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# Addendum to

Geological Report Dated December 15, 1969 on the property of

> ACACIA MINERAL DEVELOPMENT CORPORATION LTD. (N.P.L.)

49° 14' North Latitude 123° 7' West Longitude

Vancouver Mining Division British Columbia

WGG. STEVENSON & ASSOCIATES LTD.

### May 13, 1976

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### INTRODUCTION

During the period 1959 to 1969 I made examinations of a gold prospect located approximately 2 miles north east of the Daisy Lake dam 50 miles northerly from Vancouver.

My report dated December 15, 1969 provides a history and a description of the geology, property and title, recommendations for an exploration program and the estimated costs to implement the proposed program.

#### ADDENDUM

During the period 1970 to date Acacia Mineral Development corporation Ltd. retained the 20 mineral claims described in my report and staked an additional 50 mineral claims contiguous to the original claim blocks. Based on my examination of the records in the gold commissioners office in Vancouver these claims all appear to be valid.

During this same period roads have been constructed and the timber removed from most of the claim block.

In addition, Northair Mines Ltd. have made important mineral discoveries on their property 8 miles north of the subject claims and production is scheduled to commence during 1976.

### CONCLUSIONS

The assessmeatework accomplished over the past ten

W. G. STEVENSON & ASSOCIATES LIMITED CONSULTING GEOLOGISTS years on the Acacia claim block has not materially effected the conclusion recommendation and the proposed exploration program that accompanied my report of December 15, 1969.

The discovery and development of commercial mineralization eight miles northerly enhances the exploration potential of the ACACIA property.

In my judgement the exploration program proposed in my report of December 15, 1969 in the amount of \$39,600 is warranted.

Respectfully submitted

W.G. STEVENSON & ASSOCIATES LIMITED

W.G. Stevenson, P. Eng.

W. G. STEVENSON & ASSOCIATES LIMITED CONSULTING GEOLOGISTS

### CERTIFICATE

I, William G. Stevenson, DO HEREBY CERTIFY: 1. That I am a Consulting Geological Engineer with offices at Suite 609 Stock Exchange Building, 475 Howe Street, Vancouver 1, B.C.

2. That I am a graduate of the University of Utah. 1946, with a B.S. Degree.

3. That I am a registered Professional Engineer in the Association in British Columbia.

4. That I have practised my profession for 29 years.

5. That I have no direct, indirect or contingent interest in the F.F., Daisy, Ron, J or S Mineral claims nor in the securities of Acacia Mineral Development Corporation Ltd. (N.P.L.) nor do I intend to receive any interest.

6. That the report dated December 15, 1969, and this addendum dated May 14, 1976 is based on my examinations of the property made during 1959, 1966, 1968, and 1969.

DATED at Vancouver, B.C., the 14th day of May 1976.

W.G. STEVENSON & ASSOCIATES LIMITED Consulting Geologists

tevenson, P. Eng.

W. G. STEVENSON & ASSOCIATES LIMITED CONSULTING GEOLOGISTS

# GEOLOGICAL REPORT

on the property of

### ACACIA MINERAL DEVELOPMENT CORPORATION LTD. (N.P.L.)

49° 14' North Latitude 123° 7' West Longitude

Vancouver Mining Division

British Columbia

W.G.STEVENSON & ASSOCIATES LTD.

December 15, 1969.

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# APPENDIX

A	Index Map	Scale $1" = 100$ miles.
B	Geological Map	Scale $1'' = 1/2$ mile.
С	Geological Map	Scale 1" = 40 feet.
D	Tabulation of Data	pertaining to Mineral Claims.
E	Certificate of W.G.	Stevenson, P. Eng.

### INTRODUCTION

During 1959 I examined a gold prospect located 50 miles northerly from Vancouver near the border of Garibaldi Park. This property was held by Mr. Felix Letain, who accompanied me on this examination. Mr.Letain died a number of years ago and Mr.Francis Bull, Chilliwack, B.C., executor of his estate, restaked mineral claims to cover the known mineralization in this area.

During July, 1966, August, 1968, and October, 1969, in company with Mr.Bull, I have made examinations of this prospect. This report is based on information collected during these examinations, from a review of the published literature and from discussions with colleagues who are working in this area. It is designed to appraise the mineral potential of this property, to recommend means of testing this potential and to present a cost estimate for the proposed program of exploration.

### PROPERTY AND TITLE

The mineral claims held by Mr.Letain near Garibaldi Park were allowed to lapse. Mr.Bull has staked 2 blocks of mineral claims to cover the mineralization on the old Letain property.

I have reviewed the data pertaining to these mineral claims as shown on the records maintained by the B.C.Department of Mines and Petroleum Resources office in Vancouver. I have in addition examined a number of posts used to stake these mineral claims. The posts that I examined were the initial posts of the Daisy 1 and 2, the final posts of the Daisy 3 and 4; and the final post FF 9 and 10. These posts were proper size, squared at the top, metal tags properly inscribed were affixed and a well blazed line marked the position of the next set of posts.

I have attached a map marked Appendix B drawn to a scale of 1" = 1/2 mile to show the outline of the claims and their relative position. I have also attached, marked Appendix D, a tabulation of the data pertaining to these claims as shown in the B.C.Department of Mines Recorder's office.

As a result of my appraisal I believe these claims have been staked in accordance with the provisions of the Mineral Act of British Columbia and are valid.

### LOCATION AND ACCESS

These claims are located 50 miles northerly from Vancouver, B.C., approximately two miles northeast of the Daisy Lake Dam and about one-half mile westerly from the Garibaldi Park Boundary. They are positioned at 49°59' North Patitude and 123° 06' West Longitude.

The Pacific Great Eastern Railroad Station at Garibaldi is located three miles south-westerly from the claims, the port at Squamish is approximately 22 miles southerly. The northern block of mineral claims are located along a dozer trail leading from Daisy Lake into Garibaldi Park along Marble Creek. The southern block of mineral claims are accessible by a steep foot trail which extends easterly from Daisy Lake a distance of approximately one-half mile.

### HISTORY

Commencing about the turn of the Century, prospectors tested the streams in this area for placer gold, and as a result many mineral claims have been staked within a 15-mile radius of Daisy Lake.

Approximately 35 years ago Mr.Letain had a trap line east of the Cheakamus River into Garibaldi Park. While trapping in this area he prospected, put down trenches, and found gold. He eventually staked some 27 mineral claims.

A number of years ago New Jersey Zinc and other companies acquired mineral claims and are conducting exploration programs at the present time. These programs are designed to search for base metals.

The area immediately south was mapped by Dr.W.H. Mathews in 1946 and 1947. A reconnaissance map was published in Volume 69 of Geological Society of America. A geological map published in 1963 by the Geological Survey of Canada as 42 - 1963 extends north to 50° North Latitude.

#### GEOLOGY

This property is located near the southern extremity of the Coast Range Batholith, which at this latitude is 100 miles wide, and which can be traced northwesterly for several hundred miles into Alaska. The geological structures and lithology within the Coast Range Batholith are complex. A wide variety of volcanic and metamorphic rocks have been intruded by igneous rocks of infinite composition and texture.

Neither the Federal Geological Survey or the Provincial Department of Mines have mapped the area of the claim blocks. The most detailed geological mapping that has been accomplished in this vicinity is by Dr. W. H. Mathews, Professor of Geology at the University of British Columbia, and by Dr. H. Bostock of the G.S.C. The northern limit of these maps  $(50^{\circ} \text{ north})$ latitude) does not include the claim group. One other map by Dr. J. Roddick, of the G.S.C. published to a scale of  $1^{"} = 4$  miles, contributes geological information though this does not extend to the claim group.

The Bralorne Pioneer Gold Mine is located near the northeasterly edge of the Coast Range Batholith, approximately 60 miles northerly.

The ore in the Britannia Mine, which is located approximately 30 miles toward the south is associated with a meta-sedimentary-volcanic roof pendant over the Coast Range Batholith as is the ore in the Granduc Mine some 500 miles northwesterly.

New Jersey Zinc Exploration Co. Ltd., holds a block of Crown Granted mineral claims which are located

11 miles northeasterly from Daisy Lake and within the boundary of Garibaldi Park. New Jersey has accomplished considerable diamond drilling, has driven a tunnel to test copper mineralization at depth. This property, formerly called the Green Lake Mining and Milling Co. is described in the B.C.Minister of Mines' Report for 1930. Mineralization here is associated with metamorphic rocks probably roof pendants, overlying the Coast Range intrusive.

My traverse over Acacia's north claim block was in general confined to the claim line which coincides with a trail into Garibaldi Park. That part of the claim block between claims No.l to 10 trends southeasterly, adjacent to a creek which possibly represents the surface expression of the projection of a fault shown on the geological maps toward the south. This fault is positioned on the contact between an intrusive pluton on the east and metamorphic rock on the west. My examination was confined to the west side of this creek, I did not see the intrusive pluton.

The rocks that I saw on the northern claim block were predominently metamorphic, gneisses, and schists with minor granodiorite, quartz diorite, fine-grained dark dikes, quartz veins and quartz segregations. The most abundant rock is blue-grey highly altered with a granitic to porphrytic texture, described as a metamorphosed porphyritic meta-dacite. It apparently correlates

with the Harrison Lake formation described in G.S.C. Pitt Lake Map 1151A, and with the undivided metamorphic rocks, described in G.S.C. Squamish Map 42 - 1963.

The intrusive rocks for the most part have a granitic texture, classed as quartz diorite or granodiorite. It is believed the batholith was emplaced during Cretaceous time or earlier, and penetrated metamorphic volcanic and sedimentary rocks some of which remain as isolated pendants overlying the Batholith.

Light coloured quartz occurs in massive bodies and in mineralized veins throughout the property. Numerous fine-grained volcanic and dike rocks are also exposed on the property. Strong alteration and metamorphism has made analysis and recognition of rock types difficult. An interpretation of geology is further complicated by recent volcanic activity and glaciation which masks the underlying rocks of substantial parts of this area.

Three tunnels have been driven on the south block of claims. These are designed to explore an east-westerly trending fault which contains quartz containing variable amounts of copper and silver.

The rocks enclosing these veins are chlorate schists and phyllites, probably much older than the intrusives and quartz veins. The quartz veins appear to be conformable with the schistosity.

Because of the sparcity of outcrop, and the post mineral volcanic flows that mask the mineralization it will

be difficult to establish the structural pattern, the frequency of mineral occurrence and the precious metal content of the quartz bodies.

I have attached a geological map marked Appendix B. This map drawn to a scale of 1" = 1/2 mile is traced from air photo BC5, 103-126, which covers the claim block. It is based on the geology that has been published south of the 50<sup>°</sup> north latitude onto this map, and the geology I have mapped on the property.

### MINERALIZATION

The mineralization that I saw on the north block of mineral claims was associated with veins, lenses and irregular bodies of quartz. These appear to be related to faulting that projects northwesterly through the claim block, and which form at the contact between a tertiary intrusive and older rocks.

In 1959 I collected two samples which assayed 0.28 and 0.22 oz.gold over widths up to 4 feet. I have been unable to determine the precise location of these sample locations, although they are within the North Block of Acacia's Mineral Claims. In 1966 I collected 3 samples from other mineralized quartz veins. The assay results and position of these samples is shown on the attached map marked Appendix B.

The south block of mineral claims have been staked to cover an east-west rending quartz vein which contains copper and silver with minor gold. These quartz veins are possibly 10 feet wide irregular and offset by faulting.

While on the property I mapped the underground workings which were accessible and collected 13 rock samples. You will find attached a sketch map, drawn to a scale of  $1^n = 1000$  feet, and marked Appendix D, to show the location of the samples that were collected, and geology.

### CONCLUSIONS

The area has not been mapped by the Geological Survey of Canada or the Provincial Department of Mines, and the mineral claims have not been mapped or adequately prospected.

While geological information is limited, it would appear that the structural conditions and rock types here are similar to those found in many of the bodies of copper and molybdenum which are located within the Coast Range Batholith.

I have collected samples which contained gold values up to \$10.00 per ton and in addition have mapped and sampled workings which contain significant copper silver values.

The recent discoveries of both copper and molybdenum within the Coast Range Batholith suggests the mineralization of this Marble Creek property warrants investigation.

### RECOMMENDATIONS

- Compile a contour map to a scale of 1" = 1000 feet from existing photography to include all of the property.
- Survey the claims, establish a base line with picket
  lines at 400-foot intervals.
- 3. Conduct a program of geological mapping and prospecting over the property.
- Conduct a program of geochemical sampling along picket lines.
- 5. Initiate a program of geophysics over the property to include magnetic, electromagnetic and induced polarization surveying to test responses of each of these systems.
- 6. The caved tunnel should be opened, geologically mapped and sampled.

COST ESTIMATE OF PROPOSED EXPLORATION PROGRAM:

### Phase Number 1

1.	Establish a camp	\$ 2,000.00
2.	Topographic map	1,000.00
3.	Survey claims, establishing base and picket lines	4,000.00
4.	Geological mapping and prospecting	4,000.00
5.	Geochemical program Sampling 3,000.00 Assaying 2,000.00	5,000.00
6.	Geophysical program	7,000.00
7.	Open caved tunnel, map, sample and drill	10,000.00
8.	Contingencies @ 20%	6,600.00
	Total Phase No.1	39,600.00

Depending on results obtained during the first phase of the program additional exploration may be necessary.

Provision for additional geological mapping, geochemical and geophysical programs, surface and underground diamond drilling, road construction 50,000.00

TOTAL Phase Numbers 1 & 2 \$ 89,600.00

Respectfully submitted

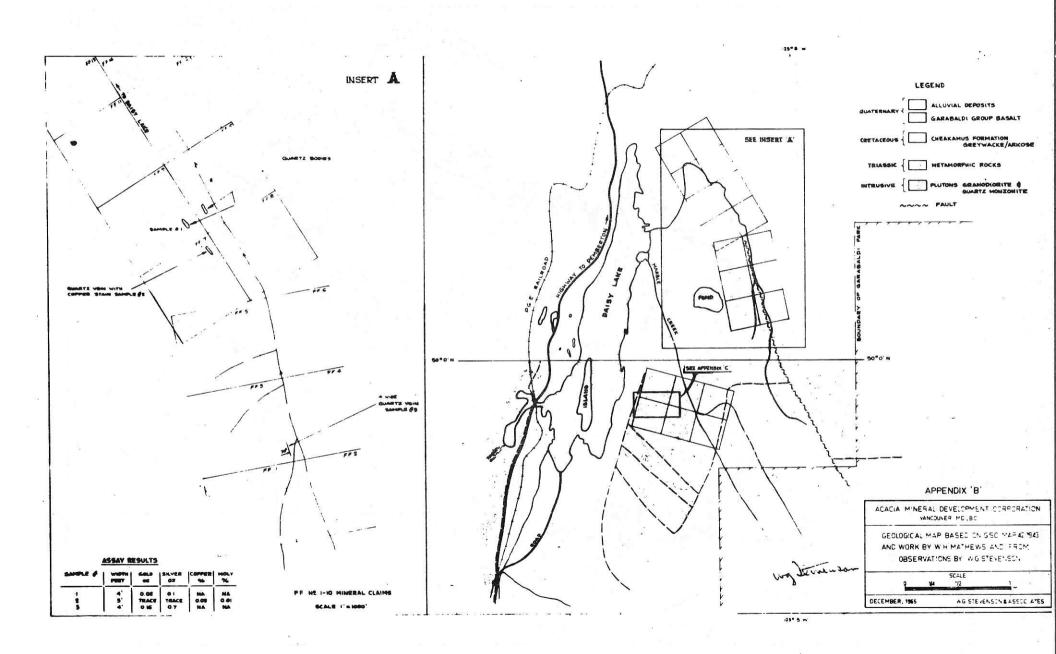
W. G. STEVENSON & ASSOCIATES LIMITED

Stevenson, P.Eng.



INDEX MAP Showing location of Mineral Claims held by ACACIA MINERAL DEVELOPMENT CORPORATION LIMITED (N.P.L.) Vancouver Mining Division British Columbia Scale 1" = 100 feet

APPENDIX A



8			02.	02.	%
SAMPLE NO.	ELEVATION	WIDTH	GOLD	SILVER	COPPER
1	2400	3'	TR	• 3	• 46
2	2400	2'	.05	1.4	.93
3	2400	2.1	.07	7.5	4.15
4	2400	2'	TR	•1	.07
5	2400	3 '	TR	.1	.67
6	2400	5 '	TR	.05	.25
7	2400	2'	.14	3.3	2.15
8	2400	2121	.05	1.25	.43
9	2300	1'	TR	.05	.01
10	2300	1'	TR	TR	.01

TR

TR

.005

2'

212'

SPECIAL

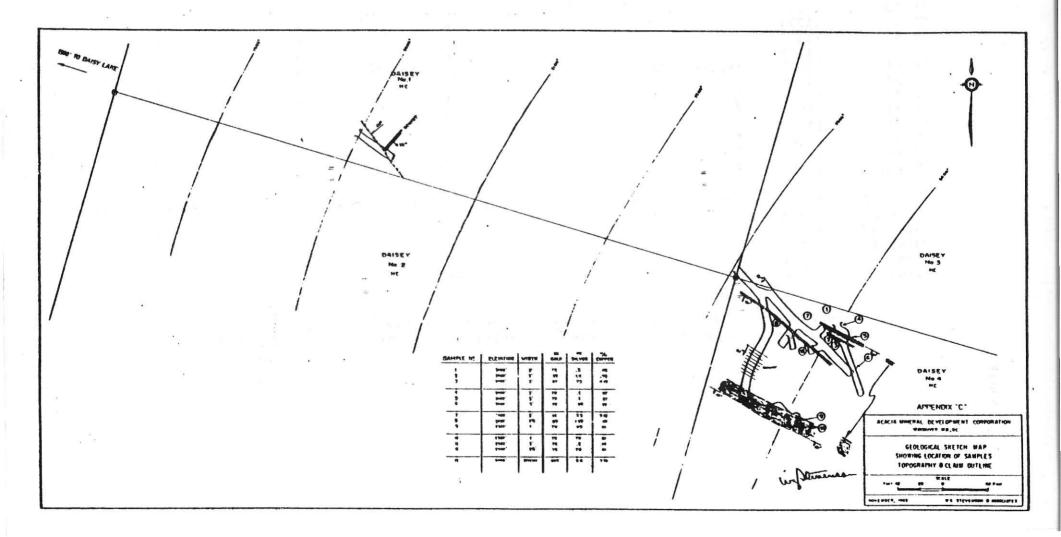
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TR

3.6

.14

.01 7.70 e



2300

2300

2400

11

12

13

To accompany	report	of	W. G.	Stevenson	
December 15,	1969,	for	Acaci	a Mineral	
Development	Corpora	tion	1 Ltd.	(N.P.L.)	

CLAIM	RECORD			*	
Name	Number	STAKED BY	DATE STAKED	DATE RECORDED	EXFIRY DATE
FF #1	11271	Francis Bull, Agent for	Oct.18,1965	Oct.27, 1965	Oct.27,1970
FF #2	11272	Estate of FELIX LETAIN	11	ii ii	17
FF #3	11273	88	89	17	11
FF #4	11274	**	83		17
FF #5	11275	**	11	88	17
FF #6	1.1276		88	11	17
FF #7	11277	Francis Bull	Oct. 19,1965	**	17
FF #8	11278	"	17	77	**
FF #9	11279	17	11	**	**
FF #10	11280		77	**	**
FF #11	11281	"	98	88	10
FF #12	11282	11	п	89	17
FF #13	11283		11		12
FF #14	11284	**	17		
Daisy #1	15847	Francis W. Bull	Apr. 2, 1969	Apr. 3, 1969	Apr.3, 1971
Daisy #2	15848		11	12	89 .
Daisy #3	15849	19	77	48	. 17
Daisy #4	15850	89	12	48	**
Daisy #5	15851	79	11	79	11
Daisy #6	15852	11	**		

Recorded Bill of Sale dated October 22, 1969, and August 22, 1969 transferred title to Acacia Mineral Development Corporation Ltd.(N.P.L.)

and the

### CERTIFICATE

I, William G. Stevenson, DO HEREBY CERTIFY: 1. That I am a Consulting Geological Engineer with offices at Suite 209 Stock Exchange Building, 475 Howe Street, Vancouver 1, B.C.

That I am a graduate of the University of Utah,
 1946, with a B.S.Degree.

3. That I am a registered Professional Engineer in the Association in British Columbia.

That I have practised my profession for 22 years.

5. That I have no direct, indirect or contingent interest in the F.F. or the Daisy Claims nor in the securities of Acacia Mineral Development Corporation Ltd.(N.P.L.) nor do I intend to receive any interest.

That the report dated December 15, 1969, is based
 on my examinations of the property made during 1959, 1966,
 1968 and 1969.

DATED at Vancouver, B.C., the 15th.day of December, 1969.

W.G.STEVENSON & ASSOCIATES LIMITED Consulting Geologists

W.G. Dtevenson, P. Eng.

APPENDIX E.

(a)	To carry out the recommendations contained in the report of William G. Stevenson, P.Eng., dated the 15th day of December, 1969, but with an Addendum thereto dated the 13th day of May, 1976, concerning the second phase of additional geological map- ping, geochemical and geophysical program, surface and underground diamond drilling, road construction on the Daisy Lake claims, a copy of		
	which is attached.	\$	50,000.00
(b)	To pay corporate debts in the amount of approximately.		25,000.00
(c)	To apply to purchase of new truck.		7,000.00
(d)	Purchase of used camp trailer approximately	e H	7,000.00

(e) Administration and general working capital

8,125.00 \$ 97,125.00

NO. OF SHARES OF ISSUEF

5. GIVE THE FULL NAME, HOME ADDRESS AND CHIEF OCCUPATION, THE NUMBER OF SHARES OF THE ISSUER BENEFICIALLY OWNED, DIRECTLY OR INDIRECTLY, BY EACH SENIOR OFFICER OR DIRECTOR OF THE ISSUER AND IF EMPLOYED DURING THE PAST FIVE YEARS, THE NAME OF EACH EMPLOYEE

NAME AND ADDRESS:	CHIEF OCCUPATION	BENEFICIALLY OWNED
FRANCIS WORTHINGTON BULL 45385 Westview Avenue Chilliwack, B. C.	Businessman Self-Employed	568,750
JESSIE BULL 45385 Westview Avenue Chilliwack, B. C.	Housewife & Caterer	256,000
ERLING REIDAR HAGELIN 4976 Eckert Road Yarrow, B. C.	Retired	18,000
Jack O. Martin 3290 Thompson Cres. West Vancouver, B. C.	Retired	50,000
PARTICULARS OF	THE CORPORATE STANDING	G OF THE ISSUER

The Issuer was incorporated in British Columbia on September 23, 1965.

The last annual report was filed with the Registrar of Companies for the Province of British Columbia on September 23, 1976. All filings required to be made by the Issuer under the Securities Act and Companies Act of British Columbia are up to date.