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# GEOLOGICAL AND GEOCHEMICAL

# ASSESSMENT

# OF THE

# MEGAN ESTELLE EVELYN and ROSE

# MINERAL CLAIMS

OMINECA MINING DIVISION

NTS 93 L 9

LAT. 54° 34.2'

LONG. 126° 24.5'

OWNERS: PETER OGRYZLO

OPERATORS: PETER OGRYZLO and DON YOUNG

WORK
COMPLETED: MAY 1985

REPORT
SUBMITTED: JUNE 1985

TABLE OF CONTENTS

INTRODUCTION:

i.Location:

The property is composed of the Megan, Estelle, Evelyn and Rose two post mineral claims. They are located 10 Km. North west of the town of Topley B.C. Record numbers are 5197, 5198, 5199 and 5200.

Topley is a siding on the CNR transcontinental railroad, with concentrate loading facilities for the copper mines on Babine lake. Services include a motel, restaurant, service station and elementary school. The town is on Highway 16 which is a major paved road, and is some 100 Km. east of Smithers which has all modern services including a mining recorder. Smithers has daily scheduled airline service to Vancouver. Other well serviced communities in the area include Houston which is 30 km. to the west and Burns Lake which is 50 Km. east.

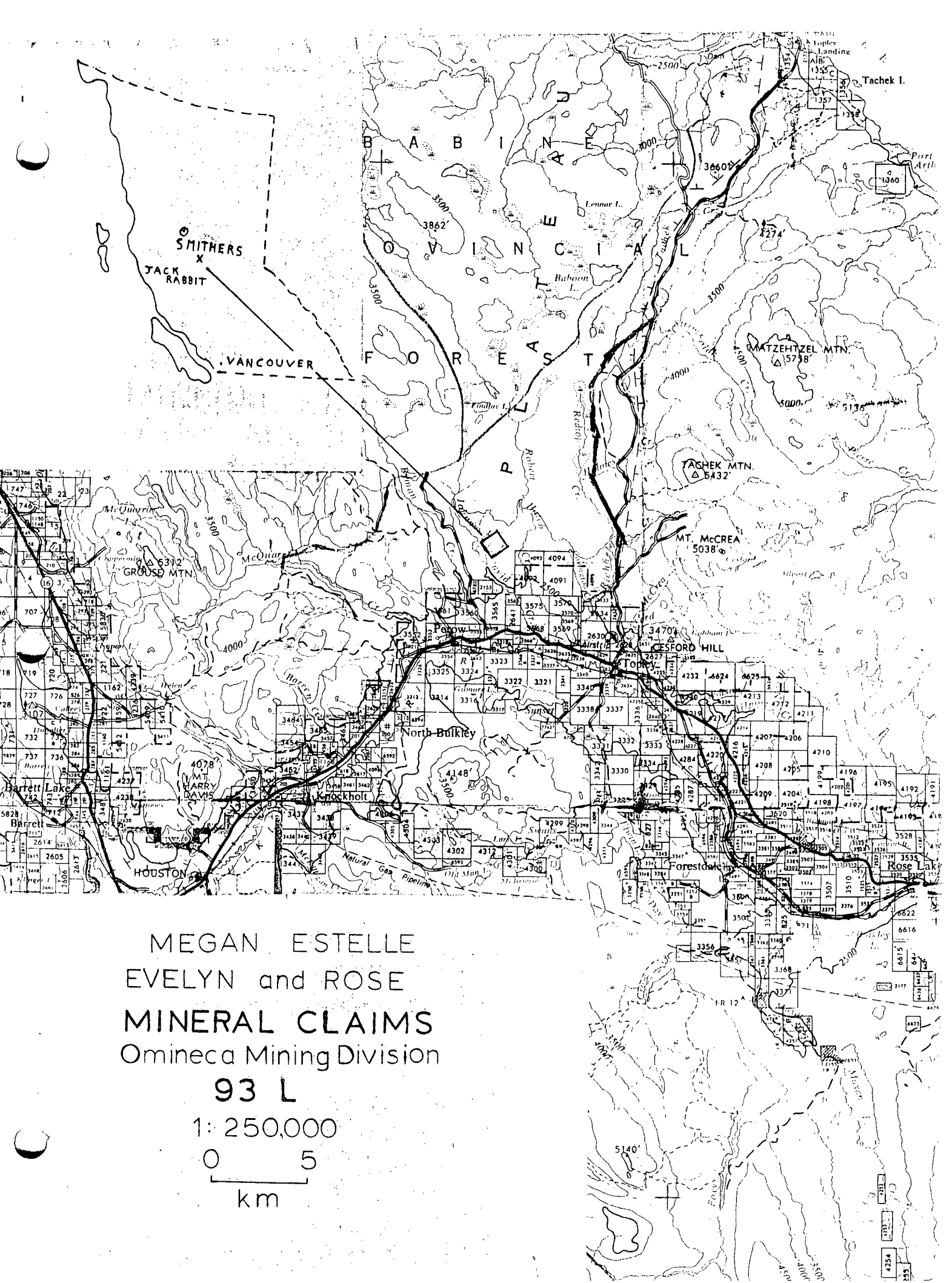
These communities form the population base of the Bulkley Valley region. The area has a stable and diverse economy relying on forestry, mining, ranching and tourism.

The claims are located on a branch stream entering Johnny David creek from the east and are at an elevation of 2700 feet. Topography is typical of the Nechako plateau, with rolling uplands cut by numerous streams. The streams are

entrenched for around 100 feet into the surrounding plateau. The plateau areas are usually covered with pine parklands on the drier ridges, with larger balsam fir and spruce in the stream valleys. In the vicinity of the showings however, these give way to open meadows and grasslands broken by aspen groves, which are more typical of the ranchlands of the Bulkley Valley. Elevations range between 2500 and 3000 feet.

The claims cover a mineralized shear zone in a primarily volcanic terrane. Outcrop is exposed in the creek bottoms and in old exploration trenches. Although an adit was reportedly driven along the shear zone, no trace of it could be found.

Water is abundant on the property, with several year round streams. An interesting feature is the occurence of depressions up to 30 meters deep south of the property. These are glacial kettles with no outlets, and would be possible tailing storage sites for any eventual mining operation. There is a 138 KVA substation 9 km southeast of the showing.




MEGAN ESTELLE
EVELYN and ROSE

# MINERAL CLAIMS

Omineca Mining Division

## 93 L

1: 250,000

0 5

km

ii.ACCESS:

Access is by helicopter from Houston, which is some 25 km. west. Round trip air time is approximately one-half hour by Bell 206 helicopter.

Ground access is by foot from highway 16. There is a four wheel drive road from the highway to the property, a distance of some 8 km. along the east bank of Johhny David Creek. The road is currently impassable, but could easily be upgraded. This road crosses private land adjacent to Highway 16.

Access is easiest by foot from the Northwood Pulp and Timber road which runs just north of the property from Michelle Bay on Babine Lake to the mill in Houston. Distance to the showing is approximately 4 km. Access has been facilitated by a network of forest fire access roads which now reach from the Northwood road to within 2 km. of the showing. These roads were constructed to fight the Row fire of 1982.

iv. HISTORY:

This region of the Central Interior has had an active mining history. Exploration began shortly after the completion of the railroad in 1911-1913. Most of the exploration activity has centered on the Topley Richfield deposit which is some 9 km east of the Jack Rabbit showing. Topley Richfield is a precious metal deposit with considerable underground development. Production was limited however. This deposit is still under active exploration. Mining began on the Babine lake porphry copper deposits in the mid 1960's. These mines are 40 to 50 km to the north and produced some 60 million pounds of copper and 20,000 to 30,000 ounces of gold per year until 1982. Production is currently suspended due to low metal prices. The Equity deposit is 40 km to the south. This is a complex polymetallic deposit and is currently a major producer of silver and copper. The area is dotted with numerous smaller prospects, several of which are being explored at present.

The Jack Rabbit prospect was discovered in 1927 by Matthew Sam of Topley, a pioneering native prospector who was also instrumental in the discovery of the Topley Richfield deposit. He discovered and developed a 40 cm wide vein of

pyrite and chalcopyrite . Reported assays were :

| Au OPT | Ag OPT | WIDTH cm. |
|---|---|---|
| 1.24 | 5.0 | 40 |
| 0.30 | 2.6 | 120 |

Copper values were also significant, being 9.4% and 2.5% respectively.

Matthew Sam continued development with a 25 meter adit and a 12 meter crosscut in 1928-1929. It was suggested that these workings were in the hanging wall a results were incoclusive. The property was explored sporadically until the late 1970's when the Phelps Dodge Corporation did a ground magnetometer survey.

iv.SUMMARY OF WORK

Two men spent some eight man days on the property during the 1985 field season. The assessment work was mostly done between May 9 and May13, 1985.

The object of the program was to map the area around the showing to determine the method to be used to see if the zone of mineralization could be extended.

GEOLOGICAL DESCRIPTIONS

i GENERAL:

The property is mostly underlain by Mesosoic volcanics which are covered by a veneer of Upper Mesozoic and younger flows and wterlain sediments of primarily basaltic composition. Block faulting is the dominant structure, with most major faults having a predominantly northwest trend.

The oldest rocks in the area are dark green tuffs , flows and shale of the Upper Triassic Takla group. These are exposed along Highway 16 6 km south of the property.

The claims are underlain by Hazelton Group volcanics ascribed to the Lower Jurassic Telkwa formation by Richards. These are a distinctive assemblage of red, maroon and green volcanics. A rhyolite breccia seems to be the most common rock type, with basaltic flows and tuffs and basaltic fragments in rhyolite present as well.

These are covered to the north by more recent basaltic flows and sediments of basaltic composition, which are related to the China nose breccias of the Endako Group volcanics. These are also distinctive as they are almost uniformly black. Primary bedding strucures are well

preserved. The base of this unit is exposed as a coarse basal conglomerate 2 km north of the property. These rocks are also exposed along the Northwood logging road. Another distinguishing feature is a marked magnetic signature. The boundaries of this unit may be easily traced on aerial magnetic maps. The contact between these basalts and the red and green intermediate volcanics of the Telkwa formation appears to be an angular uncomformity rather than a block fault.

Rocks of the Upper Cretaceous Ootsa Lake Group are exposed near the junction of Byman Creek with the Northwood road. These are greenish rhyolite and dacite flows.

Intrusive rocks of the Jurassic Topley intrusions are in contact with the Takla Group volcanics 5km southwest of the property along the Byman Creek road. These are a coarse grained gray to pink quartz monzonite. They do not appear related to the intrusions near the showing.

ii PROPERTY GEOLOGY

The property is extensively covered by glacial drift, which appears to be up to 30 meters thick. These deposits have been removed by erosion along portions of Johhny David Creek and a tributary stream. A number of exploration trenches have further exposed the rocks beside the stream.

Mapping was done at a scale of 1:1000. Control was provided by 1:50,000 topography, compass, and topofil hip chain.

VOLCANIC ROCKS

These are red, maroon and green variegated volcanic breccias and tuff. Anhydrite is common on partings with calcite filling cavities and veins. Epidote is abundant , with numerous epidotized fragments and some reddish fragments. Epidote appears to be more abundant near the showing, but it is common in the Telkwa formation. It would be difficult to establish a relation between alteration and mineralization with limited outcrop. Grey rhyolite and rhyolite tuff with minor epidote is exposed 50 meters east of the showing.

INTRUSIVE ROCKS

The red and green volcanics are cut by a beige to buff porphrytic dyke 20 meters wide. The dyke contains angular laths of bleached feldspar and rounded quartz eyes. Mafics

are either bleached or absent. The bleaching appears to be caused by sericitization and kaolinization of the dyke. Pyrite forms 1 to 2 % of the rock, with occasional malachite staining and malachite rims on pyrite.

ii MINERALIZATION:

Near the contact of the porphry dyke is a 2 meter wide shear and gouge zone striking S 20 E and dipping 70 west. The gouge is bleached to pale green with traces of specular hematite. There are zones of fault breccia cemented with quartz and clay. The hanginwall of the zone is formed of volcanic breccia and tuff, with a rhyolite pyroclastic with greenish epidotized fragments, epidotized feldspar laths and rounded black fragments. There is evidence of old workings near the zone. Twenty meters south the shear zone may be seen cutting a greyish rhyolite and andesite fragmental volcanic with some siderite, epidote and calcite. Malachite staining is present on fractures and partings.

iii STRUCTURE

The only significant structure appears to be the mineralized shear zone described above. This zone may only be traced for less than 30 meters before it is obscured by overburden. However there appears to be a topographic expression of the shear across the creek to the north where a prominent ravine enters normal to the valley. There is little outcrop around this ravine.

## SUMMARY AND CONCLUSIONS

The shear zone on the Jackrabbit property should continue to be explored. It should be sampled at depth to determine if tonnage and grade are sufficient to support a mining operation. The property is close to an established population centers, and access and power are close by.

The mineralized shear appears to be associated with the porphry dyke. The age of this dyke is of interest. Although at first glance it appears similar to the biotite feldspar porphyry dykes of the Babine intrusions, the presence of the rounded quartz eyes suggest that is more likely associated with the minor Cretaceous intrusions in the area. Quartz eyes are noticably absent in the Babine intrusions. This is of more than academic interest as it has been suggested that the Equity deposit may be hosted by rocks related to the Cretaceous Kasalka formation. This would suggest a major mineralizing event during the Cretaceous period.

A closely spaced limited geochemical survey is recommended to assist in tracing the dyke and shear zone where there are residual soils overlying the bedrock. This would be of little value where the overburden thickens at the edge of the valley. The presence of sulphides in the dyke

should permit tracing of the dyke with an induced polariztion survey, and may even be of assistance in delineating sulhphides in the shear zone if these are wide enough.

ITEMIZED COST STATEMENT

i. Allocation for wages

| | | | |
|---|---|---|---|
| P.Ogryzlo | | | |
| fieldwork | | | |
| 9/5/85 to 12/5/85 | 50 | hr.@$15.00 | $ 750.00 |
| Preparation of reports,drafting | | | |
| 20 hr. @ $15.00 | | | $300.00 |
| D.Young | | | |
| fieldwork | | | |
| 10/5/85 to 12/5/85 | 26 | hr. @$12.00 | $ 312.00 |

ii.Camp expenses

| | |
|---|---|
| 6 man days @ $25.00 | $ 150.00 |

iii.Board

| | |
|---|---|
| 6 man days @ $15.00 | $ 90.00 |
| Special living allowance | |
| 6 man days @ $ 2.50 | $ 15.00 |

iv. Travel

| | |
|---|---|
| mileage 720 miles @ $0.64 x20% | $ 92.00 |
| 1 vehicle 4 days @ $15.00 | $ 60.00 |

| | |
|---|---|
| v. Secretarial,photocopy, office | $ 100.00 |
| | ========= |
| TOTAL | $1869.00 |

# AUTHOR'S QUALIFICATIONS

I, Peter Lawrence Ogryzlo, certify that I received the degree of Bachelor of Science from McGill University in 1969.

I was continuously employed in mineral exploration and mining geology from 1969 to 1977. I have been an independent prospector from 1977 to 1982.

| Period | Employer | Position |
|---|---|---|
| 1969-1972 | Patino Mines Ltd. | Junior Exploration Geologist |
| 1972-1977 | Noranda Mines Ltd. | Mine Geologist Noranda Mines Ltd. Bell Copper Div. |
| 1977-1985 | Prospector and consulting geologist | |

# STATEMENT OF QUALIFICATIONS

I, Donald M. Young, certify that the folloming summarizes my education and experience:

| Date | |
|---|---|
| 1965 | Induced polarization survey- McPhar Geophysics |
| 1977 | Prospecting course,Granisle, B.C. Louis Tsan instructor |
| 1977 | Prospecting and claimstaking, partnered by Peter Ogryzlo |
| 1978 | Prospected under Prospector's Assistance Act |
| 1979 | Completed B.C. Ministry of Mines advanced prospecting course,Castlegar, B.C. |
| 1979-1985 | Prospected under Prospector's Assistance Act |

N

MEGAN
5197 (5)

ESTELLE
5198 (5)

EVELYN
5199 (5)

ROSE
5200 (5)

TILL

RESIDUAL SOIL

RESIDUAL SOIL

TILL

TILL

POND

POND

JACRABBIT CREEK

JOHNNY DAVID CREEK

# LEGEND

## INTRUSIVE ROCKS

2 Buff to beige quartz eye porphyry dyke

## VOLCANIC ROCKS
LOWER JURASSIC

1 Telkwa formation: red, maroon, grey and green breccia, tufs and flow of basaltic to rhyolitic composition.

1a red and green acidic pyroclastics

1b grey acidic tuf

1c grey rhyolite and andesite

1d porphyrytic rhyolite flows

shear

gouge

mal malachite

py pyrite

hem specular hematite

sid siderite

cal calcite

anh anhydrite

ep epidote

ser sericite

kaol kaolinite

workings

trench

outcrop

edge of glacial Till

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,845

GEOLOGICAL SKETCH

| | | |
|---|---|---|
| SCALE: 1:1000 | APPROVED BY | DRAWN BY P L O |
| DATE: 24-5-85 | | |

MEGAN ESTELLE EVELYN & ROSE

0 meters 50

DRAWING NUMBER