PROGRESS REPORT

On

MCLEESE LAKE PROPERTY

Prepared For

GRANITE MOUNTAIN MINES LTD. (N.P.L.)

By

W. MEYER, B.Sc.

November 18, 1971 Vancouver, B. C.

WESTERN GEOLOGICAL SERVICES LTD.
VANCOUVER, B.C.

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INTRODUCTION

During the 1971 field season a number of technical and physical programmes have been carried out on the McLeese, Bob and Tor claims owned by Granite Mountain Mines Ltd., and situated in the McLeese Lake - Gibraltar area. These include 44.5 miles of chained and flagged (and/or blazed) lines, 31.4 miles I.P. surveys, 25.5 miles soil geochemical surveys, 44.5 miles magnetometer surveys, geological surveys, trenching, 3836 feet diamond drilling and 7920 feet percussion drilling. The bulk of the technical work has been described in previous reports and therefore this summary will be confined primarily to a discussion of the geology, mineralization and drilling.

GEOLOGY

The extreme north-east corner of the eighty-seven (87) claim block is underlain by the 'diorite' phase or outer marginal phase of the Granite Mountain batholith. The contact with the intruded Cache Creek rocks is exposed in at least two (2) locations one (1) of which is on line 28E near 15N and near the main area of interest. 500 feet south of this contact, the Cache Creek metasediments are in fault contact with relatively fresh leuco quartz diorite rocks similar to the 'Granite Mountain phase' of the batholith.

Insufficient regional mapping has been carried out to determine the exact relationship of the relatively fresh quartz diorite rocks to the main mass of the batholith. It would appear, however, that the fault at the contact is post intrusive and that the fresh intrusive rocks to the south of the contact have been displaced a considerable distance to the west. Graphitic shales occur along the contact and give rise to a strong semi-circular I.P. anomaly which locally masks anticipated I.P. responses from known sulphide bearing rocks.

The principal showings on the property occur in the 'diorite' phase in the north-east portion of the property centered around L 32E - 22N where mineralization is exposed in several trenches (see previous reports). In these trenches copper mineralization in the form of malachite, azurite and chalcopyrite of potentially ore grade and over a significant length (600 feet), occurs

along shallow south dipping foliation planes and in east-west, vertically dipping fracture zones. North-south shears which offset some of the east-west fractures were not originally thought to be an important ore control except that they may have had some post-mineral movement.

Some zoning of minerals occurs in correlating trenching and later drilling. Chalcopyrite is the principal sulphide mineral in the surface showings in the trenched area whereas (from drilling) pyrite is the most abundant sulphide outside this immediate area.

A geochemical soil survey and an I.P. survey which were intended, in part, to investigate the area of the main showings was extended to the south and west beyond the fault contact to the area underlain by the 'Granite Mountain phase' of the batholith. Several I.P. and geochemical anomalies were outlined in this area. These were significant developments for a number of reasons, the most important of which are:

- mineralization in this geological enviornment could be large in extent.
- claim boundaries would not present any problems.
- The search for new mineralization could be expanded without the geological and boundary limits imposed on the main showings in the north-east corner of the claim block.

To investigate these showings and anomalies, an aggresive drilling programme was initiated.

DRILLING

One (1) diamond drill and one (1) percussion drill, under contract from Tonto Explorations Ltd., of Vancouver, were moved to the property in early July, 1971. The object of the diamond drilling was to test the grade and extent of the mineralization exposed in the surface trenches. NQ size equipment and drilling mud was used to ensure a good sample and maximum core recovery.

The object of the percussion drilling, which offers speed and economy, was to test several of the targets outside the main area of interest.

All diamond drill core was washed, logged and the bulk of it split for assay in 10 foot sections. Where recovery was poor, sludge samples were taken.

A total of 3836 feet were drilled in eight (8) holes.

All sludge from the percussion drilling was assayed for Cu and MoS_2 in 10 foot sections. The percussion drill sample represented a 1/8 split of the total sludge return. A small representative sample of each section was collected in a soil sample bag for examination with a binocular microscope.

The significant drill hole information is summarized in the table below. Diamond drill sludge assays, where comparisons can be made, are shown in brackets. Sludge assays are not available for all diamond drill intersections and the quality of the sludges collected is suspect partly due to the problems of incorporating the collecting system into the mud circulation system.

Hole No.	Location	Bearing	Dip	Depth (Ft.)	Intersection From	Intersection To	Intersection Length (Ft.)	Core % Cu	Core % MoS_2
DDH #1	32E - 22N		-90°	461	15	90	75	.29	
DDH #2	32E - 22N	North	-45°	523	22	200	178	.16	
					280	340	60	1.07	
DDH #3	29E - 19N		-90°	438	Scattered section in low grade.				
DDH #4	29E - 21 + 50N		-90°	434	70	90	20	.43 (.64)*	(.008)
DDH #5	20E - 23N		-90°	402					
DDH #6	L34E - 24N		-90°	513	90	280	190	.24	
DDH #7	34E - 24N	North	-45°	502	40	100	60		(.071)
					50	70	20		.11
					400	420	20	.81	
DDH #8	34E - 2220N	North	-45°	563	260	320	60	.21 (.28)	
					430	480	50	.35 (.51)	
TOTAL DDH				3443					

*Corresponding sludge assays in brackets.

PDH #1	4W - 16S		-90°	400					
PDH #2	0 - 16S		-90°	400					
PDH #3	0 - 12S		-90°	400					
PDH #4	0 - 2S		-90°	400					
PDH #5	8E - 14S		-90°	440	320	360	40	.27	L.01
PDH #6	16E - 6S		-90°	410					
PDH #7	4E - 20S		-90°	470					
PDH #8	4W - 28S		-90°	360					

Hole No.	Location	Bearing	Dip	Depth (Ft.)	Intersection From	Intersection To	Core Length (Ft.)	Core % Cu	Core % MoS_2
PDH #9	8W - 32S		-90°	90					
PDH #10	4E - 12S		-90°	470					
PDH #11	4W - 4N		-90°	410					
PDH #12	8W - 0		-90°	470					
PDH #13	28E - 14N		-90°	400	200	270	70	.14	L.01
PDH #14	28E - 25N		-90°	400	70	130	60	.21	L.01
PDH #15	16E - 23 + 50N		-90°	400					
PDH #16	12E - 24N		-90°	400					
PDH #17	12E - 19N		-90°	400					
PDH #18	20E - 19N		-90°	400					
PDH #19	24E - 14N		-90°	400					
PDH #20	32E - 18N		-90°	400					
TOTAL PERCUSSION				7920'					

DISCUSSION OF RESULTS

DIAMOND DRILLING

Of the eight (8) holes drilled near the main showings on McLeese No. 5 claim, five (5) returned significant intersections of copper mineralization. The remaining three (3) holes, while having minor scattered mineralization, limit major near surface projections of the mineralized zones to the south and west. Drill holes No.'s 1, 7, & 8 were inclined at 45° to the north and drilled on approximately a 200 foot grid. Holes No.'s 1 & 6 were drilled at -90° from common set-ups with drill holes No. 2 & No. 7 (see attached plan). These latter five (5) holes all encountered potentially significant intersections of copper-molybdenite mineralization. A plot in section of the geology and assay data presents some problems in correlating both geology and significant assays between drill holes. A section through drill holes No. 1 & No. 2 indicates the outline of the mineralized zone follows gently south dipping foliation rather than the steep east-west fracture zone exposed in the trench near the collar of these holes.

A section through holes No.'s 6, 7, & 8 indicates a steep dipping zone of mineralization together with a flat lying zone. The steep dipping zone corresponds to the projection of the east-west fracture zone exposed in the trench near DDH #1 while the flat lying zone follows in a general way the projected attitude of the foliation along the section.

A plausible explanation of these intersections is that the better grades of mineralization occur in the east-west fracture system where it intersects a particular band of foliated rocks whose apparent attitude is approximately north-south with a 55° dip to the east.

At the time that drilling was underway, no holes were spotted to test possible extensions to this zone due to uncertainties in the claim boundaries. Since that time, however, a legal survey has established the boundaries in favour of Granite Mountain Mines Ltd., thereby making room for possible extensions of the zone to the north and east on the Granite Mountain claims.

Two holes as tests for possible extensions to this zone should be considered, pending a review of drilling on the adjacent property and providing an exchange of data can be negotiated.

PERCUSSION DRILLING

Percussion drilling was undertaken outside the area of the surface showings on geochemical and geophysical targets. One long, narrow fault zone was tested by a series of six (6) holes (No. 5 - No. 10) spaced 400 feet to 1200 feet apart along its length. Although the first hole (No. 5) along this structure encountered mineralization, further drilling was disappointing and this particular target area was abandoned. Holes No. 13 - No. 20 were drilled to test possible extensions to the main zone outside the area being tested by diamond drilling. Scattered low grade mineralization was encountered but this did not add significantly to any potential reserves in the main zone.

The location of each hole drilled is plotted on the accompanying plan.

CONCLUSIONS AND RECOMMENDATIONS

The McLeese, Bob & Tor claims were the subject of a considerable amount of technical and physical work during the 1971 season. A total of 11,756 feet of diamond and percussion drilling in twenty-eight (28) holes was completed to test a variety of targets including a showing of potentially economic copper mineralization exposed in surface trenches. While significant mineralization was encountered in the north-east part of the group in five (5) of the eight (8) diamond drill holes, the lower grade sections are marginal to sub-marginal and the high grade sections too limited in extent to be considered economic at this time.

Two (2) diamond drill holes should be considered to test possible extensions to the north and east of the main mineralized zone pending a review of data on adjacent ground (providing an exchange of data can be arranged).

The percussion drill programme encountered scattered low grade intersections but no large zones were outlined.

Only about one-half (1/2) of the claim group has been investigated in any detail. The remaining claims, particularly the Tor claims on the east should be investigated initially with a reconnaissance geochemical survey.

Respectfully submitted,

W. Meyer

28+00W 24+00W 20+00W 16+00W 12+00W 8+00W 4+00W 0+00 4+00E 8+00E 12+00E 16+00E 20+00E 24+00E 28+00E 32+00E 36+00E 40+00E

28+00N 24+00N 20+00N 16+00N 12+00N 8+00N 4+00N 0+00 4+00S 8+00S 12+00S 16+00S 20+00S 24+00S 28+00S 32+00S 36+00S 40+00S 44+00S 48+00S 52+00S 56+00S

ENSBROOK CLAIMS
ANCHOR 2B

MAYDAY 3

MAYDAY 5

PH 2
TED 1 (ENSBROOK)
PH 3
PH 1
DDH 1

TED 2

McLEESE 3

McLEESE 4

McLEESE 5

McLEESE 6

CONTACT GRAPHITE

GRAPHITE

ENSBROOK ROAD

LIKELY ROAD

ROAD JUNCTION

OLD LOGGING ROAD

TRENCH

OLD TRENCH
10' - 0.5
090°

FAULT TREND 090°

MASSIVE JINTING

VERY STEEP CANYON
good O.C. fresh Q.D.

scattered O.C.'s
uniform fresh Q.D.

fracture trends
020°-060°

Brow of Hill

FRESH O.D. IN STREAM CUT

ROAD CUT
O.B. Fol'd Q.D.
otherwise fresh
O.C. ON ROAD CUT

O.B. FLAT BUSH

HUMMOCKS of GLACIAL TILL

Massive Bio/hrbde Q.D. Fol'd ~ 30°

Massive Slight Fol'd

bio. fol'd Q.D.

Scattered O.C. Rusty Fol'd Q.D.

Fol'd Q.D.

Massive Fresh Bio. Q.D.

chl. ser. Q.D. 160/80

Qtz Carborate Veins

Fol'n Ser. Q.D. Float

Fol'n Ser. Q.D. Float

Angular Float c.g. Q.D.

sericitized strongly fol'd Q.D. float

PH 1
PH 2
PH 3
PH 4
PH 5
PH 6
PH 7
PH 8
PH 90
PH 10
PH 11
PH 12
PH 13
PH 14
PH 16
PH 17
PH 18
PH 19
PH 20

DDH 1
DDH 2
DDH 3
DDH 4
DDH 5
DDH 8

TR 1
TR 2
TR 3
TR 4
TR 6
TR 7

CORE SHACK

LEGEND

- DIORITE PHASE
- LEUCO QUARTZ - DIORITE (Granite Mountain Phase ?)
- CACHE CREEK GROUP

inches
0 1 2
0 1 2 3 4 5
centimetres

BRITISH COLUMBIA GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

SYMBOLS

- PERCUSSION DRILL HOLE
- DIAMOND DRILL HOLE
- BEDDING,
- FOLIATION
- JOINTING
- SHEARING
- FAULT
- CONTACT

Prepared for
GRANITE MOUNTAIN MINES LTD.

Title

GEOLOGY + DRILL HOLE LOCATIONS

McLEESE CLAIMS

Scale	Survey by	Drawn by	Date
1 Inch = 400 Feet			NOVEMBER, 1971

WESTERN GEOLOGICAL SERVICES LTD.
SUITE 1015 470 GRANVILLE ST., VANCOUVER 2, B.C. PHONE 688-2305