

FILE

Box 6

92-C-15

REPORT
ON
THE MARSHALL CREEK
MOLYBDENITE PROPERTY

SARITA RIVER, B.C.
92-C-15

=====
1966

ALBERNI

MINING DIVISION

S.N. Charteris
Geologist

ORIGINAL - 1 FILE

- 1 TORONTO, Dr. Dodson (G.P. MITCHELL)
sent MAY 26/66

- 2 SPARES

REPORT ON
THE MARSHALL CREEK MOLYBDENITE PROPERTY
SARITA RIVER 92-C-15 B. C.

1966

Vancouver, B.C.
May 24, 1966

S.N. Charteris
Geologist

REPORT ON
THE MARSHALL CREEK MOLYBDENITE PROPERTY
SARITA RIVER 92-C-15 B.C.

1966

S.N. CHARTERIS

INTRODUCTION

This molybdenite prospect was brought to our attention through J.M. O'Brien, a business partner with F.M.P. Warren, Secretary-Treasurer of Marshall Creek. O'Brien may be a shareholder but he is not an officer of the company. Southwest Potash had examined the property about two weeks prior to my visit with J.M. McNulty, Marshall Creek's President, on May 9th and 10th, 1966.

SUMMARY & CONCLUSIONS

1. The Marshall Creek Molybdenite occurrence has been prospected by J.M. McNulty and associates since its discovery in November, 1965. Their work has consisted of cuts in the creek beds to expose fresh rock for sampling; some geological mapping and a preliminary geochemical survey have been completed.
2. The claims cover the upper part of diorite to quartz monzonite intrusive into a volcanic-sedimentary unit.
3. Two intersecting directions of faulting are obvious in the well-exposed rocks - N60W and N70E. Both directions correspond to the directions of major lineaments that intersect in this vicinity.
4. Molybdenite mineralization occurs as discreet flakes in the dark, silicified fault zones, extending up to 20 feet in the shattered wall rocks. The dark coloration to the quartz was not due to finely divided molybdenite as proved by the assays. (South West Potash was also so deceived.)
5. The best assay I received was 0.02% Mo - approximately 1/10 the results quoted by Marshall Creek. South West Potash said their assays were in the same order. All samples were of fresh, not oxidized, material.

6. The deposit has all the characteristics of the correct locale for a molybdenum deposit - the upper portion a silicified acid intrusive, well brecciated, with disseminated mineralization in the faults or shears that cut it.
7. Without better grades in the rock it is impossible to recommend further work on the prospect.

HISTORY

Marshall Creek has been working in this area for several years, particularly in the vicinity of some zinc-copper prospects at the north end of Nitinat Lake. The Sarita River molybdenite occurrences were brought to their attention by the foreman of a forestry road construction crew in the fall of 1965. Claims were staked in November and prospecting has continued since then.

LOCATION

See accompanying map. Two road routes can be taken - one from Victoria through Duncan, along Cowichan Lake to Sarita River Valley; the other by road from Port Alberni to Bamfield, thence up the Sarita Valley.

DEVELOPMENT WORK

The work by Marshall Creek has been:

- (a) some blasting of the outcrop areas for fresh samples for assays.
(our samples came from these pits.)
- (b) geological mapping by J. McNulty on a base map supplied by the logging company.
- (c) a geochemical survey along the roads and more recently on a grid
(results not yet available.)
- (d) surveying of the claims.

The entire area has recently been logged off and burned, giving excellent exposures. Forestry access roads and rock cuts provided the original discoveries.

GEOLOGY - See 1' = 400' plan after J. McNulty

This map was checked in the field and was found to be generally correct. The rocks units listed are not in genetic sequence and some of the terms could be argued - such as felsite is simply a fine grained quartz monzonite with greater excess silica; the quartz diorite and the diorite are nearly identical.

The faults shown were confirmed as zones of movement. Indeed more northwest trending shears than mapped by McNulty may be revealed when detailed mapping is done. The entire mass is well brecciated as a result of the faulting, permitting weathering to at least 5 feet and often 20 feet of depth.

From the hornfelsization and proximity of the surrounding volcanics together with the number of volcanic inclusions, it appears that the mineralization is in the upper portion or margin of the intrusive. The fine grained felsite is possibly part of the border phase.

MINERALIZATION

Pyrite is ubiquitous, being especially concentrated in the more fractured portions of the intrusive, forming a limonitic stain on the overlying rubble and disseminations in the hornfelsed volcanics. There is no apparent relation to the molybdenite mineralization.

Molybdenite is concentrated in the silicified fault zones extending up to 20 feet into the adjoining brecciated wall rocks. Much of the quartz in the shears is dark coloured, due, I assumed, to finely divided molybdenite. The assays failed to support this conclusion and the dark colour must be due to other minerals. Some large patches - up to 4 inches x 4 inches - of fine grained molybdenite coat some of the fractures in the shears.

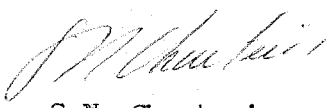
SAMPLING - See accompanying map

The returns are surprisingly low, so low that re-checks were made spectrographically on samples that were noted to contain molybdenite and pyrite. All the molybdenite must occur as visible fragments and there isn't any disseminated as finely divided particles in the wall rock.

The results are tabulated below:

| <u>Sample</u> | <u>Width</u> | <u>\$ Mo</u> | |
|---------------|------------------|---------------------------|--|
| 92430 | 8 feet | 0.01 | Grab-chip of dense grey brecciated felsite- occasional molybdenite flake. |
| 92431 | grab | 0.02 | As above, 200 feet downstream from 92430. |
| 92432 | 10 feet- chip | 0.005 (0.006 check) | Brecciated felsite with minor pyrite and molybdenite. |
| 92433 | 10 feet- chip | 0.01 | Adjoining 92432 - stronger mineralization than 92432. |
| 92434 | 8 feet - chip | 0.02 | Chip of brecciated felsite adjacent to a fault zone. |
| 92435 | grab | 0.005 | From a pit on road 800 feet southeast of 92434. |
| 92436 | 15 feet- chip | 0.02 | Chip sample of wall of creek adjacent to 0.10% Mo over 35' assay obtained by Marshall Creek. |

Vancouver, B.C.
May 25, 1966


S.N. Charteris.

TERTIARY?

TRACHYTE, ANDESITE, BASALT, DYKES

FELSPAR PORPHYRY

PORPHYRITIC QUARTZ MONZONITE

QUARTZ DIORITE

DIORITE

FELSITE

JURASSIC

META ANDESITE & LIMESTONE

GEOLOGICAL CONTACT

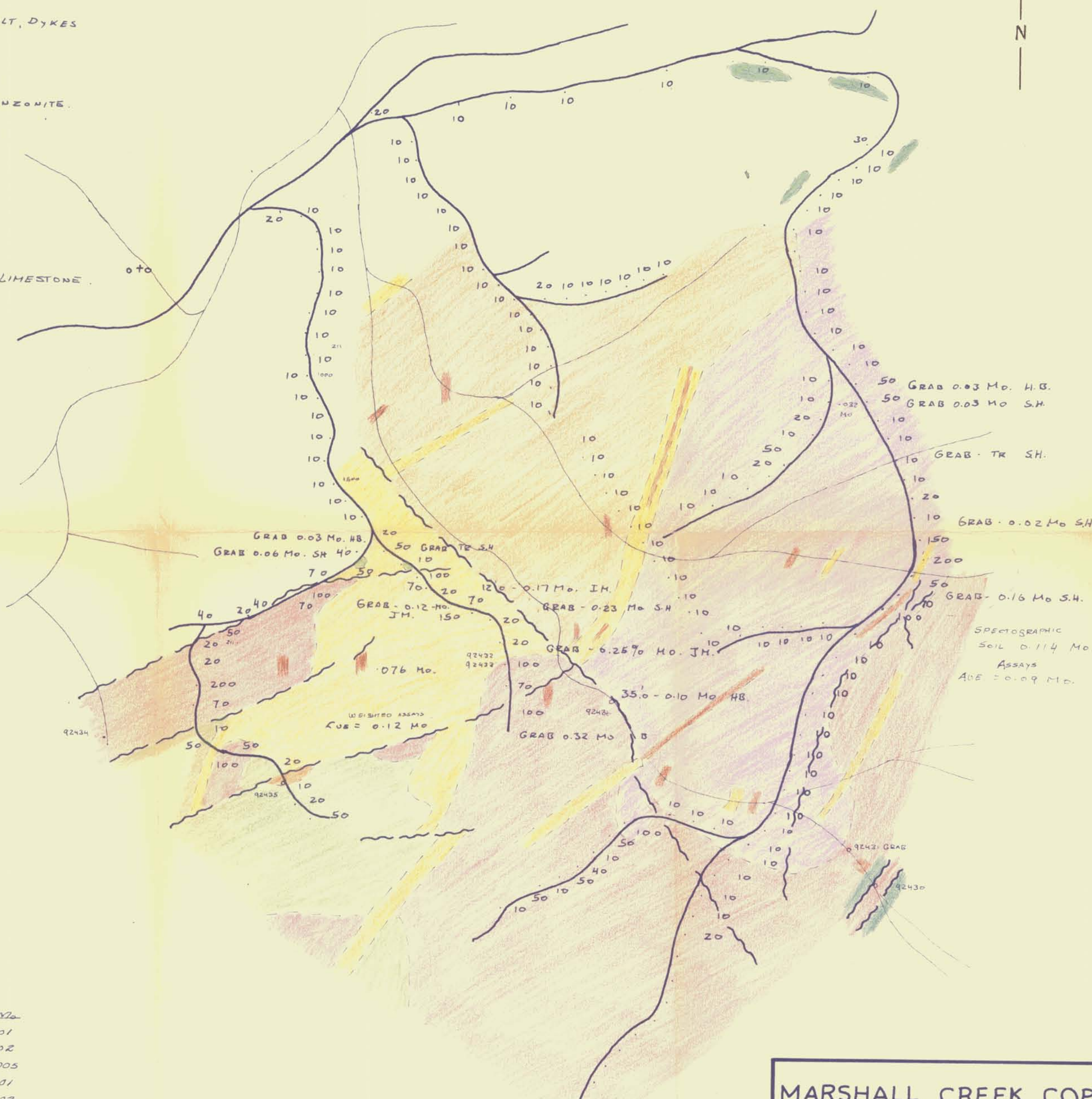
OUTCROP

FAULT

LOGGING ROAD

STREAM

N



Assay Results

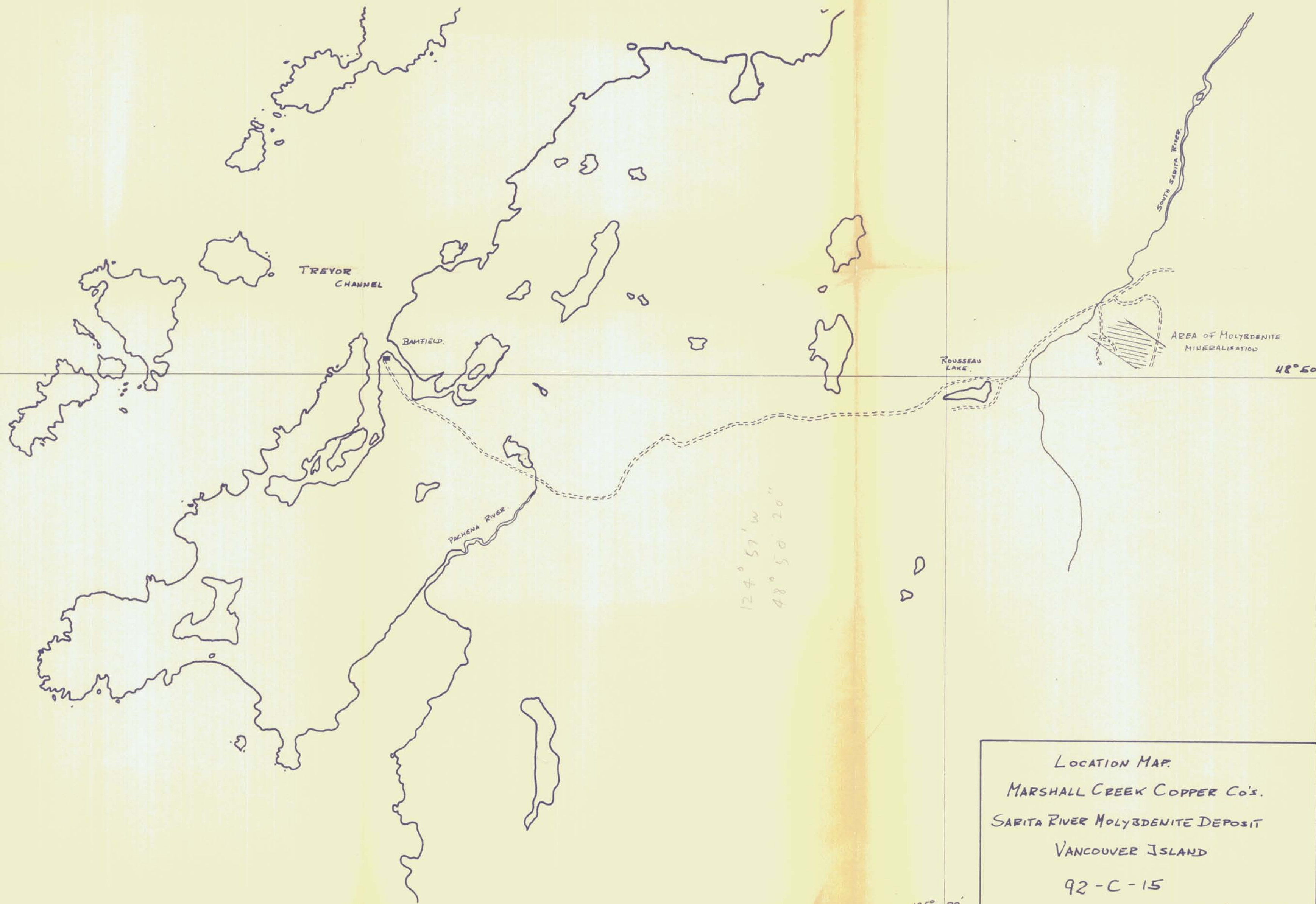
| Sample No. | Description | % Mo |
|------------|--------------|-------|
| 92430 | 8.0' - Chip | 0.01 |
| 92431 | Grab | 0.02 |
| 92432 | 10.0' - Chip | 0.005 |
| 92433 | 10.0' - Chip | 0.01 |
| 92434 | 8.0' - Chip | 0.02 |
| 92435 | Grab | 0.005 |
| 92436 | 15' - Chip | 0.02 |

MARSHALL CREEK COPPER
CO. LTD. (N.P.L.)

Geology according to J. McNulty

ANOMALOUS AREAS
ASSAY PLAN - MOLYBDENUM

SCALE 1" = 400' DATE FEB. 1966



LOCATION MAP.
 MARSHALL CREEK COPPER Co's.
 SABITA RIVER MOLYBDENITE DEPOSIT
 VANCOUVER ISLAND
 92-C-15
 SCALE 1.25" = 1 MILE.

125° - 00'