory.

This report reviews the general geological setting of the Moon Claims and other silver-lead-zinc-barite properties in the areas, and outlines a recommended initial (Stage I) program and a follow-up (Stage II) program for evaluating the economic potential of the Moon Claim Area.

Location and Access: (Figures I & II)

The Moon Claims are situated west of the Tootsee River about 120 kilometers (10 miles) southeast of Rancheria, a small settlement on the Alaska Highway. The Moon Claims are immediately west of the Mid Claims (Regional Resources -Amax - Procan) and south of the Tom Claims (Fairlady Energy Inc.)



MOON CLAIMS

FIGURE 1. Location Map and Major Mineral Deposits, Northern B.C. - Yukon Border

0 10 30 50km

B.J. PRICE, M.Sc. Feb., 1983

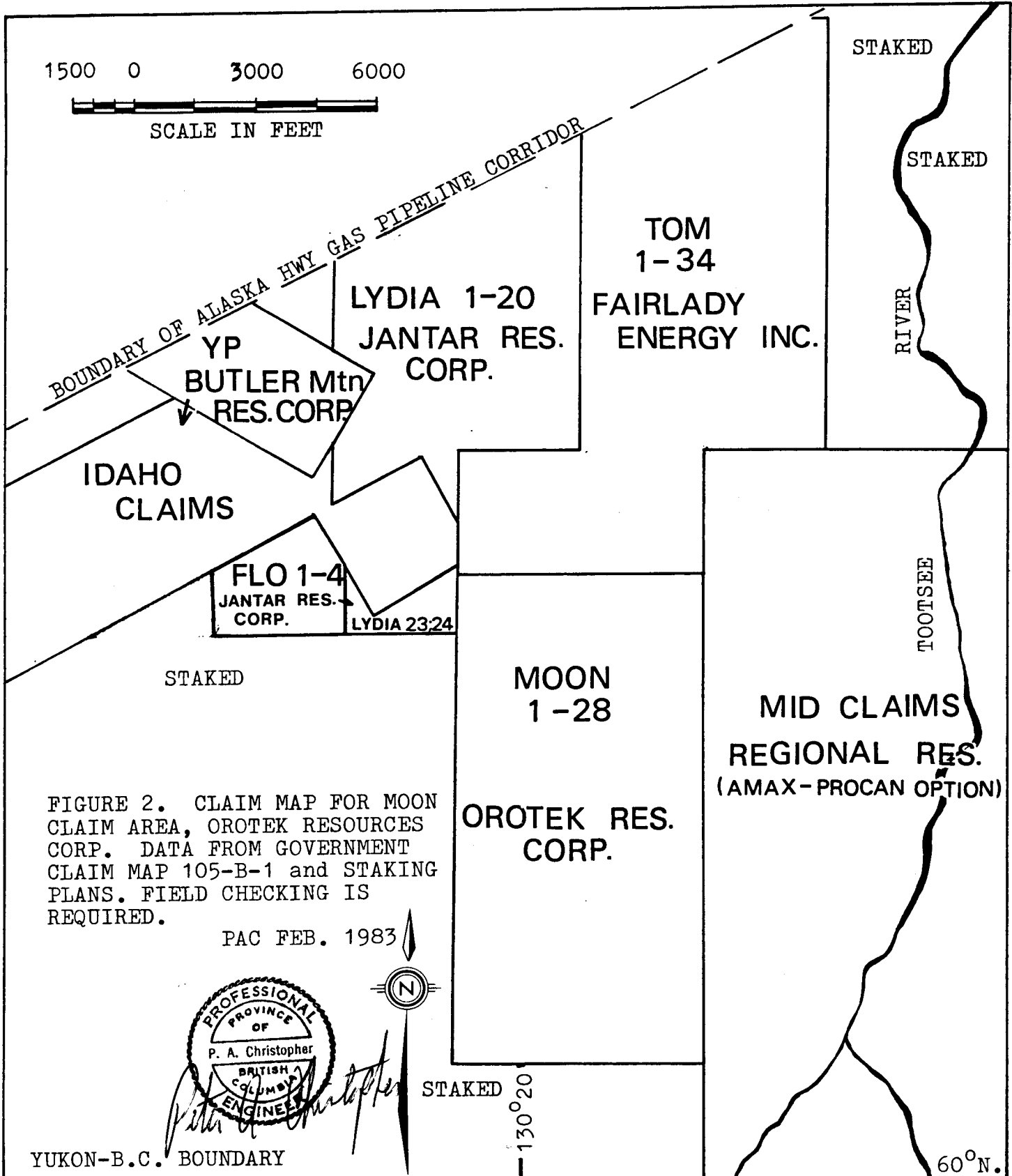


FIGURE 2. CLAIM MAP FOR MOON CLAIM AREA, OROTEK RESOURCES CORP. DATA FROM GOVERNMENT CLAIM MAP 105-B-1 and STAKING PLANS. FIELD CHECKING IS REQUIRED.

PAC FEB. 1983

YUKON-B.C. BOUNDARY

The Tootsee Lake Road, a gravel access road which leaves the Alaska Highway at Mile 701 provides four wheel drive access to the eastern edge of the Moon Claims. Fuel and accommodation are available at Rancheria, and most supplies and services are available at Watson Lake, Y.T. which is serviced by daily flights from Whitehorse and Vancouver.

Topography:

The Moon Claims lie between 1585 meters (5200 feet) and 1067 meters (2500 feet) which gives the claims a moderate relief of 518 meters. The claim area is situated west of the Tootsee River Valley and is mainly above tree line.

Claims and History:

The Moon 1 to 28 claims with grant numbers pending were recorded in February, 1983. Table I provides a summary of pertinent claim data. Snow cover prevented field confirmation of claim locations and data obtained from claim map 105-B-1 (Department of Northern Affairs and Natural Resources) should be confirmed before undertaking a major field program. The maximum possible ground coverage of 20.9 hectares (51.65 acres) per claim could be reduced by overlap of adjacent claims or less than maximum spacing of posts.

The writer suspects that the area has been staked in the past but has been unable to locate any records of previous exploration work.

Table I Summary of Moon Claim Data (NTS 105-B-1)

<u>Claim Name</u>	<u>Record No.</u>	<u>Date Recorded</u>	<u>Date Work Due</u>	<u>Staker</u>
Moon 1-4	Pending	February 10/83	February 10/84	Peter Stoffer
Moon 5-12	Pending	February 9/83	February 9/84	Val Morchischuk
Moon 13-14	Pending	February 10/83	February 10/84	Rick Ferguson
Moon 15-22	Pending	February 9/83	February 9/84	Terry Close
Moon 23-28	Pending	February 10/83	February 10/84	Rick Ferguson

REGIONAL GEOLOGY (FIGURE 3)

The area of interest is situated on the east flank of the Cassiar batholith which extends over 300 km southeasterly from Wolf Lake map sheet in the Yukon to the Kechika map area in British Columbia. In the Jennings River and Cassiar-McDame map areas and the south part of Wolf Lake area the eastern flank is underlain by Paleozoic rocks from Cambrian to Carboniferous in age and separable into two or more contrasting assemblages, some of which are believed to be "allocthonous" (i.e. deposited elsewhere and moved into place along flat lying faults) (Gabrielse and Mansy, 1980).

Rocks are described by Poole (Map 10-1960) and by Gabrielse (GSC Paper 68-55, 1968); brief descriptions of the mapped units are summarized below:

Units 1 and 2: (Lower Cambrian)

Unit 1 consists of biotite schists, quartzite, marble and skarn, with areas of extensive sills, dykes and irregular bodies of pegmatites, particularly near the contact with the Cassiar batholith.

Unit 2 contains quartzite, slate and phyllite, quartz grit and fine pebble conglomerate. Adjacent to the batholith the rocks are hornfelsed.

Unit 3: (Lower Cambrian)

This unit, which is host to numerous lead-zinc-silver showings in the area, contains grey limestone, grey to green argillite and slate, and dolomite. The unit is converted to skarn adjacent to the batholith.

Unit 4: (Middle Cambrian to Silurian)

Slates, phyllites and limestone, buff to dark grey, with dolomite and dolomitic limestone partly converted to skarn forms a unit which is difficult to separate from units 2 and 3.

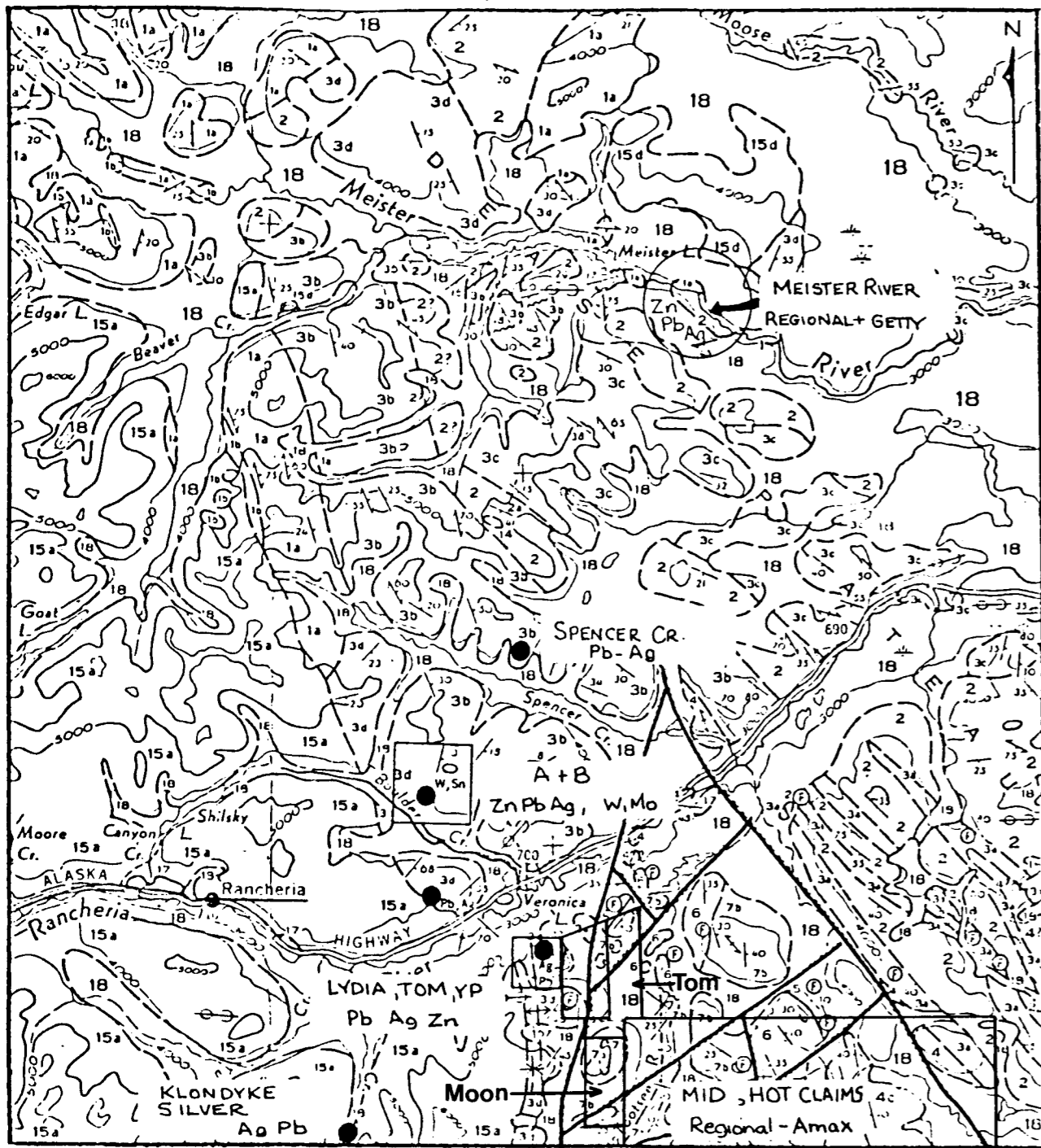


FIGURE 3. Regional geology of Rancheria area, Y.T., Portion of G.S.C. Map 10 - 1960 (Wolf Lake), Scale : 1 in = 4 miles.

QUATERNARY

PLEISTOCENE AND RECENT

18 Glacial till; gravel, sand, and silt; lake clay; volcanic ash

TERTIARY (?) AND QUATERNARY

17 Vesicular olivine basalt

CRETACEOUS OR TERTIARY

UPPERMOST CRETACEOUS OR LOWERMOST TERTIARY

16 SEAGULL AND HAKE BATHOLITHS AND STOCKS: mainly biotite leuco-quartz monzonite and alaskite, in places with quartz-tourmaline concentrations andmiarolitic cavities

JURASSIC AND/OR CRETACEOUS

15 15a, CASSIAR BATHOLITH: mainly biotite quartz monzonite and granodiorite, in part sheared and altered; 15b, RAM STOCK: saussuritized biotite-hornblende quartz monzonite and granodiorite, in part sheared; 15c, LOGJAM STOCKS: mainly biotite-hornblende quartz monzonite with basic borders; 15d, mainly biotite quartz monzonite and granodiorite; 15e, mainly biotite-muscovite granodiorite

14 Dioritic rocks: diorite, granodiorite, quartz diorite, 14a, includes gneiss, hornblendite

13 Ultramafic rocks: olivine-bearing clinopyroxenite, dunite, serpentized and metamorphosed equivalents

PERMIAN TO JURASSIC (?)

12 12a, pebble and cobble conglomerate, greywacke, limestone; minor quartzite, chert; 12b, andesitic volcanic breccia and tuff; minor lava(?); 12c, feldspathic quartzite, subgreywacke, greywacke, quartzite, grit, argillite; relatively rich in microcline, may be in part equivalent to 12a and 12b

MISSISSIPPIAN

LOWER AND MIDDLE MISSISSIPPIAN

11 Upper Division: chert, slate, argillite, hornfels; minor greywacke; 11a, limestone and dolomite, in part with chert nodules, skarn; 11b, sandy and conglomeratic tuff

10 Lower Division: chert and quartzite pebble and cobble conglomerate, chert, quartzite, slate, argillite, hornfels

DEVONIAN AND MISSISSIPPIAN

UPPER DEVONIAN AND LOWER MISSISSIPPIAN

9 Limestone and dolomite, in part with chert nodules, skarn

8 Chert, hornfels, argillite, slate, phyllite, quartzite, limestone, in part with chert nodules; skarn, tremolitic marble, dolomite; 8a, schist and gneiss

7 Greenstone, chlorite schist and quartzite, phyllite, slate, argillite, chert; 7a, greenstone, chlorite schist; 7b, argillite, slate, phyllite, chert, subgreywacke, grit, conglomerate, sericite-biotite schist and quartzite; 7c, limestone and dolomite, in part with chert nodules; 7d, quartz-albite-mica gneiss, albite-actinolite schist

SILURIAN AND DEVONIAN

MIDDLE SILURIAN AND MIDDLE DEVONIAN

6 Upper part: grey and black fetid dolomite and calcitic dolomite; Lower part: quartzite and dolomitic quartzite

MIDDLE SILURIAN

5 Grey-buff dolomite; underlain by thin-bedded shale and limestone, and buff dolomitic siltstone and quartzite

CAMBRIAN TO SILURIAN

MIDDLE CAMBRIAN TO MIDDLE SILURIAN

4 Thin-bedded buff and grey slate, phyllite, and limestone, dark grey slate and limestone; 4a, thin-bedded buff and grey phyllite and limestone; probably Middle and Upper Cambrian; 4b, black slate, argillite, grey dolomite, and dolomitic limestone; probably Ordovician; 4c, hornfels, limestone, skarn

CAMBRIAN

LOWER CAMBRIAN

3 3a, grey limestone; minor dolomite, slate, and phyllite; 3b, unfossiliferous, probably equivalent to 3a; 3c, limestone minor grey and green argillite and slate, dolomite; may be older than 2; 3d, marble, skarn

CAMBRIAN AND (?) EARLIER

LOWER CAMBRIAN AND (?) EARLIER

2 Quartzite, minor slate and phyllite, quartz grit and fine pebble conglomerate; 2a, phyllite, minor slate; 2b, hornfels

1 Probably metamorphic equivalents of 2; 1a, biotite schist and quartzite, 1b, marble and skarn; 1c, biotite schist and quartzite with sills, dykes, and irregular bodies of pegmatite; 1d, biotite schist and gneiss

CASSIAR INTRUSIONS

- Geological boundary (defined, approximate or assumed)
- Bedding (horizontal, inclined, vertical, estimated; g, gentle; m, medium; s, steep)
- Schistosity, gneissosity, cleavage (horizontal, inclined, vertical)
- Fault (defined, approximate, assumed)
- Anticline (position approximate)
- Syncline (position approximate)
- Drift ridge or rock groove (direction of ice-movement known, unknown)
- Fossil locality

MINERAL SYMBOLS

Fluorite fl Tin Sn
Lead Pb Tungsten W
Silver Ag Zinc Zn

Geology by W. H. Poole, 1951 - 1955
J. A. Roddick and L. H. Green, 1959



Unit 5: (Ordovician-Silurian)

This unit contains mainly quartzites, dolomitic siltstone and thin-bedded shale and limestone, and is probably equivalent to unit 4 in the adjacent Jennings River map sheet.

McDame Group-Unit 6:

The McDame Group, dark, fetid, dolomites and limestones with abundant fossil debris, forms a distinctive marker unit. Dolomite (intraformational?) breccia is common and white vuggy dolomite may represent reefoid accumulations of fossils, representing shoals in a shallow platform environment. Fossil evidence indicates that the McDame Group is Middle Devonian in age.

Lower Sylvester Group - Unit 7b:

According to Gabrielse (1968) "the contact of the McDame Group with the overlying Sylvester Group is almost invariably a fault." The lower part of the unit is fine-grained, black, locally graphitic slates and phyllites, with grey to black bedded and ribbon cherts. The upper part contains argillites, interbedded with sandstones, grit and conglomerate. Cherty, fine-grained limestone may be present near the top of the unit.

Several barite-silica "exhalite" horizons are present within the lower Sylvester Group in the vicinity of the "Midway" property. Stratigraphy in this area, within the Sylvester Group is described in detail by Hylands (1981), and is shown on the following page, with a diagrammatic stratigraphic section (Figure 3A).

Upper Sylvester Group - Units 7a & 8:

Massive volcanic rocks, including flows, breccias, tuffs and agglomerates with aggregate thickness of over 1500 feet form Unit 7; with ultramafic bodies (Unit 8) cutting the volcanics. The volcanics include basalt, dacite and rhyolite flows and coarse-grained equivalent intrusive rocks are said to exist in the unit (Gordey, et al 1982). Most rocks are pervasively altered to "greenstones", making them appear massive.

Cassiar Batholith:

The northwesterly trending elongate Cassiar Batholith underlies the most rugged terrain in the map area. Much of the batholith consists of massive, homogeneous biotite quartz-monzonite, grey in color and medium to coarse grained in texture. Other varieties include muscovite quartz-monzonite, augen gneisses, and later pegmatitic dykes. Alteration and shearing are commonly associated features -sericitization, chloritization and albitization are prevalent in some areas.

Other granitoid rock types occur in the Jennings River map sheet but are not within the scope of this report.

Dykes:

Greenstone dykes are common in the batholith and also within the adjacent Paleozoic rock units. Some of the dykes are known to be lamprophyres.

Structure:

The Sylvester "allochthon" is characterized by a broad, northwesterly-trending synclinal feature commonly referred to as the McDame Synclinorium. This feature parallels the contact of the Cassiar batholith in a general way but is modified by smaller scale folds conforming to embayments in the batholith, as is seen near the Marbaco property. Tight folding in Cambrian-Silurian rocks is present near Tootsee Lake. Strong northwest to northeast faulting has also affected the area, as is seen in the accompanying geological map (figure 3). Most faults are steep, normal faults such as the north-trending, easterly dipping fault cutting through the western portion of the Midway property. Faults are marked by depressions and green dykes, some of which are schistose, indicating continued movement.

Low angle faults, probably related to the hypothesized sole fault of the allochthon, are known to cut the Sylvester sequence in the vicinity of the Midway deposit (Hylands, 1981)

A strong shear zone trends northwest through the Cassiar batholith west of Tootsee Lake, and along this feature pervasive shearing and mylonization occurs over widths of 2 miles.

The Sylvester allocthon appears to pinch out in the vicinity of the Alaska Highway in Wolf Lake map area (Figure 3). Major faults mark the northern limit at Spencer Creek. South of Rancheria River, a broad area of Sylvester and McDame group rocks is thought to represent the same mineralized units as at the Midway and Marbaco properties.

Mineral Deposits in the Area:

The most significant development in mineral exploration in the southern Yukon and northern B.C. within the last few years has been the discovery of stratiform silver-lead-zinc mineralization within "exhalite" massive sulphide and silica/barite horizons in the lower portion of the Mississippian-Devonian Sylvester group.

The discovery, by Regional Resources Ltd. and partners Amax of Canada and Procan Exploration Ltd. has resulted in an extensive staking program and re-evaluation of geological data concerning mineral showings adjacent to the "Midway" property.

Several other silver-lead-zinc deposits not as yet of economic size or grade, occur in close proximity, in Cambrian to Middle Devonian strata, and also in high grade veins within the Cassiar Batholith. Several of these deposits are described briefly, following a description of the Midway property.

Vein mineralization occurring at the Silver Tip showing is discussed under a separate heading.

Midway Deposit:

The "Midway" deposit, staked by Regional Resources in 1980 and drilled in 1981 and 1982 was discovered as a result of careful exploration of the previously explored Silverknife (Silver Tip) silver-lead-zinc showing, following investigation of strongly anomalous silt sample results in the 1980 regional geochemical survey.

Six drill holes in 1981, totalling 853 meters indicated the presence of 3 mineralized zones dipping southeasterly at about 30 degrees. The lowermost zone observed only in drill core over lies the McDame limestone and varies from 1 to 1.5 meters thick and contains from 2.65 to 23.39% combined lead-zinc and from 1.24 to 22.59 oz/ton silver. This zone is locally absent and may grade

laterally into siliceous, pyritic, exhalite. Four of the 6 holes encountered a "dry cavernous opening 15 cm to 150 cm wide" near the McDame-Sylvester contact.

The lower zone consists of weakly bedded to brecciated pyrite, galena, sphalerite and carbonate fragments in an argillaceous matrix.

The middle, or "Discovery" zone, found in outcrop, occurs about 70 meters stratigraphically above the lower zone, within argillite and sandstones.

This zone varies from 0.5m to 11.2 meters in thickness and ranges in grade from 4.56 to 13.36 percent combined Pb-Zn and 1.26 to 5.03 oz/ton silver.

The Upper Zone is about 10-20 meters above the Discovery zone, ranges in thickness from 0.40m to 3.17m in thickness and has combined lead-zinc grades ranging from 2.62% to 13.15% and silver grades.

Drilling of 18 additional holes in 1982 has proven 2.78 million tonnes (3.05 M. tons) averaging 13.3 oz/tonne silver, 12% zinc and 6.1% lead with minor but possibly economic quantities of tin, bismuth, gold and copper. (Richardson, Greenshields, Canada Ltd. - research report). Composite samples from core from 8 holes averaged 0.023 oz/ton gold, 0.35% copper, and 0.14 % tin. The deposit is now known to exist over an area 2,000 feet (600m) square through a geological section of 100 ft. (30m). Definition of the deposit is not complete.

The exhalite horizons can be traced for at least 14 km along strike on the southwest part of the property and similar horizons are seen 10 km to the northeast. On the northeast side of the property a barite exhalite 4 m-thick has been traced for 5 km in float and outcrop.

The mineralized horizons are believed to represent sulfide rich exhalations deposited on the floor of a rift-controlled basin up to 14 km wide (Hylands, 1981).

The showings respond well to standard geochemical soil and silt sampling techniques; the Discovery showing has a broad coincident Pb-Zn-Ag-Ba anomaly, and seven additional areas have coincident Pb-Zn-Ag anomalies. Airborne EM and

magnetometer surveys were flown and ground EM and gravity surveys were done. Two pulse EM anomalies and one vector EM anomaly were verified by drilling.

An idealized stratigraphic section prepared by D.G. McIntyre from company plans is reproduced in figure 3A and a stratigraphic section used by J. Hylands for the Midway property is reproduced in Figure 4.

Amy (Fosco) Showings:

The Amy deposit occurs approximately 18 miles south of the Tom claims and two miles north west of the north end of Tootsee Lake. The showings were discovered in 1948 and staked by Hudson Bay Exploration as the Gem Group. In 1949, 8 diamond drill holes were completed totalling 2,935 feet, and seven deep trenches traced the mineralized zone for 550 feet with maximum width 7 feet in DDH - 2. The mineralization, galena, tetrahedrite, sphalerite, pyrrhotite and ankerite occurs as a replacement zone in limestone along a limestone-argillite contact and near the surface trace of the granite contact. The zone occupies a shear zone striking north 55-65 degrees west and dipping 60 degrees southwest.

Further work on the property in 1964 by Rancheria Mining Company consisted of soil surveys, magnetometer surveys and underground development.

In the underground workings, the vein in a 66 foot section averaged 5.9 feet wide and assayed 27.4 oz/ton silver, 7.5% Zinc and 7.5% lead. Further drifting along the vein in 1965 disclosed a vein length of at least 419 feet. Additional bulldozer trenching on other geochemical anomalies disclosed other veins. Diamond drilling to test continuity consisted of 24 holes totalling 7,500 feet.

The claims lapsed in 1969 and in 1970 the property was restaked by Fosco Mining Limited. Further underground work and drilling was done and a feasibility study was done by Dolmage, Campbell and Associates, who concluded that the deposit contained the following tonnages (diluted):

<u>Category</u>	<u>Tons</u>	<u>Ag(oz/t)</u>	<u>Pb%</u>	<u>Zn%</u>
Measured	11,400	17.10	3.74	6.26
Drill indicated	31,100	6.31	1.78	6.80
Geologically inferred	68,400	no grade assigned		
TOTAL:	110,900			

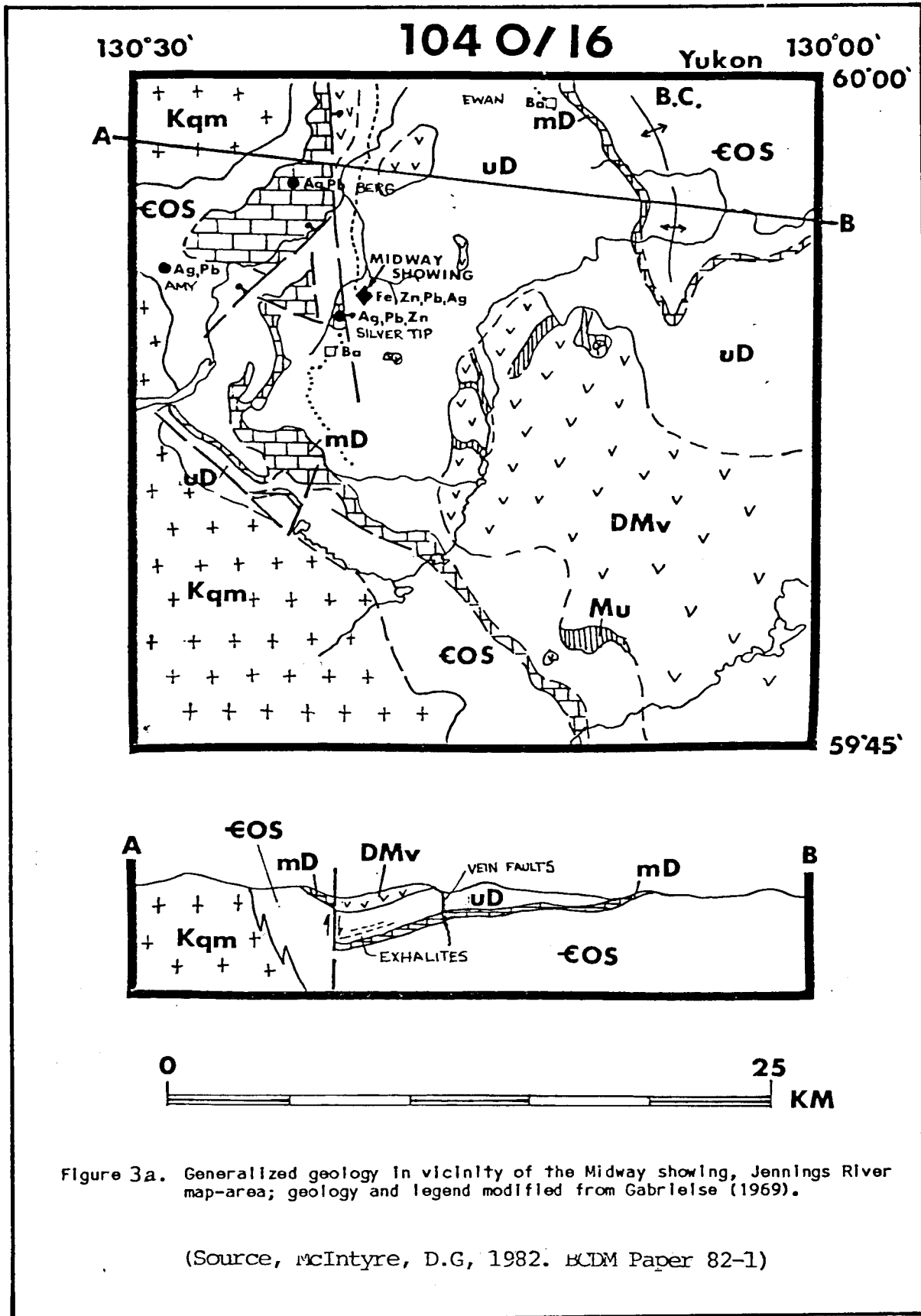


TABLE II.
Legend for Figure 3a.

CRETACEOUS

CASSIAR BATHOLITH

Kqm Quartz monzonite, granodiorite

MISSISSIPPIAN AND LATER

Mu Serpentinite, dunite, peridotite

UPPER DEVONIAN TO MISSISSIPPIAN

SYLVESTER GROUP (UPPER)

DMv Greenstone, agglomerate; dacitic tuff; minor chert, metadiorite

MIDDLE TO UPPER DEVONIAN

SYLVESTER GROUP (LOWER)

uD Slate, argillite, chert, siltstone, chert-arenite, greywacke, chert pebble conglomerate, minor limestone

MIDDLE DEVONIAN









MCDAME GROUP

mD Dolomite, fossiliferous limestone

CAMBRIAN, ORDOVICIAN, AND SILURIAN

EOS Dolomite, dolomitic sandstone and siltstone, graptolitic black shale, platy siltstone, calcareous phyllite, phyllitic limestone skarn, hornfels, limestone, quartzite

Symbols

High-angle fault; ball on downthrown block	
Antiform	
Contact: defined; assumed	
Road	
Stratabound barite	
Stratabound massive sulphide	
Mineral occurrence in carbonate rocks	
Exhalite horizon	

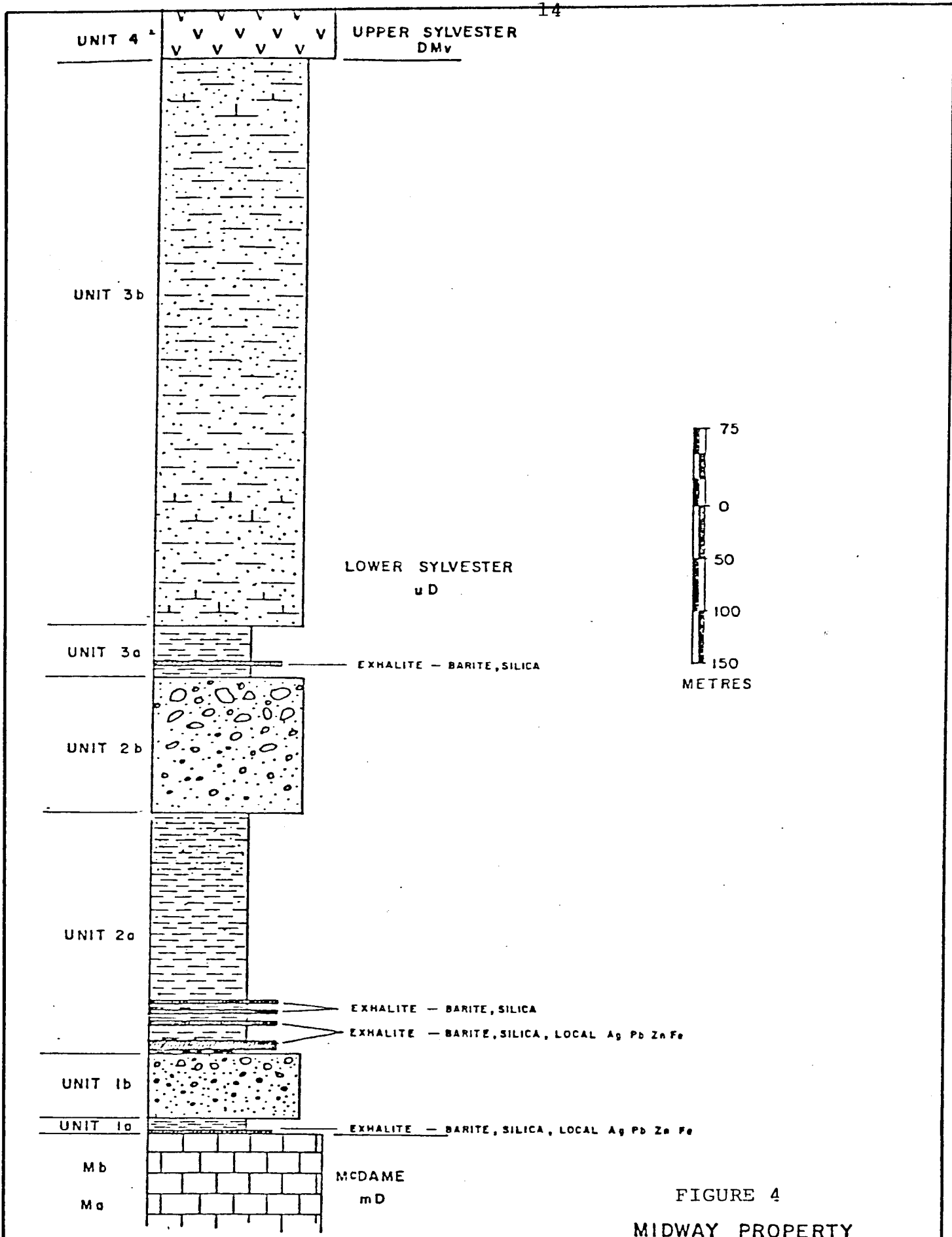


FIGURE 4
MIDWAY PROPERTY

STRATIGRAPHIC SECTION

(Source: Hylands, J. 1981)

The consultants further stated that "A comparison between the grade of drill intercepts near the underground workings and assays from channel samples taken from the drift suggests that the estimated grade in the drill indicated category is probably low by an unknown but significant amount. The reserve estimate outlined in this report should not be considered as limiting the ultimate potential of the deposit".

Bench scale mill tests produced a concentrate acceptable to custom smelters. A detailed underground exploration program was recommended, but immediate production was not recommended at that time because of the weak price for silver (\$1.29 to \$2.57 per ounce).

In 1973, additional surface work was done, confirming sampling completed on the 4450 level, and a 1400 foot crosscut and 220 feet of drifting done on the 4200 feet level.

A second estimate of ore reserves was done by Chapman Wood and Griswold in 1974, who concluded that total ore reserves now were + 140,000 tons as follows:

<u>Category</u>	<u>Tons</u>	<u>Grade (Ag/oz/t)</u>	<u>Pb%</u>	<u>Zn%</u>
Measured	18,122	13.88	3.27	7.29
Drill indicated	<u>61,727</u>	<u>9.76</u>	<u>2.70</u>	<u>5.63</u>
Total	79,849	10.70	2.84	6.03
Inferred	<u>59,326</u>	no grade assigned		
Total	<u>140,000</u>			

The claims were acquired by Marbaco Mines Ltd. in 1980 along with adjacent claims owned by D. Schellenberg. Marbaco performed geochemical surveys and trenching which indicated additional zones could be present.

At present metal prices (\$15/oz Ag, 28¢/lb Pb, 49¢/lb Zn), gross metal value per ton of ore (1974 reserve data) is \$235.50. (The estimated grade of drill indicated reserves is probably still low compared with measured reserves, as in the 1971 calculations). Few recent assays exist for gold but several samples taken from 1949 to 1967 contain 0.01 to 0.02 oz/ton.

Prospects are considered encouraging for discovery of additional mineralized zones at this property.

Some similarities exist between the Amy deposit and the lower most "exhalite" zone at the Midway deposit:

- 1) Both deposits occur near limestone - phyllite contacts;
- 2) Solution caves are found adjacent to both deposits.
- 3) Mineralogy and reserve grades are similar.
- 4) Mineralization is parallel with bedding in both deposits.

The Amy deposit is described in most reports as a strike fault system with characteristics of quartz-siderite-sulphide replacement of limestone in a Shear zone. However, the possibility exists that the deposit represents a remobilized stratiform exhalite deposit, with potential for augmentation of reserves along strike and dip.

Silver Tip Showing (Midway Property)

The Silver Tip showing, a vein or replacement deposit, is situated three miles northeast of Tootsee Lake. Extensive work was done on the property from 1956 to 1968 by several large companies including Conwest, Canex, Noranda, Bralorne Mines and Peerless Oil and Gas. It now forms part of the Midway property of Regional Resources and partners.

The area is underlain by thick-bedded McDame limestone of Devonian age, overlain by Mississippian-Devonian Sylvester Group phyllites. Gossan zones and galena float are found in several zones trending north-easterly. The largest gossan zone, No. 2, ranges from 15 to 65 feet wide and is 700 feet long and was reported to average 5.7 oz/ton silver, 6.2% lead and 2.9% zinc. Individual pieces of galena from the zone assay about 150 oz/ton silver and 70% lead (BCMM Ann. Report 1968, p.25-33). The same zone intersected in several drill holes consisted of "frozen mineralized gossan". No. 4 zone, intersected in the upper adit was sampled over 38 feet by taking muck from 175 cars, the average was 13.84 oz/ton silver, and 15.4% lead. The average of the channel samples along 40 feet in the west drift was over five feet, 0.02 oz/ton gold, 12.0 oz/ton silver, and 14.5% lead. The same zone, intersected in the

lower adit, approximately 650 feet down the dip of the fault zone, is almost completely oxidized and resembles "soft brown sugar". This almost completely leached material assays 0.2 oz/ton silver, 0.1% lead and 4.5% zinc.

Mineralized zones such as the above are localized on strong faults and fractures in the McDame limestone, along the crest of an anticline and appear to be almost completely oxidized to depths exceeding 600 feet from the surface. Apart from the gossan zones, considerable pyrite with minor sphalerite and galena occurs in the holes drilled in the phyllite, (presumably Sylvester Group), and minor galena and sphalerite occur in quartz and calcite veins and in limestone. To the writer's knowledge, fresh vein material from which the gossans resulted has not been seen on the property.

This vein-replacement deposit, as yet untested by Regional Resources has strong similarities to the Amy deposit of Marbaco Resources. Mineralogy and grades are similar and probable origin by replacement along fault zones in limy horizons seems almost certain. Considering the presence of mineralization over a vertical range of over 650 feet and 5 foot mining width, the eventual development of economic reserves on this portion of the property seems certain.

YP Property:

The YP property, adjacent to the Flo and Lydia claims, situated 4 km south of mile 701 on the Alaska Highway, owned by Flame Petro Minerals Ltd. and currently being explored by Butler Mountain Resources Ltd., has several oxidized vein or replacement zones in limestone of unknown, but probable Cambrian age. Some solid galena was hand-cobbed and shipped from the property in the 1960's. Several large gossan zones, with residual argentiferous galena, are thought to represent oxidized replacement zones of galena-tetrahedrite-sphalerite and other sulphides in siderite gangue, comparable with zones present on the Silver Tip showing of the Midway property. Geochemical surveys, geologic mapping, trenching and drilling were recommended by B.J. Price in 1980. The property was reviewed in 1982 by Glen E. White, P.Eng., who suggested pulse EM surveys in addition to geology and geochemistry, with a 2-stage program with \$40,000 expenditure in Stage I and \$110,000 in Stage II (drilling).

The program is expected to proceed in 1983.

A + B Claims:

The A + B deposit, situated 6 km north of the Alaska highway, is owned by Delphi Resources Ltd. and was explored by SEREM LTD. Strongly folded limestone and phyllites of Cambrian or Devonian age are host to Stratiform massive zinc-lead-silver zones, highly irregular in shape. The best intersection to date has been in hole 3 (1962) drilled by Scurry Rainbow Oils Ltd.: 39 feet of 1.66 oz/ton silver, 1.47% lead and 8.32% zinc. Cross cutting quartz calcite veins have significant scheelite content.

Sue Claims:

The Sue claims, 5 km south of the Lydia claims, were originally explored by Dupont of Canada Exploration as the JCS 1 and 2 claims. Although most attention was paid to molybdenum/tungsten mineralization at the contact of the Cassiar batholith with skarnified Kechika Group rocks, lead-zinc-silver mineralization was noted in a quartzite breccia. The breccia is briefly described by Eccles (1980) as a possible pipe. One sample from the breccia assayed over 10 oz/ton silver.

Noranda Claims:

Silver-lead-zinc mineralization is also present on the Root, Toot, Boot, Loot and Road claims, north and west of Tootsee River (see figure 2). Mineralization is present in quartz veins within the Cassiar batholith, but is also present in carbonate breccias. Strong lead-zinc geochemical anomalies may be associated with lamprophyric dykes, a relationship also seen on the Ag claims.

Freer Creek Areas

Numerous silver-lead-zinc veins occur near Freer Creek, approximately 10 km west of the Flo and Lydia claims. On the Luck prospect, between 3,500 and 4,000 feet elevation on the Creek, argentiferous galena, sphalerite and chalcopyrite are found in quartz veins in the Cassiar batholith quartz monzonite. The veins are associated with a lamprophyre dyke, and are outlined by EM-16 surveys and geochemical soil sampling. Hand cobbled material was shipped from one of the occurrences on the IDA property in 1970. A 25 ton shipment assayed 80 oz/ton silver, 56% lead, 5% zinc and 0.6% copper (Report by D. Parent, 1973).

The veins are presently being explored by Klondyke Silver Mines Ltd. based in Whitehorse, Yukon Territories, who plan to start an exploration and development program, early in 1983. (Whitehorse Star, January 4, 1983).

Bear and Ag Claims:

The Bear claims were staked by Douglas Schellenberg in 1978 and explored by Dupont Exploration in 1979. The Ag 1 and 2 claims were also staked by Schellenberg, in 1982. The claims are situated 2 km west of the Marbaco silver-lead-zinc deposit and are surrounded by the Fly Claims.

The only record of work done on the Bear and Ag claims is contained in an unpublished report by L. K. Eccles in 1979. Work done by Dupont included line cutting from three well-cut baselines, geological mapping, trenching and soil sampling. A total of 585 samples were collected and analyzed for molybdenum, tungsten, lead, zinc and silver. The samples outlined several molybdenum-tungsten targets and one main lead-zinc-silver anomaly. The Mo-W anomalies were trenched uncovering 2 stratiform skarn bodies up to 1 meter wide and 10 meters apart. Although mineralized with scheelite, molybdenite, powellite and galena, the showings are considered uneconomic.

Trenching in the Pb-Zn-Ag anomaly revealed a narrow high-grade vein in limestone mineralized with galena, sphalerite and ruby silver (pyrargyrite), spatially associated with a dark green, possibly lamprophyric dyke. Assays from its occurrence (selected) are as follows:

<u>No.</u>	<u>Pb%</u>	<u>Zn%</u>	<u>Ag (oz/ton)</u>
2080	0.53	27.50	3.81
2081	56	3.18	28.00
2082	19.95	7.15	11.30

Schellenberg (1983 - personal communication) suggests that the mineralization may be stratiform and may extend outward from the Ag claims into the Fly claims.

Discussion of Moon Claims:

The Moon Claims are mainly underlain by greenstone and chlorite schists of unit 7a and argillite, chert, phyllite, sandstone and conglomerate of unit 7b (Poole et al., map 10-1960). A Devonian or Mississippian age has been assigned to Unit 7 and it correlates with the Sylvester Group rocks that host the Midway deposits in the adjacent Jennings River map-area (Gabrielse et al. Map 18-1968). The presence of strong northerly fault structures (Pool et al., Map 10-1960) needed to channel mineral bearing solutions is an encouraging feature.

The writer has not field examined the Moon Claim area, but has worked on several silver-lead-zinc-barite deposits in Northern British Columbia and the Yukon Territory. Stratbound deposits tend to occur in clusters (eg. Anvil Camp; MacMillian Pass; Howards Pass; Akie River Camp; Driftpile Area). The silver rich varieties (eg. Tom, Jason, Cirque, Midway) tend to occur in a Devonian sedimentary sequence. Search for a base metal deposit on the Moon Claims is warranted because of the proximity of the Midway deposit, a stratbound deposit with high silver values in a sedimentary sequence of Devonian Age.

Conclusions and Recommendations:

Considering the proximity of the Moon Claims to the exciting new Midway silver-lead-zinc-barite discovery and similar geological settings, a basic (Stage I) exploration program of mapping, soil and rock geochemistry, geophysics and trenching is highly recommended. A budget of about \$60,000 is estimated for this program.

Initial geological mapping should be conducted at a base map scale of 1:5000 with more detailed grid mapping as required. Soil samples should be collected at 25 meter intervals, and preferably along lines that are normal to the geological strike. Rock and soil samples should be analysed for Cu, Pb, Zn, Ag and Ba. Lead is usually the best indicator element, but typical metal zoning in stratbound deposits from central iron enrichment to zinc-copper to lead-zinc to silver-lead to marginal barite should be considered in evaluating geochemical data. Electromagnetic and magnetic readings should be collected along all soil lines to allow for comparison of results.

If the Stage I program is successful in locating mineralization or strong anomalies then a follow-up (Stage II) drilling program will be warranted. A budget of \$110,000 is estimated for an initial, 500 meter diamond drill test. Testing with a percussion drill should be considered if anomalies are broad or not well defined.

COST ESTIMATE

Personnel:

Geologist/Manager	20 days @ 300	\$ 6,000.00
Assistant/Prospector	20 days @ 150	3,000.00
Sampler/Helper	20 days @ 100	2,000.00
Geophysical Crew *	10 days @ 800	8,000.00
(20 KM: EM & Magnetometer Survey)		
*includes EM * Magnetometer Rental & Reporting		

Transportation:

Truck	30 days @ 100 ea.	3,000.00
Mobilization/demob		2,000.00

<u>Room & Board:</u>	100 man days @ 40 ea.	4,000.00
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Geochemistry:

600 soils for Pb, Zn, Ag, Cu, Ba @ 12.00 ea	7,200.00
100 rock samples @ 20.00 ea.	2,000.00
(mainly rock geochem, assay as required)	

<u>Cat Trenching & Road Work</u>	80 hours @ 100 ea.	8,000.00
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Cat Mob./demob		2,000.00
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<u>Base Map Preparation:</u>		200.00
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<u>Camp Material & Field Supplies:</u>		3,000.00
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Report Preparation:

Consulting & Writing 8 days @ 300	2,400.00
Typing, Printing, Xeroxing etc.	1,000.00

\$ 53,800.00

Contingency	<u>6,200.00</u>
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Stage I Total	\$ 60,000
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Stage II: Diamond Drilling

500 meters @ 180 all inclusive (Engineering, Drilling, Mobilization/demob etc.)	\$ 90,000.00
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Contingency	<u>\$ 20,000.00</u>
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Stage II Total	\$110,000.00
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Peter A. Christopher

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CERTIFICATE

I, Peter A. Christopher, with business address at 3707 West 34th Avenue, Vancouver, British Columbia, do hereby certify that:

- 1) I am a consulting geological engineer registered with the Association of Professional Engineers of British Columbia since 1976.
- 2) I am a Fellow of the Geological Association of Canada and a member of the Society of Economic Geologists.
- 3) I hold a B.Sc. (1966) from the State University of New York at Fredonia, a M.Sc. (1968) from Dartmouth College and a Ph.D. (1973) from the University of British Columbia.
- 4) I have been practising my profession as a Geologist for over 15 years.
- 5) I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly in the property or securities of Orotek Resources Corp.
- 6) I have based this report on all available geological data on the property and adjacent mineral deposits.
- 7) I consent to the use of the report by Orotek Resources Corp. for whatever purposes it deems necessary.



Peter A. Christopher
PETER A. CHRISTOPHER, Ph.D., P.Eng.