

KERR ADDISON MI

SUITE 703 - 1112 WEST P
VANCOUVER, B.C.
PHONE 682-74

93 G

17 1980

821997

MASSIVE SULPHIDES PROJECT-

1979 REPORT OF WORK

I.B.
A.H.C.
P.S.C.
W.I.
FILE
J.B.S.
FILE

Mr. D.A. Low
Vice President
Kerr Addison
P.O. Box 91
Commerce Court West
Toronto, Ontario
M5L 1C7

APRIL 1980

Dear Dave,

Re : Massive Sulphide Project 1979
Letter of Transmittal

We undertook a stream silt appraisal of the Antler volcanic rocks mapped on the McBride Sheet (93 H, G and J) because they were allegedly the temporal and compositional equivalent of the Slide or Fennel green stone of Mississippian age. These rocks are hosts to the Chu Chua copper occurrence near Little Fort and at one time the Kutcho Creek deposit in the Stikine region was thought to be of that vintage.

Apart from scattered molybdenum, zinc and gold anomalies nothing of significance was found.

In my view the area studied lacks mobility, i.e. nothing much happened geologically, since the volcanics were deposited. No profound faulting, no evidence of later intrusion, no major tectonics of any kind were seen in the course of the work. In saying this I am aware of the fact that very little time was spent in looking for this type of evidence.

Yours very truly,



W. M. Sirola
Regional Exploration Manager

WMS/tv
Encls.

KERR ADDISON MINES LIMITED

SUITE 703 - 1112 WEST PENDER STREET
VANCOUVER, B.C. V6E 2S1
PHONE 682-7401

APR 17 1980

821997

IOB. A.H.C. P.S.C. W.J. P.M.
J.B.S.
FILE

April 15, 1980

Mr. D.A. Lowrie
Vice President - Exploration
Kerr Addison Mines Limited
P.O. Box 91
Commerce Court West
Toronto, Ontario
M5L 1C7

Dear Dave,

Re : Massive Sulphide Project 1979
Letter of Transmittal

We undertook a stream silt appraisal of the Antler volcanic rocks mapped on the McBride Sheet (93 H, G and J) because they were allegedly the temporal and compositional equivalent of the Slide or Fennel green stone of Mississippian age. These rocks are hosts to the Chu Chua copper occurrence near Little Fort and at one time the Kutcho Creek deposit in the Stikine region was thought to be of that vintage.

Apart from scattered molybdenum, zinc and gold anomalies nothing of significance was found.

In my view the area studied lacks mobility, i.e. nothing much happened geologically, since the volcanics were deposited. No profound faulting, no evidence of later intrusion, no major tectonics of any kind were seen in the course of the work. In saying this I am aware of the fact that very little time was spent in looking for this type of evidence.

Yours very truly,



W. M. Sirola
Regional Exploration Manager

WMS/tv
Encls.

REPORT ON

MASSIVE SULPHIDE PROJECT 1979

McBRIDE MAP AREA

CARIBOO MOUNTAINS, B.C.

93 H - 3, 4, 5, 6, 12, and 13

93 G - 8, 9, 15, and 16

93 J - 1, and 2

Submitted by

F. Chow

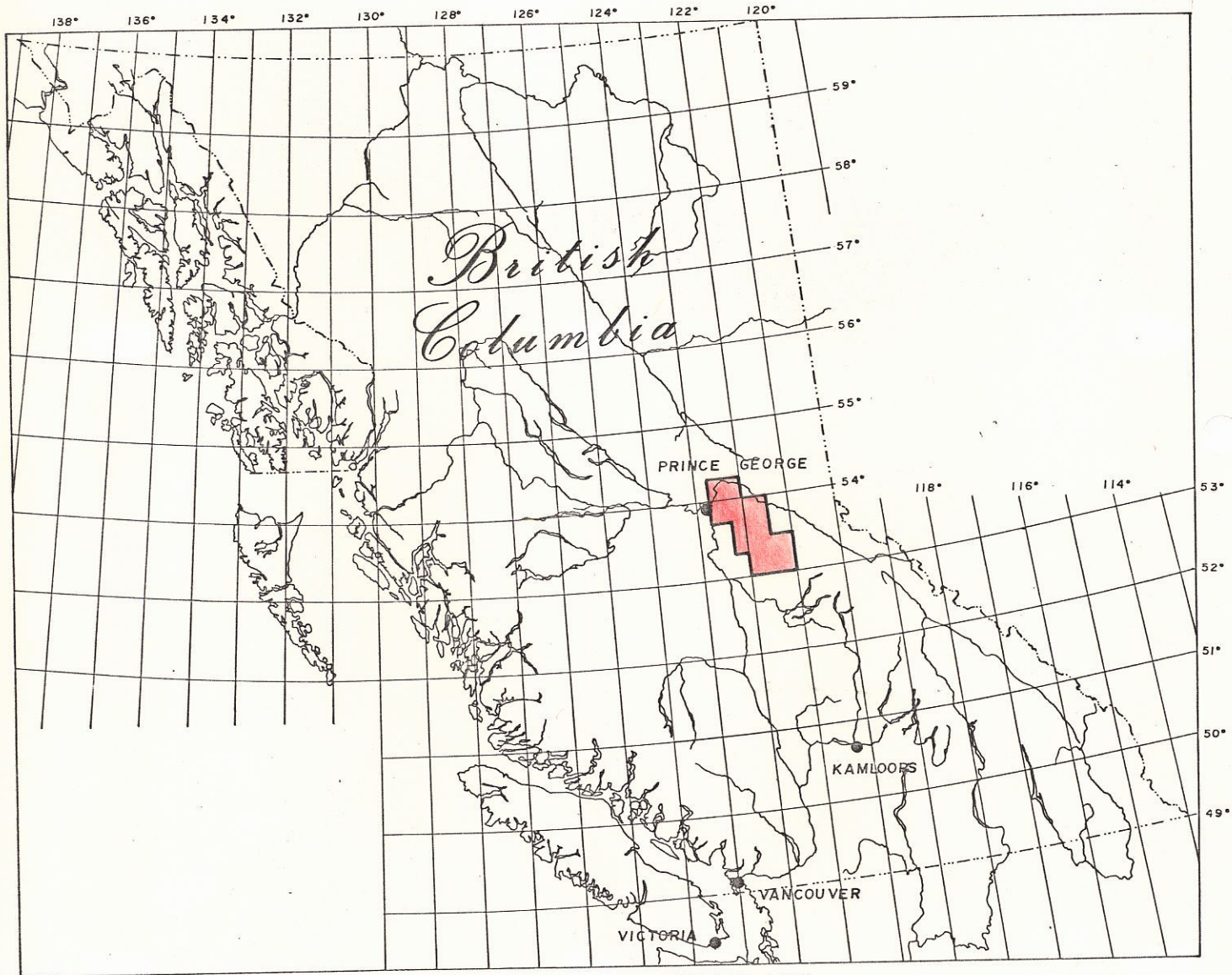
April 1980

TABLE OF CONTENTS

	<u>Page No.</u>
SUMMARY AND CONCLUSIONS	i
RECOMMENDATIONS	ii
I. INTRODUCTION	1
II. SELECTION OF EXPLORATION AREA	1
III. PROSPECTING AREA	2
A. Location and Access	2
B. Climate and Vegetation	3
C. Topography	3
IV. GEOLOGY	3
V. PROSPECTING METHOD	4
VI. MINERALIZATION	4
VII. SILT SAMPLING	4
VIII. GEOCHEMICAL RESULTS	5
1. Spectacle Lake Area - anomalous zinc	5-8
2. Stony Lake Area - anomalous gold, minor sulphides	8
3. Wells Area - anomalous zinc.....	9
4. Pitoney Lake Area - anomalous zinc	9-10
5. Wansa Creek Area - anomalous molybdenum	10-11
6. Hutton Area - anomalous gold	12
7. Stony Lake Area - anomalous gold	12-13
8. Narrow Lake Area - anomalous zinc	13-14

FIGURES

1. Productive Mineral Deposits Related To Stratigraphy.
2. Physiographic Divisions of McBride Map-Area, Also Outline of Project Area.
3. Correlation Chart, McBride Map-Area.
4. Stratigraphic Cross-section, McBride Map-Area.
5. Geology And Anomalous Silt Sample Locations (Wells).
- 5A. Geological Legend.
6. Diagrammatic Cross-Sections.



KERR ADDISON MINES LTD

MASSIVE SULPHIDES PROGRAM

LOCATION MAP

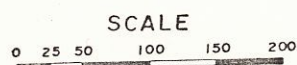


FIG. No. 1

SUMMARY AND CONCLUSIONS

Kerr Addison Mines proposed a search for massive sulphides in the Province of B.C. during the early part of 1979. The selection of prospecting areas was based on favourable volcanic rocks of Mississippian to Lower Jurassic age, ease of transportation and availability of power.

Two areas, one within the Sicker Formation in the southeastern end of Vancouver Island, and the second within the Antler Formation on the Quesnel Highlands, east central part of B.C. were chosen for the search of massive sulphides. The original plan was to conduct an aerial VLF electromagnetic survey over the Sicker Formation and then follow up with ground work on selected targets. The choice of area and search method was changed when the aerial survey equipment was not available on time. Central B.C. was chosen for the search area and the plan was revised to a reconnaissance stream silt sampling and prospecting program.

A total of 6200 sq. km. was covered by the survey, enclosing the area between the Bowron and Willow rivers from approximately the town of Barkerville to Prince George, a distance of about 125 km. A total of 547 silt samples were collected and assayed for Mo, Cu, Pb, Zn, Ag, and Au content.

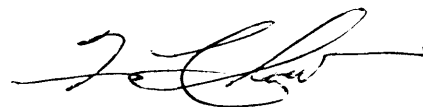
The exploration area is underlain by the Antler Formation of the Slide Mountain Group, Lower Mississippian in age and possibly Upper Triassic. The Antler Formation is dominated by volcanic rocks, chert, and argillite, with a few occurrences of diorite and gabbro.

The reconnaissance survey was confined to areas and locations where access was possible by 4-wheel drive vehicle and/or by trail bike.

No economic mineralization of importance was encountered on the traverses. Eight areas or locations show anomalous values in geochemical assays, and of these only three warrant further work but not meriting priority. These three areas and/or locations are :
1, Spectacle Lake Area - Zn anomaly; # 5, Basket Canyon Area - Mo anomaly; #6, Tsus Creek - Au anomaly.

RECOMMENDATIONS

It is recommended that follow-up silt sampling and limited soil sampling of the stream banks be conducted to check for possible economic zinc mineralization in Area #1, near Spectacle Lake. Further work by soil sampling to check the Mo anomaly in Area #5 west of Basket Canyon is proposed. Also recommended is follow-up silt sampling of the Au anomaly on Tsus Creek, south of Bowron River coal area.

A handwritten signature in cursive script, appearing to read "J. C. Lewis", located in the lower right quadrant of the page.

MASSIVE SULPHIDES PROGRAM

List of Maps

1. Location Map
2. Index Map
3. Geological Map
4. Wells & Spectable Lakes Map
Silt Sampling Results; 93H-4, 3
5. Ahbau, Stony & Indian Point Lakes Map
Silt Sampling Results; 93G-8, 93H-5, 6
6. Pitoney & Narrow Lake Map
Silt Sampling Results; 93G-9, 93H-12
7. Prince George, Wansa Creek & Hutton Map
Silt Sampling Results; 93G-15, 16, 93H-13
8. Salmon Valley & Giscome Map
Silt Sampling Results; 93J-2, 1
9. Outline of Volcanic Rocks, Jurassic to Mississippian

I. INTRODUCTION

In the spring of 1979, a search for massive sulphide deposits within the province of B.C. was proposed by Kerr Addison Mines. Discoveries of massive sulphides in Mississippian basaltic rocks near Chu Chua in recent years plus the increase in precious metal prices have renewed interest in massive sulphide deposits in B.C.

Wayne Murton, formerly of Kerr Addison, commenced the study for massive sulphide exploration in March 1979. The writer continued the study in April and then carried out the field work during June-August, 1979.

II. SELECTION OF EXPLORATION AREA

It was proposed that the search be conducted within felsic volcanic terrain which have been favoured for massive sulphide mineralization. Jurassic to Mississippian Volcanics were selected because most of the economical deposits were found within or associated with these rocks. The southern 3/4 of the province was chosen for the study, mainly for availability and lower costs for power and transportation.

Following these decisions, a geological map on a scale of 1 : 267,200 (1" = 2 mile) covering the province of B.C., from the 49° Lat. to the 57° Lat. was drafted. On the map, all volcanic rocks of Jurassic to Mississippian age were outlined, and all granitic rocks in contact were plotted. The Geological Period and the Geological Formation are labelled alphabetically following G.S.C. symbols, and are designated numerically when ages are approximated. This map was updated at the time of drafting but should be revised now with new data on hand.

Studies of known deposits and their environments, plus the frequency distribution of these deposits, point to Vancouver Island as one of the better areas for finding a massive sulphide deposit. (See Figure 1, Productive Mineral Deposits Related to Stratigraphy). A plan was proposed to fly an area in the southeastern part of the Island containing the Sicker Volcanics, with VLF electromagnetic equipment, and then follow up with ground work on selected targets. This was abandoned when the survey equipment was not available on time for the season. The decision to select another area was also prompted when information regarding a similarly conceived survey had been done recently.

Our backup choice for a prospecting area lies within the McBride Map Area, and within the Interior Plateau, on the Quesnel Highlands. The area is within the arc or big bend of the Fraser River. This area contains the Antler Formation which is reported to be similar to the Fennell Formation wherein the Chu Chua copper deposit was explored recently. (See Fig. 2 Physiographic Divisions of Mc Bride Map Area).

The original plan was also scaled down to a general reconnaissance survey.

III. PROSPECTING AREA

The prospecting area is about 6200 square km. in area, measures 50 km. wide by 125 km. long SE-NW. It covers the region from the Bowron River westerly to the Willow River, and from Antler Creek southeast of Barkerville, B.C. to the Fraser River northeast of Prince George.

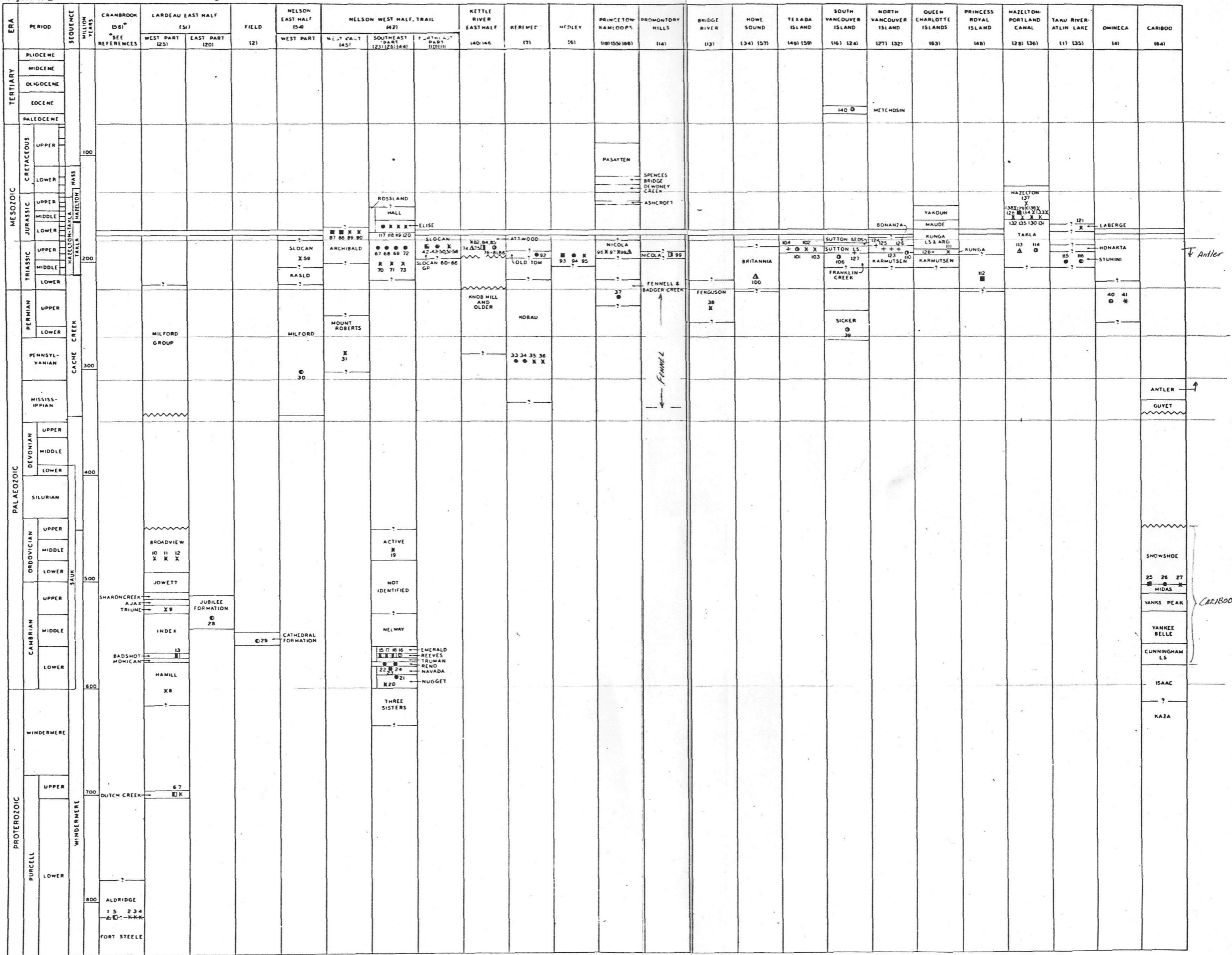
A. Location and Access

Prince George is at the N.W. corner of the prospecting area and Quesnel is about 85 km. west of the southwest end. HWY 16 and the CN Railway traverses the northern end of the area connecting to Prince

Figure 11-2

△ 10,000,000-100,000,000 Tons
 □ 1,000,000-10,000,000 Tons
 ○ 100,000-1,000,000 Tons
 × 10,000-100,000 Tons
 ● Gold
 ○ Silver
 ○ Copper
 ⊙ Lead-Zinc
 ⊕ Tungsten
 ⊖ Mercury
 ⊕ Iron

PRODUCTIVE MINERAL DEPOSITS RELATED TO STRATIGRAPHY



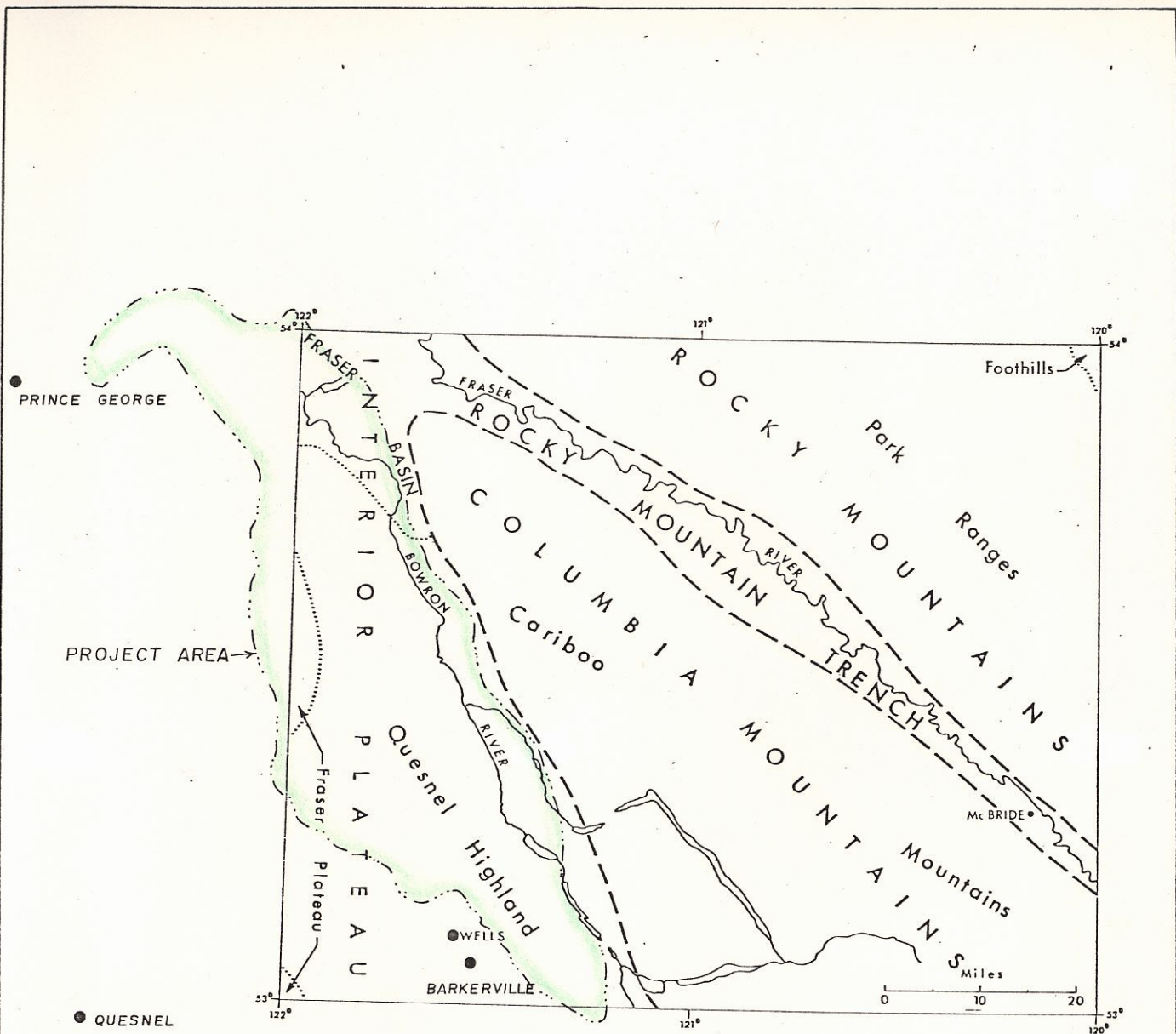


Figure 2. Physiographic divisions of McBride map-area modified from Holland (1964).

George and onto Prince Rupert on the Pacific Coast. HWY 97 and the B.C. Railway traverses north and south connecting Vancouver to Prince George and points west and north. HWY 26 from Quesnel provides access to Wells and Barkerville. All-weather, gravel forestry access roads traverse eastward from HWY 97, northward and southward from HWY 16 and HWY 26. New logging roads extend into much of the Highland area. Old logging and mining roads are numerous within the southeastern section; though passage is often difficult because of the growth of new vegetation and washouts, but access by trail bike is generally possible.

B. Climate and Vegetation

Summer days are usually hot and nights are cool. Thunder showers are common. Vegetation cover is dense and forest growth is extensive.

C. Topography

In general, the topography is gently rolling although valley sides could be steep. Elevations of the river valley range from 600 m. (2200') along the Fraser River to 900 m. (3000') near the head of the Bowron River system. The Highlands reach up to 1700 m. (5500') in elevation. Maximum relief is about 750 m. (2500').

IV. GEOLOGY

The prospecting area is underlain by the Antler Formation of the Slide Mountain Group which is Lower Mississippian or younger in age. There is evidence in the McBride Map Area that the Antler Formation may be Pre-Upper Triassic. (See Figure 3 "Correlation Chart, McBride Map-Area", and Fig. 4 "Stratigraphic Cross-Section").

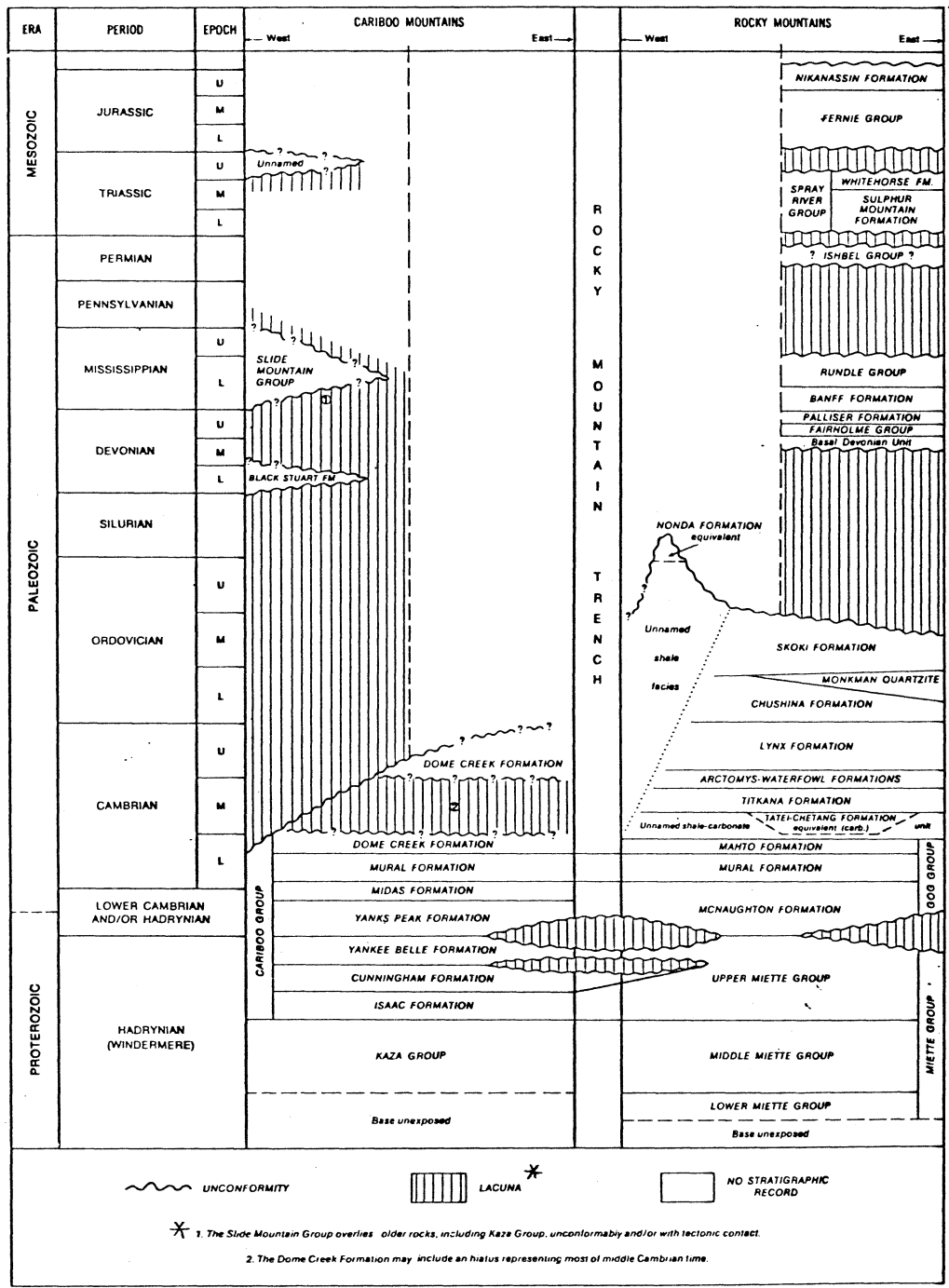


Figure 3. Correlation chart, McBride map-area.

S.W.

FRASER PLATEAU

CARIBOO MOUNTAINS

ROCKY MOUNTAIN TRENCH

ANTLER CREEK
WELLS-BARKERVILLE

HAGGEN CREEK

CLEAR MOUNTAIN

DOME CREEK

BEAR CREEK

22 miles

10 miles

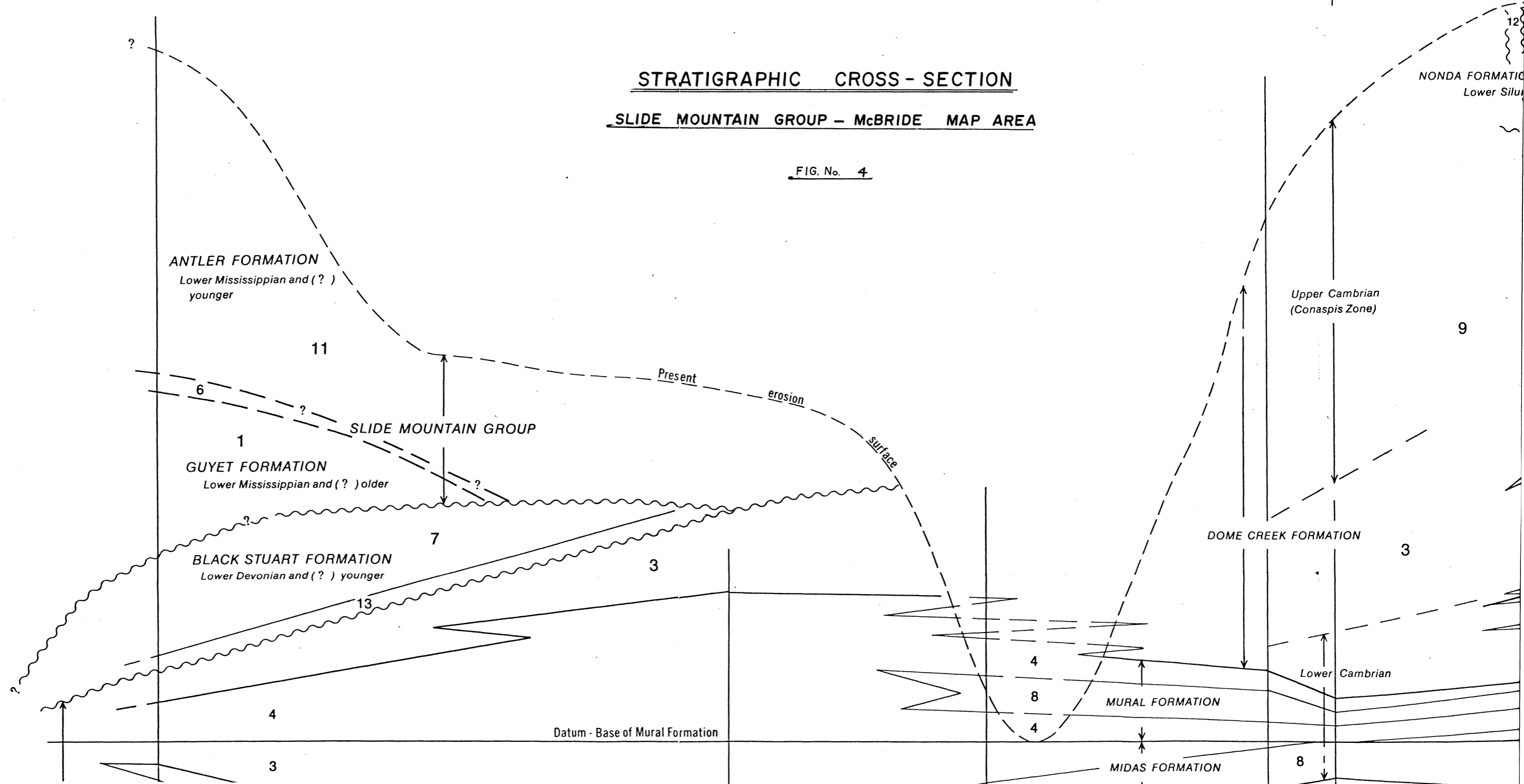
11 miles

2.5 miles

8 miles

STRATIGRAPHIC CROSS-SECTION
SLIDE MOUNTAIN GROUP - McBRIDE MAP AREA

FIG. No. 4



G.S.C. Paper 72-35, "Geology of the McBride Map Area" describes the Antler Formation as being "dominated by basic volcanic rocks, chert, and argillite and includes some coarser sedimentary rocks. Pillow basalt is abundant and can be found in every part of the formation. Volcanic breccia, though not abundant is widespread. It varies from fine-grained tuffaceous rocks to coarse angular breccia. On many places the volcanic rocks are uniform and featureless asphanitic greenstone but locally they display distinct granularity and may be diabasic. In a few places medium grained diorite and gabbro are noted. Ribbon Chert, argillite, and fine lithic sandstone, though subordinate, are scattered throughout the formation".

V. PROSPECTING METHOD.

A prospecting reconnaissance survey, involving stream silt sampling and stream float examination, was completed during the summer. Traverses were conducted along existing roads and trails with the use of a 4-wheel drive vehicle and trail bikes. Traverses by foot were restricted to distances not greater than about 500 metres to assure that the coverage would be completed by the end of August.

VI. MINERALIZATION

No mineralization, except the odd spots of chalcopyrite, was seen during the summer's work. Altered volcanic float rocks were noted in stream beds, usually barren and sometimes with minor pyrite.

VII. SILT SAMPLING

Fine silt was not usually present in the streams and becomes less as the streams dry up in the summer. By mid July, most of the small drainages have dried up.

Most of the samples are wet screened, using a can with 1.5 mm. diameter holes punched through the bottom and then collected in a water filled gold pan. This was done to discard the bulk of the twigs, leaves, moss, and the pebbles and coarse sand. Wherever water was available, a large portion of the fine humus was floated off the pan. A visual check of the silt in the pan is made to assure that there is more than enough for assaying.

A total of 574 silt samples were collected.

VIII. GEOCHEMICAL RESULTS

In general, the prospect area showed a rather low geochemical response. Usual values for Mo are 1-2 ppm, for Cu 20-35 ppm, for Pb 12-22 ppm, for Zn 35-65 ppm and 40-74 ppm ranges, for Ag 0.1-0.3 ppm and 0.3-1.0 ppm ranges and for Au nd-10 ppb.

Assay results show 3 highly anomalous (greater than 3 x background) samples, a few single or groups of moderately anomalous (3 x background) samples, and also a few slightly anomalous ones. These are described below:

1. Area: Map Area 93H/3W, Spectacle Lake
Palmer Range, between Antler Creek and Spectacle/
Babcock Lakes.
- Location: 53°03' Lat./121°13' Long. northwestward to 53°07' Lat.
121°18' Long.
- Sample
- Sites: MS-79 to MS-88. Sites are located on small, medium and
large streams flowing E and NE into Spectacle Lake
and Babcock Lake from the Palmer Range.

Assays:

<u>Sample Marking</u>	<u>Mo ppm</u>	<u>Cu ppm</u>	<u>Pb ppm</u>	<u>Zn ppm</u>	<u>Ag ppm</u>	<u>Au ppb</u>	<u>Ag * bg/c</u>	<u>PH</u>
MS-79	5	30	17	630	2.3	10	1.3	5.5
MS-80	4	30	15	275	2.2	50	1.5	5.8
MS-81	4	36	16	185	2.1	10	1.4	5.8
MS-82	1	24	11	126	1.6	nd	.9	5.8
MS-83	2	42	21	316	1.8	nd	1.1	5.5
MS-84	4	26	14	125	1.6	nd	.9	-
MS-85	1	41	14	117	2.0	nd	1.3	5.5
MS-86	2	32	16	220	2.0	nd	1.3	5.5
MS-87	3	39	21	280	2.4	nd	1.7	-
MS-88	2	35	18	245	2.8	nd	2.1	5.5

Sample Sites: MS-65 to MS-78 all on small to medium size streams flowing NW and W into Antler Creek from the Palmer Range.

Assays:

<u>Sample Marking</u>	<u>Mo ppm</u>	<u>Cu ppm</u>	<u>Pb ppm</u>	<u>Zn ppm</u>	<u>Ag ppm</u>	<u>Au ppb</u>	<u>Ag * bg/c</u>	<u>PH</u>
MS-65	1	36	47	89	2.0	40	1.3	6.0
MS-66	3	39	42	120	2.0	nd	1.3	6.0
MS-67	2	30	26	76	1.9	nd	1.2	6.0
MS-68	1	20	20	93	1.6	10	.9	6.0
MS-69	3	30	19	100	1.9	10	1.2	5.8
MS-70	1	25	15	63	1.2	10	.5	5.8
MS-71	2	31	26	134	2.4	nd	1.7	6.0
MS-72	2	30	15	90	2.0	nd	1.3	5.8
MS-73	1	53	12	110	3.0	10	2.3	5.5

* Ag background correction approximated.

Sample
Sites: MS-65 to MS-78 cont'd

<u>Sample Marking</u>	<u>Mo ppm</u>	<u>Cu ppm</u>	<u>Pb ppm</u>	<u>Zn ppm</u>	<u>Ag ppm</u>	<u>Au ppb</u>	<u>Ag * bg/c</u>	<u>PH</u>
MS-74	1	48	9	102	1.9	nd	1.2	5.5
MS-75	1	36	11	82	2.1	nd	1.4	5.5
MS-76	1	41	13	64	2.2	nd	1.5	5.5
MS-77	1	32	13	81	2.8	nd	2.1	5.5
MS-78	1	51	16	197	2.2	20	1.5	5.8

Discussion:

The drainages surrounding the Palmer range contain a slightly higher content in Zn and perhaps Ag values*. Au content is low therefore the sampling is not picking up any flower gold from the placer gravels.

The anomalous geochemical values are in Zn with suggested Mo association.

Stream float rocks, in order of abundance, are: andesite, basalt, argillite, phyllite, quartzite, volcanic agglomerates, and jasper.

The source of the zinc values cannot be determined accurately but can be confined to the units below Lower Mississippian, from the Guyet Formation down to the Lower Cambian Mural Formation, and may also come from the Protozoic units. Argillite, limestone, chert, and phyllite are repeated rock units in the different formations. (See Figs. 5 "Geology and Anomalous Silt Sample Locations", and 6 Diagrammatic Cross Sections"). The source is definitely not from the Antler Formation because samples MS-74 to 77 located within the heart of the Antler Formation did not show any anomalous values. Also, some Zn and Mo highs were detected in other areas containing the older rock units.

* Ag background correction approximated.

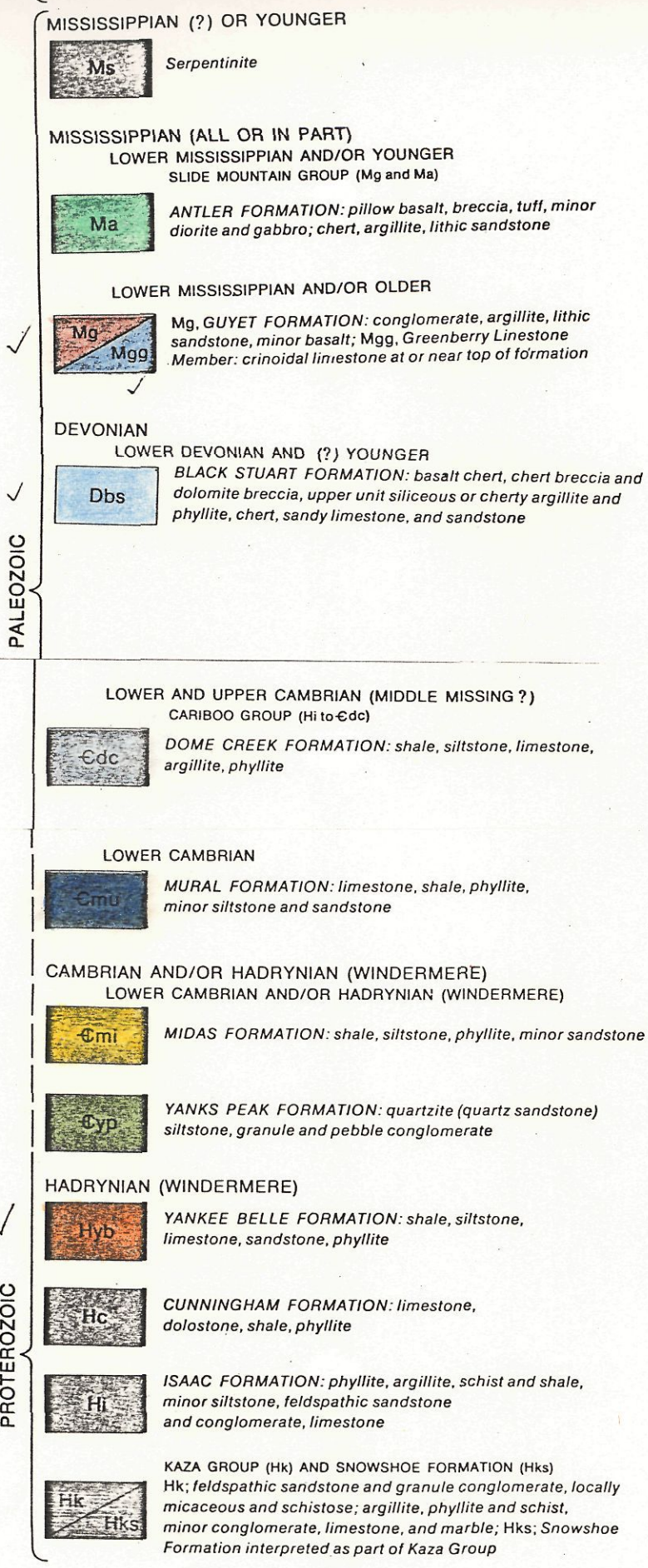
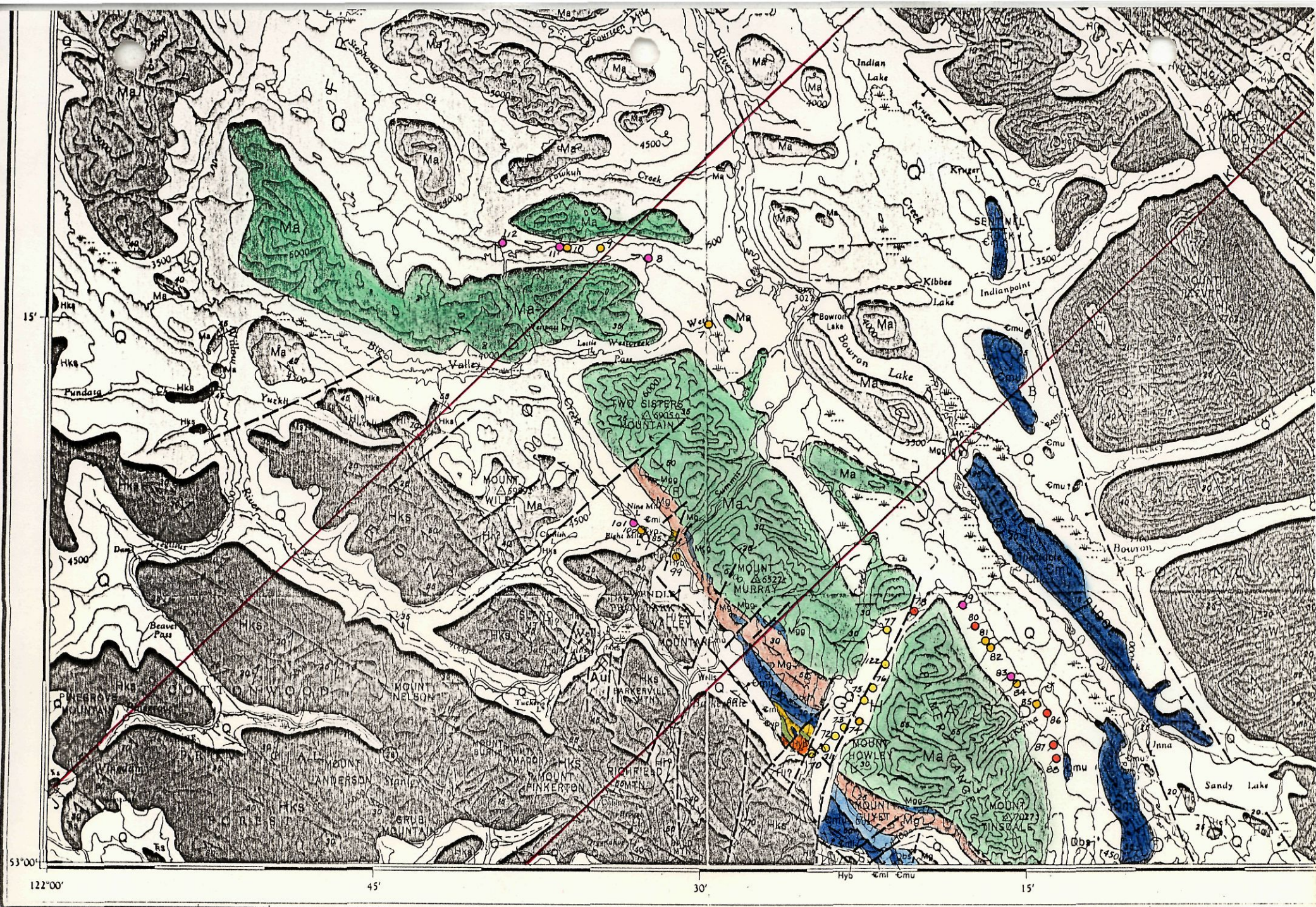


FIG. No. 5 A



- Anomalous
- Moderately anomalous
- Slightly anomalous
- Background +
- Background -

**GEOLOGY AND
ANOMALOUS SILT SAMPLE LOCATIONS**

**KERR ADDISON MINES LTD
MASSIVE SULPHIDES PROJECT**

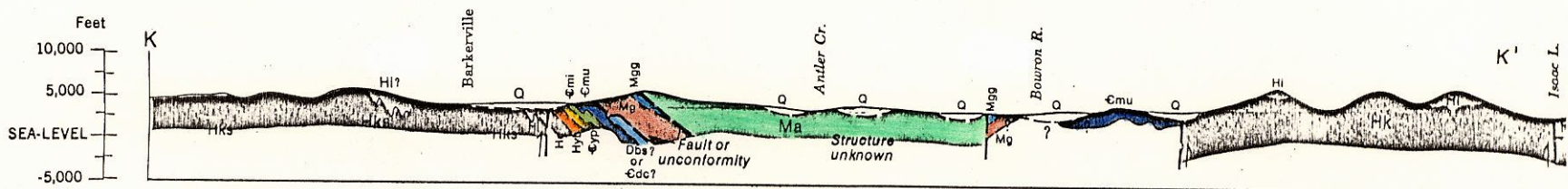
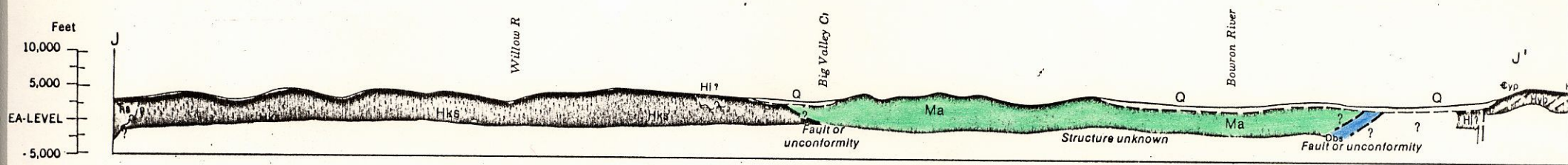
N.T.S - 93H (SW)

SCALE - 1:250,000

FIG. No.5

June - August, 1979

F. Chow



DIAGRAMMATIC CROSS-SECTIONS

SCALE - 1:250,000

FIG. No.6

Follow-up work consisting of detailed silt sampling and limited soil sampling along the creek banks should be done to check for possible economical mineralization.

2. Area: Map Area 93H/5E, Stony Lake
N.W. Branch of West Creek Drainage Area.
- Location: 53°18.5' Lat./ 121°30' to 121°40' Long.
- Sample Sites: MS-8 , 11 and 12 are sites on N-S tributaries of the easterly flowing creek, and they are spread along a distance of 10,000 m. MS-9 is on the main W-E Creek.

Assays:

Sample Marking	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Ag * bg/c	PH
MS- 7	1	31	20	92	1.6	nd	0.9	5.8
MS- 8	1	45	20	106	2.0	170	1.3	5.8
MS- 9	2	13	16	138	1.6	10	0.9	6.0
MS-10	3	34	16	42	1.4	nd	0.2	5.8
MS-11	2	106	21	64	1.6	10	0.9	5.8
MS-12	4	134	30	62	2.8	10	2.1	5.5

The geochem values, except for one gold sample of 170 ppb are not that exciting. The values as a whole may prompt some interest in that there is some sulphide mineralization within the area when compared to the almost negative results of the surrounding area.

Andesite and basic volcanic float rock, plus altered volcanic float rock at site MS-10 were observed. Geochem highs may be attributed to quartz veins.

A second look into the area is warranted only if we should have field crews working closeby.

* Ag background correction is approximated.

3. Area : Map Area 93H/4E, Wells. Eight Mile Lake Area.
 Location: 53°08' Lat./121°32' Long.
 Sample
 Sites : MS-101 is on a 30 cm. wide by 2 cm. deep, 1.5°
 gradient stream, flowing N 20° E into the drainage
 joining Eight Mile Lake and Nine Mile Lake.

Assays :

Sample Marking	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Ag * bg/c	PH
MS- 98	2	53	23	83	2.0	20	1.3	
MS- 99	4	38	24	106	1.8	10	1.1	5.8
MS-100	3	29	20	100	2.0	10	1.3	5.5
MS-101	3	32	44	370	3.0	10	2.3	5.5
MS-102	2	40	24	84	2.8	20	2.1	5.8

Discussion:

MS-101 is a local Zn high with a slight increase in Pb content. The value of Ag is unknown because the background correction is approximated. The slight increase in Mo content is similar to that of Area 1. Both areas probably contain two or more of the same rock units; therefore the source of the zinc is related to a rock formation. (Pleasant Valley which parallels the rock structures shows a slightly higher background in Zn and Ag.). A geochem survey across the structure should pinpoint the source, and this can be done in Area 1 where the values are more significant and traversing is easier.

Presently, no further work is proposed for Location 3.

4. Area : Map Area 93G/9E, Pitoney Lake. Willow Creek West.
 Location: 35°37' Lat./122°09' Long.
 Sample
 Site: MS-282 is on a fast flowing 20 cm. wide by 6 cm. deep
 stream which flows N 30° E into Willow Creek.

* Ag background correction approximated.

Assays : 4 ppm Mo, 25 Cu, 23 Pb, 730 Zn, nd Ag, and 10 ppb Au,
PH is 5.5.

Discussion :

This is the highest zinc geochem value obtained during the field season. Adjacent sample sites MS-281 and 283 located 600 m. NW and 1700 m. SE did not show anomalous values. The location is on a major NW fault contact between the Antler Formation on the east and the Lower Cambrian, Cariboo Group of NW-SE striking, quartzite, phyllite, argillite, and limestone on the West. An abrupt kink in the Willow River suggests an E-W cross fault. The source of the zinc is localized and probably emanates from a vein or fault. No further work is proposed for location 4.

5. Area: Map Area 93G/16E Wansa Creek. Basket Canyon and Portage Canyon Area, West of Bowron River.
- Location: 53°54' Lat. /122°06' Long. and 53°56' Lat. /122°10' Long.
- Sample Sites :
- MS-417 is on a dry S 80° E drainage, 15 cm. wide by 6 cm. deep channel, 1 degree gradient draining on large flat terrain. Organics are 10%+ by volume.
- MS-424 is on a dry eastward drainage, 30 cm. wide by 4cm. deep channel, 0.1 - 2 degree gradient, draining a wide, N-S flat swampland. Organics are 5% by volume.
- The sites are 5500 m. apart and drain separate swamp lands.

Assays:

Sample Marking**	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Ag * bg/c	PH
MS-416	1	14	18	92	1.0	10	0.2	6.7
MS-417	13	5	20	48	2.4	nd	0.5	-
MS-418	1	37	28	85	1.7	nd	0.7	-
MS-419	2	14	20	93	0.9	30	0.2	6.3
MS-420	3	12	20	120	1.5	10	nd	-
MS-421	nd	11	15	59	0.8	nd	0.2	6.3
MS-422	nd	11	15	62	0.8	10	0.3	-
MS-423	nd	3	10	58	0.4	10	nd	5.8
MS-424	37	8	27	200	1.7	50	nd	-

Discussion:

Three claim blocks 2000 m. south, called the "Vama" group, are owned by Imperial Oil. One claim lies on the opposite side of Bowron River. MS-417 is moderately anomalous in Mo but weak in other elements. The site is within Triassic-Jurassic terrain. Adjacent sample sites 500 m. and 600 m. away show no anomalous values and others from the same drainage area do not indicate the presence of economic minerals. No further checking is necessary for this area.

MS-424 is highly anomalous (37 ppm) in Mo, slightly to moderately anomalous (200 ppm) in Zn, and slightly anomalous (50 ppm) in Au. The site is within Mississippian-Triassic terrain. The nearest sample site MS-423, 1100 m. to the south, show negative geochem results. No samples were taken northward as no drainages were observed. Although it is an isolated geochemically anomalous site, the value of 37 ppm Mo with accompanying increases in zinc and gold, should warrant further sampling. A reconnaissance soil survey is proposed.

* Vancheochem Lab. corrected.

** MS-416 to MS-421 One drainage area

MS-422 to MS-424 Second drainage area

6. Area: Map Area 93H/13W, Hutton. Tsus Creek, south of Bowron River coal area.
- Location: 53°47.5' Lat./121°50' Long.
- Sample Site: MS-476 is on Tsus Creek, 5 m. wide by 10 cm. deep, and flows north into Bowron River. Tsus Creek shows a gradient of about 1° at the sample site but the flood channel accomodates a large volume of run-off water.
- Assays: Sample assayed 490 ppb Au but very low in the other elements tested.

Discussion:

The creek bed contains much fine gravel and sand; composing of quartzite, f.g. green stone with pyrite, diorite, basic f.g. volcanics, granite, conglomerate, and chert. A sample, MS-478 was taken 2.4 km. upstream but assayed only 10 ppb Au.

Further silt sampling along Tsus Creek and its tributaries, upstream to sample site MS-478, is recommended.

7. Area: Map Area 93H/5E, Stony Lake. Eighteen Mile Creek north.
- Location: 53°28' Lat./121°36' Long.
- Sample Site: MS-522 is on a 130 cm. wide by 0.5 cm. deep stream, flowing at a 2° gradient easterly towards Bowron River. The channel doubles in width during run-off periods.
- Assays: Sample assayed 150 ppb Au but very low in other elements tested. PH is 6.

Discussion:

The stream bed contains greenstone, diorite, gabbro, quartzite, and pillow lavas (?). No gold was detected at a smaller stream 600 m.

south. There are no drainages northward for 2700 metres. It is proposed that the site be re-checked and additional sampling of the stream be conducted during the trip to check location #6.

8. Area: 93H/12E, Narrow Lake. Bowron River East/Haggen Creek north.

Location: 53°35' Lat./121°38' Long.

Sample

Sites: MS-557 is on a small S 30° W drainage to Bowron River, 6 cm. wide by 1 cm. deep, with a gradient of 250. The flow was down to a trickle in late summer. MS-558, located 750 m. south and 15 m from the Bowron River, is on a 120 cm. wide by 5 cm. deep creek, with a gradient of 1 degree. PH is 6.3.

Assays:

<u>Sample</u> <u>Marking</u>	<u>Mo</u> <u>ppm</u>	<u>Cu</u> <u>ppm</u>	<u>Pb</u> <u>ppm</u>	<u>Ag</u> <u>bg/c</u> <u>ppm</u>	<u>Zn</u> <u>ppm</u>	<u>Au</u> <u>ppb</u>	<u>PH</u>
MS-553	1	28	20	0.1	80	10	6.5
MS-554	nd	33	19	0.1	73	nd	-
MS-555	3	58	23	0.1	145	10	6.5
MS-556	1	18	9	nd	41	nd	6.4
MS-557	6	35	18	0.2	115	20	-
MS-558	7	49	30	nd	113	10	6.3

Discussion:

At site MS-558, the stream bed contains mainly quartzite and basalt, also volcanic breccia and sandstone. At the Forestry camp site on Haggen Creek, about 400 m. SE of MS-550, near its junction with Bowron River, the rock cuts show sheared, rusty and altered basaltic rocks.

Shale is exposed on road cuts 200 m. north of MS-557, and also at about 1000 m. SE of MS-557 on the opposite side of Bowron River.

A 16-unit claim block straddles the road, located 5000 m. NW of MS-557, but 4 silt samples collected across the property showed only one slightly anomalous element, (6 ppm Mo).

The 6 ppm and 7 ppm Mo assays accompanied by slight increases in zinc content from samples MS-557 and 558 are interpreted to be caused by a weakly mineralized zone. No further work is proposed.

A handwritten signature in black ink, appearing to be "J. E. ...", located in the lower right quadrant of the page.