

824176

REPORT OF WORK ON THE  
AH THERE (LOT 1960) CROWN-GRANTED MINERAL CLAIM  
GREENWOOD, B.C.  
1973/1974

for

MASCOT MINES & PETROLEUMS LIMITED  
Suite 900 - 837 West Hastings Street  
Vancouver, B.C.  
V6C 1C2

by  
H.H. Shear, P.Eng.  
Geologist

SEPTEMBER 1974

REPORT OF WORK ON THE  
AH THERE (LOT 1960) MINERAL CLAIM  
AT GREENWOOD, B.C.  
1973/1974

The Ah There Crown-granted mineral claim (Lot 1960) lies around the south corner of the Greyhound claim. A portion of this Crown Grant lies along the west border of the Greyhound mineral claim, adjacent to the Greyhound pit.

Mascot Mines & Petroleums Limited drilled five percussion holes on the Ah There. In addition, logs were available from hole S.J. 8 drilled by San Jacinto Explorations in 1969, DW 5 drilled by Granby in the 1950's and V6 drilled by Ventures. Rock types encountered were skarny andesite and skarny limey rock belonging to the Greyhound skarn zone. In the vicinity of the Ah There shaft the skarny limey rocks were intensely pyritic.

Minor amounts of chalcopyrite were noted in the top few feet of S.J. 8. Mascot drilled four holes 100 feet north, south, east and west of S.J. 8, and minor amounts of chalcopyrite were noted in two of these holes. The best assays were 0.20% copper from 33 ft. to 43 ft. in S.J. 8 and 0.19% copper from 30 ft. to 40 ft. in G22. No copper mineralization was noted in the other holes drilled by Mascot. The log of DW5 cited minor copper values to be present. From 126 ft. to 132.5 ft. assayed 0.46% copper.

A potential for locating ore still exists in the southeastern portion of the Ah There as the holes drilled did not penetrate the pyritic limey skarn. Drilling has indicated that the upper 200 ft. is barren of copper mineralization. Deeper drilling is required to test to the bottom of this zone. It should be noted that a larger or higher grade zone would have to occur relative to the known Greyhound deposit to be economic at this depth.

*H.H. Shear*

H.H. Shear, P.Eng.

DRILL HOLE LOGS:

- G20 This hole is located on the Ah There claim near the haystack in Deadwood Flats. The hole was drilled vertically to a depth of 100 feet in overburden but it failed to reach bedrock.
- G22 This is a 100 ft. deep vertical drill hole located 100 ft. north of S.J. 8 on the Ah There claim. 0 - 20 ft. overburden, 20 - 75 ft. epidote-garnet skarnified andesite with approximately 1% pyrite in the upper part of this section and 3 - 5% pyrite at depth, 75 - 100 ft. Kettle River arkose. At 86 ft. there is a one foot section of epidote-garnet skarn.
- G23 This hole was drilled 100 ft. west of S.J. 8 on the Ah there claim and to a vertical depth of 120 ft. 0 - 30 ft. overburden, 30 - 40 ft. epidote-garnet skarnified andesite with minor pyrite, 40 - 65 ft. Kettle River arkose in part but still abundant skarn material (the amount of skarn decreases with depth), 65 - 120 ft. dark green andesite becoming increasingly richer with respect to epidote and garnet with depth (at 100 ft. the original rock - andesite - is still apparent although it has almost completely been altered to an epidote-garnet skarn), 105 - 109 ft. garnet-epidote skarn with approximately 10% pyrite (no chalcopyrite).
- G24 This hole was collared 100 ft. south of S.J. 8 on the Ah There claim and was drilled vertically to a depth of 110 ft. 0 - 25 ft. overburden, 25 - 60 ft. Kettle River arkose with minor skarn (this section contains abundant iron oxide and minor fine-grained pyrite - the rock appears to be highly fractured with the iron oxide developed along the fractures), 60 - 75 ft. epidote-garnet skarn with pyrite, 75 - 110 ft. andesite, fine-grained pyrite and minor epidote-garnet skarn. It appears that the bottom of this hole was changing to arkose.
- G25 This hole was located 100 ft. east of S.J. 8 on the Ah There claim and drilled vertically to a depth of 100 ft. 0 - 30 ft. overburden, 30 - 50 ft. fine-grained intrusive (?) with minor pyrite, 50 - 80 ft. mixed Kettle River arkose and skarn and minor chalcopyrite, 60 - 80 ft. abundant pyrite with the odd seam of approximately 10% pyrite, 80 - 95 ft. mainly Kettle River arkose with abundant pyrite, 95 - 100 ft. epidote-garnet skarn with abundant hematite and pyrite.

D R I L L H O L E A S S A Y S

	<u>FOOTAGE</u>	<u>% Cu</u>	<u>Oz/ton Gold</u>	<u>Oz/ton Silver</u>
G20	Overburden - not assayed.			
G22	20-30	.11	.005	Tr
	30-40	.19	.005	Tr
	40-50	.06		
	50-60	.04		
G23	70-80	.04		
	80-90	.03		
	90-100	.02		
	100-110	.06		
	110-120	.11	.005	Tr
G25	60-70	.02		
	70-80	.06		
SJ8	33-43	.20	0.020	Tr
	43-54	.11		
	54-64	.02		

PEACOCK  
LOT 1243

PLUTO  
LOT 2393

GREYHOUND  
LOT 1014

PIT

BOB 2 FR

AH THERE  
LOT 1960

SYD. M. JOHNSON  
LOT 1961

PH-21  
390'

G-28  
230'

G-21  
410'

G-22  
100'

G-23  
120'

\*S-9

G-25  
100'

V-6\*

G-24  
110'

RP-3

PH-12

PH-11

G-20  
100' O.B.

\*DW-5

G-27  
90'

MASCOT MINES & PETROLEUMS LIMITED

DRILL HOLE LOCATIONS

PLUTO-AH THERE AREA

SCALE 1" = 400' | DATE - OCT. 1974

DRAWN BY - E. R. GAYFER

REPORT OF WORK ON THE  
PLUTO (LOT 2393) MINERAL CLAIM  
GREENWOOD, B.C.

1974

for

MASCOT MINES & PETROLEUMS LIMITED  
Suite 900 - 837 West Hastings Street  
Vancouver, B.C.  
V6C 1C2

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REPORT OF WORK ON THE  
PLUTO (LOT 2393) MINERAL CLAIM  
GREENWOOD, B.C.

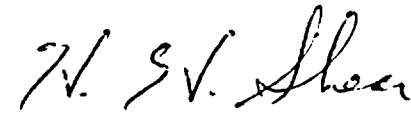
1974

The Pluto Crown-grant (Lot 2393) lies immediately west of the Greyhound mineral claim and is separated from it, except for a few feet of common border, by narrow strips of the Hardscrabble and Ah There claims.

Mascot Mines & Petroleums Limited ('Mascot') drilled two percussion holes on the Pluto and one on its border just into the Hardscrabble. In addition, logs of four previous holes drilled on the claim were available to Mascot.

The Pluto is entirely covered by overburden. Drilling indicates that at bedrock a major portion of the claim is covered by Tertiary Kettle River arkose. This suggests a large down-faulted block of large vertical displacement. The Kettle River arkose was found by drilling to be bounded on the north and northwest by quartz diorite which is a branch of the Greenwood stock. On the east, the arkose is bounded by limey Greyhound type skarn. Hole G21 drilled through the arkose near the centre of the Pluto. Highly pyritic Greyhound type skarn was encountered below. PH21 drilled into the pyritic skarn at 340 feet and was drilled to the limit of rods, 410 feet, in the same material.

An ore potential exists below the arkose on the Pluto claim. However, the target is not attractive due to the great thickness of barren arkose overlying the skarn. A mineral body similar to the Greyhound deposit would not be commercial at that depth.

  
H.H. Shear, P.Eng.

DRILL HOLE LOGS:

- G21 Located south of the public road near the centre of the Pluto Crown Grant. This hole is vertical to a depth of 410 feet, 0 - 80 ft. overburden, 80 - 150 ft. grey Kettle River arkose with 4 - 5% pyrite, 150 - 215 ft. grey Kettle River arkose with 1% pyrite, 215 - 340 ft. light grey Kettle River arkose (this section is more altered than previous sections and shows an increase in chlorite, epidote, and hematite - it also contains unaltered arkose and 2 - 3% pyrite), 340 - 410 ft. Greyhound type skarn with abundant pyrite, epidote, hematite and chlorite. Copper values were very low.
- G28 Located at the intersection of the Motherlode mine road and the main public road near the west end of the Pluto. This hole is vertical and drilled to a depth of 230 ft.; 0 - 30 ft. overburden, 30 - 190 ft. grey-green, fine-grained diorite with 4 - 5% coarse-grained pyrite (minor epidote at 65 - 100 ft.; 110 - 120 ft. 1% pyrite), 190 - 230 ft. similar to the above section but lighter in colour and approximately 1% pyrite. (At 220 - 230 ft. approximately 10% pyrite.)
- PH21 Drilled on the old C.P.R. railroad bed just northeast of the Pluto. This hole is vertical and drilled to a depth of 390 ft.; 0 - 80 ft. overburden, 80 - 155 ft. Kettle River formation - chert with 3 - 5% pyrite, 155 - 270 ft. Leucocratic arkose derived from a quartz-diorite with approximately 3% pyrite (sulphides decrease to about 1% from 200 - 250 ft.), 270 - 390 ft. mainly siliceous fragments, slightly chloritized with 2 - 3% pyrite and abundant calcite. Rock unit silicified arkose or possibly Knob Hill chert.



D R I L L H O L E A S S A Y S

	<u>FOOTAGE</u>	<u>% Cu</u>
G21	340-350	.02
	350-360	.02
	360-370	.02
	370-380	.02
	380-390	.02
	390-400	.01
	400-410	.01
PH21	70-120	.02
	120-170	.03
	170-220	.03
	220-270	.02
	270-330	.02
	330-390	.02

PEACOCK  
LOT 1243

PLUTO  
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PIT

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AH THERE  
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LOT 1961

PH-21  
390

G-28  
230

G-21  
410

G-22  
100

G-23  
120

\*SJB

G-25  
130

G-24  
110

V-6\*

RP-3

PH-12

PH-11

G-20  
100' O.B.

\*DN-5

G-27  
90

MASCOT MINES & PETROLEUMS LIMITED

DRILL HOLE LOCATIONS

PLUTO-AH THERE AREA

SCALE 1" = 400' | DATE - OCT. 1974

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REPORT OF WORK ON THE  
GOTCHA MINERAL CLAIM GROUP  
GREENWOOD, B.C.  
1973/1974

for

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Suite 900 - 837 West Hastings Street  
Vancouver, B.C.  
V6C 1C2

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H.H. Shear, P.Eng.  
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INTRODUCTION

The Gotcha Group is a copper prospect located two miles west of Greenwood, British Columbia. Mascot Mines & Petroleum Limited ('Mascot') completed two exploration programs on the property in November, 1973, and May-June, 1974. Widespread low grade copper occurs on the group which has been drilled extensively in the past. The objective of the program was to test areas drilled by Silver Dome where interesting assays were reported and to test undrilled showings.

CLAIMS

The Gotcha Group includes the following claims:

Mineral Claims

*June 29/77*

Mineral Leases

Gotcha 1-10	33005-14	Salamanca Fr.	L. 2902	M389	<i>✓</i>
Gotcha 11 Fr.	33015	Iva Lenore	L. 1262	M389	<i>✓</i>
Gotcha 12-15	34275-9	Viceroy Fr.	L. 1722	M389	<i>✓</i>
Gotcha 16-17 Fr.	36258-9 <i>all gone</i>	No. 9	L. 882s	M389	<i>✓</i>
Gotcha 18-20	34580-2 <i>✓</i>	Arlington Fr.	L. 1110	M389	<i>✓</i>
Gotcha 21 Fr.	34583	Tam O'Shanter	L. 2405	M388	<i>✓</i>

HISTORY

Numerous workings occur from the Tom O'Shanter-Gotcha #8 to the Buckhorn-Moreen Fr. (San Jacinto option) areas. Prospectors in the early 1900's searched for ore within a large zone of very low grade copper mineralization. An early Minister of Mines Annual Report mentions a high grade copper-gold vein a few inches wide being explored on the Iva Lenore. A small tonnage of silver ore was reported to have been shipped from the Tom O'Shanter.

The first extensive work for which any records are available was a twenty-one diamond drill hole program completed by Silver Dome Mines in 1964 to 1965. Several of these holes were drilled to a depth of 500 ft. and the deepest was 674 ft. Some assays are available from this drilling but Mascot's program has shown these to be totally unreliable, particularly in respect to the higher grade sections reported.

From 1966 to 1969, Utah Construction had the property under option. Utah covered all of the property, excepting the southwest corner, with I.P., soil sampling (copper) and magnetometer surveys on a 100 ft. x 400 ft. grid. They also completed a geologic map of this area. Copies of these surveys were made available to Mascot Mines & Petroleum Limited.

Utah drilled seven diamond drill holes on which data is not presently available. The writer saw the information on this drilling after the program was completed. Results were on the whole quite disappointing. One 10 ft. section from the drilling assayed 0.5% copper, but the balance was generally less than 0.1% copper.

In 1971 Perry, Knox and Kaufmann, Inc., on behalf of Sun Oil, completed a percussion drilling program and two diamond drill holes from the Buckhorn-Moreen Fr. area into the area immediately west of the Arlington Fr.-Viceroy Fr. area. Assays were generally less than 0.10% copper and the program effectively eliminated most of this area from further exploration.

In 1972, Fury Explorations Ltd. optioned the property and subsequently farmed it out to Mapletree Exploration Corporation (Cyprus). They examined the property, compiled an extensive report on past work and completed a new geologic map of the area on a scale of 1"=400'. Mapletree did not do any physical work on the Gotcha Group. Their report was available to Mascot.

## GEOLOGY

Refer to Map 1 at the back which shows the geology and the location of all drill holes by Mascot and past operators. The geology was taken from Mapletree's geologic map.

The dominant feature of the geology on the Gotcha Group is a body of Nelson quartz-diorite which is approximately 3200 ft. wide and lies in an east-west direction for over 5,000 ft. from the Tom O'Shanter to the east beyond the Buckhorn and Moreen Fraction. The quartz diorite has been slightly mineralized throughout, with pyrite and chalcopyrite as fracture fillings and would probably average overall from 0.05 to 0.10% copper. Higher concentrations of copper occur in places of more intense shearing along the contact zone of this intrusive. The quartz diorite is lightly chloritized throughout and heavier chloritization occurs along sheared zones within it. The native copper zone on the Tom O'Shanter and the Iva Lenore zone occur in more intensely sheared areas of the quartz diorite.

The quartz diorite is bounded on the north and south by altered andesite and chert of the Knob Hill formation. Rusty white Knob Hill chert, resembling quartzite, has been slightly mineralized with copper in the Gotcha 7-10 and Iva Lenore area. The quartz diorite has been found to shallowly underlie the chert where Mascot drilled. Green copper staining is present in an outcrop of Knob Hill chert located on the border of the Gotcha 19 and 20.

The quartz diorite is bounded on the west by arkose and shaly sandstone of the tertiary Kettle River formation. Lava flows of the Marron formation overlie the Kettle River formation a few hundred feet to the west of the quartz diorite. The Kettle River-quartz diorite contact dips at over 20° to the west. Since the topography rises sharply to the west, the overlying post mineral formations thicken considerably in that direction.

#### MASCOT PROGRAM

From November 19 to 21, 1973, Mascot completed four percussion holes (600 ft.), PH13-16, on the Iva Lenore zone. This drilling was done to test an interesting copper stained zone. Some drilling had been done by Silver Dome on the edges of this zone, but the best stained areas had never been drilled. Mascot's drilling indicated that the zone will average 0.14% copper. One of the four holes, Ph15, was drilled near the southern limits of this zone on the chert-diorite contact. A 50 ft. section from 30 ft. to 80 ft. averaged 0.37% copper.

From May 30, to June 25, 1974, Mascot completed a second exploration program on the Gotcha Group. A comprehensive percussion drill program of seventeen holes, G3-G19, totaling 3,515 ft., was completed to accomplish the following objectives. All undrilled showings of interest were tested (G7-9, 12-14). Some drilling was done to check the better intersections reported by Silver Dome (G3 and 11). A detailed study, with composites, was made of the Utah geophysical data and some drilling was done as followup (G15, 18, 19). One hole was drilled from the PH15 site in an attempt to trace the better values there (G10). Three holes were drilled on the native copper zone on the Tom O'Shanter (G4-6). Two holes were drilled in the Kettle River formation west and southwest of the native copper zone to look for its source (G16 and 17). These two holes did not get through the Kettle River formation.

Approximately 4200 ft. of access trails were built by bulldozer to several drill sites. A considerable amount of road improving was required to make other sites accessible.

Three holes in the overall program encountered marginal or interesting copper values. PH15 returned 50 ft. of 0.37% copper and the total length of 110 ft. averaged 0.27% copper. G10 drilled at the same site but in the opposite direction of PH15, returned 70 ft. of 0.20% copper. G8 intersected 60 ft. of 0.26% copper.

The area to the south of these holes was generally open and untested. No control could be ascribed to the mineralization other than the contact zone between the chert and diorite. To search for continuing mineralization to the south, a portion of the Gotcha 7-10, Iva Lenore and Salamanca Fraction was covered by a 100 ft. x 400 ft. grid. The grid was used to complete a geochemical survey for copper and a magnetometer survey. Approximately 33,500 ft. of grid lines were run using a topofil and flagging. Anomalies occurred on both the soil sample and mag surveys. Refer to Map 2 in the back cover.

Two soil anomalies were partially delineated. Both trend irregularly north-south and are open north and south. The anomalous values for the most part varied from 100 to 200 PPM copper above a background of approximately 40-50 PPM. Three samples assayed over 1000 PPM. The highest, 4000 PPM,

was taken in a drainage bottom at the head of Buckhorn Creek and was probably contaminated. The anomalous areas are underlain mostly by quartzitic chert. The soil anomalies are not strong, but may point to stronger mineralization below, associated with the chert-diorite contact.

One magnetometer anomaly and several single anomalous readings were disclosed by the magnetometer survey. The magnetometer anomaly lies irregularly north-south and in part coincides with one of the soil anomalies. Several high readings occur sporadically along the anomaly. For the most part it is a low order anomaly and can be related in part to barren magnetite bearing rocks.

These anomalies are of marginal interest and did not seem sufficiently strong to warrant further drilling while the percussion drill was on the property.

#### CONCLUSIONS

Work completed to date indicates that the possibility of a large copper orebody occurring at or near surface on the Gotcha Group is very remote. The writer feels that the widespread low grade copper mineralization occurring on the property may be an indication that a porphyry type copper deposit lies at depth in proximity to or under the area.

To test this theory some petrographic studies should be made to ascertain if an alteration pattern can be developed to suggest a target for deep drilling.

*H. H. Shear*

H.H. Shear, P. Eng.



APPENDIX: DRILL LOGS AND ASSAYS

- P.H.#13 Drilled on Iva Lenore at S45W and  $-45^{\circ}$  to a depth of 230 ft. Located 800 ft. S66E from NW corner of Iva Lenore. Drilled November 19th, 1973. 0-230 ft. diorite with minor chalcopyrite and pyrite.
- P.H.#14 Drilled at N  $-45^{\circ}$  and to a depth of 150 ft. Located 700 ft. S35E from NW corner of Iva Lenore, just east of Iva Lenore shaft. Drilled November 20th, 1973. 0 - 150 ft. diorite with minor chalcopyrite and pyrite.
- P.H.#15 Drilled at S  $85^{\circ}$  E and  $-60^{\circ}$  to a depth of 110 ft. Located 1200 ft. S37E from NW corner of Iva Lenore. Drilled November 20th, 1973. 0-110 ft. intermixed quartzite and diorite with minor chalcopyrite and pyrite.
- P.H.#16 Drilled at N  $70^{\circ}$  E and  $-45^{\circ}$  to a depth of 110 ft. Located 760 ft. S55E from NW corner of Iva Lenore. Drilled November 21st, 1973. 0-110 ft. diorite with minor chalcopyrite and pyrite.
- G3 Drilled in the southeastern part of Gotcha #3. The hole is vertical and bottoms at 150 ft. Green chloritized granodiorite. Minor pyrite and iron oxide.
- G4 Drilled on the Tam O'Shanter Crown Grant L2405. The hole is vertical and bottoms at 150 ft. 40-120 ft. green quartz-diorite with 3-4% magnetite, (native copper present throughout, but decreases with depth. Iron oxide, minute specks of malachite, pyrite and chalcopyrite) 140-150 ft. is a milky-white fault zone.
- G5 This hole was to test the areal extent of the native copper zone, and it is located approximately 150 ft. south-east of G4. Depth of vertical hole 150 feet. The rock type is the same as in G5, green quartz-diorite with abundant silica. Sulphides consist of 2-3% pyrite with minor chalcopyrite; minute grains of native copper along with malachite are present throughout.

- G6 This hole is 200 ft. south of G4 and 100 ft. southwest of G5, and is vertical to a depth of 170 ft. Drilled to test native copper zone. 0-100 ft. native copper visible in a siliceous green quartz-diorite, 100-110 ft. return water reddish-brown due to iron oxide rock type same as above, 110-170 ft. same as the first 100 ft. with occasional seam of iron oxide. Although native copper was present in the entire hole, absolutely no sulphides were seen in the hole.
- G7 This hole is in the southern part of Gotch #8 and was drilled in an area of old workings. The hole is vertical and bottoms at 240 feet. 0-50 ft. mainly quartzite with pyrite and minute chalcopryite and molybdenite, 50-60 ft. changes to quartz-diorite with 1-2% pyrite, 60-240 ft. quartz diorite with some chlorite, pyrite increases to approximately 3%. Minute chalcopryite from 190-200 feet.
- G8 This hole is located in the northeastern part of Gotcha #8, and it is vertical to 300 feet. 0-40 iron oxide rich weathered diorite with minor pyrite, 40-180 feet is a bleached diorite with approximately 1-2% sulphides mostly pyrite, 180-300 medium-grained granodiorite or quartz-diorite, and 0.5% sulphides, mostly pyrite, uniformly distributed throughout the samples.
- G9 This is a 230 foot vertical hole located in the southwestern part of Gotcha #5. 0-30 ft. iron oxide rich chloritized diorite with traces of pyrite and the odd speck of molybdenite, 30-90 chloritized diorite with occasional coarse quartz grains (30-50 feet apparently contains some quartz veins which contains the odd speck of molybdenite. 80-90 feet minor chalcopryite probably less than 0.2% copper), 90-170 feet bleached quartz-diorite becoming more mafic with depth. (Pyrite evenly scattered to 150 feet but represents less than 1% only traces of chalcopryite were seen.)

- G10 Collared on the Iva Lenore. It was drilled to a depth of 200 feet in westerly direction at  $-60^{\circ}$ . 0-30 feet weathered light greenish-gray diorite with abundant iron oxide and traces of malachite and pyrite, 30-200 feet greenish-gray chloritized diorite. The upper part of the hole contains some native copper. The odd speck of molybdenite was seen from 40-90 feet and 140-170 feet. Minor pyrite and traces of chalcopyrite seen throughout.
- G11 This hole was drilled at a bearing of S80W and dip of  $-60^{\circ}$  to a depth of 150 feet. The hole is located on the western edge of Iva Lenore. 0 - 30 feet weathered chloritized diorite with minor iron oxide and traces of pyrite and chalcopyrite, 30-150 feet is a chloritized quartz-diorite with minor pyrite and traces of chalcopyrite. The odd speck of molybdenite is present.
- G12 This hole was drilled on the Gotcha #21 Fr. to a depth of 150 feet at  $-60^{\circ}$  with a bearing N27<sup>o</sup>E. 0-20 ft. weathered, fine-grained altered diorite, 20-40 dark green fine-grained volcanic (dyke ?), 40-150 feet light green chloritized diorite with minor sulphides (70-80 ft. best run of sulphides with approximately 1% pyrite and  $\frac{1}{2}$ % chalcopyrite.)
- G13 Collared on the Gotcha #21 Fr.; this hole was drilled to a depth of 120 ft. at  $-60^{\circ}$  with a bearing of S25W. The entire hole was a dark green chloritized diorite with the first 20 ft. being weathered. Sulphide content was less than 0.25% with the occasional speck of chalcopyrite.
- G14 This hole is located of the west edge of the Gotcha #20 claim and is vertical. The drill hole was stopped at 300 ft. 0-40 ft. rusty weathered quartzite with malachite, chalcopyrite, pyrite, and possibly chalcocite or magnetite. 40-200 ft. same as above except unweathered. 200-300 same as above but with less sulphides and no malachite and very little chalcopyrite.

- G15 Drilled near the northern boundary of Gotcha #5 claim in a vertical hole to a depth of 250 ft. 0-80 ft. overburden, 80-90 ft. dark blackish-green diorite mostly silica and chlorite with some magnetite and minute amounts of chalcopyrite and pyrite, 90 - 250 ft. quartz-diorite with strong chlorite and approximately 5% magnetite. Feldspars are still largely unaltered and contain minute amounts of sericite.
- G16 Located on Mineral Lease M-388 (Tam O'Shanter Crown Grant L2405). This hole was drilled vertically for 410 ft. No rocks of potential economic interest were encountered. 0-310 Kettle River arkose - quartz-feldspar arkose, 310-410 Kettle River volcanics.
- G17 Drilled on the northern boundary of the Gotcha #8 claim; this hole is vertical to a depth of 225 ft. and was abandoned due to loss of circulation. 0-70 ft. similar to 310-410 ft. on hole G16; 70 - 225 ft. sandstone or conglomerate of the Kettle River formation.
- G18 Located on the northern boundary of Iva Lenore. This hole was drilled due north at  $-60^{\circ}$  and abandoned at 180 feet due to loss of circulation. 0-30 ft. overburden, 30-40 rusty weathered dark-green chloritized quartz-diorite, 40 - 180 dark-green chloritized quartz-diorite. Pyrite was the only sulphide seen and it only represented trace amounts.
- G19 This is a vertical hole drilled to a depth of 140 ft. Located on the Gotcha #16 Fr. 0-26 ft. overburden. 26-140 quartz-diorite with only the odd speck of pyrite.

ASSAYS IN % COPPER

<u>FOOTAGE</u>	<u>HOLE NUMBERS</u>			
	<u>PH13</u>	<u>PH14</u>	<u>PH15</u>	<u>PH16</u>
0-10	0.26		0.11	0.10
10-20			0.22	0.16
20-30	0.12	0.06	0.14	0.12
30-40		0.16	0.34	0.17
40-50	0.14	0.18	0.40	0.16
50-60		0.14	0.38	0.18
60-70	0.09	0.12	0.40	0.19
70-80		0.08	0.31	0.18
80-90	0.17	0.07	0.24	0.17
90-100		0.08	0.25	0.21
100-110	0.16	0.08	0.16	0.15
110-120		0.14		
120-130	0.15	0.12		
130-140		0.11		
140-150	0.14	0.11		
150-160				
160-180	0.13			
180-200	0.17			
200-230	<u>0.12</u>			
Average:	.15	.11	0.27	.16

ASSAYS ON COMPOSITES FOR  
MOLYBDENUM SULPHIDE, SILVER AND GOLD

<u>HOLE NO.</u>	<u>FOOTAGE</u>	<u>%</u>		
		<u>MoS<sub>2</sub></u>	<u>Au</u> <u>oz/ton</u>	<u>Ag</u> <u>oz/ton</u>
PH13	0-60	0.002	0.010	Tr
	60-120	0.003	0.006	0.004
	120-180	0.004	0.008	Tr
	180-230	0.004	0.005	0.010
PH14	20-70	0.004	0.004	Tr
	70-120	0.002	0.008	Tr
	120-150	0.002	0.006	Tr
PH15	0-50	0.002	0.006	Tr
	50-110	0.007	0.008	0.02
PH16	5-50	0.004	0.008	Tr
	50-110	0.005	0.004	Tr

ASSAY VALUES IN % COPPER

H O L E N U M B E R S

HOLE NO.	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	G13	G14	G15	G16	G17	G18	G19	G20
0-10		.07								.05								
10-20		.12	.08	.08		.20	.10	.14	.07	.11	.11	.06						
20-30	.05	.05	.09	.13	.07	.19	.02	.16	.08	.10	.10	.08						
30-40	.09	.04	.11	.08	.06	.15	.01	.15	.10	.11	.07	.13						
40-50	.10	.04	.12	.11	.06	.20	.02	.28	.08	.10	.07	.10						
50-60	.07	.04	.17	.13	.04	.16	.02	.30	.11	.08	.08	.08						
60-70	.06	.04	.14	.14	.05	.16	.05	.20	.10	.09	.07	.09						
70-80	.09	.03	.12	.12	.10	.16	.06	.19	.08	.15	.07	.09						
80-90	.08	.04	.13	.10	.10	.12	.12	.12	.09	.12	.06	.11						
90-100	.08	.05	.11	.10	.08	.13	.06	.12	.09	.09	.09	.08						
100-110	.05	.05	.10	.11	.06	.17	.06	.12	.09	.06	.08	.08	.08					
110-120	.04	.05	.10	.12	.10	.14	.07	.11	.12	.05	.08	.08	.08					
120-130	.05	.06	.10	.10	.09	.15	.06	.30	.12	.04	.08	.09	.08					
130-140	.04	.06	.07	.13	.08	.35	.06	.16	.10	.05	.07	.07	.08					
140-150	.04	.04	.11	.14	.06	.27	.05	.14	.10	.05	.07	.07	.08					
150-160				.16	.07	.24	.08	.19			.09	.09	.10					
160-170				.14	.07	.23	.06	.11			.11	.11	.10					
170-180					.09	.26	.08	.11			.12	.12	.10					
180-190					.10	.22	.07	.09			.08	.08	.10					
190-200					.08	.16	.11	.08			.06	.06	.10					
200-210					.06	.14	.09	.09			.04	.04	.08					
210-220					.05	.09	.09	.09			.03	.03	.08					
220-230					.05	.14	.14	.14			.02	.02	.08					
230-240					.09	.14	.14	.14			.02	.02	.08					
240-250						.12	.12	.12			.02	.02	.08					
250-260						.12	.12	.12			.02	.02	.08					
260-270						.13	.13	.13			.03	.03	.08					
270-280						.14	.14	.14			.02	.02	.08					
280-290						.09	.09	.09			.02	.02	.08					
290-300						.11	.11	.11			.02	.02	.08					
300-310																		

NOT ASSAYED

NOT ASSAYED

NOT ASSAYED

NOT ASSAYED

BEDROCK NOT REACHED

ASSAYS ON COMPOSITES FOR  
MOLYBDENUM SULPHIDE, SILVER AND GOLD

<u>HOLE NO.</u>	<u>FOOTAGE</u>	<u>Au</u> <u>Oz/ton</u>	<u>Ag</u> <u>Oz/ton</u>	<u>%</u> <u>MoS<sub>2</sub></u>
G7	20-60	Tr -	Tr	0.003
G8	30-60	0.004 3.00	Tr	0.003
G9	10-50	0.005 3.75	Tr	0.040
G9	80-90	0.005 3.75	Tr	0.007
G10	40-90	0.008 6.00	Tr	0.010
G10	110-170	0.006 4.50	Tr	0.007
G14	10-50	Tr -	0.06 1.16	0.001
G14	50-100	0.010 7.50	0.03 0.50	0.001
G14	100-150	0.005 3.75	0.10 1.67	0.009

REPORT OF WORK ON THE  
STANDARD et al MINERAL CLAIMS PROPERTY  
GREENWOOD, B.C.

1973

for

MASCOT MINES & PETROLEUMS LIMITED  
Suite 900 - 837 West Hastings Street  
Vancouver, B.C.  
V6C 1C2

by

H.H. Shear, P.Eng.  
Geologist

SEPTEMBER 1974



REPORT OF WORK ON THE  
STANDARD et al MINERAL CLAIMS PROPERTY  
AT GREENWOOD, B.C.  
1973

This property consists of four mineral claims lying around the northwest corner of the Motherlode-Greyhound property. The claims are the Butcher Boy (Record No. 13255), Sam (Record No. 15443), Standard (Record No. 15444) and G.J. (Record No. 13259). These claims were optioned by Mascot Mines & Petroleums Limited because of their close proximity to the Motherlode deposit and because a large untested I.P. anomaly had been found on the Standard.

A percussion hole, 300 feet deep, was drilled on the Standard I.P. anomaly. The attached sketch shows the location of the hole. The hole encountered black Knob Hill chert over its entire length and no minerals of interest were observed. Assays from this hole returned nil copper values and also ruled out pyrite or carbon (graphite) as the cause of the I.P. anomaly. Pechiney geologists described this rock type as containing manganiferous coatings on the fractures which may explain the cause of this anomaly. A thorough reconnaissance was made of the anomaly area.

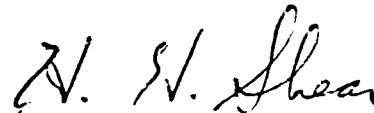
In pursuing the exploration program on the Motherlode area, it became evident that the Motherlode deposit in its host rocks of Brooklyn limestone is a remnant which has been down faulted into rocks of the older Knob Hill formation. Drill holes were completed north of the Motherlode pit in an attempt to locate a continuation of mineralization to the north but with no success. The chances seem remote that there is any extension from the Motherlode deposit into the Standard claim.

A brief examination was made of the Butcher Boy workings which had been done in the pyritic Knob Hill chert. The work was done on a calcite vein, six inches to one foot wide, carrying minor sphalerite and malachite.

Geologic mapping on the Motherlode-Greyhound property covered the southern portion of the G.J. Rock types mapped were Knob Hill chert and andesite, pulaskite and diorite. No mineralization of interest was observed.

A geologic map was completed by Pechiney in 1969 which included the Standard et al property. The rocks outcropping on the four claims are Knob Hill chert and andesite, Brooklyn sharpstone conglomerate, and tertiary lavas and intrusives belonging to the Marron formation. Minor pods of limestone occur in the sharpstone conglomerate. The white Brooklyn limestone forming the west wall of the Motherlode pit trends north into the southwest corner of the Standard.

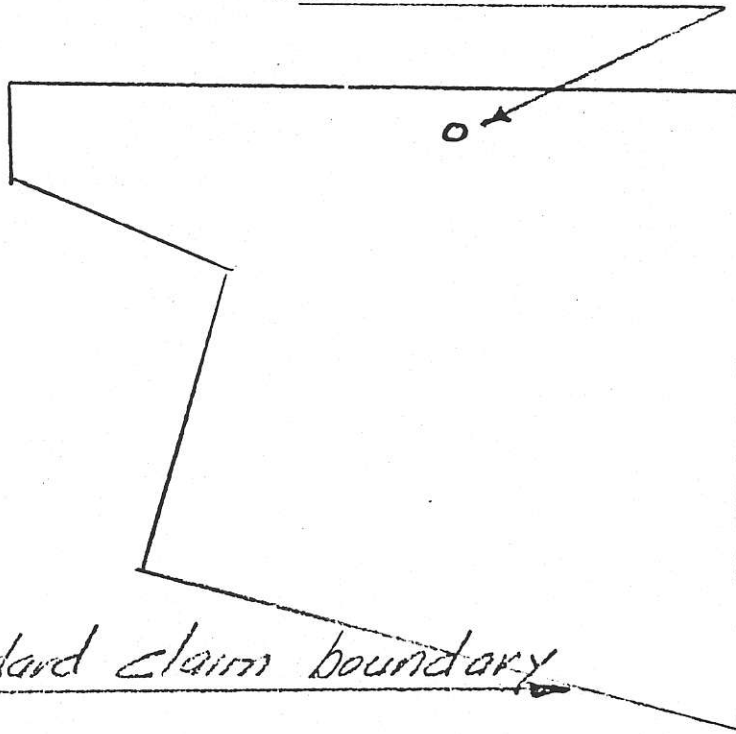
The important copper ore bodies in the district have, so far, been found only in horizons of the Brooklyn limestone. This formation overlies the Brooklyn sharpstone conglomerate. It would appear that the favourable host rocks have been eroded off the Standard et al property.



H.H. Shear, P.Eng.  
Geologist

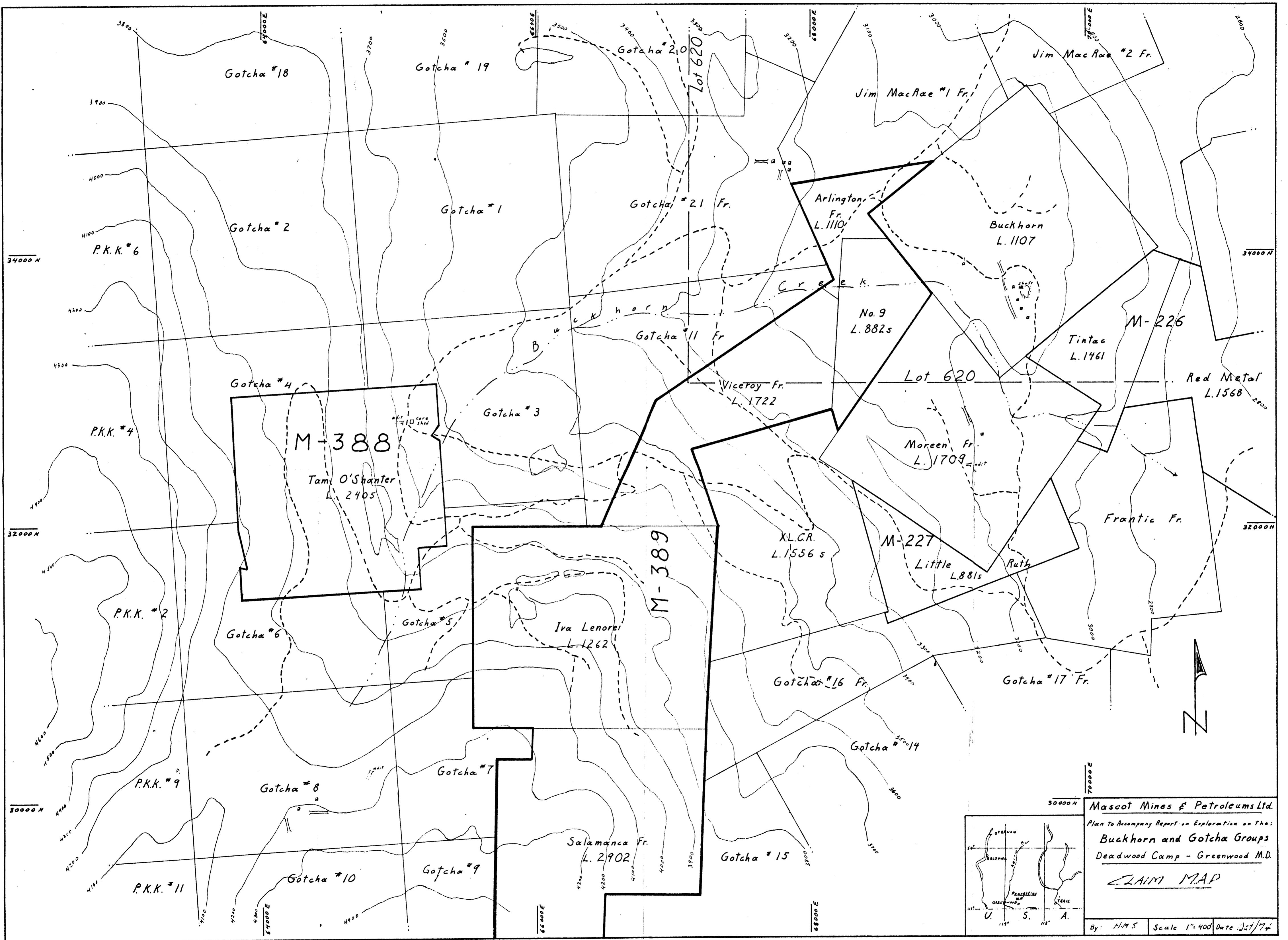
HHS/mm

Location of percussion  
drill hole - PH-1



Standard claim boundary

Sketch Showing  
Location of  
Drill Hole on  
Standard Mineral  
Claim.

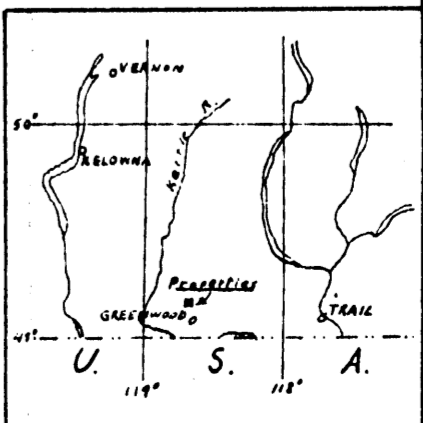


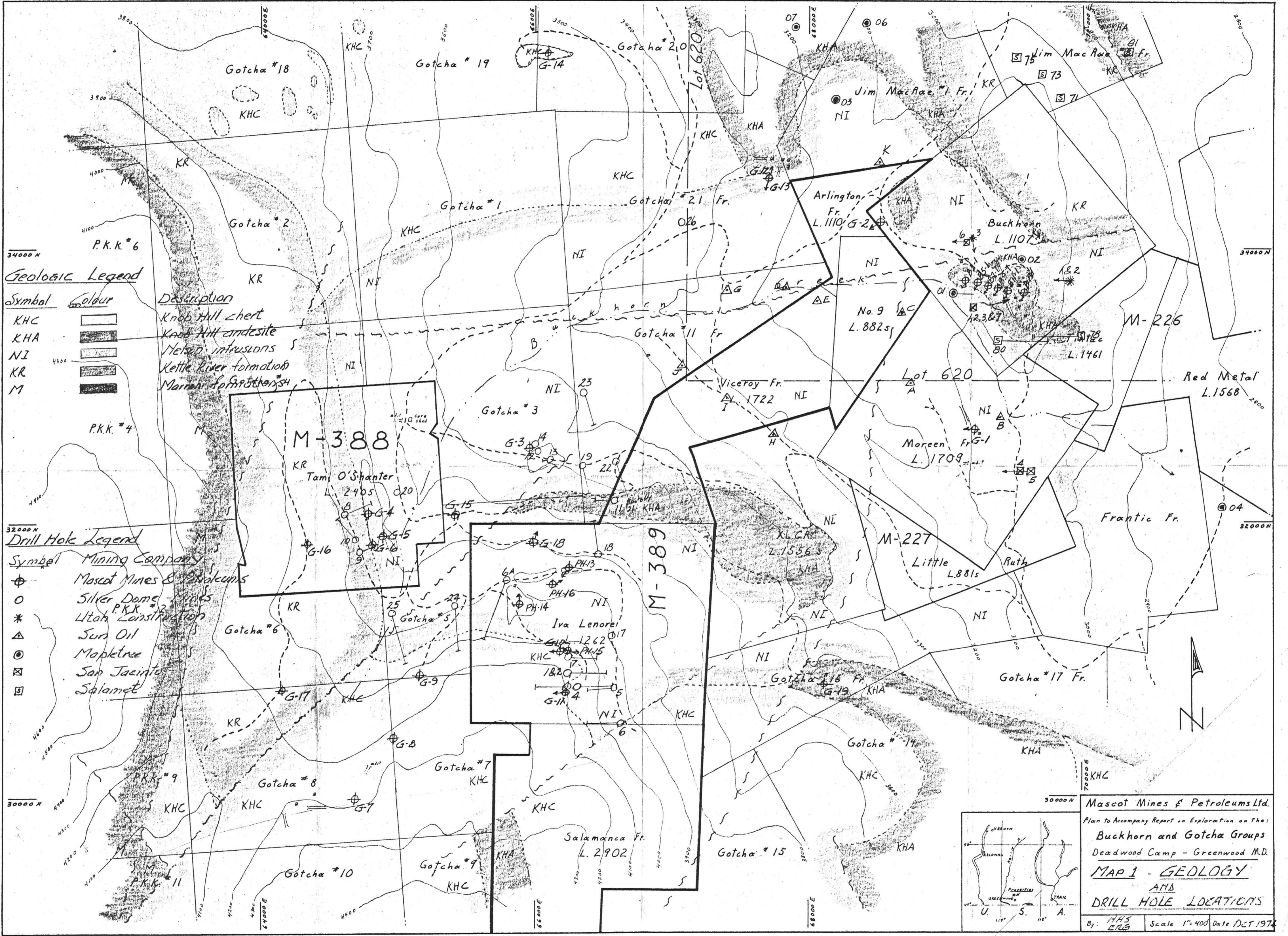
Mascot Mines & Petroleum Ltd.

Plan to Accompany Report on Exploration on the:  
 Buckhorn and Gotcha Groups  
 Deadwood Camp - Greenwood M.D.

CLAIM MAP

By: H.H.S. Scale 1"=400' Date: 2/7/74





**Geologic Legend**

Symbol	Colour	Description
KHC	[White]	Knob Hill chert
KHA	[Dark Grey]	Knob Hill andesite
NI	[Light Grey]	Nelson intrusions
KR	[Medium Grey]	Kettle River formation
M	[Dark Grey]	Marian formation

**Drill Hole Legend**

Symbol	Mining Company
⊕	Mascot Mines & Petroleum
○	Silver Dome Mines
*	Utah Construction
△	Sun Oil
⊙	Mapletree
⊠	San Jacinto
⊡	Salamet

Mascot Mines & Petroleum Ltd.  
 Plan to Accompany Report on Exploration on the:  
 Buckhorn and Gotcha Groups  
 Deadwood Camp - Greenwood M.D.  
**MAP 1 - GEOLOGY**  
 AND  
**DRILL HOLE LOCATIONS**  
 By: HHS  
 ERG Scale 1" = 400' Date DEC 1974

