177. # 3No. # 6458

6458

GEOCHEMICAL REPORT

Granges Exploration A.B. 1060-1055 W. Hastings St. Vancouver, B.C. V6E 2E9

# OMINECA MINING DIVISION

"E" and "F" CLAIM GROUP

Fawnie Nose Area

Latitude 53° 22' Longitude 125° 10' N.T.S. 93F-6

Date of Work: August 1st to August 15th, 1977

Dated at Vancouver, B.C. October 12, 1977

> MINERAL RESOURCES BRANCH ASSESSMENT REPORT

Author P. Eng. Zbitnoff

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# ENCLOSURES

- Plan A Copper and zinc geochemical plan plotted in parts per million.



#### <u>Introduction</u>

During the period of August 1st to August 15th, 1977, Granges Exploration Aktiebolag's exploration crew worked on the E and F group. This crew consisted of four men\_which included Mr. Beverly McFadden, field geologist for Granges Exploration who was in charge during H. Shear's absence.

The program which was carried out on the property consisted of camp erection, grid establishing and geochemical soil sampling on the E and F claim groups.

This survey was conducted on behalf of Granges Exploration Aktiebolag in an effort to locate zones of interest for further detailed investigation.

#### Property

The property as illustrated on Figure 1 consists of the E claim (tag #01517) record no. 429 and the F claim (tag #19829) record no. 662. These two claims comprise 10 contiguous units of which E claim contains 4 units and the F claim contains 6 units. The total area covered by the two claims is 250 hectares.

# Location And Access

The E and F group is located in Central British Columbia, 290 miles (467 kilometers) north northwest of Vancouver, B.C. The claims lie 70 miles (112 kilometers) south southeast of the town of Burns Lake.

Access is via helicopter from Burns Lake or Houston. Float planes based at Telkwa are utilized for moving large amounts of equipment to the property. The equipment is landed at a log wharf on Capoose Lake and then slung by helicopter to the property a distance of 5 to 6 miles (8 to 9.6 kilometers) to the southeast.

# Physiography, Vegetation and Climate

The E and F group lies on the western slope of the Fawnie Range which trends in a north - south direction in this particular area. The area covered by the claims has an elevation which rises from 1580 meters on the western boundary to a maximum of 1860 meters on the easterly boundaries of the claims. The trees located at the 1580 meter level which essentially is the treeline are sparse and consist of balsom and lodge pole pine. The area above the treeline, at the crest of the Fawnie Range at 1860 meters, is tundra with no shrubbery of any kind.

#### General Geology

In the E and F claim area, a significant content of the light volcanic flows, tuffs, and breccias of the Takla group occur. These volcanics appear to be of rhyolitic in composition. The Takla group follows the core of the Fawnie Range for 13 kilometers to the northwest past Mt. Swannell and 16 kilometers to the southeast past the Fawnie Nose.

A small portion of the Hazelton group overlies the Takla group, with an angular discordence within the core of the Fawnie Range which according to Memoir 324 geological map is a fault contact.

# SURVEY SPECIFICATIONS

#### Survey Grid

The origin of the traverse grid begins with the base line at the northeast corner of the E claim which continues to the west along the common boundary of the E and F claims for 2000 meters where it ends at the northwest corner of the E claim (20+00W). The entire E and F claim was grided at 100 meter intervals to the south using a compass and a hip chainer. The picket lines extend to the south 1500 meters to cover the F claim. A total of 2.0 kilometers of baseline was established along with 26.5 kilometers of picket lines.

#### Geochemical Survey

Soil samples of the upper "B" horizon were obtained, where they were available, with the use of augers. These samples were taken at 100 meter intervals along the picket lines. The samples were then placed in kraft soil envelopes and delivered to ACME Analytical Laboratories Ltd., 6455 Laurel Street, Burnaby, B.C. The samples are dried for approximately 16 hours at 75° centigrade and sieved to -80 mesh. A .5 gram samples is digested with diluted aqua regia in a hot water bath for one hour and diluted to 10 mls with de-mineralized water. The determination of copper, lead, zinc, and silver are determined by atomic absorption from the solution. Silver is determined by atomic absorption using a background correction. Geochemical analysis of gold is done by obtaining a 10 gram sample which has been ignited over night at 600° centigrade and is digested hot with diluted aqua regia, and the clear solution is extracted with methyl isobuthyl ketone. The determination is done by atomic absorption from the methly isobuthyl ketone extractent with background correction.

# Discussion of Results

A coincident gold, silver, copper, lead and zinc geochemical anomaly is located on the E claim and stradles the crest of the Fawnie Range through the central portion of the F claim. An excellent correlation between the four elements gold, silver, copper and lead are obtained from the plot of the samples.

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The zinc is largely dispersed and may be due to the high mobility of the zinc ions. The lead and the silver anomalies are coincident in nature. The high lead value has a direct correlation with a high silver value; ie - station (7+00W) (5+00S) 1320 PPM lead correlates with a 11.8 PPM silver.

The gold is plotted in parts per billion, silver in parts per 10 million, copper zinc and lead are plotted in parts per million. Attached are two plans; Plan A showing the copper and zinc geochemical anomalous conditions and Plan B showing the gold, silver and lead geochemical anomalous conditions.

# Conclusions

During the first two weeks of August a geochemical soil survey was conducted over the E and F claim group on the Fawnie Range of B.C.

The survey located a definite geochemical trend situated on the crest of the mountain range. This may partialy be due to mineralization situated beneath the soil cover.

#### Recommendations

The geochemical anomalies require further investigation to determine the source of the silver, gold, copper, lead and zinc anomalies.

It is recommended that the anomalous areas be geochemical surveyed at closer intervals with particular attention being paid to the geology in the vicinity of the geochemical anomal



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# Expenditures

# Personnel

B.W. McFadden (Aug. 1st to 15th incl.)\$	823.80
D.F. Pasco (Aug. 1st to 15th incl.)	975.45
D.W. Wilson (Aug. 1st to 15th incl.)	498.75
T. Horvatin (Aug. 1st to 15th incl.)	658.05
Meals and Accommodations	380.16
Communications	14.36
Transportation	1,326.01
Geochemical Assay Costs	1,215.50
Map and Report Preparation	659.88
\$	6,551.96



## STATEMENT OF QUALIFICATIONS

Name: G.W. Zbitnoff, George Wm.

Profession: Geologist, University of Saskatchewan, B.A. 1963

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 Saskatchewan Department of Mineral Resources.

Post graduate experience - 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.

Six 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.





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