

84-#115 - 12060
3

PROSPECTING AND GEOCHEMICAL

REPORT ON THE JUNE 1 CLAIM

Liard Mining Division,

Tootsee Lake Area, British Columbia

Location

N.T.S. 104 - 0 - 16E

Latitude: 59°53'28"

Longitude: 130°11'47"

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

For

12,060

**A B S Resources Ltd.
7438 East Broadway
Burnaby, British Columbia
V5A 1S4**

By

**Peter A. Christopher, Ph.D., P.Eng.
Peter Christopher & Associates Inc.
3707 West 34th Avenue
Vancouver, British Columbia
V6N 2K9**

October 24, 1983

TABLE OF CONTENTS

	<u>PAGE</u>
SUMMARY	1
INTRODUCTION	2
LOCATION	2
PROPERTY	3
HISTORY	3
REGIONAL GEOLOGY	4
MINERAL DEPOSITS IN THE AREA	5
GEOCHEMISTRY	6
DISCUSSION OF THE JUNE 1 CLAIM	7
CONCLUSIONS AND RECOMMENDATIONS	9
COST ESTIMATE	10
CERTIFICATE	12
REFERENCES	13
COST STATEMENT	14

LIST OF ILLUSTRATIONS

FIGURE 1	Location Map	
FIGURE 2	Claim Map	
FIGURE 3	Regional Geology	
FIGURE 3A	Geology, Midway Area	
MAP I	Geochemical Map	In Pocket

TABLES

TABLE 1	Pertinent Claim Data
---------	----------------------

SUMMARY

The 20 unit June 1 Claim is situated about 6 kilometers (3.7 miles) southeast of the Regional Resources "Midway" silver-lead-zinc deposits. A brief prospecting and geochemical examination of the claim has located significant anomalous soil geochemical values for silver and an extensive overburden covered valley area.

Considering the proximity of the June 1 claim area to the Midway deposits, similar geological settings, and encouraging geochemical results, a basic (Stage I) exploration program of mapping, soil geochemistry and reconnaissance VLF-EM is recommended and follow-up (Stage II) geochemical and geophysical programs may be required. The Stage I program is estimated to cost \$17,000 and the Stage II program is estimated to cost \$57,000. The initial exploration program should concentrate on the covered valley area.



Peter A. Christopher

INTRODUCTION

Discovery of the "Midway" silver-lead-zinc stratiform mineral deposit near Tootsee River in 1981 by Regional Resources has encouraged evaluation of nearby areas with potential for lead-zinc-silver deposits. The 20 unit June 1 claim adjoins the "Midway" property of Regional Resources Ltd. and is situated about 6 kilometers southeast of the Midway Pb-Zn-Ag deposits. The property was examined by the writer with the assistance of Mr. Les Demczuk on September 15, 1983 at the request of Mr. Benny Tam of A B S Resources Ltd. A Canwest helicopter stationed at Rancheria was used to obtain access to the claim. The purpose of the examination was to determine if further exploration could be justified. Prospecting and geochemical sampling were carried out to aid evaluation of the property. A total of 136 soil samples were collected along reconnaissance soil lines and prospector traverses were made along the main creeks. A two stage program is outlined in this report with a recommended Stage I program of additional soil sampling, geological mapping and reconnaissance VLF-EM and contingent follow-up geochemical and geophysical surveys.

LOCATION (Fig.1)

The June 1 Claim is situated about 4.5 kilometers west of the main branch of Big Creek and adjacent to the west fork of Big Creek. The geographical coordinates of the legal corner post are latitude $59^{\circ}53'28''$ north and longitude $130^{\circ}11'47''$ west. The claim area is about 22 kilometers south of the Alaska Highway, 110 kilometers westerly from Watson Lake, Yukon Territory and 30 kilometers southeast of Rancheria in N.T.S. map sheet 104 - 0 - 16E. The British Columbia-Yukon Territory border is about 12 kilometers north of the property. The nearest roads on the Midway Property are about five kilometers to the northwest with access to the Midway property via the Tootsee Lake Road. Helicopter support will be needed to ferry crews or to establish a camp on the property. Helicopters are available year round at Watson Lake and during the summer field season are generally stationed at Rancheria, Y.T.

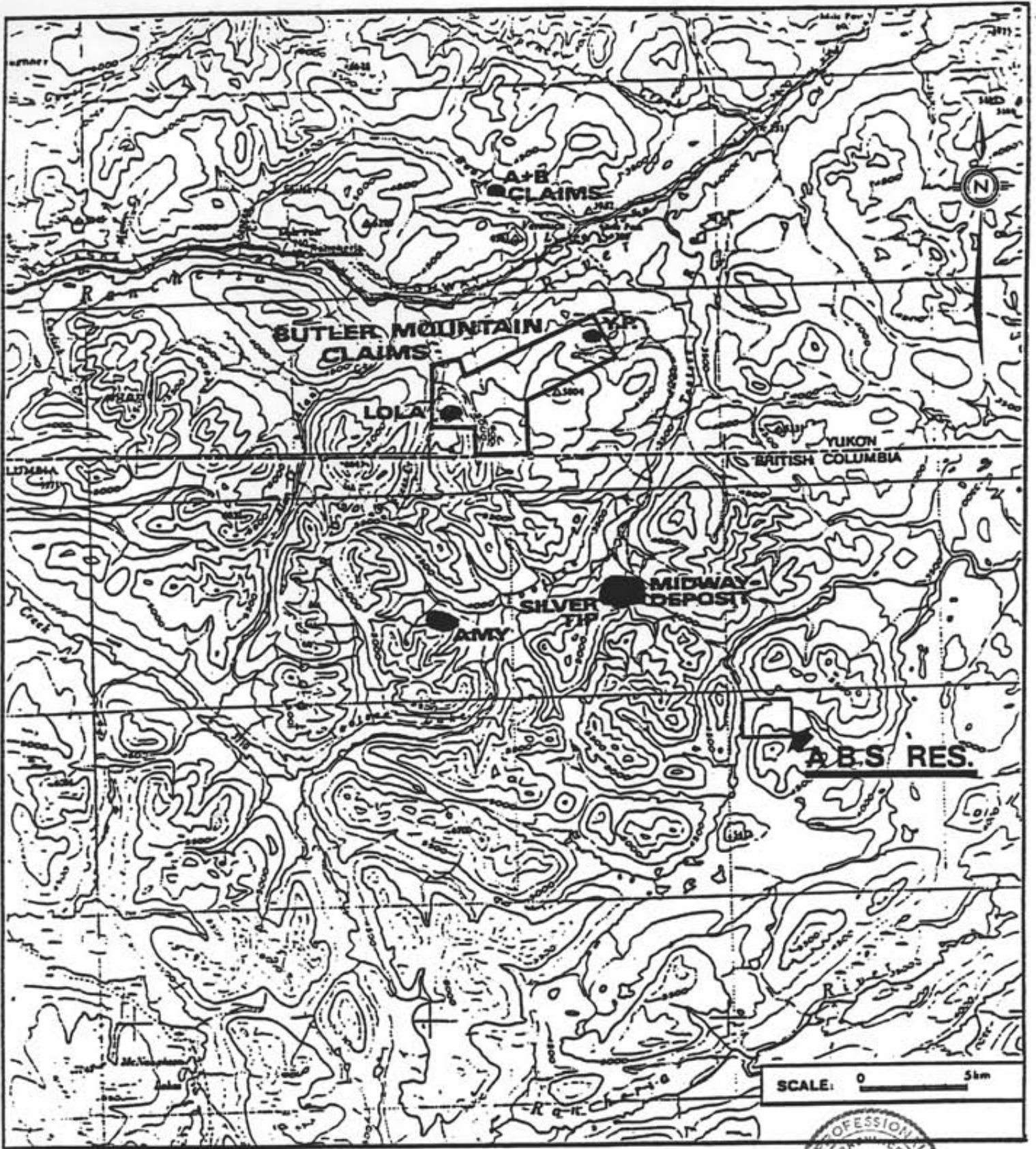
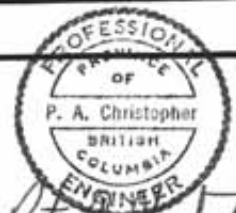


Figure 1: Location Map.



Peter A. Christopher

PROPERTY

The 20 unit June 1 Claim was located by Jake Melnychuk on April 5, 1983 and recorded on April 8, 1983. The claim was located by using the modified grid staking method with the legal corner post situated about 5 kilometers west of the main Big Creek valley and 2.5 kilometers east of the main west fork of Big Creek. The legal corner post is a common post for the April 1, May 1, June 1, and July 1 claims. The legal corner post, and 4S, 5W corner post and the 4S, 4W; 4S, 3W and 4S, 2W identification post were examined. The property extends 5 units (2.5 kilometers) west and 4 units (2 kilometers) south from the legal corner post and has a maximum possible area of 500 hectares. Part of the June 1 claim area had previously been held by Darrell Reinke as the See 1 Claim with record number (1758(12)). Table I summarizes pertinent claim data and Figure II shows the distribution of mineral claims in the area.

Table I - Pertinent Claim Data

<u>Name</u>	<u>Units/ Distribution</u>	<u>Staker</u>	<u>Date Staked</u>	<u>Date Recorded</u>	<u>Record #</u>
June 1	20/4S,5W	Jake Melnychuk	April 5, 1983	April 8, 1983	2697(4)

HISTORY

The area was previously held as the See 1 claim by Darrell Reinke but no work was filed and the claim lapsed. The June 1 claim was staked on April 5, 1983 by Jake Melnychuk and recorded on April 8, 1983. W.E. England Diamond Drilling Ltd. acquired the ground and in turn sold the property to A B S Resources Ltd. in September, 1983.

REGIONAL GEOLOGY (Figure 3 and 3A)

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 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 in detail by Gabrielse (GSC Paper 68-55, 1968); brief descriptions of the mapped units are summarized below:

Good Hope and Atan Groups: (Unit 1)

Rocks of these units, probably Hadrynian and Lower Cambrian in age, are exposed only near the contact with the Cassiar batholith, where they have undergone extensive contact metamorphism. Clastic rocks are converted to hornfels and quartzites and limestones to marble and skarn.

Kechika Group:

Unit 2 and Unit 3 include rocks of Upper Cambrian to Silurian age. These are strongly hornfelsed shales and siltstones and calcareous phyllites. Shales in the lower part of Unit 3 carry graptolite fossils. Unit 2 may be as thick as 1000 feet (300 m) but unit 3 is thin, from 100 to 200 feet (30 to 60 m).

Unit 4:

Two formations described by Gabrielse as Units 4a and 4b are distinctive light-grey weathering resistant dolomites, sandy dolomites and dolomitic sandstones with conspicuous bedding. The units are believed to be Silurian and Lower Devonian.

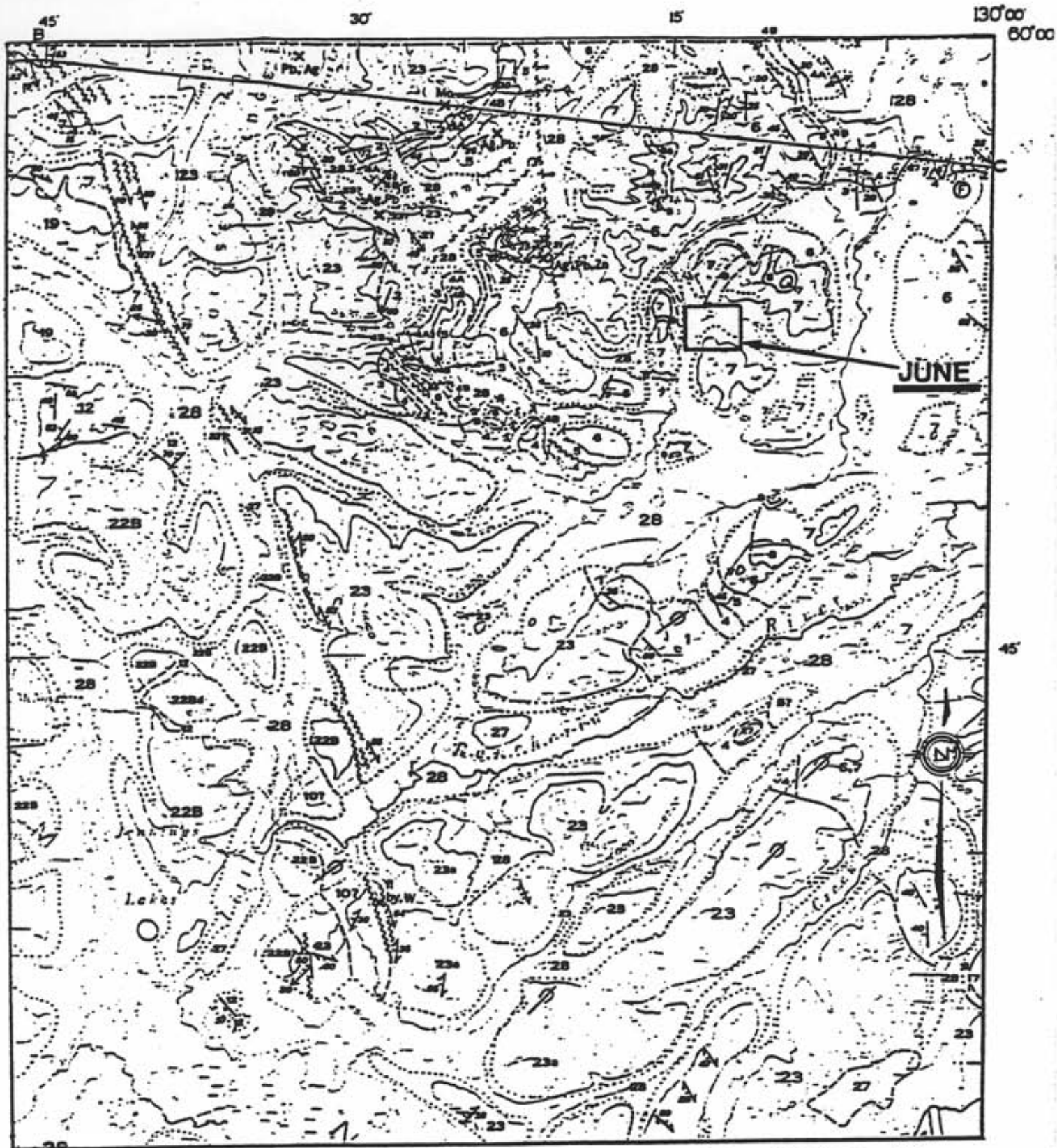


FIGURE III. REGIONAL GEOLOGY (FROM GABRIELSE, 1969). 4 miles = 1"



Peter A. Christopher

LEGEND FIGURE 3

- CENOZOIC**
- QUATERNARY**
PLEISTOCENE AND RECENT
- 28 Unconsolidated glacial, fluvio-glacial, and alluvial deposits
- TERTIARY(?) AND QUATERNARY**
- 27 TUSA FORMATION: lava, tuff, agglomerate; 27a. recent volcanic vent
- CRETACEOUS**
- UPPER CRETACEOUS**
- 25 GUNDERBURY BATHTHOLITE: microlite hornblende granite, granite porphyry, apatite, pegmatite, syenite; 25a. abundant dioritic inclusions
- 23 23A. TUSA BATHTHOLITE
23B. PARALLEL CREEK BATHTHOLITE: biotite granite and quartz monzonite; 23Ba. abundant inclusions and screens of schist
- 24 KLDNKIT BATHTHOLITE: foliated biotite quartz monzonite
- MID-CRETACEOUS**
- 23 CASSIAR BATHTHOLITE: biotite quartz monzonite, granodiorite; 23a. muscovite quartz monzonite; 23b. contains abundant inclusions and screens of schist; in part gneiss
- JURASSIC**
- LOWER (?) AND MIDDLE (?) JURASSIC**
- 22 22A. EDMOND PEAK BATHTHOLITE
22B. NOME LAKE BATHTHOLITE: biotite-hornblende granodiorite and quartz monzonite; 22Ba. hornblende monzonite
- 21 CHRISTMAS CREEK BATHTHOLITE: hornblende quartz diorite, granodiorite, minor diorite and quartz monzonite; 21a. biotite-hornblende granodiorite, unaltered, probably younger than 21; 21b. hornblende quartz diorite, biotite-hornblende quartz diorite and granodiorite; 21c. gabbro
- 20 CHARLIE COLE STOCK: foliated quartz diorite
- 19 FLATE CREEK STOCK: biotite-hornblende quartz diorite, diorite, gabbro, granodiorite; 19a. hornblende diorite and quartz diorite, monzonite to melanocratic; biotite-hornblende quartz monzonite and monzonite
- JURASSIC (?)**
- LOWER JURASSIC (?)**
- 18 Felsopartha quartzite, greywacke, grit, argillite, slate
- TRIASSIC**
- UPPER TRIASSIC**
- 17 SHONKTIAW FORMATION: sapsite porphyry, agglomerate
- 16 NAZCHA FORMATION: volcanic conglomerate, tuff, felsic porphyry, agglomerate, siltstone, hornfels
- PERMIAN**
- 15 Massive and bedded greenstone, tuff, breccia, and pillowed lava, age relative to 13, and 14 unknown
- 14 TUSLA FORMATION: well-bedded and massive limestone, minor pillowed basalt
- CARBONIFEROUS (?) AND PERMIAN**
- 13 KIDANDA FORMATION: chert, argillite, quartzite, hornfels, minor limestone and greenstone; 13a. limestone; 13b. greenstone
- CARBONIFEROUS - Mainly Pennsylvanian (?)**
- 12 12. undivided: 12a. chert, argillite, slate, quartzite, hornfels; 12b. limestone; 12c. muscovite and calcite, in part with chert nodules, at least in part lower Pennsylvanian; 12d. chert, slate, argillite, conglomerate

CARBONIFEROUS

11 11. undivided: 11a. argillite and hornfels, generally massive; 11b. fine-grained, black limestone; 11c. granule, pebble and cobble conglomerate, quartzite; 11d. argillite and chert; 11e. crystalline, dark grey limestone; 11f. mass-tuff and tuff, massive green volcanics; 11g. chert-nodule, fossiliferous limestone, probably correlative with 12c

10 OBLIQUE CREEK FORMATION: meta-chert, quartzite, hornfels, greenstone meta-diorite, schist, gneiss, granite sills and dykes; 10a. crystalline limestone

CARBONIFEROUS (Mainly Mississippian (?))

9 BIG SALMON COMPLEX: quartz-albite-mica gneiss, albite-calcite schist, quartz-chlorite-sphene-albite gneiss, meta-chert, limestone, siltite, hornfels; 9a. dolomite; at least in part correlative with 7

MISSISSIPPIAN (?) AND LATER

8 Serpentinite, paragneiss, gneiss; 8a. serpentinite, in part altered to talc and carbonaceous

MISSISSIPPIAN (in part or entirely)

7 STYVESTER GROUP (upper part): massive greenstone, agglomerate; minor chert and meta-diorite, may locally include some 6

DEVONIAN AND (?) MISSISSIPPIAN

UPPER DEVONIAN (mainly or entirely (?))

6 STYVESTER GROUP (lower part): slate, in part granitic, argillite, chert, chert arenite, greywacke, pebble conglomerate, siltstone; 6a. limestone

MIDDLE DEVONIAN

5 MADAME GROUP: acid dolomite and limestone

SILURIAN AND DEVONIAN

UPPER SILURIAN (?) AND LOWER (?) DEVONIAN

4 Undivided, locally includes 5 and/or older rocks
4A. Lower Division: sandy dolomite, dolomitic sandstone
4B. Upper Division: laminated, well-bedded dolomite

ORDOVICIAN AND SILURIAN

LOWER ORDOVICIAN (?), LOWER AND MIDDLE (?) SILURIAN

3 Black, graphitic shale, clay siltstone, locally hornfelsed; includes uppermost part of Koshika Group

CAMBRIAN AND (?) ORDOVICIAN

2 KECHIKA GROUP: thin-bedded hornfels, siltite, calcareous pyllite, phyllite limestone

CAMBRIAN AND HADETHIAN

1 ATAN AND GOOD HOPE GROUPS, UNDIVIDED: cordierite-biotite hornfels, dolomite, limestone, siltite, quartzite; 1a. carbonite, age uncertain

PRECAMBRIAN

- Limit of drift-covered area
- Geological boundary (defined, approximate or assumed)
- Bedding (inclined, vertical)
- Foliation, cleavage (inclined, vertical)
- Plunge of lineation, mainly fold axes (horizontal, inclined)
- Fault (defined, approximate, assumed) solid circle
indicated downthrow side
- Thrust fault (with its direction of dip; defined, approximate)
- Anticline (defined, approximate) arrow indicates direction of plunge
- Syncline
- Drowned ridge and glacial strike
- Fossil locality
- Mineral prospect or occurrence

McDame Group - Unit 5:

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 6)

Gabrielse (1969) mapping indicates that "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. Details of Sylvester Group stratigraphy in the area of the "Midway" deposits has been described by Hylands (1981).

Upper Sylvester Group (Units 7, 8)

Massive volcanic rocks, including flows, breccias, tuffs and agglomerates with aggregate thickness of over 1,500 feet form Unit 7 with ultramafic bodies (Unit 8) cutting the volcanics. Volcanic flows vary in composition from basalt to rhyolite. Most rocks are pervasively altered to greenstone.

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.

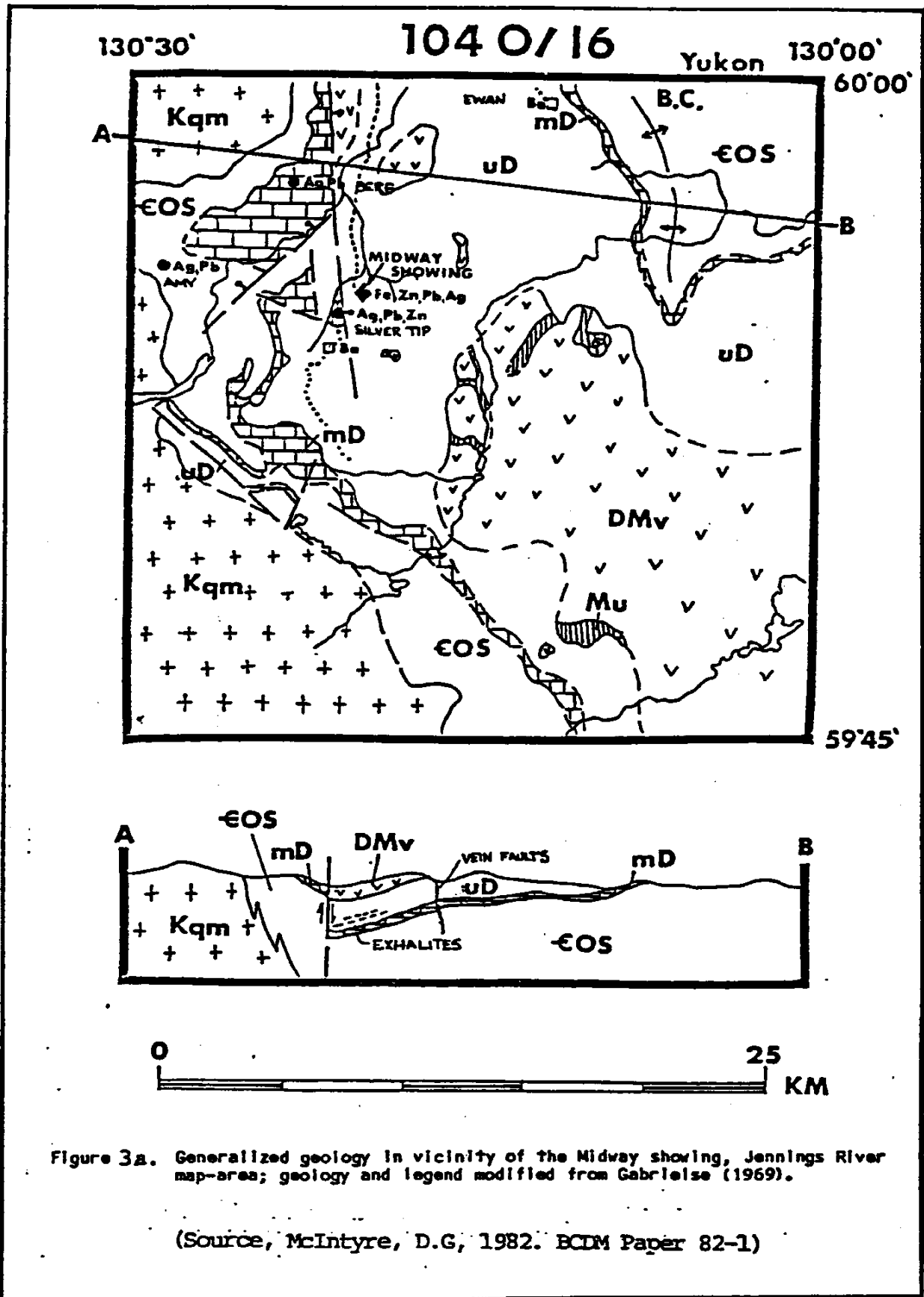


TABLE II.
Legend for Figure 3a.

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	

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 on mineral showings adjacent to the "Midway" property (Figure 3A). This renewed activity has led to the discovery of Au-Ag-Pb-Zn-As mineralization by Butler Mountain Minerals Corp. The presence of significant gold mineralization near the eastern margin of the Cassiar Batholith needs further evaluation. Arsenic appears to be a pathfinder for the gold mineralization.

The Amy, YP, Silver Tip, Berg and JCS showings all occur in Cambrian to Middle Devonian strata in close proximity to the Alpha Group and high grade silver veins have been located within the Cassiar Batholith. The presence of nearby significant showing provides encouragement for exploring overburden covered areas on the Alpha Group.

GEOCHEMISTRY

A total of 136 soil samples were collected at 50 or 100 meter intervals along lines parallel to claim boundaries at the southern part of the claim area (Map 1). Soil samples were taken from the B horizon with organic material excluded as much as possible. Samples were analyzed for Pb, Zn, Ag and As at Chemex Labs Ltd. in North Vancouver, B.C. using atomic absorption spectrometry. Sample preparation included sieving to -80 mesh, or to -35 mesh with grinding when there was insufficient fines. Analytical results for Pb, Zn, Ag and As are presented in Map 1.

Discussion of Geochemistry

Considering values of 0.5 ppm silver to be of interest and values of greater than 1 ppm to be anomalous, 21 of the samples have values of interest and 13 are anomalous. Values range from the detection limit of 0.1 ppm to 5.8 ppm silver. Anomalous values appear to be associated with the granitic-volcanic contact zone.

Arsenic values were obtained to check for a possible gold-arsenic association. Values range from 1 to 45 ppm with ten or greater considered to be of interest. Adjacent sample near the southwest corner of the claim have values of 30 ppm and 45 ppm. Arsenic appear to be associated with elevated silver values in the granitic-volcanic contact zone.

Lead values vary from 1 ppm to 33 ppm with values greater than 20 considered to be of interest but no anomalous values found.

Zinc values vary from 38 to 353 ppm with values greater than 200 considered to be of interest but no anomalous values found.

Geochemical values for soils obtained from the southern part of the June 1 claim suggest that the contact zone between the granitic and volcanic rocks has potential for silver mineralization. Arsenic values indicate modest anomalous values but insufficient data was obtained. No strong lead or zinc response was obtained but continued use of lead and zinc as possible indicators is recommended. The geochemical survey should be continued into the valley (i.e. covered) area.

DISCUSSION OF THE JUNE 1 CLAIM

Most of the June 1 Claim is overburden covered as shown on G.S.C. Map 18-1968 but the very southern part of the claim has rock outcrops of altered volcanics which probably correlate with the upper part of the Sylvester Group and medium grained granitic rocks of quartz monzonite or granodiorite composition. Volcanic rocks appear to be affected by emplacement of serpentine and altered to greenstone. Granitic rocks are quartz veined and often have a rusty appearance. Dark hairline fractures cut the granitic rocks. The greenstone observed is on the upper slopes and could overlie more favourable lower Sylvester Group rocks that occupy the valley bottom. The covered valley area appears to have good mineral potential and is considered an excellent prospecting target.

Since overburden covers all of the area of potential interest, indirect geochemical and geophysical methods should be used to evaluate the property. A north-south claim boundary line should be used as a baseline and prospecting lines run normal to the claim boundary at 200 meter spacings with a 50 meter soil or silt sample interval. Samples should be analyzed for lead, zinc and silver to check for Midway type deposits. Silver and arsenic values obtained indicate that the granitic-volcanic contact zone is of interest as a precious metal target. Further analyses for arsenic may lead to a gold-arsenic association similar to the zone on the Butler Mountain

Minerals Corp. YP property. Continued lead and zinc analyses are warranted because lower Sylvester Group rocks should underlie valley areas that have not been tested in this survey.

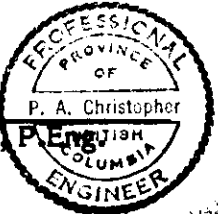
CONCLUSIONS AND RECOMMENDATIONS

The June 1 Claim is well situated with respect to the massive sulphide discovery on the adjoining Midway Property and in a geological environment favourable for gold mineralization. The covered valley area on the claim should have stratigraphy similar to the adjoining Midway property and geochemical and geophysical methods should be used to test for possible mineralization.

The initial prospecting and geochemical program has produced strongly anomalous silver in soils in the volcanic-granitic contact area. This zone should be prospected toward the covered valley area. Arsenic values near the southwest corner of the claim require additional follow-up.

A basic Stage I geological and geochemical program is recommended for the property with contingent Stage II geophysical and geochemical follow-up of anomalous areas. Cost estimates for the Stage I and Stage II programs follow:

Peter A. Christopher
Peter A. Christopher, Ph.D. P. Eng.
October 24, 1983

A circular professional seal for the Province of British Columbia. The outer ring contains the text "PROFESSIONAL ENGINEER" at the top and "PROVINCE OF" at the bottom. The inner circle contains the name "P. A. Christopher" and "COLUMBIA".

COST ESTIMATE

Stage I Prospecting, Geological, Geochemical

Personnel

Project Geologist	5 days @ \$300 each	\$ 1,500
Assistant/Prospector	5 days @ \$150 each	600
Consulting & Management	(2 field days)	1,000

<u>Room and Board</u>	12 man days @ \$50 each	600
------------------------------	-------------------------	-----

Transportation

Mobilization		1,000
Truck Rental and Fuel	5 days @ \$120	600
Helicopter	4 hours @ \$500	2,000

Geochemical Analyses

400 soils @ \$8.00 each (Pb, Zn, Ag, As)		3,200
--	--	-------

Statistical Analysis		100
----------------------	--	-----

<u>Field Expendables</u>		500
---------------------------------	--	-----

<u>Shipping</u>		100
------------------------	--	-----

<u>Reporting</u>		<u>3,000</u>
-------------------------	--	--------------

Total	\$14,200
Contingency	<u>2,800</u>

Stage I Total	<u><u>\$17,000</u></u>
----------------------	-------------------------------

Stage II Geochemical, Geophysical

Personnel

Project Geologist	10 days @ \$300 each	\$ 3,000
Assistants/Prospectors	30 days @ \$150 each	4,500
Consulting/Management	(2 field days)	1,500
Geophysical Crew (Pulse EM)	10 days @ \$1,000 each*	10,000

*includes reporting and instrument rental

<u>Room and Board</u>	52 man days @ \$50 each	2,600
-----------------------	-------------------------	-------

<u>Grid Preparation</u>	10 kilometers @ \$500 each	5,000
-------------------------	----------------------------	-------

Geochemical Analyses

300 samples @ \$8.00 each (Pb, Zn, Ag, As)	2,400
100 gold @ \$6.00 each	600
Statistical Analysis	100

<u>Field Expendables</u>	800
--------------------------	-----

Transportation

Helicopter	20 hours @ \$500 each	10,000
Truck	15 days @ \$120 each	1,800
Mobilization/Demob		3,500

<u>Base Map Preparation</u>	2,000
-----------------------------	-------

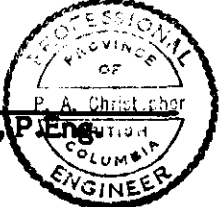
<u>Rentals</u>	500
----------------	-----

<u>Report Preparation and Consulting</u>	4,000
--	-------

Total	\$52,300
Contingency	4,700
Stage II Total	<u>\$57,000</u>

TOTAL STAGES I AND II \$74,000

Peter A. Christopher
Peter A Christopher, Ph.D., P.Eng.
October 24, 1983

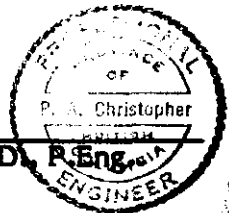


CERTIFICATE

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.A. (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 A B S Resources Ltd.
- 6) I have based this report on a property examination on September 15, 1983 by the writer and review of available literature in the area.
- 7) I consent to the use of the report by A B S Resources Ltd. for whatever purposes it deems necessary.

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



REFERENCES

- Gabrielse, H., 1969. Geology of the Jennings River Map-Area. G.S.C. paper 68-55, 37 pp.
- Gross, W.H., 1964. Geological, Geochemical and Geophysical Studies, Amy claim group. Rancheria Mining Company Ltd., BCDM Assessment Report No. 734.
- Hylands, J., 1980. Midway property. Assessment Report No. 9912 BCDM.
- McIntyre, D.G., 1982. Midway Occurrence. Geological Fieldwork, 1982. BCDM Paper 1982-1, pp. 162-66.
- Poole, W.H. et al, 1960. Wolfe Lake Map Area, Yukon Territory. GSC Map 10-1960.
- Price, Barry J., 1975. Brief Report on the A + B claims near Rancheria, Y.T. Private report for Delphi Resources Ltd.
- Price, B.J., 1980. Geological Report, YP Silver-Lead Prospect, Watson Lake M.D., Yukon Territory. Unity Gold Resources, unpublished Company Report.

COST STATEMENT

A. Field Work

1. Personnel

Engineer (P.A. Christopher, P.Eng.)	Sept. 15	\$ 350
Geologist (Les Demczuk, B.Sc.)	Sept. 15	150

2. Crew mob/demob 300

3. Room & Board 2 man days @ \$50 100

4. Expendables (flagging, hip chain, sample bags, etc.) 50

5. Vehicle rental (including gas & oil, mileage) 120

Services @ cost plus 10%

6. Helicopter 1.5 hours 531

7. Geochemistry 1,136

8. Shipping 25

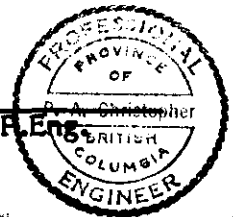
B. Office Work

1. Report Writing and consulting 1,000

2. Typing, photocopies, map preparation, etc. 250

TOTAL COSTS \$4,012

Peter A. Christopher
Peter A Christopher, Ph.D., P. Eng.
October 24, 1983



APPENDIX

CERTIFICATES OF ANALYSIS



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

TELEPHONE: (604) 984-0221
TELEX: 043-52587

CERTIFICATE OF ANALYSIS

TO : CHRISTOPHER, PETER & ASSOCIATES INC.

3707 WEST 34TH AVE.,
VANCOUVER, B.C.
V6N 2K9

CERT. # : A8315070-001-A

INVOICE # : I8315070

DATE : 29-SEP-83

P.C. # : NONE

JUNE

Sample description	Prep code	Pb ppm	Zn ppm	Ag ppm	AS ppm		
CJS-83915-01	201	8	65	0.1	3	--	--
CJS-83915-02	201	8	65	0.1	4	--	--
CJS-83915-03	201	6	59	0.1	4	--	--
CJS-83915-04	201	11	55	0.1	3	--	--
CJS-83915-05	201	9	49	0.1	5	--	--
CJS-83915-06	201	7	42	0.1	3	--	--
CJS-83915-07	201	23	89	0.1	6	--	--
CJS-83915-08	201	12	84	0.1	3	--	--
CJS-83915-09	201	9	43	0.1	3	--	--
CJS-83915-10	201	15	69	0.2	3	--	--
CJS-83915-11	201	14	69	0.1	4	--	--
CJS-83915-12	201	12	45	0.1	2	--	--
CJS-83915-13	201	14	67	0.1	5	--	--
CJS-83915-14	201	11	59	0.1	3	--	--
CJS-83915-15	201	24	126	0.1	6	--	--
CJS-83915-16	201	17	97	0.1	3	--	--
CJS-83915-17	201	18	102	0.1	6	--	--
CJS-83915-18	201	16	82	0.1	5	--	--
CJS-83915-19	201	18	48	0.1	4	--	--
CJS-83915-20	201	30	73	0.1	2	--	--
CJS-83915-21	201	13	45	0.1	2	--	--
CJS-83915-22	201	12	56	0.1	3	--	--
CJS-83915-23	201	16	50	0.1	5	--	--
CJS-83915-24	201	14	48	0.1	2	--	--
CJS-83915-25	201	10	69	0.1	4	--	--
CJS-83915-26	201	15	140	0.1	4	--	--
CJS-83915-27	201	18	76	0.1	6	--	--
CJS-83915-28	201	20	84	0.1	5	--	--
CJS-83915-29	201	33	75	0.1	9	--	--
CJS-83915-30	201	23	73	0.1	4	--	--
CJS-83915-31	201	12	79	0.1	5	--	--
CJS-83915-32	201	15	86	0.1	4	--	--
CJS-83915-33	201	12	71	0.1	5	--	--
CJS-83915-34	201	8	90	0.1	3	--	--
CJS-83915-35	201	10	78	0.1	5	--	--
CJS-83915-36	201	14	91	0.1	6	--	--
CJS-83915-37	201	15	88	0.1	6	--	--
CJS-83915-38	201	14	65	0.1	5	--	--
CJS-83915-39	201	12	106	0.1	6	--	--
CJS-83915-40	201	12	95	0.1	9	--	--



Certified by *Hart Bichler*



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

TELEPHONE: (604) 984-0221

TELEX: 043-52597

CERTIFICATE OF ANALYSIS

TO : CHRISTOPHER, PETER & ASSOCIATES INC.

3707 WEST 34TH AVE.,
VANCOUVER, B.C.
V6N 2K9

CERT. # : A8315070-002-A

INVOICE # : I8315070

DATE : 29-SEP-83

P.O. # : NONE

JUNE

Sample description	Prep code	Pb ppm	Zn ppm	Ag ppm	AS ppm		
CJS-83915-41	201	18	95	0.1	7	--	--
CJS-83915-42	201	8	60	0.1	30	--	--
CJS-83915-43	201	12	120	0.1	45	--	--
CJS-83915-44	201	12	101	0.1	9	--	--
CJS-83915-45	201	12	97	0.1	7	--	--
CJS-83915-46	201	13	49	0.1	6	--	--
CJS-83915-47	201	19	153	0.1	10	--	--
CJS-83915-48	201	17	107	0.1	9	--	--
CJS-83915-49	201	15	71	0.1	5	--	--
CJS-83915-50	201	13	85	0.1	9	--	--
CJS-83915-51	201	15	77	0.1	5	--	--
CJS-83915-52	201	12	81	0.1	7	--	--
CJS-83915-53	201	18	113	0.2	7	--	--
CJS-83915-54	201	20	109	0.1	9	--	--
CJS-83915-55	201	17	97	0.2	6	--	--
CJS-83915-56	201	17	78	0.1	7	--	--
CJS-83915-57	203	10	64	0.1	7	--	--
CJS-83915-58	201	14	70	0.9	6	--	--
CJS-83915-59	201	9	70	0.1	4	--	--
CJS-83915-60	201	10	72	0.1	7	--	--
CJS-83915-61	201	13	69	0.5	5	--	--
CJS-83915-62	201	27	200	0.9	5	--	--
CJS-83915-63	201	23	100	0.1	5	--	--
CJS-83915-64	201	9	52	0.1	5	--	--
CJS-83915-65	203	24	101	0.4	10	--	--
CJS-83915-66	203	21	93	0.1	6	--	--
CJS-83915-67	201	24	94	0.1	5	--	--
CJS-83915-68	201	15	74	0.1	5	--	--
CJS-83915-69	201	15	84	0.1	5	--	--
CJS-83915-70	203	8	54	0.1	3	--	--
CJS-83915-71	201	9	66	0.1	6	--	--
CJS-83915-72	201	10	50	0.1	3	--	--
CJS-83915-73	201	10	45	0.1	3	--	--
DGS-83915-01	201	8	85	0.1	6	--	--
DGS-83915-02	201	8	72	0.1	7	--	--
DGS-83915-03	201	11	52	0.1	3	--	--
DGS-83915-04	201	10	84	0.1	7	--	--
DGS-83915-05	201	10	74	0.1	6	--	--
DGS-83915-06	201	13	353	0.6	4	--	--
DGS-83915-07	201	14	50	0.3	5	--	--



Certified by *Stuart Richler*



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

TELEPHONE: (604) 984-0221

TELEX: 043-52597

CERTIFICATE OF ANALYSIS

TO : CHRISTOPHER, PETER & ASSOCIATES INC.

3707 WEST 34TH AVE.,
VANCOUVER, B.C.
V6N 2K9

CERT. # : A8315070-003-A

INVOICE # : I8315070

DATE : 29-SEP-83

P.O. # : NONE

JUNE

Sample description	Prep code	Pb ppm	Zn ppm	Ag ppm	AS ppm		
DGS 83915-08	201	25	177	0.2	9	--	--
DGS 83915-09	201	9	121	0.2	10	--	--
DGS 83915-10	201	20	235	2.2	20	--	--
DGS 83915-11	201	12	172	0.1	6	--	--
DGS 83915-12	201	12	98	0.1	3	--	--
DGS 83915-13	201	17	106	1.3	6	--	--
DGS 83915-14	201	10	46	5.8	1	--	--
DGS 83915-15	201	12	338	2.0	6	--	--
DGS 83915-16	201	13	86	2.8	5	--	--
DGS 83915-17	201	13	155	0.9	11	--	--
DGS 83915-18	201	15	175	1.1	7	--	--
DGS 83915-19	201	16	192	2.4	14	--	--
DGS 83915-20	201	7	85	2.2	3	--	--
DGS 83915-21	201	12	95	0.1	4	--	--
DGS 83915-22	201	2	82	0.5	2	--	--
DGS 83915-23	201	12	132	0.1	5	--	--
DGS 83915-24	201	14	303	1.9	10	--	--
DGS 83915-25	201	8	159	0.8	7	--	--
DGS 83915-26	201	15	176	1.1	11	--	--
DGS 83915-27	201	32	230	1.2	15	--	--
DGS 83915-28	201	15	185	0.6	7	--	--
DGS 83915-29	201	15	67	0.1	5	--	--
DGS 83915-30	201	12	102	0.1	4	--	--
DGS 83915-31	201	13	85	0.1	5	--	--
DGS 83915-32	201	16	94	0.2	6	--	--
DGS 83915-33	201	23	130	0.1	5	--	--
DGS 83915-34	201	20	110	0.1	7	--	--
DGS 83915-35	201	9	100	0.1	7	--	--
DGS 83915-36	201	10	97	0.1	4	--	--
DGS 83915-37	201	8	112	0.1	5	--	--
DGS 83915-38	201	15	115	0.1	3	--	--
DGS 83915-39	201	3	84	0.1	1	--	--
DGS 83915-40	201	10	250	0.1	5	--	--
DGS 83915-41	201	8	286	0.1	4	--	--
DGS 83915-42	201	20	266	0.1	11	--	--
DGS 83915-43	201	29	310	0.2	5	--	--
DGS 83915-44	201	9	102	0.1	5	--	--
DGS 83915-45	201	4	20	0.1	1	--	--
DGS 83915-46	201	7	160	0.1	4	--	--
DGS 83915-47	201	9	230	0.2	4	--	--



Certified by *Hart Bichler*



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604) 984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : CHRISTOPHER, PETER & ASSOCIATES INC.

3707 WEST 34TH AVE.,
VANCOUVER, B.C.
V6N 2K9

CERT. # : A8315070-004-A
INVOICE # : I8315070
DATE : 29-SEP-83
P.O. # : NONE
JUNE

Sample description	Prep code	Pb ppm	Zn ppm	Ag ppm	AS ppm		
DGS 83915-48	201	12	100	0.1	5	--	--
DGS 83915-49	201	8	110	0.1	2	--	--
DGS 83915-50	201	1	38	0.1	2	--	--
DGS 83915-51	201	7	197	2.4	5	--	--
DGS 83915-52	201	12	85	0.2	2	--	--
DGS 83915-53	201	14	130	0.2	10	--	--
DGS 83915-54	201	9	113	0.1	5	--	--
DGS 83915-55	201	11	85	0.1	4	--	--
DGS 83915-56	201	16	71	0.1	3	--	--
DGS 83915-57	201	11	207	4.9	12	--	--
DGS 83915-58	201	13	84	0.1	5	--	--
DGS 83915-59	201	17	80	0.1	3	--	--
DGS 83915-60	201	17	85	0.1	3	--	--
DGS 83915-61	201	10	67	0.1	4	--	--
DGS 83915-62	201	12	66	0.2	3	--	--
DGS 83915-63	201	7	69	0.1	5	--	--



Certified by *Hart Bichler*



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

TELEPHONE: (604) 984-0221
TELEX: 043-52597

*** INVOICE ***

To : CHRISTOPHER, PETER & ASSOCIATES INC.

Invoice # : 18315070

3707 WEST 34TH AVE.,
VANCOUVER, B.C.
V6N 2K9

Date : 29-SEP-83
P.O. # : NONE
Project JUNE

Invoice for analytical work reported on certificate(s) A8315070-001 to -004

Quantity	Analysed for code description	unit price	amount
136	004 - Pb	ppm	
	005 - Zn	ppm	
	006 - Ag	ppm	
	013 - AS	ppm	
		6.95	945.20

Sample preparation and other charges :

132	201 - soil + sediment -80 mesh	0.60	79.20
4	203 - -35 mesh sieve + ring	2.00	8.00

TOTAL \$ 1032.40

Please pay this amount ----> \$ 1032.40

TERMS -- NET 30 DAYS

1.5 % per month (18 % per annum) charged on overdue accounts



MEMBER
CANADIAN TESTING
ASSOCIATION

