10/84

#### GEOCHEMICAL REPORT

ON A

### SOIL GEOCHEMISTRY SURVEY

OVER THE

PRED CLAIM GROUP

SQUAMISH AREA

### VANCOUVER MINING DIVISION

#### BRITISH COLUMBIA

PROPERTY

- : 50 km due north of Vancouver, B.C. on Meslillooet Creek
- : 49° 122° NW
- : N.T.S. 92G/10W

WRITTEN FOR

: NEW ALSTER ENERGY LTD. #1620 - 625 Howe Street Vancouver, B.C. V6C 2T6

SURVEYED BY

: TRANS-ARCTIC EXPLORATIONS LTD. #1807-1450 West Georgia Street Vancouver, B.C. V6G 2T8

WRITTEN BY

: David G. Mark, Geophysic; GEOTRONICS SURVEYS LTD. #403-750 West Pender Str Vancouver, B.C. V6C 2T7

DATED

: January 19th, 1984



GEOTRONICS SURVEYS LTD. Engineering & Mining Geophysicists

VANCOUVER, CANADA

# TABLE OF CONTENTS

SUMMARY	i
CONCLUSIONS	ii
RECOMMENDATIONS	iii
INTRODUCTION AND GENERAL REMARKS	1
PROPERTY AND OWNERSHIP	2
LOCATION AND ACCESS	2
TOPOGRAPHY	3
HISTORY OF PREVIOUS WORK	3
GEOLOGY AND MINERALIZATION	3
SURVEY PROCEDURE	5
TESTING PROCEDURE	6
TREATMENT OF DATA	6
DISCUSSION OF RESULTS	7
SELECTED BIBLIOGRAPHY	9
GEOPHYSICIST'S CERTIFICATE	10
APPIDAVIT OF EXPENSES	11

GEOLOGICAL BRANCH ASSESSMENT REPORT

11,703

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# LIST OF ILLUSTRATIONS

At Back of Report			Sheet
Property Location Map	1:8	,600,000	1
Claim Location Map	1:	50,000	2
Soil Geochemistry Gold - Silver	1:	5,000	3
Soil Geochemistry Copper - Arsenic	1:	5,000	4
Soil Geochemistry Lead - Zinc	1:	5,000	5

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### SUMMARY

A soil geochemistry survey was carried out along a logging road through the Fred Claim Group during November, 1982. The claim is located 50 km due north of the Vancouver, British Columbia, along Meslillooet Creek. Access to the property is gained by a four-wheel drive vehicle along a series of logging roads from Squamish. The terrain consists of mountainous slopes forested with moderately dense coniferous trees. The purpose of the survey was to locate probable zones of gold or sulphide mineralization.

The area is underlain by metasedimentary and metavolcanic rocks of the Gambier formation of Jurassic Age, and quartz diorites and related rocks of the Cretaceous Coast Range Intrusives.

The property is located in proximity to the Maggie Mines property on which the presence of significant intersections of gold, copper, lead, zinc and silver mineralization is known to occur. The Fred Claims are also located near the Anaconda-Britannia Mine property which produced copper, silver, zinc and gold mineralization.

The soil samples were dug every 30 m along roads, subsequently tested for 6 metals (gold, silver, copper, arsenic, lead and zinc) plotted and contoured.

### CONCLUSIONS

- 1. The New Alster property is underlain by rocks that may be favourable to mineralization. In the area occurs the Britannia Mines property as well as the Maggie Mines property. A number of gossan areas and mineral showings are known to occur on recently staked claims in the surrounding area as well.
- 2. The soils revealed three anomalies of copper, lead and zinc, labelled A, C and D that are indicative of sulphide mineralization. Anomaly B, a good copper anomaly, is probably off of the property.
- 3. The anomalies are small, though strong, indicating the causative sources to be very close. They are also one dimensional with the samples having been staked along the road.
- 4. The sampling did not turn up any interesting results in gold or silver. However, very little of the property was sampled. Furthermore, gold and silver mineralization may occur near the copper, lead and zinc anomalies. Detailed grid sampling around these anomalies may reveal anomalous values in gold and silver.

### RECOMMENDATIONS

The work was done principally for assessment credits but did turn up interesting results. The anomalies should therefore be further checked by geological mapping and further soil sampled on a detailed grid.

The recommendations as outlined in Timmins' engineering report should be continued, as well. Of prime importance would be to geologically map and soil sample the whole property.

#### GEOCHEMICAL REPORT

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#### BRITISH COLUMBIA

#### INTRODUCTION

This report discusses the survey procedure, compilation of data and the interpretation of a soil geochemistry survey carried along the logging road through the Fred Claim Group during the period of November 11th to 20th, 1982.

The survey wase carried out by Trans-Arctic Explorations Ltd. under the field supervision of Richard Simpson, mining exploration technician, who has 18 years experience. A total of 161 soil samples were picked up.

The primary purpose of the soil sampling was to locate gold, silver and sulphide mineralization directly.

The survey was done to meet assessment requirements for the claims.

### PROPERTY AND OWNERSHIP

The property consists of four 2-post claim and one 20-unit claim staked within the Vancouver Mining Division as shown on Sheet 2 and as described below:

Claim Name	No. Units	Record No.	Expiry Date		
Fred 3	20	1041	October 8, 1983		
F	1	1042	October 8, 1983		
R	1	1043	October 8, 1983		
E	1	1044	October 8, 1983		
D	1	1045	October 8, 1983		

The expiry date shown does not take into account the survey under discussion as being accepted for assessment credits.

The claims are owned by New Alster Energy Ltd. of Vancouver, B.C.

#### LOCATION AND ACCESS

The claim area is approximately 50 km due north of Vancouver and south of the Mamquam River on Meslillooet Creek.

The geographical coordinates are 49° 35' N latitude and 122° 55' W longitude.

It can be reached by taking the Mamquam River Road, immediately south of Squamish, then turning on the Stawamus River Road. This is followed for several kilometers before turning left to cross Indian River and heading up a road on the north side of Meslillooet Creek for approximately 0.8 km. Most of the claim can be reached on old logging roads by a 4-wheel drive vehicle.

### TOPOGRAPHY

The property is located at the south end of the Pacific Ranges which is a physiographic unit of the Coast Mountains. The terrain is, in general, steep and mountainous with elevations ranging from 400 m to 1,800 m. The claims are dissected by major northwest drainage systems with general relief from ranges to valleys being in the order to 1,000 m. The area is forested and overburden covered with only scattered outcrops generally exposed except for precipitous rock at high elevation. Vegetation on the lower slopes consists of Douglas fir, cedar and spruce.

#### HISTORY OF PREVIOUS WORK

The area of the Britannia district to the southwest of the claim area has long been well known for production from the Anaconda Mine. Production between 1905 and 1974 yielded 55 million tons of ore grading 1.1% copper, 0.65% zinc, 0.2 oz/ton silver and 0.02 oz/ton gold.

Exploration work on the Maggie Mines property, in proximity to the recently acquired land, between 1977 and 1981 included trenching, geological mapping, diamond drilling, Geochemical analysis on diamond drill core, soils and stream sediments, Turam surveys performed by another company in 1970 and reinterpreted, and magnetometer surveys.

On the Fred Claim Group, New Alster Energy carried out airborne magnetic and VLF-EM surveys during the summer of 1982.

#### GEOLOGY AND MINERALIZATION

The following is quoted from W.G. Timmin's geological report:

"The area is underlain by metasedimentary and metavolcanic rocks of the Gambier Formation of Jurassic Age, and quartz diorites and related rocks of the Cretaceous Coast Range intrusives. The favourable metavolcanics appear to be of rhyolite to dacite composition, and are associated with argillites, cherts, anhydrites and minor barite units. The greenstones, cropping out discontinuously as pendants within granitics, are the host rocks for the Britannia Mine, the Maggie, McVicar and other nearby prospects, the Northair Mine, Seneca and Fire Lake prospects as well as numerous other showings.

"They are metamorphosed regionally in the lower greenschist facies and intensely deformed.

"The regional structure is dominated by transposition of pendants of the older metavolcanics in northwest striking attitudes. These may or may not be accompanied by massive regional shear zones such as the Britannia shear.

"Structure and stratigraphy in the area are complicated and as yet, not well known. The structure in the area of the Maggie Mines property consists of tight folds and the transposition of rocks into S-Tectonites."

"The following is an abstract quoted from a paper entitled 'Deformed Mesozoic Volcanogenic Cu-Zn Sulphide in the Britannia District, British Columbia' authored by J.T. Payne, J.A. Bratt and B.G. Stone and printed in Economic Geology, volume 75, 1980, pages 700 - 721:

"'The Britannia Copper-zinc sulphide deposits, previously described as having formed from hydrothermal solutions emplaced into foliated host rocks, are re-interpreted as volcanogenic in origin and to have been deposited from hydrothermal and exhalative solutions related to contemporaneous dacite volcanism and then deformed during later shearing and faulting. Massive sulphide deposits occur near the upper contact of coarse dacitic tuff. Anhydrite, barite, and chert form related exhalative deposits.'

"Pyrite, pyrrhotite, chalcopyrite, sphalerite and galena are the principal sulphide minerals [on the Maggie Mines property]. The mode of occurrence of silver and gold which has been reported in minor quanitities is not known.

"The sulphide minerals occur in several forms. Pyrite and pyrrhotite are frequently disseminated in some of the volcaniclastic units, although not necessarily together. Observations suggest that the principal occurrence of the other sulphides is associated with silicified zones.

"Reports and news releases on the Maggie Mines Ltd. property indicate the presence of significant intersections of copper, lead, zinc and silver mineralization indicated by drilling carried out on the property within a possible massive sulphide volcanogenic mineral belt sub-parallel to and some four miles northeast of the past productive Britannia ore zones."

#### SURVEY PROCEDURE

The samples were picked up at 30-meter centers along the road as shown on Sheets 3 to 5. They were dug with a D-handled shovel at about a 15- to 20-cm depth. The horizon sampled was B. Samples were placed in brown, wet-strength, paper bags with the sample number marked thereon.

#### TESTING PROCEDURE

All samples were tested by Acme Analytical Laboratories Ltd. of Vancouver, B.C. The sample is first thoroughly dried and then sifted to -80 mesh. A measured amount of the sifted material was put into a test tube with subsequent measured additions of aqua regia. The mixture was next heated for a certain length of time. The parts per million (ppm) copper, silver, lead, zinc, arsenic and gold was then measured by atomic absorption.

#### TREATMENT OF DATA

The statistical parameters for each metal, which were "guess-timated", are shown in the following table with the Sheet number that the geochemistry values for each metal were plotted on.

Metal	Au	Ag	Cu	As	Pb	zn
Sheet number	1	1	2	2	3	3
Mean background value	.005	0.20	10	5	5	70
Sub-anomalous threshold value	.008	0.40	16	9	9	90
Anomalous threshold value	=	-	25	15	15	120

All values are in ppm.

On each plan, the sub-anomalous values were isolated by dashed lines and the anomalous values by solid lines.

### DISCUSSION OF RESULTS

The writer has labelled four anomalies by the letters A to D that are worthy of further discussion.

Anomaly A is 120 m long consisting of anomalous values in copper, lead and zinc with the copper and lead being highly anomalous. The anomaly indicates copper, lead ans zinc sulphides occurring in close proximity. There was no correlation with gold or silver.

Anomaly B is fairly anomalous in copper with minor lead values. It occurs at the west end of the road survey and probably is off of the Fred Claim Group. (This, of course, is not known for sure until the boundaries of the Fred Claim Group and those of the surrounding claims are properly surveyed in the field.)

Anomaly C is a 1-value zinc anomaly that is extremely high for this area it is highly indicative of zinc sulphides occurring in this area.

Anomaly D consists of moderate lead and zinc anomalies for a distance of 100 meters.

There were virtually no anomalous values in gold, silver, or arsenic (other than one arsenic high). It would appear therefore there is none of this type of mineralization occurring along the road. However, it should be remembered that very little of the property was covered and that gold and silver could well occur elsewhere on the Fred Claim Group.

Anomalies A, B and C contain high copper, lead or zinc values with little or no buildup on either side. This indicates little dispersion of the metal ions indicating the causative source to be probably close by.

The airborne results were looked at to determine any possible correlation with the soil sample results. There appears to be none. However, this is inconclusive since only a small part of the property was soil sampled.

Respectfully submitted, GEOTRONICS SURVEYS LTD.

Geophysicist

January 19, 1984

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- Timmins, W.G., P.Eng., Geological Report on the F,R,E,D, and Fred Claims, Britannia Beach Area, B.C. for Alster Energy Ltd., November 1, 1981.

### GEOPHYSICIST'S CERTIFICATE

I, DAVID G. MARK, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geophysicist of Geotronics Surveys Ltd., with offices located at #403-750 West Pender Street, Vancouver, British Columbia.

## I further certify:

- I am a graduate of the University of British Columbia (1968) and hold a B.Sc. degree in Geophysics.
- I have been practising my profession for the past 15 years and have been active in the mining industry for the past 18 years.
- 3. I am an acive member of the Society of Exploration Geophysicists and a member of the European Association of Exploration Geophysicists.
- 4. This report is compiled from data obtained from a soil geochemistry survey carried out by Trans-Arctic Explorations Ltd., under the field supervision of Richard Simpson from November 11th to 20th, 1982.
- I have no interest, direct or indirect, in the Fred Claim Group, nor in any other properties or securities of New Alster Energy Ltd.

David G. Mark, Geophysicist

January 19th, 1984

# AFFIDAVIT OF EXPENSES

The soil geochemistry survey was carried out from November 11th to 20th, 1982 on the Fred Claim Group, Meslillooet Creek, Vancouver M.D., B.C. to the value of the following:

## FIELD:

Picking up of samples, 161 at \$6/sample	\$ 966
LABORATORY:	
161 samples @ \$8.25/sample for Au, Ag, Cu, As, Pb and Zn	\$1,328
OFFICE:	
Report including drafting, interpretation and compilation	\$1,000
Total	\$3,294

Respectfully submitted, TRANS-ARRYIC EXPLORATIONS LTD.

Richard Simpson, Manager









