

PRELIMINARY GEOLOGICAL & GEOCHEMICAL REPORT

ON THE BLUE 1 TO 4 CLAIM GROUP

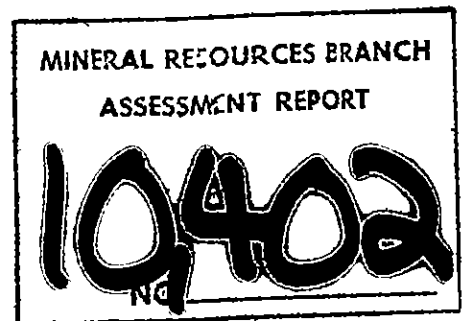
LIARD N.D.; 1040/9E, 104P/5W, 12W  
59° 31' N; 129° 59' W  
FOR

REGIONAL RESOURCES LTD.

Vancouver  
British Columbia

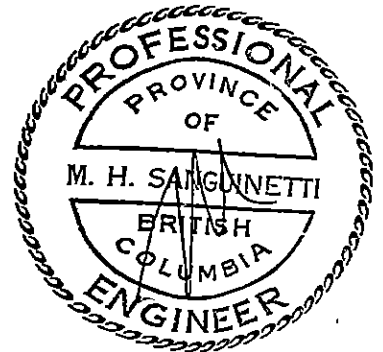
BY

Carl G. Verley, B.Sc.  
Geologist



Supervised by  
Michael H. Sanguinetti, P.Eng.  
Geologist

CORDILLERAN ENGINEERING  
1418-355 Burrard Street  
Vancouver, B.C. V6C 2G8



December 18, 1981

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<b>CLAIMS</b>	Blue #1 to 4 Record Numbers 2013(8) to 2016(8) inclusive
<b>EXPIRY DATE</b>	August 18, 1982
<b>LOCATION</b>	39 km (24 miles) North of Cassiar, B.C.
<b>WORK PERIOD</b>	August 10 to September 30, 1981

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### PLATES

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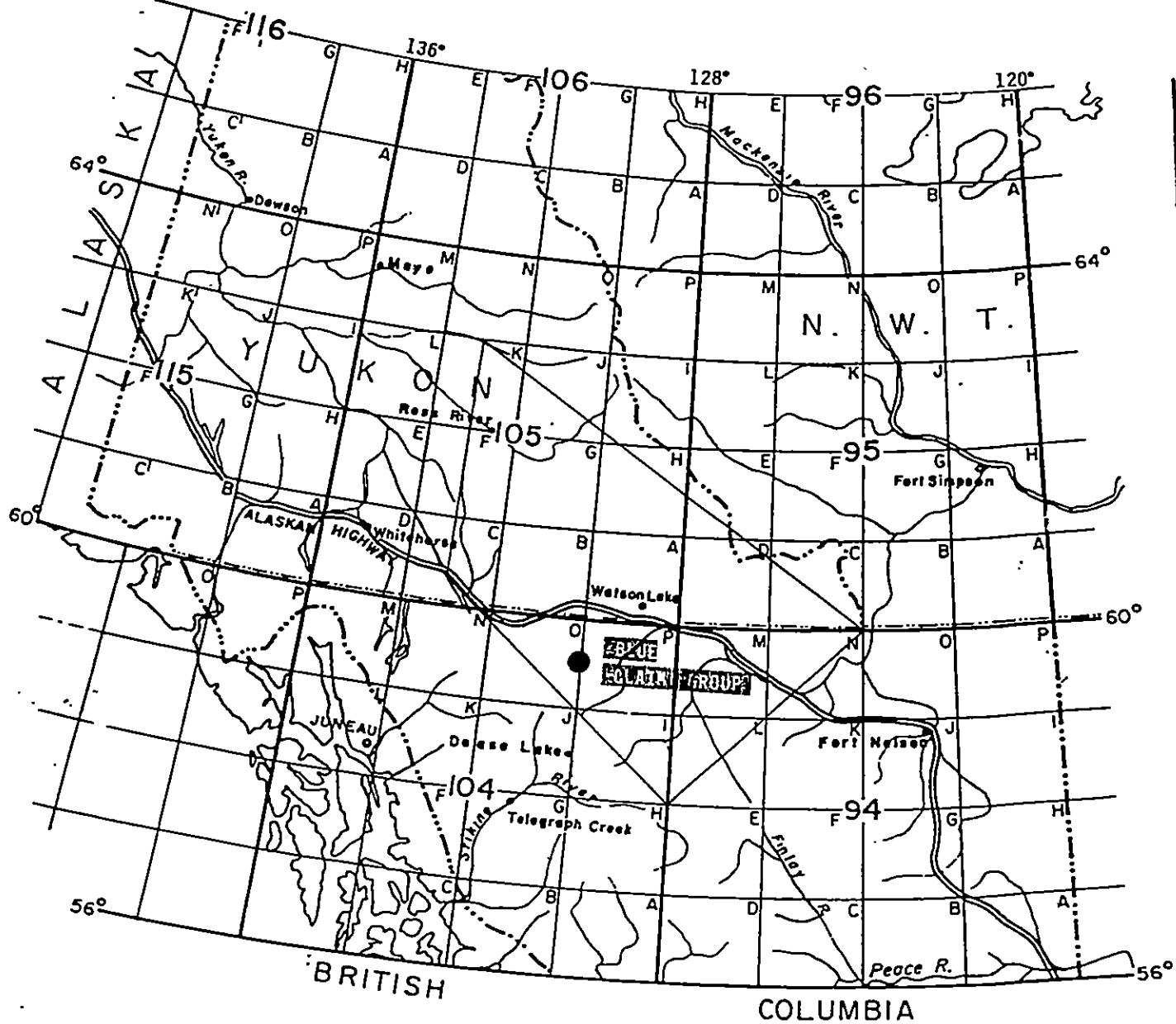
I N T R O D U C T I O N

1.

## I N T R O D U C T I O N

The Blue property is situated 39 kilometres (24 miles) north of Cassiar, British Columbia in the Liard Mining Division (Figure 1). It represents a new lead-zinc-silver massive sulphide discovery. In August, 1981 Cordilleran Engineering acquired 4 claims (63 units, Figure 2) for Regional Resources Ltd. The property is situated at latitude  $59^{\circ}32'N$  and longitude  $130^{\circ}00'W$ . It lies 13 kilometres (8 miles) from a gravel road off the Stewart-Cassiar Highway.

The claims are underlain by a Devono-Mississippian sequence of sediments which host lead-zinc-silver massive sulphide mineralization. The similarity of mineralization, sedimentary environment and geological age to deposits located on the Midway property, the Macmillan Pass area to the north as well as the Gataga River area to the south suggests that there is excellent potential for locating economic lead-zinc-silver mineralization on the Blue. Further work is strongly recommended.



REGIONAL RESOURCES LTD.  
 LOCATION MAP  
 BLUE 1 TO 4 CLAIM GROUP

Liard Mining Division  
 Cassiar Area, British Columbia

SCALE: 1" = 125 MILES

BY

CORDILLERAN ENGINEERING  
 1418 - 355 BURRARD STREET  
 VANCOUVER, B.C. V6C 2G8

December, 1981

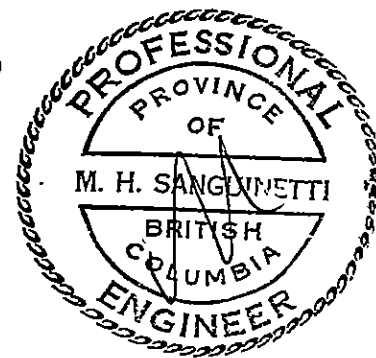


FIGURE 1

C L A I M S

2.

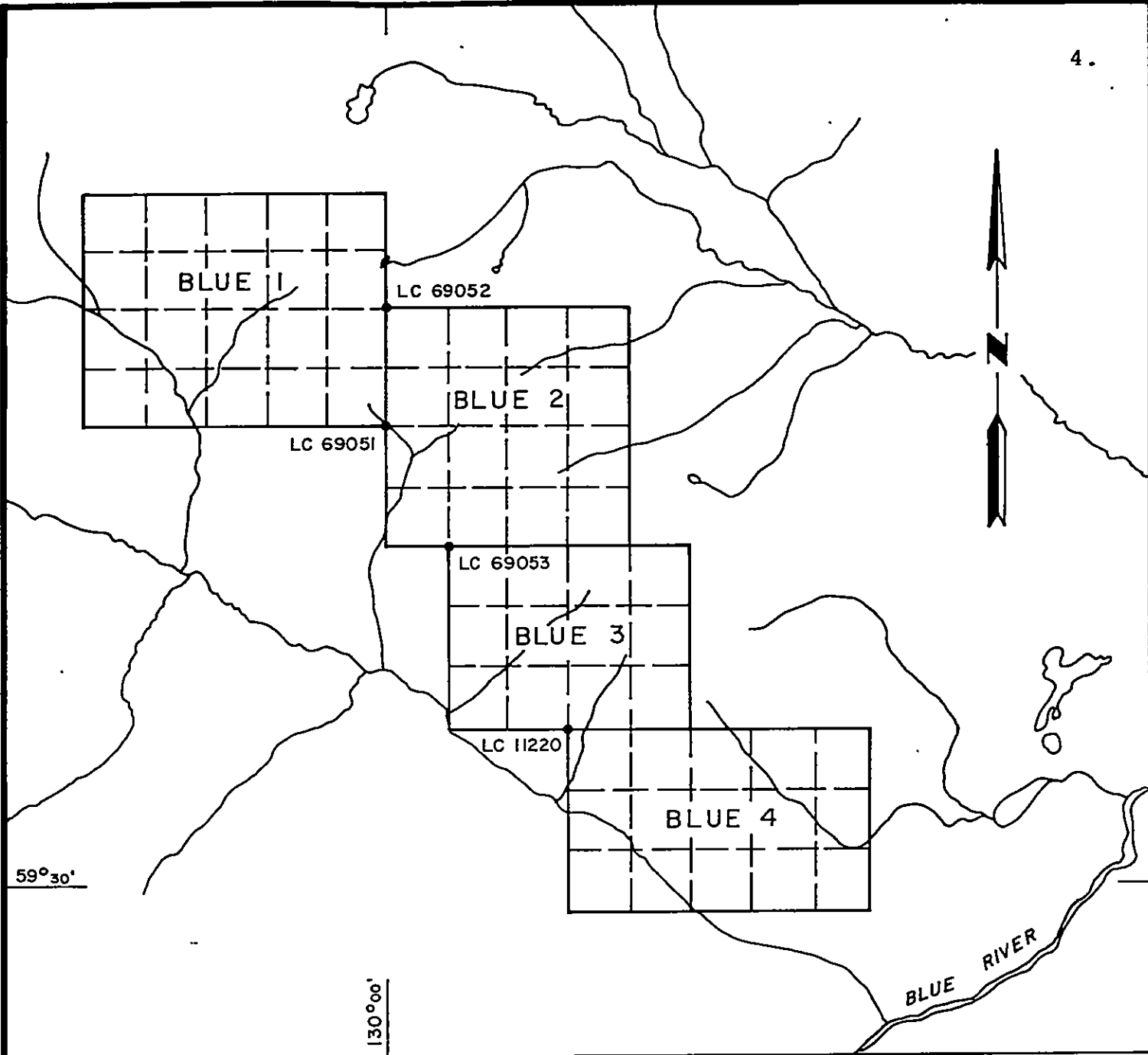
## C L A I M S

The Blue property (Figure 2) consists of 63 units in four mineral claims in the Liard Mining Division as noted in Table I.

TABLE I  
CLAIM DATA

<u>CLAIM</u>	<u>RECORD NO.</u>	<u>NO. OF UNITS</u>	<u>EXPIRY DATE</u>
Blue 1	2013 (8)	20	18 August, 1982
Blue 2	2014 (8)	16	18 August, 1982
Blue 3	2015 (8)	12	18 August, 1982
Blue 4	2016 (8)	<u>15</u>	18 August, 1982
		63 Units	

Title to the claims is held by J. W. Stollery. A program of mapping, soil sampling and prospecting was conducted after the property was staked. This work will be applied for assessment.



REGIONAL RESOURCES LTD.

# CLAIM MAP

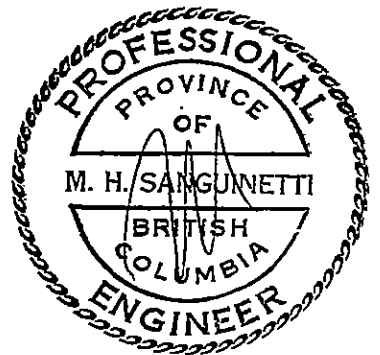
## BLUE PROPERTY

LIARD MINING DIVISION, B.C.  
N.T.S. 104 O/9, 104 P/5,12

SCALE: 1:50,000

BY

CORDILLERAN ENGINEERING  
1418 - 355 BARRARD STREET  
VANCOUVER, B.C. V6C 2G8





G E O L O G Y

STRATIGRAPHY  
INTRUSIVE ROCKS  
STRUCTURE

3.

## G E O L O G Y

(Plate 1)

The Blue property is situated in the Stikine Ranges of the Cassiar Mountains. The claims lie on the belt of Middle Devonian to Upper Devonian sediments which occur between the Cassiar Batholith to the west and intermediate to basic volcanic rocks of the Upper Sylvester Group oceanic complex to the east.

The property covers predominantly alpine ground where there is generally poor exposure of the recessive shales which host mineralization.

GEOLOGY (cont'd)STRATIGRAPHY

Preliminary mapping indicates that the sedimentary succession can be subdivided into the following units (Figure 3):

**MCDAME** Middle Devonian<sup>D</sup><sub>M</sub>L McDame Limestone

This unit consists of thin-bedded, medium to finely crystalline, fetid, medium to dark grey limestone. The limestone is locally fossiliferous (crinoidal). Quartzite and argillite members occur within (or below?) the limestone sequence and have not been differentiated by the present mapping. The contact between the McDame and overlying units is not well exposed, but is presumed to be conformable. Gossanous zones occur at several locations along this contact.

**LOWER SYLVESTER** Upper Devonian<sup>D</sup><sub>U</sub>1 Argillite

A sequence of relatively coarse sediments forms at least one coarsening upward cycle at the base of this unit. Coarse sandstones exhibiting graded bedding (to three feet thick) and debris flows occur in the upper part of the cycle. Overlying this are sand and silt laminated argillites. Sand laminations are typically calcareous (calcareenites? or calcite cement?). The estimated thickness of this sequence is 300 metres.

<sup>D</sup><sub>U</sub>2 Exhalite

This unit hosts the lead-zinc-silver mineralization located on the Blue property. It consists of at least three interbedded exhalite horizons, which are very fine grained (cryptocrystalline), pyritic and baritic, light to medium grey, orange weathering chert. They contain fine-grained, pale yellowish to mauve sphalerite, disseminated in aggregates or in clusters (West Showing). Galena is less common except at the Discovery Showing where exhalite hosts massive lead-zinc mineralization. The individual exhalite beds range from about a metre in thickness to several tens of metres

## GEOLOGY - Stratigraphy (cont'd)

at the West Showing, where it appears that several beds coalesce to form one thick interval. Exhalites are interbedded with black chert (silicified argillite?) and carbonaceous argillite with relatively few sand laminations. In some localities a distinct increase in quartz veining is noticeable below the exhalite horizons (feeder zones?). The lower and upper contacts of this unit are defined as the base of the lowest exhalite, and the top of the highest exhalite. These contacts are considered normal. Estimated thickness of  $U^D_2$  is up to 300 metres although the sequence appears to thin to 20 metres west of the Discovery Showing.

### $U^D_3$ Argillite

This unit consists of silt and sand laminated argillite. Sand bands are relatively abundant (>5%) and appear to consist of both parallel and ripple laminated types. The upper fifty feet of this sequence is typically sheared exhibiting a well developed flaser structure with sand bands as augen. In view of this shearing the upper contact is believed to be a thrust fault. The thickness of the unit appears to vary from 20 to 150 metres, probably due to fault displacement of the upper portion.

## **UPPER SYLVESTER** Devonian-Mississippian

### $DM_V$ Devonian-Mississippian Volcanics

A sequence of intercalated intermediate to basic volcanic, pyroclastics and shale in excess of 500 metres thick forms the top of the stratigraphic succession on the Blue property. Lenses(?) of ultramafic rocks are common, but undifferentiated by mapping. This entire unit is thought to be an allochthonous oceanic volcanic complex.

# PRELIMINARY STRATIGRAPHY BLUE CLAIM GROUP

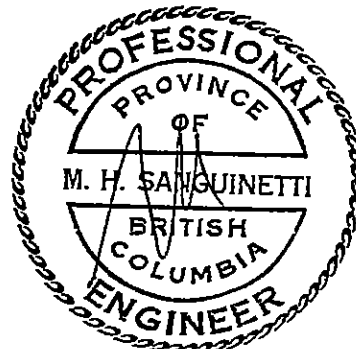
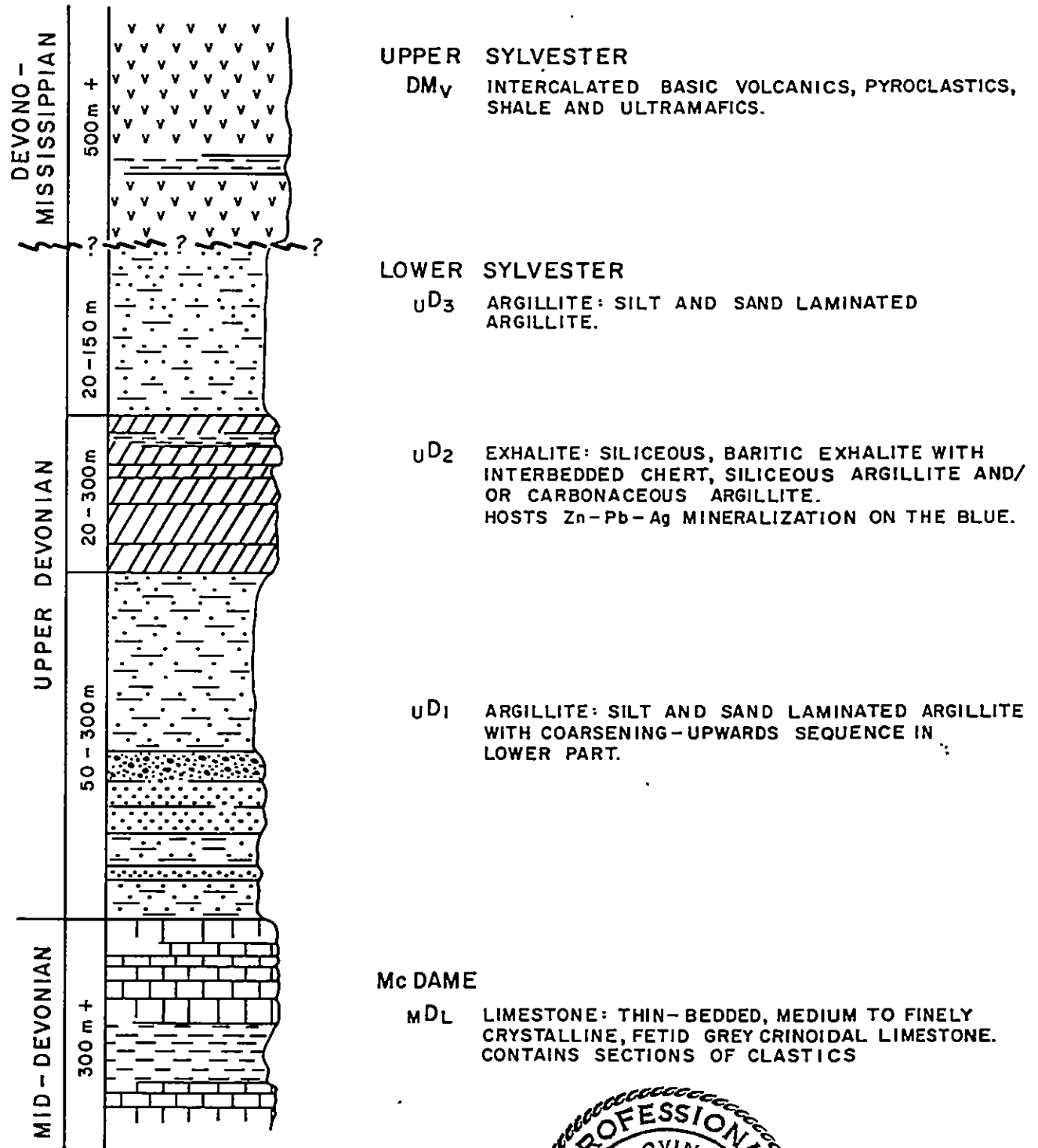


FIGURE 3

GEOLOGY (cont'd)INTRUSIVE ROCKSKQM CASSIAR BATHOLITH

The Cassiar Batholith lies immediately west of the property. This intrusive consists of medium-grained biotite quartz monzonite in the vicinity of the Blue. The effect of this intrusive is a local contact development of two to three percent pyrrhotite and pyrite in the argillites.

STRUCTURE

The sediments on the Blue property occur in a moderate to steep northeasterly dipping belt that extends for nine kilometres across the property. Numerous shear zones occur in the argillites but movement along these appears to be minimal. At the northwest end of the claims the sedimentary units bend northward where they abut the Cassiar Batholith.

4.

## MINERALIZATION

Mineralization on the Blue property is hosted by a unit of baritic, siliceous exhalite which extends for a strike length of nine kilometres across the property. Pyrite is a ubiquitous component of the light grey, orange weathering exhalite. The persistence of this mineral throughout the exhalite indicates the extent of the sulphide depositional environment and indicates the limits of a basin which has potential for hosting massive sulphide bodies.

Two modes of occurrence for lead and zinc are found on the Blue. At the Discovery Showing subcrop of massive galena-sphalerite-barite (Table II) occurs in a creek bank adjacent to pyritic, baritic, siliceous exhalite. It is believed that this material represents a mineralized horizon weathered in place. A thick (2 metre+) ferricrete fan in the creek extends for approximately 60 metres upstream from this occurrence. The ferricrete fan is similar to and reminiscent of that found in

MINERALIZATION (cont'd)

the creek draining massive sulphide exposures on the Tom property, Macmillan Pass, Y.T. It indicates that mineralization may be located above the Discovery Showing but is not presently exposed.

The second mode of occurrence is noted at the West Showing where sphalerite and minor galena are disseminated in pyritic, baritic, siliceous exhalite. The occurrence may be fringing a higher grade potentially economic body of zinc-lead-silver mineralization.

Located on the southeastern extremity of the Blue property are two swamps, one containing ferricrete and one hydrozincite. These hydromorphic accumulations are indicative of local mineralization. The hydrozincite swamp may have developed from mineralization located at the McDame-Lower Sylvester contact. The ferricrete appears to be distinct and unrelated to the hydrozincite and may reflect mineralization in an upper exhalite.

TABLE II  
ASSAY DATA - BLUE CLAIM GROUP

<u>Sample Number</u>	<u>Cu %</u>	<u>Pb %</u>	<u>Zn %</u>	<u>Ba %</u>	<u>Ag oz/t</u>	<u>Au oz/t</u>	<u>Remarks</u>
7033	-	32.54	15.30	15.0	0.50	-	Discovery Showing: selected grab sample
7034	-	0.75	0.45	3.4	0.28	-	Siliceous exhalite
7035	-	0.67	0.79	6.3	1.16	-	Siliceous exhalite
7036	-	0.42	0.37	5.6	0.09	-	Siliceous, pyritic exhalite
7037	-	0.08	4.85	-	0.04	-	West Showing: siliceous, mineralized exhalite
7038	-	0.02	6.75	-	<0.02	-	West Showing: siliceous, mineralized exhalite
7039	-	0.08	0.40	-	0.04	-	West Showing: argillite below exhalite
7051	0.01	0.02	1.27	1.97	0.02	0.002	West Showing: siliceous, mineralized exhalite
7052	0.01	0.02	<0.01	3.99	0.05	0.002	West Showing: black chert
7053	<0.01	0.03	3.53	3.21	0.02	0.002	West Showing: siliceous, mineralized exhalite



GEOCHEMISTRY

5.

## G E O C H E M I S T R Y

Preliminary geochemical sampling was conducted on the Blue group in order to locate and define the mineralized exhalite horizons. A total of 25 soil and 19 stream sediment samples in addition to 15 rock samples were collected for analysis. Six talus fines collected are noted as stream sediments. The results of this sampling are listed on Table III. The locations of stream sediment, soil, rock in addition to the assay samples are plotted on Plate 1.

Soil samples were collected from the B horizon where present, stream sediments were taken from the active part of the channel, talus fines were representative of the material present and the rock chips were from fresh material whenever possible. Each site was marked with flagging and notes were made describing location and material collected. All samples were placed in numbered kraft envelopes and shipped for analysis to the North Vancouver laboratory of Bondar Clegg and Company, Ltd. Analysis for copper, lead, zinc and silver were by  $\text{HNO}_3$ -HCl hot extraction

GEOCHEMISTRY (cont'd)

atomic absorption method. Gold analysis was by aqua regia extraction and fire assay atomic absorption and barium analysis was by X-ray fluorescence.

These geochemical results indicate that the showings are outlined by moderate to strong stream sediment anomalies. Soils taken eastward from the Discovery Showing suggest, with increasing Pb, Zn and Ag values, that mineralization persists in the exhalite for at least 800 metres to the east. Rock Samples establish the baritic nature and high lead-zinc-silver background of the exhalite.

GEOCHEMISTRY (cont'd)

TABLE III (Refer to PLATE 1 for locations)  
SOIL, STREAM SEDIMENT & ROCK GEOCHEMISTRY - BLUE CLAIM GROUP

<u>Sample No.</u>	<u>Cu ppm</u>	<u>Pb ppm</u>	<u>Zn ppm</u>	<u>Ag ppm</u>	<u>Au ppb</u>	<u>Ba ppm</u>
<b>SOILS</b>						
1	-	29	205	0.4	-	2850
2	-	36	345	0.2	-	2670
3	-	15	155	0.2	-	2450
4	-	14	152	0.2	-	2140
5	-	19	137	0.2	-	2080
6	-	54	239	0.3	-	2840
7	-	63	157	0.2	-	3010
8	-	181	135	1.0	-	4040
9	-	82	157	0.2	-	3700
10	-	56	148	0.4	-	3520
11	-	12	171	0.3	-	1610
12	-	23	201	0.8	-	2140
13	-	41	169	1.0	-	2380
14	-	262	201	0.9	-	4740
15	-	37	269	0.3	-	3100
16	-	129	261	0.6	-	5160
17	-	266	156	1.2	-	6360
18	-	19	172	0.4	-	2160
19	-	27	188	2.5	-	2530
20	-	42	188	1.6	-	2080
21	-	130	156	1.0	-	6660
22	-	151	222	1.3	-	8430
23	-	193	155	1.2	-	7630
24	-	35	222	1.2	-	1930
25	-	38	112	1.8	-	2640
<b>STREAMS</b>						
Y783	49	23	445	0.2	-	2850
Y787	68	24	640	0.8	-	1660
Y788	220	50	785	0.2	-	1530
Y789	70	82	1060	0.4	-	4820
Y789W1*	-	28	164	0.7	-	4220
Y789W2*	-	14	129	0.5	-	6500
Y789W3*	-	193	905	0.3	-	4490
Y789W4*	-	450	91	1.7	-	17640
Y789W5*	-	93	257	0.2	-	4920
Y789W6*	-	39	255	0.2	-	2750
Y790	57	18	1935	0.2	-	3720
Y791	54	16	385	0.2	-	4770
Y792	77	32	725	0.8	-	2360
Y793	70	42	670	0.7	-	1410
Y794	100	88	1595	0.2	-	7000
Y795	12	28	154	0.2	-	700
Y796	50	20	305	0.2	-	2900
Y797	55	48	760	0.2	-	4070
BLU-2S	.4	8	>20000 (2.49%)	0.2	15	740

\*W series - talus fines

GEOCHEMISTRY (cont'd)TABLE III (cont'd) (Refer to PLATE 1 for locations)

<u>Sample No.</u>	<u>Cu ppm</u>	<u>Pb ppm</u>	<u>Zn ppm</u>	<u>Ag ppm</u>	<u>Au ppb</u>	<u>Ba ppm</u>	<u>Remarks</u>
<b>ROCKS</b>							
Y789 RB-1	-	5	5	0.2	-	-	Float - pyritic, siliceous, carbonaceous argillite
Y789 RB-2	-	44	31	0.7	-	4.6%	Talus - barite-spotted, pyritic exhalite
Y796 RB-1	-	57	13	2.3	-	-	o/c - pyritic, carbonaceous argillite
BLU - 4R	63	1200	280	4.0	25	5590	Dark grey chert with gossanous quartz stringers
BLU - 5R	87	47	1220	1.0	5	2350	Carbonaceous argillite
BLU - 6R	270	41	1510	1.4	5	2050	Gossanous band below exhalite
BLU - 9R	39	51	45	6.3	15	8650	Clayey exhalite?
BLU -10R	5	16	12	2.0	15	9170	Gossanous argillite
BLU -11R	15	14	25	4.7	10	4430	Gossanous argillite
BLU -12R	92	13	40	2.4	5	1620	Gossanous cap on exhalite
BLU -13R	26	12	120	0.4	15	1130	Gossanous carbonaceous argillite
BLU -14R	44	16	80	0.3	ND	940	Gossanous carbonaceous argillite
BLU -15R	21	57	1220	0.3	ND	>20000	Siliceous exhalite
BLU -17R	27	88	107	1.5	5	1830	Siliceous black argillite
BLU -20R	39	2	71	0.9	10	>20000	Siliceous exhalite

EVALUATION

6.

## EVALUATION

Lead-zinc-silver mineralization on the Blue property is considered to be of the stratiform, shale-hosted type. The claims cover a sedimentary succession that is the same age and of a similar depositional environment to that on the Midway property as well as the Tom and Jason deposits, Macmillan Pass, Y.T. and the Cirque deposit at Gataga River, B.C.

The highly significant lead-zinc-silver mineralization found at the Discovery Showing (32.54% Pb, 15.30% Zn, 0.50 oz/ton Ag) indicates that potentially economic grades exist on the Blue. Mineralization at the West Showing and hydromorphic zinc on the southeast end of the property are favourable indications that additional lead-zinc mineralization may lie along strike. The strike length (8 km) of the exhalite horizon indicates the areal extent along which multiple lead-zinc-silver occurrences may lie. These features suggest that further exploration has a high probability of locating economic lead-zinc-silver mineralization on the Blue property.

S U M M A R Y   A N D   C O N C L U S I O N S



## 7. SUMMARY AND CONCLUSIONS

The Blue property consists of four mineral claims (63 units) located in the Liard Mining Division, 39 kilometres north of Cassiar, British Columbia. The claims were acquired for Regional Resources Ltd. by Cordilleran Engineering and are registered in the name of J. W. Stollery.

Work conducted on the claims consisted of geological mapping, prospecting and soil sampling.

Stratiform lead-zinc-silver mineralization is located on the property in a pyritic, baritic, siliceous exhalite. The exhalite is within Upper Devonian Lower Sylvester Group sediments. The Lower Sylvester is bounded above by possibly allochthonous oceanic volcanics (Upper Sylvester) and below by carbonates of the McDame Formation.

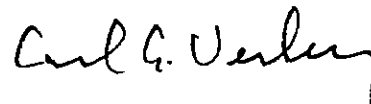
Grab samples of lead-zinc-silver mineralization

SUMMARY AND CONCLUSIONS (cont'd)

from the Discovery Showing assay 32.54% Pb, 15.30% Zn and 0.50 oz/ton Ag. This mineralization has definite economic potential. Further work is strongly recommended.

Respectfully submitted

CORDILLERAN ENGINEERING



Carl G. Verley, B.Sc., Geologist



Michael H. Sanguinetti, P.Eng.,  
Geologist

CGV;MHS/z

December, 1981

APPENDIX "A"

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

DOMINION OF CANADA: }  
 PROVINCE OF BRITISH COLUMBIA. }  
 To Wit: }

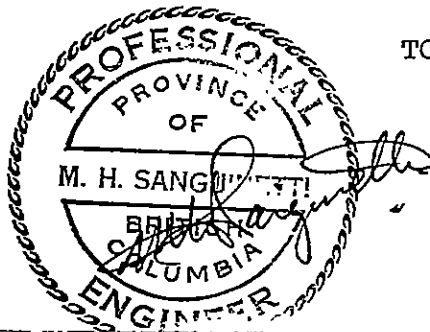
in the Province of geological mapping and  
 reconnaissance geochemistry on the Blue  
 #1 to 4 inclusive mineral claims.

I, MICHAEL H. SANGUINETTI, agent for JOHN W. STOLLERY  
 of 1418 - 355 Burrard Street, Vancouver,

in the Province of British Columbia, do solemnly declare that a program of geological mapping  
 (1:10,000) combined with preliminary geochemical sampling (69 samples)  
 was conducted on the Blue #1 to 4 (inclusive) mineral claims in the  
 Liard Mining Division during the period August 19<sup>th</sup> to September 30<sup>th</sup>,  
 1981. The following expenses were incurred in this work and in the  
 later preparation of the report:

Payroll (Verley, Balon, Rowe, Tindle, Ewen) .....	\$3,096.00
Management Fees (Cordilleran Engineering) .....	2,170.00
Drafting, printing .....	1,032.19
Assays (10 samples) .....	204.00
Geochemical analyses (59 samples) .....	549.65
Helicopter (Northern Mountain - 13.1 hours .....	4,912.50
Fuel (1375.5 L. @ \$0.477) .....	656.11
Camp supplies, food, accomodation (19 mandays @ \$13.25/md) .....	251.75
Supervision, Report preparation (M. Sanguinetti, P.Eng. 7 days @ \$350/d) .....	2,450.00

TOTAL: \$15,322.20



APPENDIX "B"

PERSONNEL

PERSONNEL

The following personnel worked on the Blue 1 to 4 claim group or were engaged in the report preparation:

C.G. Verley, B.Sc. Geologist	301 - 1867 West 3rd Avenue, Vancouver, B.C.
- Mapper, Sampler, Report Preparation	
E.A. Balon Mining Technician (Haileybury)	1418 - 355 Burrard Street, Vancouver, B.C.
- Sampler, Prospector	
J.D. Rowe, B.Sc. Geologist	1418 - 355 Burrard Street, Vancouver, B.C.
- Mapper	
H.E. Ewen Mining Technician (Haileybury)	3239 Ganymede Drive, Burnaby, B.C.
- Sampler, Prospector	
J.L. Tindle	General Delivery Whistler, B.C.
- Sampler	
M.H. Sanguinetti, P.Eng. Geologist	1418 - 355 Burrard Street, Vancouver, B.C.
- Supervisor, Report Preparation	

<u>NAME</u>	<u>PERIOD WORKED</u>	<u>DAYS</u>	<u>RATE</u>	<u>TOTAL SALARY</u>
C.G. Verley	Aug.19-Dec.18, 1981	14	\$132/day	\$1848.00
E.A. Balon	Aug 19-Sept.30, 1981	5	\$120/day	\$ 600.00
J.D. Rowe	Aug 19-Sept.30, 1981	2	\$132/day	\$ 264.00
H.E. Ewen	Aug 19-Sept.30, 1981	2	\$ 96/day	\$ 192.00
J.L. Tindle	Aug 19-Sept.30, 1981	2	\$ 96/day	\$ 192.00
M.H. Sanguinetti	Sept.22-Dec.18, 1981	7	\$350/day	\$2450.00

APPENDIX "C"

CERTIFICATES

WRITER'S: Carl G. Verley, B.Sc., Geologist

SUPERVISOR'S: Michael H. Sanguinetti, B.Sc., P.Eng.  
Geologist

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**CORDILLERAN ENGINEERING**

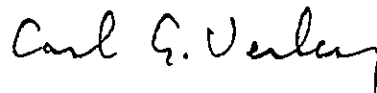
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1418 MARINE BUILDING, 355 BURRARD STREET, VANCOUVER, BRITISH COLUMBIA V6C 2G8 TEL: (604) 681-8381

**WRITER'S CERTIFICATE**

I, Carl G. Verley of Vancouver, British Columbia hereby certify that:

1. I am a geologist residing at 301-1867 West 3rd Avenue, and employed by Cordilleran Engineering of 1418-355 Burrard Street, Vancouver, B.C. V6C 2G8
2. I am a graduate of the University of British Columbia, B.Sc., in 1974, and have practiced my profession since that time.
3. I am an Engineering Pupil with the Association of Professional Engineers of the Province of British Columbia.
4. I am the author of this report which is based on work conducted on the Blue #1-4 mineral claims during the period September 21 to September 30, 1981. This work included geological mapping and geochemical sampling, undertaken on behalf of Regional Resources Ltd.

**CORDILLERAN ENGINEERING**

Carl G. Verley, B.Sc.,  
Geologist

CGV/z  
December 18, 1981  
Vancouver, B.C.



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**CORDILLERAN ENGINEERING**

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1418 MARINE BUILDING, 355 BURRARD STREET, VANCOUVER, BRITISH COLUMBIA V6C 2G8 TEL: (604) 681-8381

**SUPERVISOR'S CERTIFICATE**

I, Michael H. Sanguinetti of Vancouver, British Columbia hereby certify that:

1. I am a geologist residing at 2208 West 35th Avenue, and employed by Cordilleran Engineering of 1418-355 Burrard Street, Vancouver, British Columbia.
2. I am a graduate of the University of British Columbia, B.Sc., in 1965, and have practiced my profession since that time.
3. I am a member of the Association of Professional Engineers of the Province of British Columbia.
4. I supervised the writing of this report which is based on the results of a field program conducted by Cordilleran Engineering during August-September, 1981.



CORDILLERAN ENGINEERING

A handwritten signature in cursive script, appearing to read "M. H. Sanguinetti".

Michael H. Sanguinetti, B.Sc., P.Eng.,  
Geologist

MHS/z

December 18, 1981  
Vancouver, B.C.

APPENDIX "D"

REFERENCES

REFERENCESDIAKOW, L.J., and PANTELEYEV, A.:

- 1981: Cassiar Gold Deposits, McDame Map-Area (104P/4,5), B.C. Ministry of Energy, Mines & Pet.Res., Geological Fieldwork, 1980, Paper 1981-1, pp.55-62.

GABRIELSE, H.:

- 1963: McDame Map-Area, Cassiar District, British Columbia, G.S.C. Mem.319.
- 1969: Geology of the Jennings River Map-Area, British Columbia (104-O), G.S.C. Paper 68-55.
- 1978: Geology of Cry Lake (104-I) Map-Area, G.S.C. Open File 610, Geological Map, 1:125,000.

PANTELEYEV, A.:

- 1979: Cassiar Map-Area (104-P), B.C. Ministry of Energy, Mines & Pet.Res., Geological Fieldwork, 1978, Paper 1979-1, pp.51-60.
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APPENDIX "E"

ASSAY AND ANALYSIS CERTIFICATES

Bondar-Clegg & Company Ltd.  
130 Pemberton Avenue  
North Vancouver, B.C. V7P 2R5



# Geochemical Lab Report

REPORT: 101-0079

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Pb PPM	Zn PPM	As PPM	Ba PPM
BLU-01		29	205	0.4	2850
BLU-02		36	345	0.2	2670
BLU-03		15	155	0.2	2450
BLU-04		14	152	0.2	2140
BLU-05		19	137	0.2	2080
BLU-06		54	239	0.3	2840
BLU-07		63	157	0.2	3010
BLU-08		181	135	1.0	4040
BLU-09		82	157	0.2	3700
BLU-10		56	148	0.4	3520
BLU-11		12	171	0.3	1610
BLU-12		23	201	0.8	2140
BLU-13		41	169	1.0	2380
BLU-14		262	201	0.9	4740
BLU-15		37	269	0.3	3100
BLU-16		129	261	0.6	5160
BLU-17		266	156	1.2	6360
BLU-18		19	172	0.4	2160
BLU-19		27	188	2.5	2530
BLU-20		42	188	1.6	2080
BLU-21		130	156	1.0	6660
BLU-22		151	222	1.3	8430
BLU-23		193	155	1.2	7630
BLU-24		35	222	1.2	1930
BLU-25		38	112	1.8	2640



# Geochemical Lab Report

REPORT: 121-3387

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Au PPM	Ba PPM
BLU-IS	SOIL	11	7	15400	0.2	35	1510
Y830-1			25	1050	3.5		2930
Y830-2			23	750	3.3		2570
BLU-4R		63	1200	280	4.0	25	5590
5R		87	47	1220	1.0	5	2350
6R		270	41	1510	1.4	5	2050
9R		39	51	45	6.3	15	8650
10R		5	16	12	2.0	15	9170
11R		15	14	25	4.7	10	4430
12R		92	13	40	2.4	5	1620
13R		26	12	120	0.4	15	1130
14R		44	16	80	0.3	ND	940
15R		21	57	1220	0.3	ND	>20000
17R		27	88	107	1.5	5	1830
20R		39	2	71	0.9	10	>20000
25		4	8	>20000	0.2	15	740
MR-1R		75	505	950	0.3	10	
2R		7	19	650	0.3	ND	



### Geochemical Lab Report

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ba PPM	NOTES
Y782-RB-1	RX		6	237	0.2		
Y789-RB-1			5	5	0.2		
Y796-RB-1			57	13	2.3		
Y-779	PULPS	42	7	90	0.2	1160	
Y-780		123	20	305	0.8	2040	
Y-781		28	20	200	0.2	950	
Y-782		9	15	91	0.2	520	
Y-783		49	23	445	0.2	2850	
Y-784		21	30	165	0.2	1740	
Y-785		23	10	261	0.2	980	
Y-786		18	16	168	0.2	1510	
Y-787		68	24	640	0.8	1660	
Y-788		220	50	785	0.2	1530	
Y-789		70	82	1060	0.4	4820	
Y-790		57	18	1935	0.2	3720	
Y-791		54	16	385	0.2	4770	
Y-792		77	32	725	0.8	2360	
Y-793		70	42	670	0.7	1410	
Y-794		100	88	1595	0.2	7000	
Y-795		12	28	154	0.2	700	
Y-796		50	20	305	0.2	2900	
Y-797		55	48	760	0.2	4070	
Y-798		29	7	81	0.2	610	
Y-799		44	12	154	0.2	620	
Y-800		25	6	79	0.2	550	
Y-801		99	20	145	0.7	3070	
Y-802		89	14	93	0.6	2580	
Y-803		104	10	123	0.2	3040	
Y-804		87	11	160	0.3	3540	
Y-805		31	5	48	0.2	410	



## Geochemical Lab Report

SAMPLE NUMBER	ELEMENT SITE	% REF.	NOTES
7030	ROD B	.20000	
7034		>20000	ed
7035		>20000	ed
7036		.20000	ed



# Geochemical Lab Report

REPORT: 121-2201

PAGE

SAMPLE NUMBER	ELEMENT UNITS	Pb PPM	Zn PPM	As PPM	Ba PPM	NOTES
Y-789RB-2	RX	44	31	0.7	>20000	6*
Y-789RB-W1	PULP	28	164	0.7	4220	
Y-789RB-W2		14	129	0.5	6500	
Y-789RB-W3		193	905	0.3	4490	
Y-789RB-W4		450	91	1.7	17640	
Y-789RB-W5		93	257	0.2	4920	
Y-789RB-W6		39	255	0.2	2750	

APPENDIX "E" V.

PAGE No. 1

BONDAR-CLEGG & COMPANY LTD.

DATE: November 18, 1981

1418 - 355 Burrard Street  
 Vancouver, B. C.  
 V6C 2G8

CERTIFICATE OF ASSAY

Samples submitted: November 2, 1981  
 Results completed: November 18, 1981  
 PROJECT: Regional

I hereby certify that the following are the results of assays made by us upon the herein described pulp samples.

MARKED SEE OUR GEOCHEM REPORT 121-3382	GOLD		SILVER		Zn						
	Ounces per Ton	Grams per Metric Ton	Ounces per Ton	Grams per Metric Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent
MLU - 25					2.49						

NOV 10

APPENDIX "E" vi.

NOTE:  
 Rejects retained three weeks  
 Pulps retained three months  
 unless otherwise arranged.

*[Signature]*  
 Registered Assayer, Province of British Columbia

1418 - 355 Burrard Street  
Vancouver, B. C. V6C 2G8

## CERTIFICATE OF ASSAY

PROJECT: REGIONAL SHIPMENT #12

I hereby certify that the following are the results of assays made by us upon the herein described..... rock..... samples.

MARKED	GOLD		SILVER		Pb	Zn	Cd				
	Ounces per Ton	Grams per Metric Ton	Ounces per Ton	Grams per Metric Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent
7033			0.50		32.54	15.30	0.04				
7034			0.28		0.75	0.45	-				
7035			1.16		0.67	0.79	-				
7036			0.09		0.42	0.37	-				
cc Mr. E. A. Balon	- Watson Lake										

## NOTE:

Rejects retained three weeks  
Pulps retained three months  
unless otherwise arranged.

1418 - 355 Burrard Street  
Vancouver, B.C.  
V6C 2G8

## CERTIFICATE OF ASSAY

Samples Submitted: August 7, 1981  
Results Completed: August 17, 1981

PROJECT: Regional Ship # 13

I hereby certify that the following are the results of assays made by us upon the herein described Rock samples.

MARKED	GOLD		SILVER		Pb	Zn					
	Ounces per Ton	Grams per Metric Ton	Ounces per Ton	Grams per Metric Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent
7037			0.04		0.08	4.85					
7038			<0.02		0.02	6.75					
7039			0.04		0.08	0.40					
7040			0.04		0.09	7.45					



## NOTE:

Rejects retained three weeks  
Pulps retained three months  
unless otherwise arranged.

CERTIFICATE OF ASSAY

PROJECT: REGIONAL

I hereby certify that the following are the results of assays made by us upon the herein described.....rock.....samples.

MARKED	GOLD		SILVER		Cu	Pb	Zn	Ba			
	Ounces per Ton	Grams per Metric Ton	Ounces per Ton	Grams per Metric Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent
WITH GEOCHEM REPORT # 121 - 3387											
7051	0.002		0.02		0.01	0.02	1.27	1.97			
7052	0.002		0.05		0.01	0.02	<0.01	3.99			
7053	0.002		0.02		<0.01	0.03	3.53	3.21			
cc Mr. C. Verley											

NOV 0

NOTE:  
 Rejects retained three weeks  
 Samples retained three months  
 otherwise arranged.

*[Signature]*  
 Registered Assayer, Province of British Columbia

APPENDIX "E" ix.

