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PHONE BUS.: 682-6191
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328 MARINE BUILDING
355 BARRARD STREET
VANCOUVER 1, B.C.

REPORT ON
CRESTON ZINC PROPERTY
by
A. E. AHO
May 10, 1966

Submitted to
Aspen Grove Mines Limited (N.P.L.)
#826 - 510 West Hastings Street
Vancouver, 2, B. C.

PROGRESS OF WORK

Since my last report of August 5, 1965, sampling of the bulldozer trenches had been completed, a test self potential survey is reported to have been unsuccessful in detecting the mineralized portions of the zone, and diamond drilling was stopped.

It appears that the last drill holes to the south were placed too far in the hanging wall side of the zone and probably did not penetrate it.

The latter part of the drill program was conducted without adequate geologic supervision, so survey information on projection of the zone relative to drill hole location is not available. An assay plan of the trench sampling has not been available until now.

This report briefly reviews the results to date and points out that the main potential of the property still remains untested.

The property presently consists of 57 claims and two fractions; coverage should be checked. Previous reports on the property should be consulted for background information.

TRENCH SAMPLING

The accompanying assay plan shows channel sampling of the zone done by John Bucholz and H. Tysseland after the northern part of the mineralized zone was exposed by bulldozer trenching. The sampled sections of the trench exposed the zone reasonably well, although partly on vertical faces that may not have exhibited

true width. However, parts of the lower (south) portion of the trench diverged into the pyritized footwall of the zone and therefore did not expose the mineralization, which appears to be fairly continuous.

The unsampled sections thus represent unexposed mineralized parts of the zone, and could add to the value of the property.

The northern section that was sampled corresponds approximately to my original sampling of surface trenches but shows slightly lower grade, apparently because of dilution by greater sample width and, in places, mixed material from the trenching.

The southern sampled section shows lower grade, but adjoining parts of the zone were not exposed. Better exposure of the zone by further trenching would be necessary to give a true evaluation of the southern part of the zone.

DRILL HOLES

Inspection of the cores from the remainder of the drilling showed that hole A-4, spotted closer to the zone than A-3 which failed to reach the target, intersected 29.5 feet of mineralization. Sampling of the core from hole A-4 showed an average grade at 2.91% zinc across 19.5 feet from 163 feet to 180 feet, or 2.13% zinc across 29.5 feet from 157.5 feet to 198.5 feet which, although low grade, shows a substantial width and strength of zone.

Hole A-5 appears barren and, similar to hole A-3, may not have intersected the zone.

Hole A-7 did not intersect the zone since it was placed too far on the hanging wall side. Rough logs of these holes are appended to this report.

Results from Hole A-4 showed a wide zone and the rest of the holes were thus inconclusive. The main downhill (south) extent of the zone has thus certainly not been effectively tested and is open for several thousand feet downhill. Topographic and geochemical indications suggest that the zone probably extends at least 2500 feet down the draw which crosses the highway and railway northwest of the known zinc showing on

the road (which is a separate zone) and might extend for some further distance under overburden below the highway and railway. The porous limestone member which parallels the hanging wall side of the zone and is the source of springs, appears to be a stratigraphic marker.

CONCLUSIONS

Exploration to date on the property has continued to be encouraging for a large potential of low grade zinc ore in an ideal and easily accessible location on the railway only about 80 miles from the smelter at Trail, B.C. Present indicated surface grades and widths are in the order of 4 to 6% zinc with minor lead and cadmium across widths of 6 to 10 feet, but the mineralized zone appears to be extensive and fairly continuous along strike with good possibilities of larger sections of better grade. Present information is insufficient to give any tonnage estimates except for a potential in the order of 500,000 tons in the upper section, but considering that the total open strike length of zone is probably in excess of 2500 feet over a total elevation difference of about 1000 feet, considerably greater tonnage potential probably exists.

In view of the present demand for zinc the property thus warrants an aggressive, well financed, and effectively managed program of exploration of sufficient magnitude to adequately test its potential. This program should consist of:

- (a) Additional more detailed geochemistry, especially on the downhill projection to and beyond the highway.
- (b) Geophysical consultation and survey to determine and use the best applicable method to define mineralized sections if possible.
- (c) Additional bulldozer trenching and sampling, mainly downhill. (Note that debris cannot be pushed into Wilds Creek because of contamination of farm water supply.)
- (d) Diamond drilling of the entire favourable target zone at about 200' spacing, followed by closer holes in favourable sections.
- (e) Underground exploration and development where justified.

RECOMMENDATIONS

It is recommended that about \$185,000 be made available for this program, to be divided into two stages approximately as follows:

Stage 1


Line cutting and survey	\$ 2,000.00
Geochemistry	2,000.00
Geophysics	4,000.00
Bulldozer rentals (trenching and drill moves)	10,000.00
Diamond drilling, say 8000' total @ \$7.50/ft.	60,000.00
Assaying	3,000.00
Management and overhead	10,000.00
Contingencies @ 10%	<u>9,000.00</u>
	\$100,000.00

Stage 2 (contingent on evaluation of
results of Stage 1)

Drilling contract, say approximately 800' @ \$70.00	56,000.00
Management, geology, and overhead	10,000.00
Assaying	10,000.00
Contingencies	<u>9,000.00</u>
	\$ 85,000.00

The above estimates are only approximate and must be revised depending on contract price and finalization of detailed plans.

Respectfully submitted,



Dr. A. E. Aho, PhD, P.Eng. (B.C.)

Aaro E. Aho, M. D., P. Eng.

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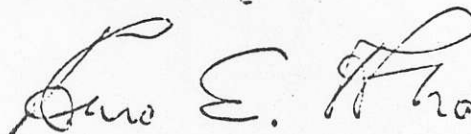
May 12, 1966.

CERTIFICATE

I Aaro E. Aho, with business and residential addresses in Vancouver, British Columbia, do hereby certify that:

1. I am a consulting geological engineer.
2. I am a graduate of the University of British Columbia, (B.A. and B.A.Sc., Geological Engineering, 1949), and of the University of California at Berkeley (PhD., Economic Geology, Petrology, Structural Geology and Volcanology, 1954).
3. I am a registered Professional Engineer of the Province of British Columbia.
4. From 1949 to 1957 I was engaged in mining exploration in Canada and the United States for a number of companies. I was exploration manager for British Yukon Exploration Co. Ltd. (a subsidiary of the White Pass and Yukon Corporation) when I retired in 1958 to begin private practice as a consulting geological engineer.
5. I have personally visited the Creston Zinc property of Aspen Grove Mines on several occasions including in 1965 when the past exploration was essentially completed, and have inspected all drill cores.
6. I do not hold, nor do I expect to receive any interest directly or indirectly in the properties or the securities of Aspen Grove Copper Mines Limited.

Respectfully submitted,



Aaro E. Aho, B.A., B.A.Sc.,
Ph.D., P. Eng.

Vancouver, B. C.

May 12, 1966.

LOGS OF
BALANCE OF 1965 DIAMOND DRILL HOLES ON
CRESTON ZINC PROPERTY
(December, 1965)

DDH A-3 (See previous reports for log of first portion)

155-160 Same as before.
160-175 Banded hornfels or tuff; less limy, bleached or altered than before.

DDH A-4

0-53 Overburden.
53-58 White hornfels or tuff.
58-83 Greenish hornfels.
83-88 Altered porous limy, greenish "zone" rock with pyrite, possibly sphalerite (?).
88-103 Much barren, fractured ground, some pyrite, very poor core recovery.
103-120 Porous altered limy rock.
120-157 $\frac{1}{2}$ Bleached limy tuff zone, some disseminated zinc at 142' and minor zinc throughout most.
157 $\frac{1}{2}$ -168 As above but more finely banded zinc.
168 $\frac{1}{2}$ -172 Finely banded pyrite, sphalerite, last 2' appears to be in footwall with pyrite disseminated in greenstone.
172-207 Bleached silicified tuff to end of hole, still contains considerable pyrite; altered porphyry 200-203'.

Core sampled 157.5' to 198.5' in mineralized zone.

DDH A-5 (No zone intersected)

0-26.5 Overburden (till).
26.5-49.5 Light tuffaceous banded argillite (common).
49.5-56.5 Same (?) broken up, silicified, with minor disseminated pyrite.
56.5-90 Banded tuff, light green to white, local rusty spots 64-67'.
90-145 More greenish, banded, mottled hornfelsic; fractured and silicified 96.5-98'; 1-2' alteration 137' and 139'.
145-149 Schistose greenstone.
149-162 Hornfels, intercalated greenstone, slight mineralization of pyrite at 157'.
162-172 Banded hornfels.

DDH A-7 (A-6 abandoned, A-2 not drilled)

0-50' Overburden (till).
50-91' Badly fractured, greenish, altered tuff or hornfels, gouge at 54', 63', and 65'.
91-93 Buff dolomite or limestone.

93-108 Banded tuff or hornfels (argillite).
108-109 Buff dolomite.
109-158 Tuff, altered and fractured, with pyrite stringers
in places, considerable quartz;
(May be approaching mineralized zone).

NO.	DEPTH	DESCRIPTION	GR. ANALY.
✓ 78208	7.5 ft.	Str. 3 - 0	2.45
○ 1	6.4	10	1.14
✓ 5	9.	20	3.08
✓ 6	8.	30	2.16
✓ 7	6.	40	2.94
✓ 8		50	4.19
✓ 9	7.10	60	5.24
✓ 10	7.5	70	2.89
✓ 11	5.2	80	1.14
✓ 12	10.	90	4.09
✓ 13	13.6	4 - 0	4.76
✓ 14	13	10	2.41
✓ 15		20	4.71
✓ 16	4.6	30	5.05
○ 17	4.6	40	5.05
✓ 18	8.6	50	4.14
✓ 19		60	3.66
✓ 20	10	70	4.04
✓ 21	8.8	80	1.83
✓ 22	9.8	90	4.14
✓ 23	4	5 - 0	5.53
✓ 24	10.5	10	1.06 ✓
✓ 25	?	20	1.73 ✓
✓ 78229	Resample of 25	20	1.61
✓ 26	7.7	30	3.11
✓ 78230	Resample of 26	30	.70
✓ 27	5.6	40	.98
✓ 78231	Resample of 27	40	.70
✓ 28	10	NO. 1 Cross Trench	4.33
✓ 32	4.6	50	1.46
✓ 33	6.3	60	.91
✓ 34	2.11	70	1.56

No.	Depth	Description	Zn	Cu
73235	Cancel			
36	"			
37	"			
38	"			
39	"			
40	2	Stn. 7- 60	4.88	
41	1	70	6.74	
42	6.5	80	2.16	
43	9	90	.85	
44	10.2	8- 00	.60	
45	9.9	10	1.06	
46	14	20	1.51	
47	14.6	30	1.76	
48	15.10	40	1.41	
49	12.9	50	2.06	
50	12.9	60	2.06	
51	10.2	70	2.16	
52	12	80	3.72	
53	14.10	90	2.21	
54	12.4	9- 00	2.62	
55	Select sample ^{25'} 25 feet west of trench Survey line at Stn, 7 - 40 Rock in place.		1.01	
56	" " " " "	4- 30	6.40	
57	D.D.H. No. A - 4 157 1/2 to 161		Gold Trace Silver 0.1 Copper 0.04 Zinc 1.16	
58	" " " 161 to 163		Gold Trace Silver 0.1 Copper 0.01 Zinc 4.23	

ASPEN CROFT MINES LTD.

D.P.M. 1-4

- 60

FROM	TO	WIDTH	ASSAY
157½	161	3½	1.16
161	163	2	4.23
163	168½	5½	.68
168½	173½	5	3.37
173½	178½	5	2.54
178½	180	1½	3.95
180	185	5	2.73
185	190	5	1.17
190	195	5	.63
195	198½	3½	.88

Average grade From 163 ft. To 180 ft. 2.91 % Zinc. True Width - 19½ ft.

" " " 157½ ft. " 198½ ft. 2.13 % Zinc. " " - 29½ ft.