

GEOLOGICAL REPORT

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on

Wm. RIGLER MOLYBDENUM CLAIMS  
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Located north of the headwaters of Manson  
Creek, Manson Creek P. O. B.C. 55 degrees  
35 min. North Lat. 124 degrees 28 min.  
West Long.

by

Percy E. Page P. Geol.  
10941 90 Ave. Edmonton.

for

93 N / 9 W  
10 E

MANSON SANDS LTD.  
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202 - 1550 West Georgia  
Vancouver B.C.

Examined between 22 - 30 July 1967.

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*Main showing and annotations # 3*

*Map taken from data from Maps 876 A and 93 N # 4*

INTRODUCTION

This report has been prepared at the request of Mr. Peter O'Brien, President of Manson Sands Ltd. 1550 West Georgia, Vancouver B.C. and Mrs. F. Bown, 6769 Cambie Street Vancouver B.C., a director of the Company.

Manson Sands Ltd. present owners of the claims now desire a geological examination of the property and an appraisal of its prospect for the commercial production of molybdenum.

Information has been obtained from reports to the B.C. Minister of Mines, the Geological Survey of Canada and the files of Page Geological Ltd. Information from Manson Sands Ltd has been accepted as stated and no search has been made as to the legal status of the claims.

LOCATION AND ACCESE

The Wm. Rigler group of molybdenum claims (34, more or less) is located on the southern slope of Black Jack Mountain and the valley between Mount Gillie and Baldy Mountain, a few miles north of the headwaters of Manson Creek.

The numerous bulldozed trenches and excavations on this property may be reached by motor truck over devious winding road a distance of fifteen miles south of Manson Creek P. O. Camp site was established close to a small lake. Transport used was a four wheel drive power wagon carrying camping equipment drills, dynamite and mining tools.

The access area is apparently a terminal morain of steep sand hills, now covered with jack-pine. The tops of the ridges have been bulldozed flat to make a narrow road which in places, winds for several miles to gain one mile of distance.

Area number two, to the south-west may be reached by a forestry road but area number three at higher elevation south-east has no access road.

EXPLORATION AND DEVELOPMENT

The attached map indicates the base line survey and location of the numerous large bulldozed trenches where overburden and glacial till have been removed to a depth of six to ten feet, exposing boulders and bed rock. Southern excavations have not reached bed rock except in the large trench at the end of the road.

Most of the trenching was done in 1966. The area was surveyed and mapped by M. Osetenko and acknowledgment is hereby made to his excellent work. Manson Sands Ltd. has used the report as a basis for appraisal of the property. Locations and survey points have been checked. Additional rock exposures and geological findings have been recorded and mapped.

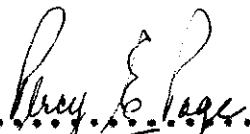
Exploration in the area north of the Higler claims has continued for many years. Manson Creek and Germansen Landing have long been known as gold placer areas. The recent discovery of molybdenum on Mount Gillies has led to roadbuilding and opened up a new area to exploration.

CONCLUSIONS AND RECOMMENDATIONS

Some molybdenite has been found on the claims to date, but not in commercial quantity. Development work has been exploratory and the property must be regarded as prospective until the origin of the mineral has been discovered and evaluated.

The terrain is suitable for an Induced Polarization Survey and such an exploratory method is recommended as suitable to locate any concentration of sulphides in the area.

Edmonton, Alberta.  
28 September 1967.

  
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Percy E. Page P. Geol.  
Consulting Geologist.



NATIONAL  
TOPOGRAPHIC  
MAP 93 N.

1.

GEOLOGICAL REPORT

on

WM. RIGLER MOLYBDENUM CLAIMS

Located:

North of the headwaters of Manson Creek,  
Manson Creek P. O. B.C. 55 degrees 35 minutes  
North Latitude, 124 degrees 28 minutes West Long.

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Examined between 22 - 30 July 1967.



**GEOLOGY**  
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Geological information on the Manson Creek area may be found in Map 676 A and a report to the Geological Survey of Canada, summarized in 1946 by J. E. Armstrong.

The outstanding geological feature on the claims is the large Omineca granite batholith intruding the Triassic Cache Creek argillites and greenstones. Several types of granite underly the claimed area but volcanic sediments are to be found along the north and south boundaries of the mineralized zone. A branch of the Manson Fault is located a short distance to the east.

The Cache Creek group consists of andesites, argillites and quartzites along with minor limestone. No particular granite structures were found or mapped but the geological trend in the sediments is north-west with medium sharp dip to the east and south.

Molybdenum occurs only in the quartz veins or adjacent country rock. The extensive trenched areas have been bulldozed in search of quartz veins in the underlying granite. Mineral rocks are not dissimilar to those at Endako or Alice Arm, B.C. However the area lacks the large andisitic structures, extensive quartz veining and general abundance of basic rocks.

GEOLOGY CONTINUED

It appears that commercial amounts of molybdenite will not be discovered here until the search is extended to areas of more positive granite structure (perhaps to the east and south) where andesites, slates and basic rocks may be of more frequent occurrence.

The Armstrong report indicates only one minor showing of molybdenite; that at Chuchi Lake some thirty five miles to the south. However the Rigler prospect is a recent discovery and development work may extend it to other areas.

The larger quartz veins were found in the southern trenches, but the molybdenite there is in association with pyrite, the sulphides frequently amounting to five per cent or more. Results to date seem to indicate that the search should be continued to an area showing greater alteration of the minerals.

AREA 1.  
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This includes the baseline survey and the trenched areas shown on the attached map, scale 1 inch = 100 feet.

As indicated, a large quartz vein may be traced for a distance of thirty or forty yards on an east - west strike. Disseminated molybdenite and pyrite occur at irregular intervals in this vein and along its contact with the underlying granite. Boulders of high grade quartz molybdenite and pyrite may be found in this pit and at several locations at higher elevation. Indeed it is the discovery of such float rock in the glacial till of the area that has led to the extensive search for more and better molybdenite in place.

AREA 2.  
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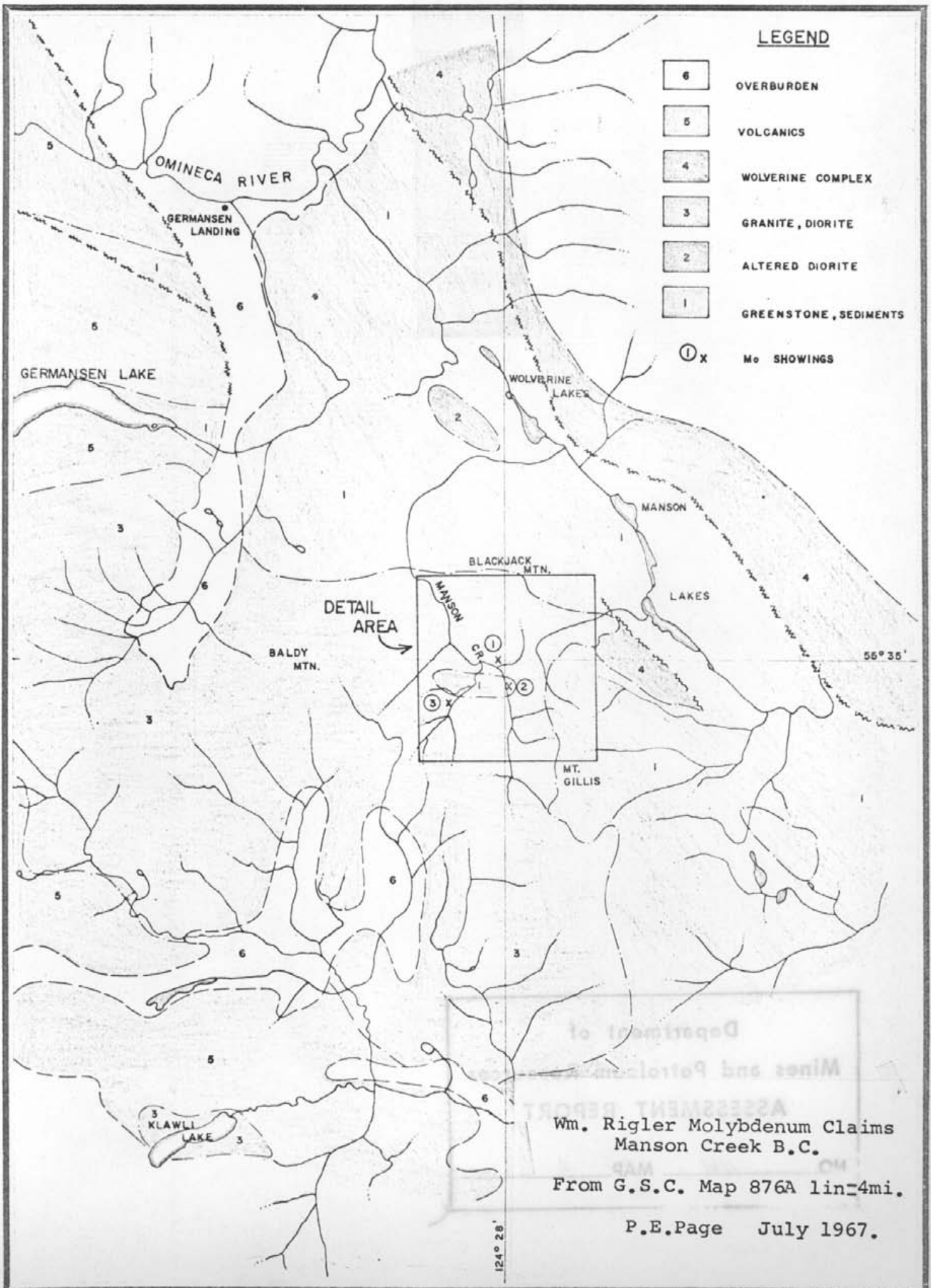
Another area of molybdenite occurrence may be found approximately one mile south of Area 1. on a small tributary of Manson Creek. A contact of granite with Cache Creek rocks is exposed. Molybdenite may be traced for five or ten yards. More trenching should be done at this location.

AREA 5.  
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Search for high grade molybdenite float rock has been extended to an area of higher elevation approximately two miles south-west. Here a good grade of ore rock has been found in boulders of grey aplitic granite. No molybdenite was found in place. Such boulders indicate an origin of dyke structure. Exploration here has been hindered by heavy overburden but search should be continued.

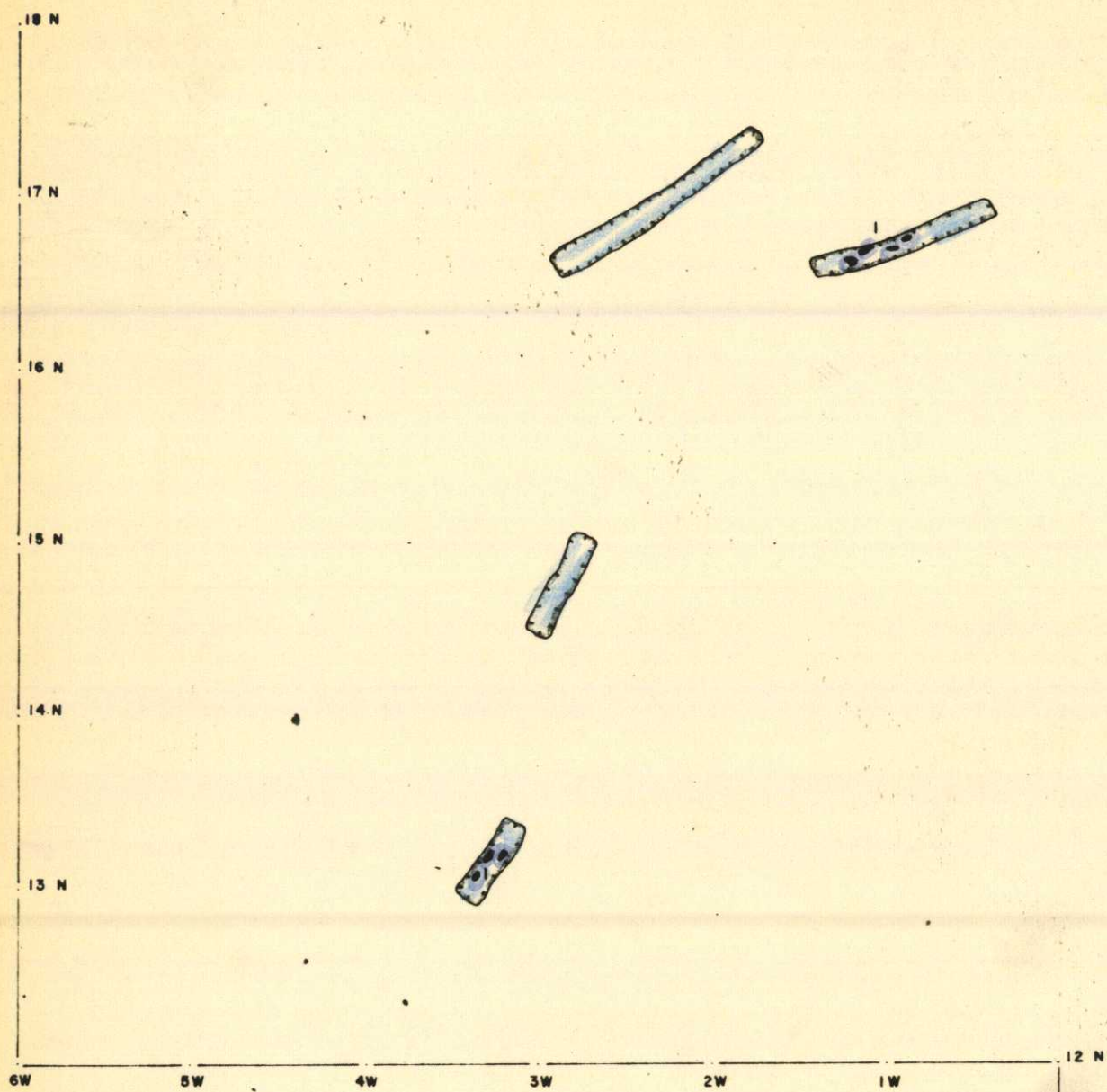
**LEGEND**

- 6 OVERBURDEN
- 5 VOLCANICS
- 4 WOLVERINE COMPLEX
- 3 GRANITE, DIORITE
- 2 ALTERED DIORITE
- 1 GREENSTONE, SEDIMENTS
- ① X No SHOWINGS



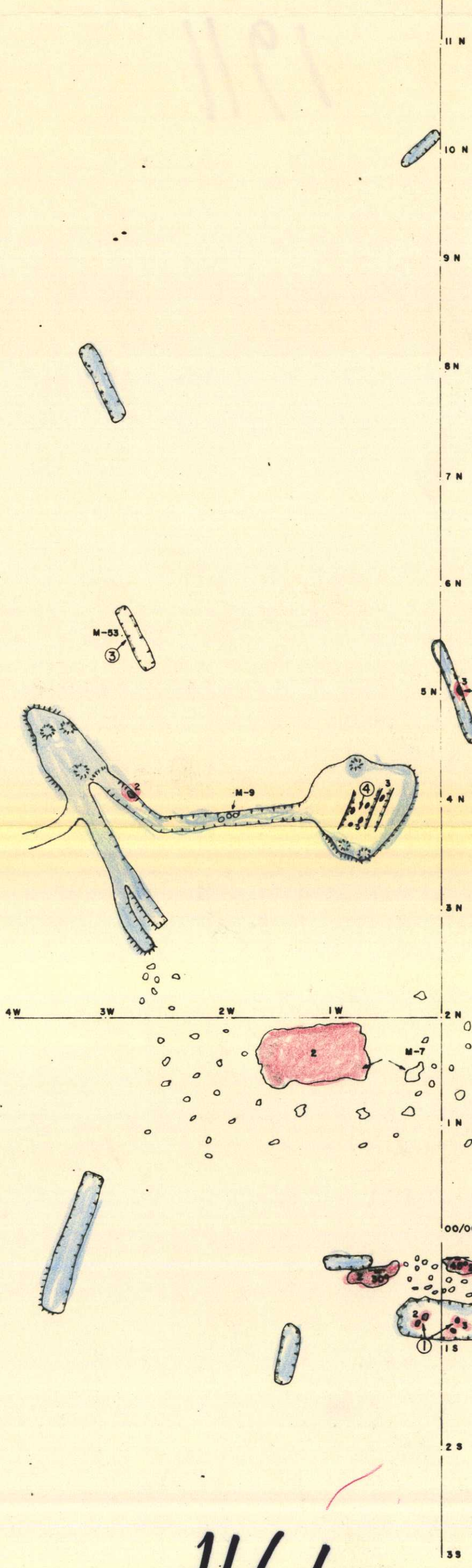
Department of  
Mines and Petroleum  
ASSESSMENT REPORT  
MAP  
Wm. Rigler Molybdenum Claims  
Manson Creek B.C.  
From G.S.C. Map 876A 1 in 4 mi.

P.E. Page July 1967.



**LEGEND**

- 2W — Baseline & Station No.
- Trench
- Qtz. vein & Attitude
- Qtz. Boulders with MoS<sub>2</sub> & FeS<sub>2</sub>
- Granite Outcrop - lt. grey, micaceous
- Shale Float - black, pyritiferous
- Granite Float - lt. grey, micaceous
- K.V.-M-7 Specimen No.
- ① Boulders - high grade MoS<sub>2</sub>

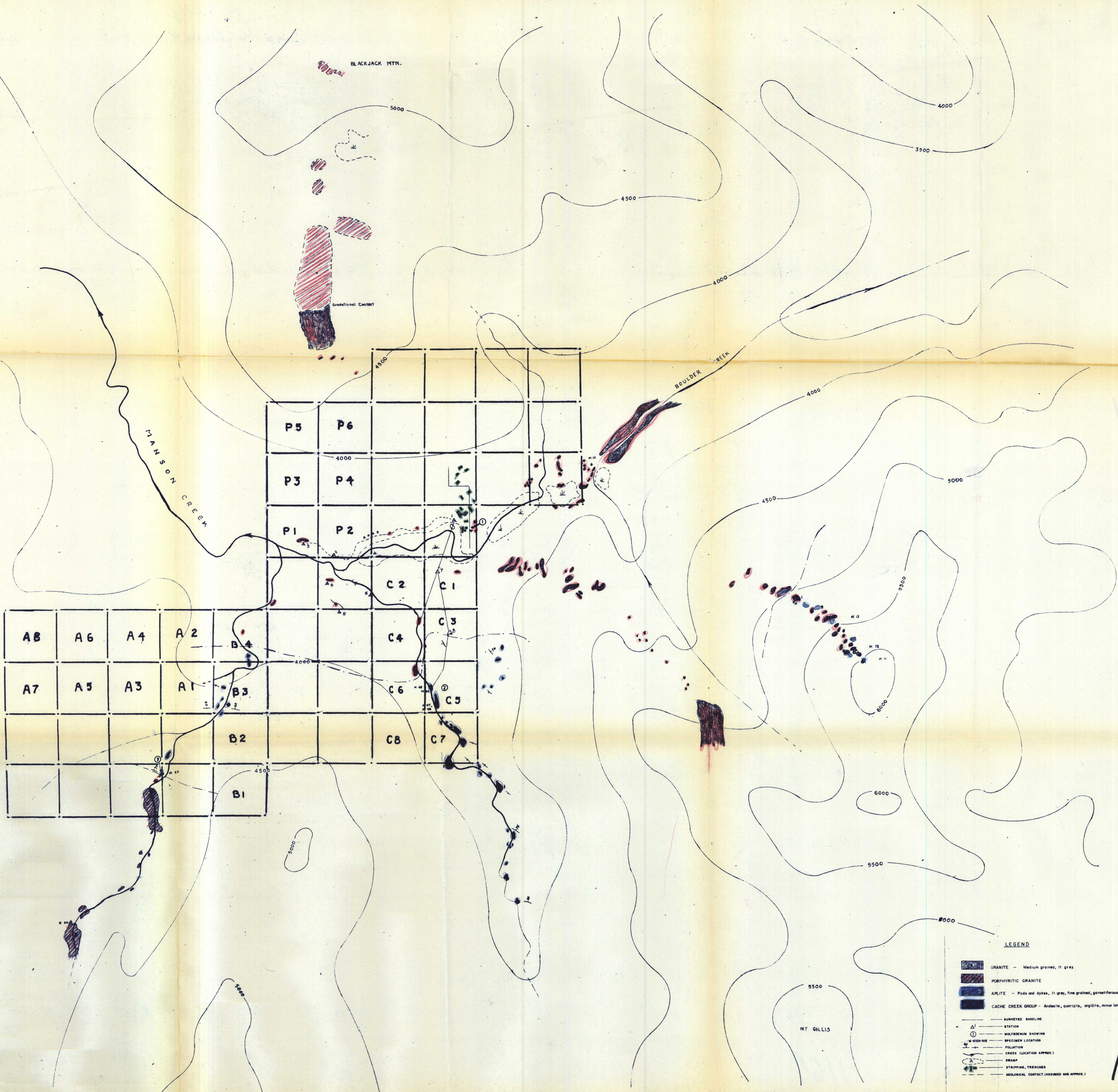


ASSESSMENT REPORT  
 Mines and Petroleum Resources  
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Wm. Rigier Molybdenum Claims  
 Manson Creek B.C.  
 Main Showing and Excaavations  
 Map from M. Osetenko Survey  
 Scale 1 inch = 100 feet.  
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- LEGEND**
- GRANITE - Medium grained, ff grey
  - PORPHYRYTIC GRANITE
  - APLITE - Pods and dykes, ff grey, fine grained, garnetiferous
  - CACHE CREEK GROUP - Andesite, quartzite, argillite, minor limestone
  - SURVEYED BASELINE
  - STATION
  - MOLDENBERG SHOWING
  - SPECIMEN LOCATION
  - POLLUTION
  - CREEK (LOCATION APPROX.)
  - SWAMP
  - STRIPPING, TRENCHES
  - GEOLOGICAL CONTACT (ASSUMED AND APPROX.)

Department of  
 Mines and Geology  
 TECHNICAL REPORT  
 Wm. Higler Molybdenum Claims  
 Manson Creek B.C.  
 Scale: 1 in. = 1000 ft.  
 Data taken from G.S.C. Map 876A,  
 National Topographic map 93 N.,  
 Files of Sage Geological Ltd.  
 Osetenko Survey and Physical  
 Examination. (Main available  
 outcrops indicated, other areas  
 covered with trees and overburden.)

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