GEOCHEMICAL REPORT

on

BIG JOE CLAIM GROUP

Lat. 54°
Long. 128°
NW Quadrant

Skeena Mining Division

103I/15W

by

Norman W. Burmeister
November, 1966

Claims held by:

E.R. Anderson and
L. Remillong

852

857

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INTRODUCTION:

The Big Joe Group consisting of forty claims is located in the Skeena Mining Division, north of Terrace, B.C. Sparse molybdenite mineralization occurs on the claims, primarily along fracture planes and associated with numerous quartz veinlets within a quartz monzonite stock. The claim area is largely covered by a thin layer of mountain soil and moss.

During the summer of 1966, the Big Joe Group, which is owned in partnership by Messrs. E.R. Anderson and I. Remillong of Terrace, was examined by Silver Standard engineers. It was recommended that the property be optioned and a soil sample survey be carried out over the area to delimit the mineralization and outline targets for further exploration. Subsequent to the option agreement the survey was done during September and October of 1966.

PROPERTY:

The Big Joe Group is comprised of twenty "Big" and twenty "Joe" claims. Record dates for said claims are from November 16, 1965 to December 14, 1965. In January of 1966 the claims were grouped by Messrs. Anderson and Remillong. The claims are staked by both location line and witness posts.

LOCATION AND ACCESS:

The Big Joe Group is located 32 miles north northwest of Terrace, B.C. (Lat. 54° Long. 128° NW Quadrant) on a spur of the Columbia Cellulose road. The Cedar River, which runs in a southerly direction in the area divides the group into nearly equal eastern and western blocks.

The claims can be reached by passenger vehicle along the Columbia Cellulose road. The principal showings are approximately forty miles from the turnoff on Highway 16.

GENERAL GEOLOGY:

The area is largely underlain by argillites, quartzites, and greywackes of the Bowser Group. Within the claim area the Bowser rocks have been intruded by a body of quartz monzonite, which is elongated in the east-west direction.

The intrusive body, which is classified as a major sill has a width of about 2000 feet and an overall length of more than

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General Geology - cont'd:-

7000 feet. Molybdenite mineralization associated with fracturing and quartz veining within the sill has been observed over a considerable distance along the sill.

GEOCHEMISTRY:

The geochemical survey was conducted to delimit the extent of the significant mineralization and outline targets for further exploration. Geochemistry was selected for this phase of exploration as there is little outcrop on the claims and geophysical methods are more or less precluded by the absence of associated conductive or polarizing mineralization.

In preparation for the soil sampling, a grid was cut from a 13,000 foot base line running east-west through the centre of the claim group. The grid lines were cut on 400 foot centres to 3500 feet north and 3500 feet south. A total of 33 line miles were cut. Soil sampling was done on 100 foot centres and a total of 1743 samples were collected.

Sampling was done at the top of the "B" zone. On the Big Joe claims the "A" zone to "B" zone break is quite easily recognized, the "A" being nearly black and rich in organic material, and the "B" being a yellow to buff clay-rich horizon. The top of the "B" zone lies at a depth of six to eighteen inches below the surface on the claim group. A mattock or one inch diameter auger was used to penetrate the "A" zone. At each sampling station about 20 grams of soil was collected and stored in 3 1/2" x 6" high wet-strength Kraft paper bags.

All samples were semi-quantitatively analyzed for molybdenum content by Technical Services Laboratories Ltd. The soils were air dried and screened to minus 80 mesh with a nylon sieve. Determinations were made for total molybdenum content, using hydrochloric acid extraction and colorometric comparison. For each determination a one gram sample of the sieved fraction was tested.

The regional background in the Cedar River area is interpreted to be one to two ppm molybdenum. Over the mineralized stock a local threshold of 20 ppm was established. The results, which are plotted on the accompanying maps, have been contoured at 0-4 ppm, 4-19 ppm, 20-39 ppm, and 40 plus ppm molybdenum.

CONCLUSIONS & RECOMMENDATIONS:

The geochemical survey has served to very distinctively outline the more interesting portions of the claim group. Anomalous values are well grouped and a very significant contrast between background and threshold values is evident.

At least two anomalies are sufficiently large and strong to warrant further exploration by physical means. Prior to such physical work, however, it is recommended that additional geochemical work be done with samples presently collected. This should consist of establishing a confirmation anomaly with another metal. Either silver, mercury, copper, or zinc could be used in this connection. Spot checks of background and anomalous samples should be made to determine which metal will provide the most distinctive contrast.

Respectfully submitted,

Norman W Burmeister

N.W. Burmeister
Geologist

STATEMENT OF QUALIFICATIONS

Norman W. Burmeister:

1. Graduated from the Colorado School of Mines in Golden, Colorado in 1961 in Geological Engineering.

2. Has been employed as a Geological Engineer in the mineral industries for the past five years.

3. Has personally examined the Big Joe property; has supervised the work described in this report, and has compiled the data herein.

4. Is a full-time employee at Silver Standard Mines Ltd. as a Geological Engineer.

CERTIFIED CORRECT:

Wm. St. C. Dunn
Superintendent of Exploration

EVIDENCE OF EXPENDITURES INCURRED

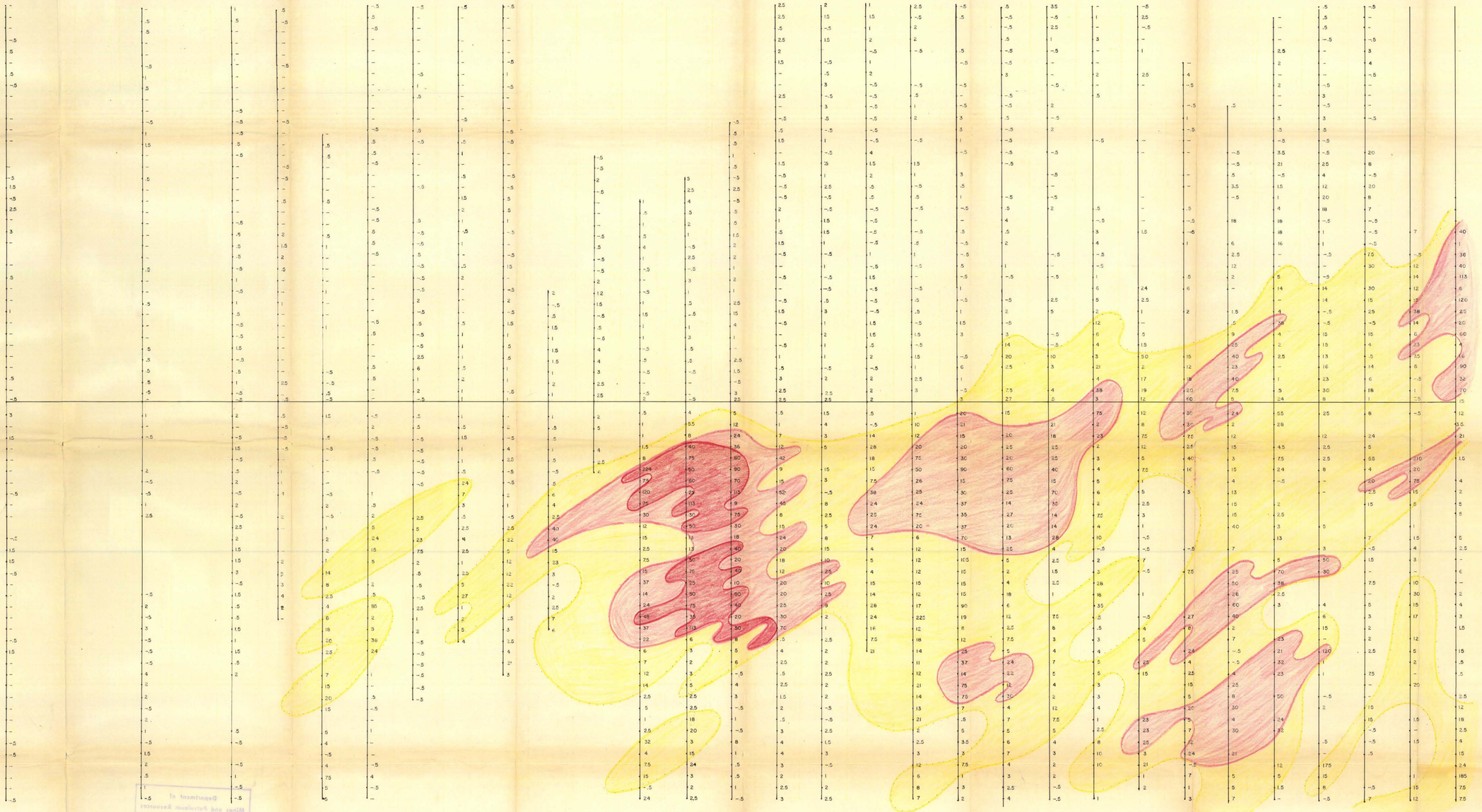
Engineering & Supervision:			
10 man days	@	$ 30.00/man day	$ 300.00
Sampling:			
46 man days	@	$ 20.00/man day	920.00
Linecutting - (33 line miles):			
62 man days	@	$ 20.00/man day	1,240.00
Geochemical Analyses:			
1743 samples	@	$ 1.40 each	2,527.35
TOTAL COST -			$ 4,987.35

CERTIFIED CORRECT:

W. St. C. Dunn
Superintendent of Exploration

Declared before me at the City
of [illegible] in the
Province of [illegible] 10
day of November 1966

[illegible]



0-4 ppm Mo

4-19 ppm Mo

20-39 ppm Mo

40 plus ppm Mo

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BIG JOE GROUP

GEOCHEMICAL SOIL SAMPLE SURVEY

Terrace, B. C.

by

Silver Standard Mines Limited

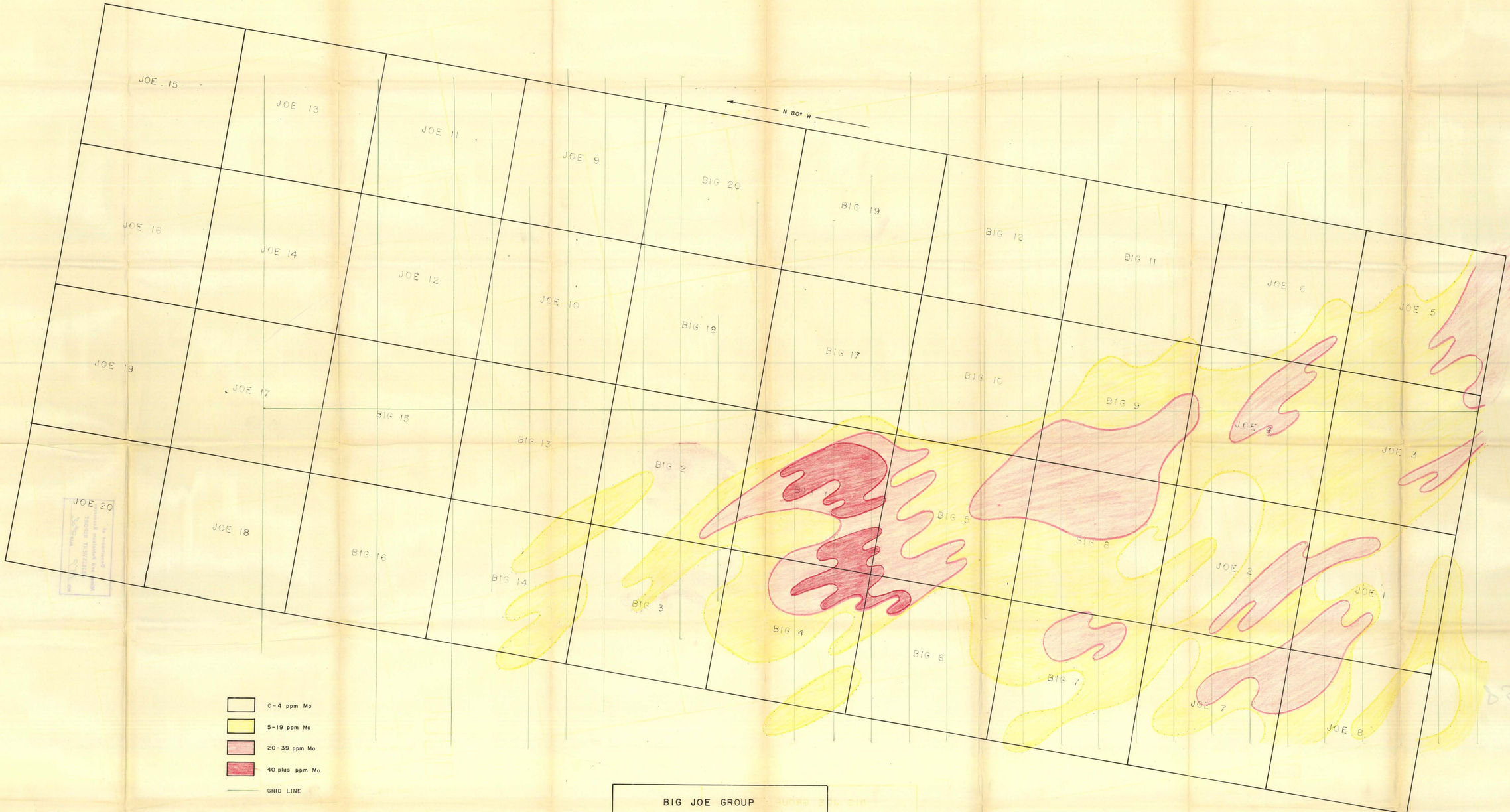
NOVEMBER 1966

SCALE 1"=300'

TO ACCOMPANY GEOCHEMICAL REPORT ON THE BIG JOE CLAIM GROUP

November 10, 1966

Norman W. Burmister



BIG JOE GROUP
GEOCHEMICAL SOIL SAMPLE SURVEY
Terrace, B.C.
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TO ACCOMPANY GEOCHEMICAL REPORT ON THE BIG JOE CLAIM GROUP

November 10, 1966 Norman W. Burmester

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