

510

MINERAL HILL MOLYBDENUM PROSPECT

REPORT

ON

MAGNETOMETER SURVEY

WOLF and BEAR GROUPS

OWNERS:

W.D. YORKE-HARDY
and
P.J. HUBER

Located 30 Miles East of Smithers, B.C.

On Mineral Hill Mountain

Omineca Mining Division

54° - 126° NW

By: R.E. Anderson, P.E., B.C.

4th October, 1963

93L/10E

T A B L E O F C O N T E N T S

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Scale 1" to 100"
Contour Intervals 50 Gammas

Department of	
Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO. <u>510</u>	MAP

MAGNETOMETER SURVEY REPORT
on
WOLF and BEAR GROUPS

INTRODUCTION:

The claim groups discussed in this report are located in north-central British Columbia, lying on the southern flank of Mineral Hill, approximately 30 miles southeast of the village of Smithers. Exploratory investigations of the prospect area included a magnetometer survey and the collection of soil samples for the determination of molybdenum content. The surveys were undertaken during the latter part of October 1962 and early November 1962 by Southwest Potash Corporation under the direction and supervision of R.E. Anderson, P.E., B.C.

LOCATION AND ACCESS:

Mineral claims covering the prospect area are located on the southern and western flanks of Mineral Hill. Elevations within the claim block range from 2600 to 3500 feet above sea level. The terrain is heavily wooded and for the most part is extensively covered by an unknown thickness of humus, soil and rock debris. Provincial Highway No. 16 adjoins the western boundary of the claim block, and access to the showings from this point is provided by approximately one mile of dirt road. The access road trends easterly from Highway 16, passing through the Hungry Hill Ranch and skirting the northern end of Government (Fishpan) Lake.

MAGNETIC SURVEY METHOD:

A Radar Exploration Co. torsion wire magnetometer was used to carry out magnetic measurements over a grid area measuring 2200 by 2100 feet. Station spacings were established at 100 foot intervals. The Radar magnetometer is the null type instrument which measures the vertical component of the earth's magnetic field. The scale value of the instrument was set by the manufacturer at 19.4 gammas per division. The smallest reading or sensitivity obtainable is approximately 10 gammas.

In conducting the magnetometer survey a base station was first established within in the central portion of the grid area. The operator obtained readings at 100 foot intervals, and tie-in was made at the base station several times each day in order to determine diurnal variations and to check on any unusual magnetic activity resulting from magnetic storms. By arbitrarily assigning a magnetic value at the base station and noting the difference in readings between the base station and each survey station occupied, magnetic values were computed for each of the stations within the grid area. The resultant data were then plotted and contoured on a map at a scale of 1" to 100', contour intervals 50 gammas (Plate 1). The survey included readings at 420 separate stations connected by 8.22 miles of line traverse.

INTERPRETATION:

The grid area surveyed covers a contact zone between a light gray, fine grained quartz feldspar porphyry mass and a thin covering of hornfelsic rocks underlain by light gray, fine to medium grained alaskite granite. Surface mineralization within the granitic and hornfelsic rocks is present in scattered exposures along the contact zone which occupies the northern portion of the grid area.

The chief purpose of the magnetometer survey was to determine whether or not a relationship existed between the sulphide mineralization (molybdenite-pyrrhotite) and the indicated geological structure. Anomalous magnetic values coinciding with surface exposures and possible extensions of this mineralized zone lying to the northwest and southeast suggests a relationship may be present. The anomalous trend is bounded to the northeast by low magnetic values obtained over quartz feldspar porphyry exposures, and to the southwest by uniform magnetic values over an area completely masked by overburden.

The following is a summary of personnel involved and costs incurred in completing the Magnetometer Survey on the Wolf and Bear Claim Groups:


(1) Instrument Readings and Computations:

H. Marko - October 22-26, 1962 @ \$15 per day - \$75.00
R. Anderson - " 22-26, 1962 @ \$15 " " - \$75.00

(2) Map Preparation:

R. Anderson - Nov. 1 and 2, 1962 @ \$15 " " - \$30.00
R. Anderson - Oct. 1 and 2, 1963 @ \$15 " " - \$30.00

Total - \$210.00


R.E. Anderson, P.E., B.C.

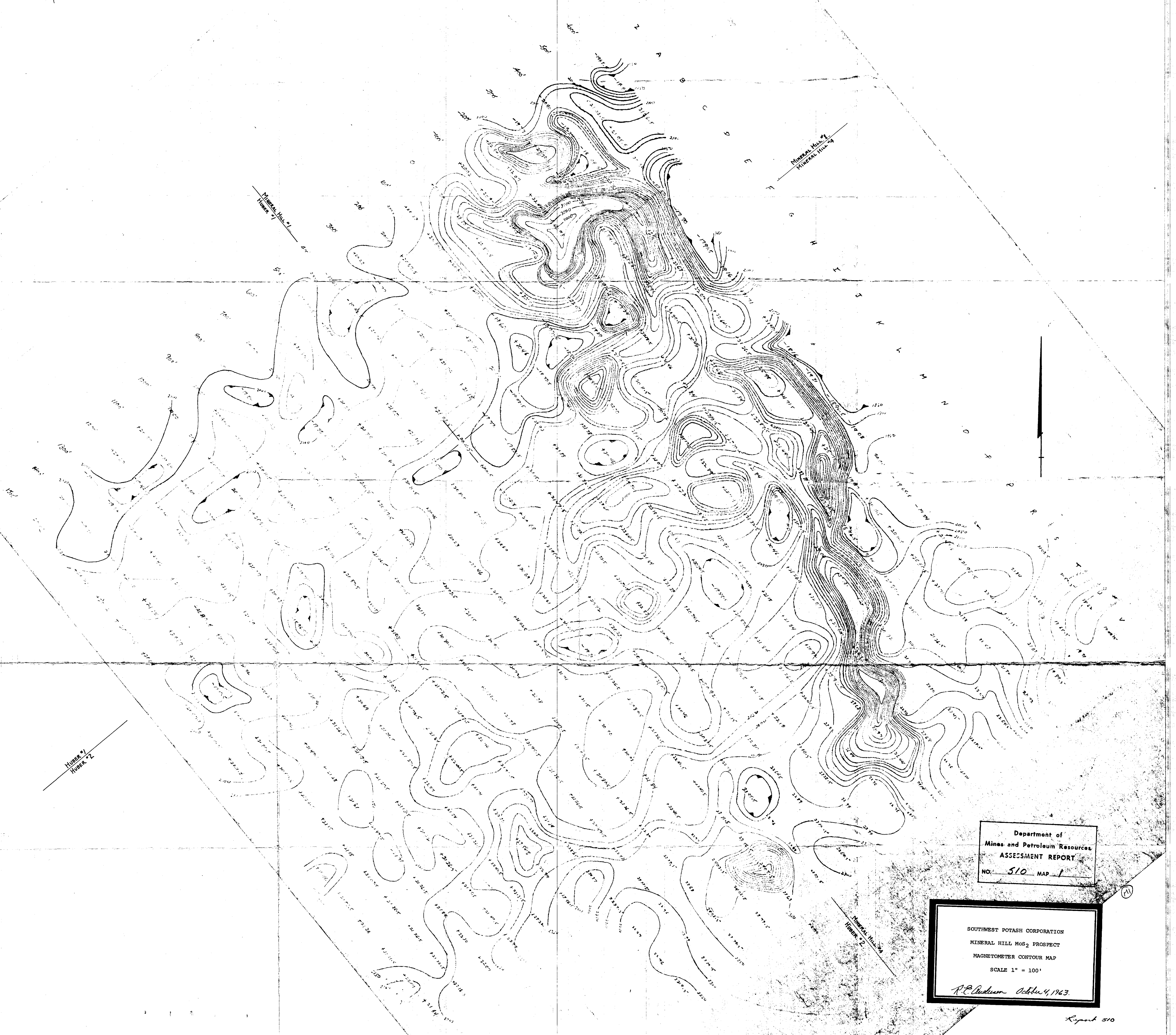
Oct. 4th, 1963

APPENDIX A

Mineral Claim Schedule

<u>BEAR GROUP:</u>	<u>Claim Name</u>	<u>Record Number</u>
	Mineral Hill No. 1	12486
	Mineral Hill No. 2	12487
	Mineral Hill No. 3	12488
	Mineral Hill No. 8	12997
	Huber No. 1	15758
	Huber No. 3	15760
	Huber No. 4	15761
	Huber No.11	15763
	Huber No.12	15764
	Huber No.13	15765
	Huber No.14	15766
	Huber No.15	15767
	Huber No.16	15768

<u>WOLF GROUP:</u>	<u>Claim Name</u>	<u>Record Number</u>
	Mineral Hill No. 4	12489
	Mineral Hill No. 7	12996
	Huber No. 2	15759
	Huber No. 9	16058
	Huber No.10	16059
	Huber No.17	16909
	Huber No.18	16910
	Huber No.19	16214
	Huber No.20	16215
	Huber No.21	16216
	Huber No.22	16217
	Huber No.23	16218
	Huber No.24	16219
	Huber No.25	16220
	Huber No.26	16221
	Huber No.27	16222
	Huber No.28	16223
	Huber No.29	16224
	Huber No.30	16225
	Huber Fraction No. 1	16060



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 510 MAP 1

SOUTHWEST POTASH CORPORATION
MINERAL HILL MoS₂ PROSPECT
MAGNETOMETER CONTOUR MAP
SCALE 1" = 100'
R.P. Anderson October 4, 1963