83-#42-#11051

GRÄNGES EXPLORATION AB
CANADIAN DIVISION

GEOCHEMICAL GEOPHYSICAL REPORT

PEM CLAIM 554 (3)

OMINECA MINING DIVISION

LATITUDE 53° 10' N

LONGITUDE 124° 52' W

NTS 93 F 2/W

GRANGES EXPLORATION AKTIEBOLAG
1110 - 625 Howe Street
VANCOUVER, B. C.
V6C 2T6

Date Of Work July 19 - 23, 1982

Author:
G. W. Zbitnoff P. Eng.

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INTRODUCTION

During the period July 19 - 23 Granges personnel under the direction of E. Fluskey and supervised by G. Zbitnoff undertook a soil sampling program and a magnetometer survey ont he Pem claim. The program was intended to delineate possible structures associated with zinc rich "boils" located in previous reconnasance work. Previous work on the claims has consisted of various electromagnetic surveys which returned inconclusive results.

CONCLUSIONS

The geochemical survey indicates a broad area anomalous in lead, zinc, and silver. With regard to the poor electromagnetic responses over the area the cause of the anomalous conditions is now thought to be related to epithermal vein systems.

The magnetometer survey adds little to the understanding of the underlying structure. The magnetic high area in the north central part of the grid is attributed to magnetic bearing dacites found as float in the area.

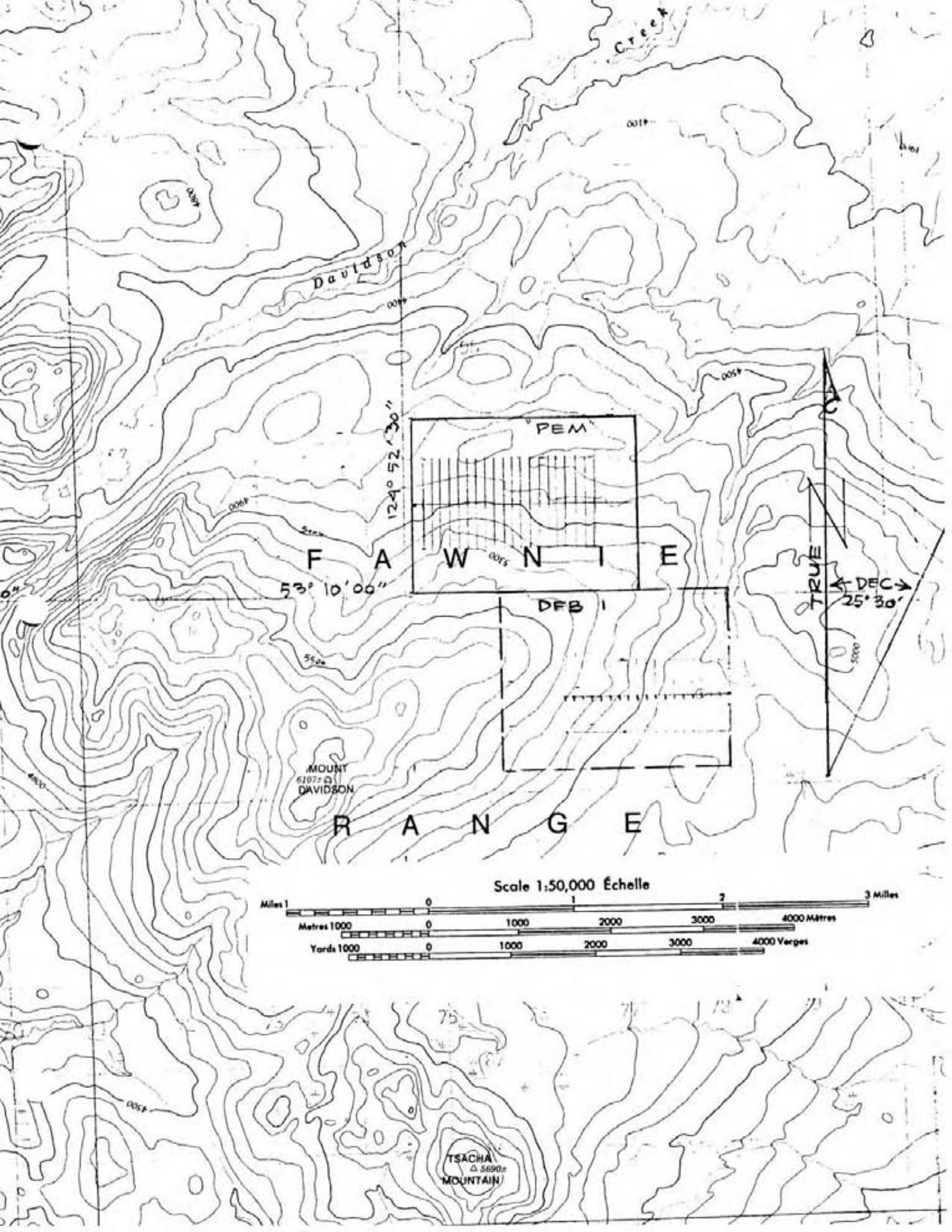
RECOMMENDATIONS

A hammer siesmic survey be conducted along several lines to profile overburden cover. Following that and if applicable a backhoe trencing program across the anomalous trends.

Claims PEM 544 March 18 20 units

LOCATION AND ACCESS

The PEM claim is located on the north slope of Mount Davidson in the Omineca Mining Division at longitude 124° 52' W latitude 53° 10' N. Access is via helicopter from Burns lake, 153 Km north of the claim.


Creek
Davidson
"PEM"
124° 52' 30"
F A W N I E
53° 10' 00"
DFB 1
TRUE
DEC
25° 30'
MOUNT
6107± ft
DAVIDSON
R A N G E
Scale 1:50,000 Échelle
Miles 1
0
1
2
3 Miles
Metres 1000
0
1000
2000
3000
4000 Mètres
Yards 1000
0
1000
2000
3000
4000 Verges
TSACHA
Δ 5690±
MOUNTAIN

The claim lies within 11 Km of the Kluskusootsa logging road.

PHYSIOGRAPHY

The survey area is situated onthe north flank of Mount Davidson between 1433-1616 m elevations. Approximately one third of the property lies within an old burn and is relatively open. The remainder of the area is covered by Balsam, Spruce and Pine. The northeast portion of the grid consists mainly of swampy sub-alpine meadows. The property for the most part is covered with pleistocene and recent cravels, sand, clay and till.

GENERAL GEOLOGY

The general geology of the area is shown on Map 1131 A Nechako River at a scale of 1"=4 miles. The property is indicated as underlain by cretaceous and/or tertiary volcanics of the Ootsa Lake group. No outcrops have been located on the claims. Float in the area consists of volcanic breccias, quartz eye dacites, tuffs and meta-sediments.

SURVEY GRID

The original grid established for the electromagnetic surveys was utilized in this survey. Line intervals are at 100 m with station sites marked by flagging at 100 m spacings on the 1 Km long section lines.

GEOCHEMICAL SURVEY

A total of 220 samples were collected and analysed for lead, zinc and silver. Sixty of the samples were later re-run for gold.

Soil samples of the upper "B" horizon were obtained at an average depth of 0.3 meters with the use of augers. These samples were collected at 100 meter intervals along the picket lines. The samples were then placed in kraft soil envelopes and delivered to Acme Analytical laboratories Ltd, 852 East Hastings, Vancouver, B. C.

The samples are dried at 75° c and sieved to -80 mesh. A 0.50 gram sample is digested with dilute aqua regia in a boiling water bath and diluted to 10 MLS with demineralized water. The elements are determined by a direct reading plasma spectrometer analysis (ICP).

DISCUSSION OF RESULTS

A broad 1.5 km x 0.6 km coincident lead zinc and silver geochemical anomaly was disclosed by the survey. The anomalous area appears to have a general ENE trend although this may be due to the "coarse" nature of the survey. The spot highs in the survey as well as surface lineaments indicate a general WNW trend for any underlying structures.

Due to sample spacing and the few number of samples analyzed for gold the results are somewhat inconclusive although anomalous conditions do occur.

MAGNETOMETER SURVEY

The magnetometer survey was conducted using a scintrex MF-2 fluxgate magnetometer over 20.8 km of line. This instrument measures the vertical components of the earths magnetic field to an accuracy of $\pm$ 10 gammas. The survey was started by establishing the baseline as datum by running the line from east to west and back and correcting stations for diurnal variation. Section lines were then run and corrected to the base readings for the baseline stations. Readings generally were taken at 100 m intervals with detailing at closer intervals where magnetic highs were encountered. Readings are plotted in gamma's.

DISCUSSION OF RESULTS

The magnetometer data is generally "Flat". A slight increase in magnetic intensity is noted in the north central part of the grid. This may be caused by magnetite bearing dacite located as float in that area.

Respectfully submitted

G. W. Zbitnoff BA, P. Eng

STATEMENT OF QUALIFICATIONS

Name: Zbitnoff, George Wm.

Profession: Geologist

Professional Associations:

Member of the Association of Professional Engineers of the Province of Manitoba since 1969.

Member of the Association of Professional Engineers of the Province of British Columbia since 1973.

Experience:

Pre graduation experience in geology with the Department of Mineral Resources of Saskatchewan.

Two and one half years, field geologist with Hudson Bay Exploration and Development, Central Canada.

Six years, field and resident geologist with Noranda Exploration Ltd., Central Canada.

Eleven years geologist and Assistant Manager with Granges Exploration Aktiebolag, Canadian Division.

Active experience in all geologic provinces of Canada and parts of the United States and Mexico.

PEM CLAIM

COST BREAKDOWN

Personnel	Date of Work	
Fluseky, E.	July 19-23 @ 150.00/day	$ 750.00
Taylor, K.	July 19-23 @ 110.00/day	550.00
Broullard, J.	July 19-23 @ 100.00/day	500.00
Weeks, S.	July 19-23 @ 90.00/day	450.00

Report Preperation

Prew, M. 1 day drafting Sept 3, 1982	170.56
Zbitnoff, G. 1 day Feb 4, 1983	231.12

Assay cost 220 samples @ 2.60			572.00
Assay cost 60 samples @ 3.50			210.00
Mag rental 5 days @ 20.00/day			100.00
Camp costs 20 man days @ 35.00/day			700.00
Helicopter July 19 3.5 hrs	1,743.15		
28 3.3 hrs	1,583.85	50%	2,066.84
	3,327.00		6,200.52

ASSAY → 100 • H — SAMPLE LOCATION, H INDICATES OBSERVABLE AMOUNTS OF HUMUS	DRAWN BY: M.P	GRÄNGES EXPLORATION AB CANADIAN DIVISION VANCOUVER OFFICE	MAGNETOMETER & GEOCHEMICAL SOIL SURVEYS. PEM CLAIM 544 (3) MOUNT DAVIDSON AREA, B.C.	SCALE: 1 : 5,000
	DATE: SEPT 1982			PROJECT No.: 70120
				N.T.S. No.: 93 F - 2