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1984 ASSESSMENT REPORT GEOCHEMICAL SOIL SURVEY AND VLF-ELECTROMAGNETIC SURVEY

on the

MERIT WEST MINERAL CLAIM

Slocan Mining Division

NTS 82K/3E

Lat. 50 degrees 02'

Long. 117 degrees 15'

for

AEGIS RESOURCES LTD. (Owner-Operator)

GEOLOGICAL BRANCH ASSESSMENT REPORT

R.S. Verzosa, P.Eng.

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December, 1984 Vancouver, British Columbia

GEN6.AEG:1.1-9

	Province of British Columbia	Ministry of Energy, Mines and Petroleum Resources	TITLE	ASSESSMENT REPORT PAGE AND SUMMARY
	TYPE OF REP	ORT/SURVEY(S)		TOTAL COST
		L & VLF ELECTROMAG		\$8,228.12
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B.C. MINE	RAL INVENTORY NUMB	ER(S), IF KNOWN		
				К/.3.Е
				ees .15.'
12 units); F	PHOENIX (Lot 1706); Mine	ral Lease M 123; Mining or Certified	Mining Lease ML 12 (claims in	
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				· · · · · · · · · · · · · · · · · · ·
1)	Aegis Resourd	ces.Ltd (2)		
MAILING	ADDRESS			
	#305 - 1285 1	W. Pender St.,		
	.Vancouver, B.	.C. V6E.4B1	· · · · · · · · · · · · · · · · · · ·	•••••
	R(S) (that is, Company pay Aegis Resourd	-		
	ADDRESS			
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•••••	.High angle.no	orthwesterly quart	z veins in the	Triassic
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REFEREN	CES TO PREVIOUS WOR	к		

TABLE OF CONTENTS

INTRODUCTION	1
HISTORY	1
GENERAL GEOLOGY	1
GEOCHEMICAL SURVEY	4
VLF-EM SURVEY	6
GEOCHEMICAL SURVEY RESULTS	6
CONCLUSIONS	7
RECOMMENDATIONS	7
BIBLIOGRAPHY	8
STATEMENT OF COST	9

Page

i

LIST OF ILLUSTRATIONS

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FIGURE	1:	Location Map	2
FIGURE	2:	Index Map	3
FIGURE	3:	Regional Geology	5
FIGURE	4:	Soil Geochemistry (Silver) In	Pocket
FIGURE	5:	Soil Geochemistry (Lead) In	Pocket
FIGURE	6:	Soil Geochemistry (Zinc) In	Pocket
FIGURE	7:	Soil Geochemistry (Arsenic) In	Pocket
FIGURE	8:	Soil Geochemistry (Molybedenum) In	Pocket
FIGURE	9:	VLF-EM Survey In	Pocket

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INTRODUCTION

The Merit West mineral claim is located in southeastern B.C. in the Slocan Mining Division (Figure 1). The claim, comprising of four units, sits astride Highway 31A about 2.5 Km. southwest of the abandoned village of Zincton (Figure 2). It is wholly owned by Aegis Resources Ltd.

During the period October 11 - 18, 1984 an exploration program consisting of a VLF-EM Survey and a soil Geochemical Survey was carried out by Aegis Resources Ltd. on the Merit West mineral claim. The work was initiated on the basis of a recommendation contained in a geological evaluation report by D.W. Tully, P.Eng., dated March, 1984. This report presents the results of the exploration program.

HISTORY

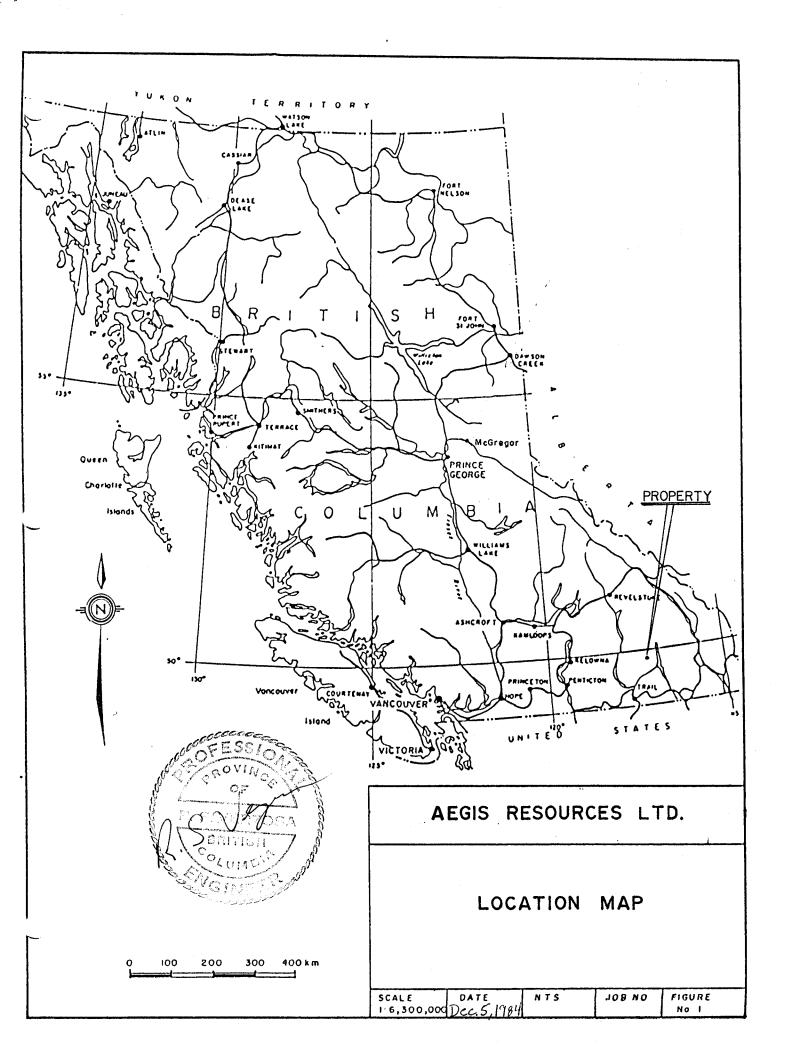
It is possible that the ground covered by the Merit West claims may have been part of the original Payne group of claims. The presence of old workings on the property suggests that some exploration may have been carried out during the time the Payne deposit was being developed.

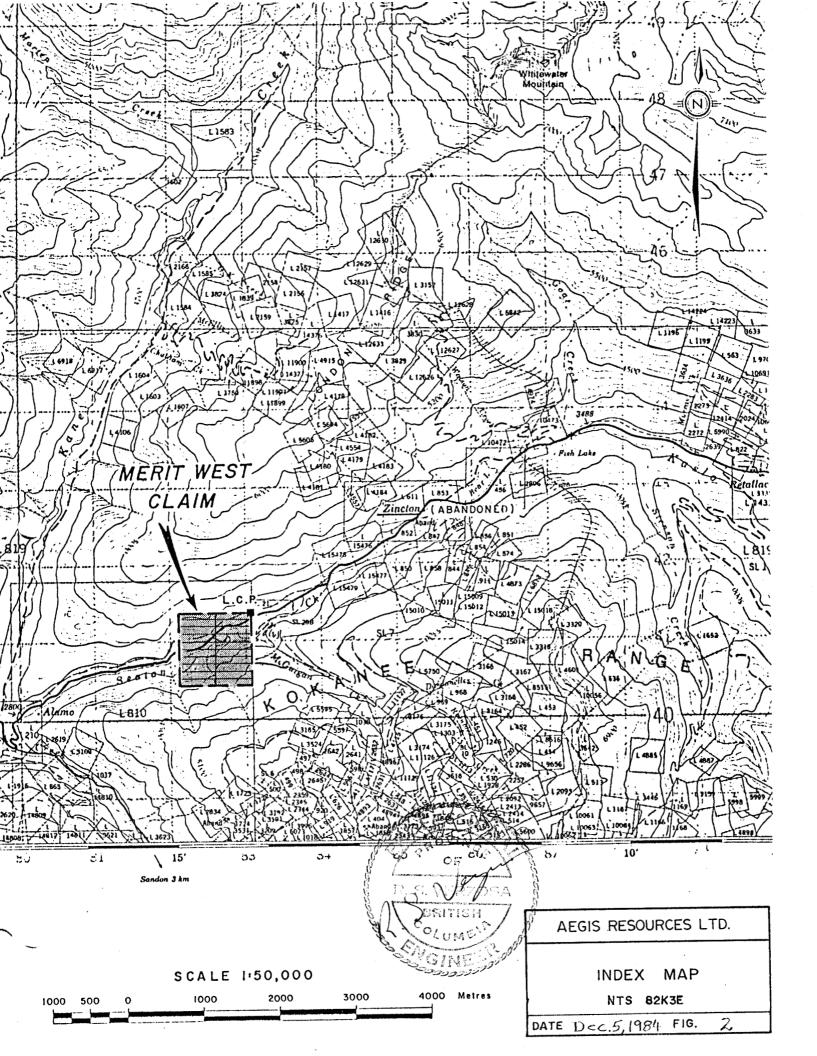
The Payne vein of the Sandon silver camp fame was discovered in 1891 and was in operation until 1905. During this period, ore worth some 5 million dollars in silver, lead and zinc was reportedly shipped. Other nearby deposits that were former producers include the St. Keverne, Slocan Boy and Rambler Cariboo among others.

Since the Merit West property is located just north of the famous Sandon silver camp, its economic future relies on possible geological extensions of the nearby silver-lead-zinc deposits such as the formerly productive Payne lode immediately south.

GENERAL GEOLOGY

The Merit West mineral claim lies immediately north of the Sandon silver camp, an area noted for its numerous silver, lead and zinc deposits. The general area is underlain by a northwesterly belt of meta-sediments and limestone that belong to the Slocan Group. The Group is intruded by granites and associated acidic intrusives that are probably phases of the Nelson Batholith





Complex (Figure 3). Within the Merit West claim the dominant rocks comprise argillites and phyllites. North of the highway on the steep hillsides are exposed intrusive rocks in the phyllites. The only mineralization observed on the propoerty is from dump material from the old adit carrying sparse pyrite and specks of galena in quartz. The adit probably followed a vein striking approximately N. 35 degrees W.

GEOCHEMICAL SURVEY

Sampling Procedure

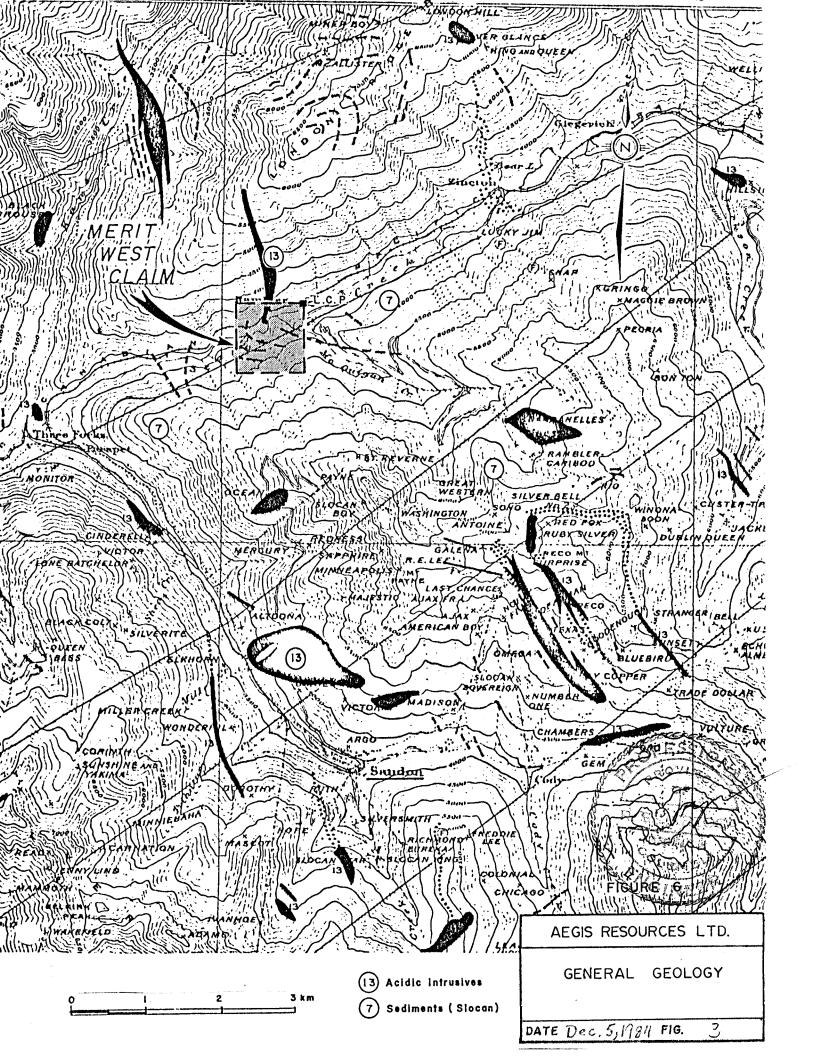
A grid of east-west lines at 100-metre interval was established from a central north-south baseline for a total of 11 line kilometres. Soil samples were dug at 50 metre intervals along the grid lines. Samples were selected from the "B" horizon at depths of commonly 30 cm. The selected samples were placed in wet-strength Kraft envelopes. A total of 176 samples were collected. A large part of the property is covered by swampy areas along Seaton Creek and talus cover and cliff faces on the hillside.

Analytical Procedure

All samples were analyzed by Acme Analytical Laboratories of Vancouver, B.C. The testing procedure initially involve the digestion of 0.5 gm. of dry material in 3 cc of 3-1-3HCl-HN0₃-H₂0 at 90 celcius for one hour. After the sample is diluted with water to 10 cc, it is analyzed by atomic absorption for silver, lead, zinc, arsenic and molybedenum. All values are expressed in parts per million (ppm).

Treatment of Data

The distribution pattern of the various elements in a geochemical survey are epxressed in mean, threshold and anomalous values. Usually, the threshold value which may indicate potential mineralization is taken as the mean plus twice the standard deviation, while the anomalous value which may be a prime indicator of nearby mineralization is taken as the mean plus three times the standard deviation. The following statistical values calculated to the nearest tenth obtain:



	Ag	Pb	Zn	As	Mo
Mean	0.90	20	300	8	4
Threshold	2.0	40	650	16	15
Anomalous	3.0	60	850	20	20

VLF-EM SURVEY

Survey Procedure

A Sabre Model 27 VLF-EM instrument manufactured by Sabre Electronics of Vancouver was utilized in the survey. Using the VLF transmitter in Seattle, Washington, readings were taken at 25 metre intervals along the grid lines.

The working principle of the VLF-EM survey method is well documented in the literature and need not be repeated in this report. However, it may be worth mentioning that the method can produce numerous unwanted responses brought about by such features as swamp edges, creeks and topographical irregularities.

Treatment of Data

The Fraser method was used in coverting the tilt angles to contourable degrees. Only the 0, 10 and 20 degree values were contoured.

GEOCHEMICAL AND GEOPHISICAL SURVEY

The results of the geochemical survey are presented in Figures 4 to 8 while the results of the VLF-EM Survey are presented in Figure 9.

A discussion of the survey results can best be made by comparing the VLF-EM anomalies with the distribution patterns of the various elements as well as the possible effects of the significant topographical features. Anomaly "A" in Figure 9 appears coincident with threshold values of all five elements analyzed. Anomaly "B" while being almost coincident with anomalous soil values may be a response from a nearby stream. The high soil values downslope of the old workings are considered contaminations. Anomalies "C" and "D" are likewise probably

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related to the creek by which they occur while their coincident soil anomalies may have resulted from transported material. It would appear that the other discreet EM anomalies along Seaton Creek are responses related to swamp conditions.

CONCLUSIONS

The geochemical anomalies such as those on the southern half of the property are interpreted as contaminations from old workings. The close affinity of the EM anomalies with the drainage pattern of the area make them suspect as responses from water bearing conductions.

RECOMMENDATIONS

No further work on the Merit West Property is recommended.

BIBLIOGRAPHY

Fraser, D.C., (1971), VLF-EM Data Processing, CIM, January, 1971, pp. 39 - 41

Geological Survey of Canada, Memoirs 173/184

Geological Survey of Canada, Map 273A

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Tully, D.W., (1984), Report on the Merit West Mineral Claim, Private Report

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AEGIS RESOURCES LTD. MERIT WEST MINERAL CLAIM

1984 ASSESSMENT WORK GEOCHEMICAL AND GEOPHYSICAL SURVEY

Statement of Costs

Field work for the above claims from October 11 - 18, 1984			
Contract work for soil sampling, line cutting, and VLF-EM Survey (Bill Chase and Associates Ltd.) - 8 days\$4,336.00			
Sample Analysis			
Equipment Rental (Sabre EM, 8 days @ \$30.00/day) 240.00			
Travelling and board and lodging 810.77			
Drafting (22 hrs. @ \$18.00) 396.00			
Printing 75.00			
Field Supervision (R.S. Verzosa, P. Eng, 2 days) 600.00			
Report preparation and data compilation			
Typing, copying and binding 100.00			

TOTAL



