# GEOLOGY REPORT ON THE JS MINERAL CLAIM

Kamloops Mining Division N.T.S. 92 I 16 92 P 1

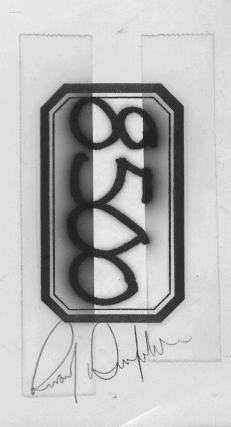
Latitude 51 North Longitude 120 26 West

Claim Name: JS (15 units) Claim Owner: Jost Schmising Claim Record No: 1986(8)

Report by: R. Durfeld, Geologist

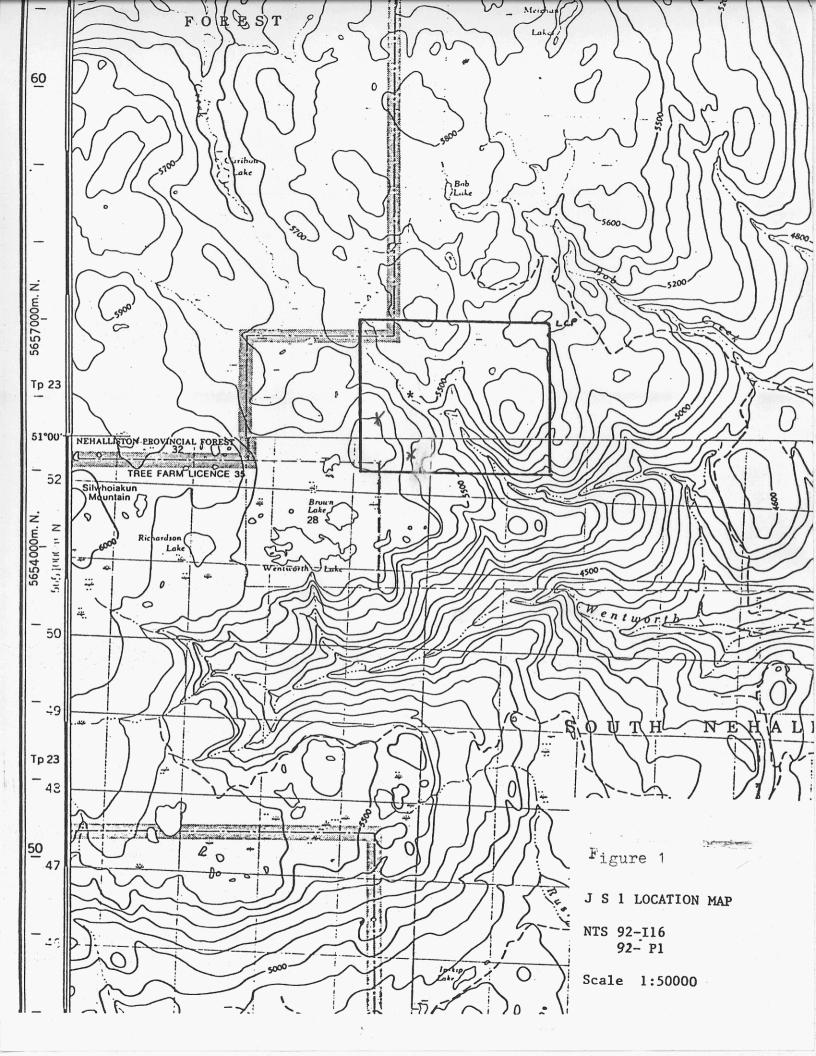
R. DURFELD GEOLOGICAL CONTRACTING 2029 SOUTH LAKESIDE DRIVE WILLIAMS LAKE, B.C.

October, 1980.



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#### 1. INTRODUCTION

The JS mineral claim is located (Figure 1) twenty-two miles due north of the city of Kamloops on the edge of the Bonaparte Plateau between the elevation of 4500 and 5500 feet. Access to the property is by helicopter from Kamloops or via the Jameison Creek logging roads of which the Bob Lake branch terminates just north of the property.

Initial work in the area was conducted in 1973 by Amoco Canada Petroleum Company Ltd. to evaluate a reconnaissance geochemical molybdenum anomaly located in 1972. Amoco's 1973 programme consisted of follow-up geochemical sampling (rock, soil, silt) and geological mapping that is documented in assessment report #4665. On June 12, 1978 the area was staked as the Horseshoe Claim and when it lapsed in 1979 it was restaked on August 5 as the JS mineral claim by Jost Schmising.

During the period September 23 to 26, 1979 the author was on the property conducting geological mapping and prospecting that is documented in this report. The scale of the mapping was at 1:5000 and covered an area of approximately two square kilometers. An old cut baseline was re-labelled to assist in topographic control and the stations are labelled at 100 foot intervals.

The geology of the JS claim as interpreted by the Geological Survey of Canada is comprised of Dioritic rocks of Triassic-Jurassic Age intruding meta-sediments of Pennsylvanian-Permian Age (Cache Creek Equivalent) with overlying Tertiary Plateau Lavas. Molybdenum mineralization is developed in silicified-hornfelsed meta-sediments near their contact with the intrusive diorite.

#### 2. PROPERTY

Claim Name
JS (15 units)

Record Number 1986(8)

Record Date
August 9, 1980

Owner: Jost Schmising.

### 3. GEOLOGY

Three days of Geological Mapping and Prospecting were conducted on the JS claim. An old cut baseline up the creek was used for control and mapping was done on a grid basis. Outcrop exposure was generally good in the creek bottom butewas masked by glacial till and plateau lavas in the higher gently rolling areas. Implied contacts were mapped with the assistance of rubble analysis. The geological data was compiled at a scale of 1:5000 and is attached as (Figure 2) of this report.

# a) Regional Geology

The regional geology of the JS mineral claim as interpreted by the Geological Survey of Canada is comprised of Dioritic rocks of Triassic-Jurassic Age intruding meta-sediments of Pennsylvanian-Permian Age (Cache Creek Equivalent) and overlain by Tertiary Plateau Lavas.

# b) Local Geology

The local geology will be discussed in reference to figure #2 the Geology Plan.

#### Unit C

Unit C represents the oldest rock unit on the property and is thought to be of Pennsylvanian-Permian (Cache

## 3. GEOLOGY (Continued)

# b) Local Geology (Continued)

## Unit C. (Continued)

Creek Equivalent Age) and in the immediate area of the property varies from an argillite to quartzite and quartz muscovite schist.

#### Unit B

Unit B is generally a medium grained diorite to quartz diorite porphyry. The feldspar grains are generally milky white to light green euhedral to rounded and are 5 mm in diameter. The mafics are generally elongate hornblende crystals up to 7 mm long. Several outcrops of diorite were found to contain clear rounded quartz grains to 4 mm and were called quartz eye diorite. This quartz eye diorite may represent a distinct phase of the intrusion but mapping was not detailed enough to demonstrate its spatial distribution.

## Unit A

Unit A is a sequence of Olivine Basalts of Tertiary Age that in the higher elevation masks the Mesozoic rocks.

#### c) Alteration

The hydrothermal alteration within Unit B, the dioritequartz diorite is recognized as light green to milky white (sericite) on feldspars with coincident light green mottled chlorite on hornblende crystals and would seem to fall into the propyllitic alteration suite.

The hydrothermal alternation in Unit C is generally a silicification and fine hornfels near the intrusive contact. Minor fine secondary biotite was noted in hornfelsed sections.

# 3. GEOLOGY (Continued)

## d) Mineralization

Pyrite was the only sulphide mineral noted disseminated in the Diorite-Quartz Diorite. Only isolated occurrences of chalcopyrite and molybdenite were noted on quartz veins within this unit.

In the area of baseline 35 NW molybdenum mineralization was noted with disseminated pyrite in the silicious fine hornfelsed rocks of Unit C (Cache Creek) near its contact with Unit B (Diorite) to the north. In this area molybdenite accurs as smears, around dry fractures, on quartz veins and fine disseminated over a test pitted area of about 20 metres by 20 metres. A representative grab sample from these test pits was assayed for molybdenum and ran .098% Mo.

#### 4. SUMMARY AND CONCLUSIONS

The geological mapping documented in this report outlined an area of Diorite-Quartz Diorite (Unit B) intruding fine grained sediments of (Unit C). The fine grained sediments are silicified and altered near the Dioritic contact. Molybdenum mineralization was noted developed as molybdenite in some areas of these altered sediments.

It is felt that the economic mineral potential for this area would be for a low grade porphyry type molybdenum deposit. The known molybdenum mineralization is developed in the altered sediments of (Unit C) near their contact with the Diorite-Ouartz Diorite (Unit B). The extent of the molybdenum mineralization in the altered sediments (Unit C) should be explored and the various intrusive phases of (Unit B) should be studied to define their role in the development of molybdenum mineralization in this area.

## JS CLAIM COST STATEMENT:

## Technical Staff

·	\$ 920.00
Report Preparation and Drafting	250.00
Board - Sept 23-26, 1979 1 man 4 days @ \$15/day	60.00
Travel Trailer Rental - Sept. 23-26, 1979 4 days @ \$15/day	60.00
Truck Rental - Sept. 23-26, 1979 4 days @ \$25/day	100.00
R. Durfeld - Sept. 23-26, 1979 3 days on property @ \$150/day	\$ 450.00

If accepted \$800.00 of this work will be applied to the JS claim as partial fullfilment of assessment filed on August 11, 1980.

R.M. Durfeld, B.Sc. Geologist.

## STATEMENT OF QUALIFICATIONS

I Rudolf M. Durfeld on Williams Lake, British Columbia, hereby certify that:

- 1) I am a graduate of the University of British Columbia, Bachelor of Science (Geology Major) in 1972 and have practiced my profession as geologist since that time.
- 2) I am a Fellow of the Geological Association of Canada.
- 3) I am the author of this report which is based on work conducted on September 23-26, 1979.

R.M. Durfeld, B.Sc. Geologist.

