

142

Noranda Exploration Company Limited
Geological and Self Potential Surveys
of the
Bruce Group of Mineral Claims
Midway, 9 miles southwest
of
Greenwood, B.C.
49° 118° Southeast

M. M. Menzies P. Eng.
September/October - 1956

20 21 22

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Cost Statement

Geological and Self Potential Report 4 pages

#1 1 Geological Map Scale 1" = 50'

#2 1 Self Potential Map Scale 1" = 200'

NORANDA EXPLORATION COMPANY LIMITED

Cost of Geological and Self Potential Surveys
of the
Bruce Group of Mineral Claims
Greenwood, B.C. - 1957

Professional Engineering:

Supervisory, field, drafting

20 days @ \$35.00/day - \$700.00

Technical (Self Potential Operator):

4 days @ \$20.00/day - \$ 80.00

Labor:

Survey grid, Self potential assistant,
Engineer's helper

10 days @ \$14.00/day - \$140.00

Total cost - \$920.00

Cost Proportions:

Bruce, Bruce 1-7 inclusive.....\$100.00 a claim

M.M. 7/14

Noranda Exploration Company Limited
Geological and Self Potential Report
of the
Bruce Group of Claims

Introduction:

The 16-claim Bruce copper property was staked by John Kleman, Ed Wanke, and Ole Johnson of Greenwood, B.C. in January, 1956 and optioned by Noranda Exploration Company Limited the following September. A geological and self potential survey was carried out during September and October.

Description:

The Bruce property is very arid with sparse vegetation confined to the fringes of alkaline sloughs and water courses. Elevations range from about 2000 feet at the highway to approximately 3500 feet on the north boundary of the property. Steep slopes and rolling bench land are characteristic of the local topography. Soil cover is light with much rock exposed.

The Bruce group, located in the Graham Camp about two and one-half miles northwest of Midway, can be reached by jeep along an old wagon road connecting the original mine workings with the highway.

Geology:

Numerous exposures of Brooklyn (?) shale and limestone, the latter extensively garnetized, are found over an area about 1500 feet square in the vicinity of the old mine workings. These rocks are cut by stocks of granite and diorite and by numerous feldspar porphyry dykes. Midway volcanics cap older formations about 1000 feet east of the copper showings.

Many trenches, a shaft, two short adits, a long tunnel and an open-cut expose the mineralized skarn in the map area. A small tonnage of copper ore, averaging 1.43 percent copper, 0.03 ounces gold, and 0.69 ounces silver, was shipped to a local smelter around 1909.

From an examination of the old workings it is apparent that the ore is closely related to granitic stocks and dykes. The known deposits are erratic and small. Although good grade chalcopyrite is found in a few places, pyrite is more abundant in the large open cut.

Reasons for Survey:

The geology of the Graham camp is similar to that of the formerly productive camps in the Boundary District and thus the mineralized deposits of the Bruce warranted a preliminary investigation of the immediate area to assess the probability of an economic ore occurrence.

Details of Geological Survey:

Mapping was carried out by means of a transit and stadia survey. Topography, physical features, mine workings, and rock outcrops were all mapped with care and plotted at a scale of 50 feet to the inch.

Details of Self Potential Survey:

A north-south grid, covering an area of 1000 feet by 2000 feet was established over the mineralized area. Readings were taken at 50 foot intervals along section lines spaced 250 feet apart and plotted at a scale of 200 feet to the inch. In all, over 200 readings were taken.

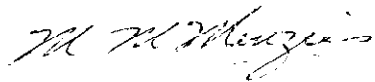
Results:

Results of the survey are summarized as follows:

1. Geology is similar to that of former productive camps of the Boundary District.
2. Known deposits on the Bruce are small and erratic.
3. Self potential work failed to disclose any highly anomalous areas and thus tended to confirm early conclusions regarding the limited size and erratic character of the ore deposits.

4. A more extensive programme, including an electromagnetic survey to probe beneath the Midway Volcanics, is probably worthy of consideration by a smaller mining company.

Respectfully submitted,



Morris M. Menzies, P. Eng.

GEOLOGICAL MAP
BRUCE MINERAL CLAIM
 TRANSIT AND STADIA SURVEY
 SEPTEMBER, 1956

SCALE: 1 inch = 50 FEET CONTOUR INTERVAL - 25 FEET

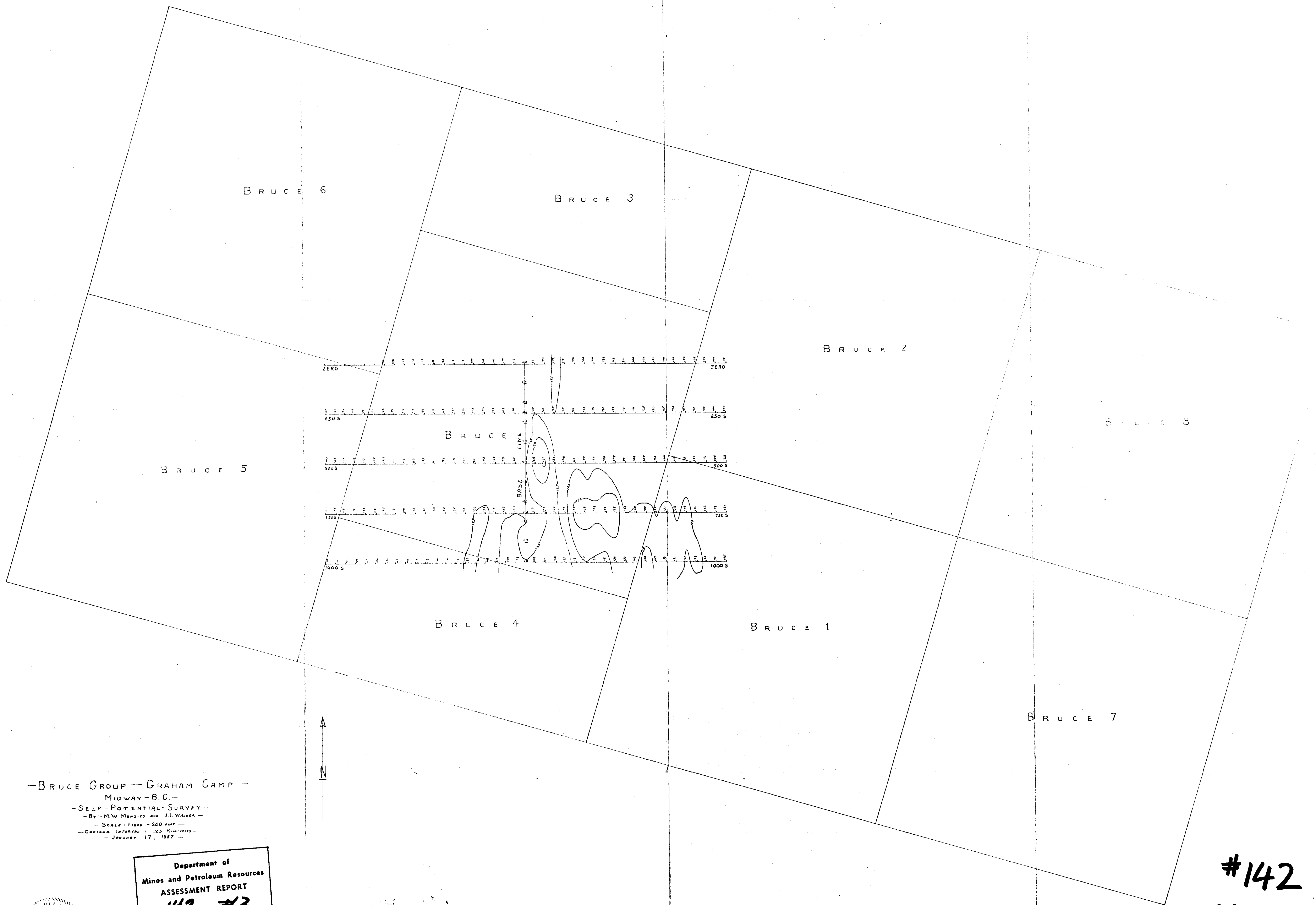
- | | |
|--|-------------------|
| Phonolite, syenite, pink syenite dikes | L |
| Feldspar porphyry dikes | M |
| Volcanic breccia, tuff, agglomerate | T |
| Andesite dikes | I |
| Limestone K-feldspar porphyry | H |
| Diorite | G |
| Skarnized diorite | F |
| Limestone | C |
| Chert | D |
| Argillite | E |
| Skarn | S |
| Metalic deposits | A |
| Silicification | (hatched pattern) |

Department of
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 ALBUQUERQUE REPORT
 NO. 142 MAP #1



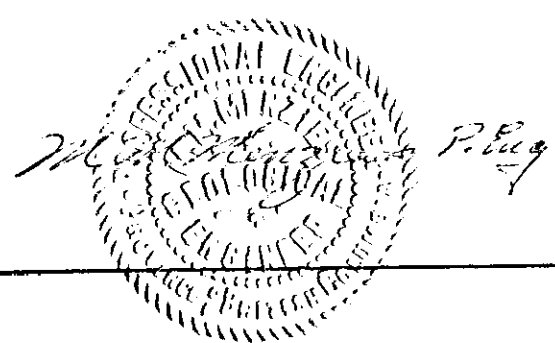
#142
 MAP 1





-BRUCE GROUP - GRAHAM CAMP -
 -MIDWAY - B.C. -
 -SELF-POTENTIAL SURVEY -
 -By -M.W. MENZIES and J.T. WALLACE -
 -SCALE: 1 inch = 200 feet -
 -Contours Interval = 25 Meters -
 -January 17, 1937 -

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 142 MAP #2



#142
 MAP 2