## PROGRESS REPORT

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ON

DUSTY MAC MINES LTD. (NPL)

DUSTY MAC PROPERTY

OKANAGAN FALLS, B.C.

BY
D.M. CANNON, P. ENG.

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INTRODUCTION:
The following is a report of the progress on your property at Okanagan Falls, British Columbia, since the recommencement of operations on June lst, 1969.

## SURFACE TRENCHING:

A total of 2510 lineal feet of bulldozer trenching was completed in 14 trenches that cross cut the breccia horizon in an east-westerly direction. Within the bulldozer trenching, a total of 1510 lineal ft. of rock trenching was done to provide bedrock material for bulk sampling purposes. The normal depth of the rock trenching was $6^{\prime \prime}$ below the surface.

A small amount of bulldozer work was done approximately 2000 ft . to the north-west, in the area of the old original workings and exposed additional mineralization. Follow up work on this zone has not yet started.

## GEOLOGY:

Additional geological mapping has proven that the auriferous breccia horizon extends over an area that is at least 200 ft. wide and 250 ft. long in a north-south direction. The total area has not yet been established.

Underground work has proven that the breccia extends to a depth of 30 to 35 ft . in the area tested. The total volume of this horizon can only be determined by
sive drilling.
The gold and silver mineralization is definitely related to the degree of silicification. Hense the metallic mineralization may be confined to relatively flat lying lenticular pods that are irregularly distributed throughout the zone. The brecciated material that is not silicified contains either low grade mineralization or is barren.

In two of the trenches, argillite and sandstone have been exposed and are underlying the breccia. In the balance of the trenches, the underlying rock is andesite porphyry that is probably volcanic in origin.

The argillite and the sandstone where exposed are barren. Andesite porphyry is also usually barren but in diamond drill hole No. 4 a 10 foot core length showed increased fracturing and sulphide mineralization which contains gold and silver values.

## DIAMOND DRILLING:

The initial diamond drill section was laid out to cross cut the zone in a generally east-west direction along a line that is normal to the direction of the inclined shaft and raise, and lies between collar of the shaft and the collar of the raise. A total of seven holes, collared at 25 foot intervals and inclined at $60^{\circ}$ to the east, have been dri
along this section. Except for Holes \#4 and \#5, the average depth was approximately 75 ft. Hole \#4 was drilled to a depth of 101 ft . and \#5 to a depth of 88 ft .

A second section has been laid out along a line that is 25 ft . north of the first and three holes have been completed on it. The holes in this section are also programmed to be drilled to approximately 75 ft . depth.

Currently Hole No. 11 is being drilled vertically from a point midway between holes \#1 and \#6, and will be continued to a depth of 500 ft.

## SAMPLING:

A total of 149 bulk samples were taken in the rock trenches. For the most part, each of the samples represented a length of 10 ft . All of the muck from each 10 ft . section was crushed to minus $1 / 2^{\mathbf{u}}$ mesh in a portable crusher and was then reduced to a useable size in a Jones splitter. The final sample consisted of approximately 15 lbs. of material.

Diamond drill cores are being split longitudinally and separated into 5 ft . or 10 ft . sections. Half the core is sent to the assayer for analysis and the other half is stored at the property.

All assaying has been done by John O. Dolphipin assayer in Osoyoos, British Columbia.

SMELTER SHIPMENT:
A shipment consisting of approximately 26 tons of near surface material was selected from trench $D$ and was sent to the Trail smelter as siliceous ore. The purpose of this shipment was to determine whether:
a) the breccia material was siliceous enough to be acceptable as a flux, and
b) to have an accurate check of the previous bulk sampling and assaying.

The material that was selected was representative of the mineralization that was exposed in the trench.

## LONG HOLE PERCUSSION DRILLING:

A series of percussion holes were drilled at flat and slightly inclined angles from existing outcrop. The purpose of these holes was to try and determine the continuity of exposed high grade mineralization.

## RESULTS:

Results of the bulk sampling from the surface trenches were generally low and disappointing.

In Trench ' $D$ ' a short section was deepened from the usual 6" depth to approximately 12" and was resampled. Resultant assay returns showed a substantial improvement in gold ando of silver values although they were still not ore grade. $\frac{M . C A N N O N}{C B / T / S H}$

Trench No. C-l was placed along a line approximately midway between trenches $C$ and D. Sample results from this trench gave an average of $0.581 \mathrm{oz} / \mathrm{ton}$ gold and $13.95 \mathrm{oz} /$ ton silver for a length of 70 ft .

Subsequent trenching between Cl and D and Trench Cl and $C$ exposed exceptionally high grade material with fairly abundant visible gold and silver.

The diamond drill results prove the existence of a shallow mantle of breccia material overlying andesite porphyry. All of the breccia contains more or less gold and silver as indicated by assay, but the high grade ocourrences are extremely erratically distributed throughout the zone.

An average of the assay results obtained from the first section drilled was $0.232 \mathrm{oz} /$ ton gold and $6.58 \mathrm{oz} /$ ton silver. Additional diamond drill results from the second section are awaited.

The smelter shipment of material corroborated the previously obtained bulk sampling results. There were no recoverable gold values and the silver content was l. $10 z /$ ton. The silica content was $75.5 \%$ but there was also $11.4 \%$ aluminium which carries a penalty.

## WORK PROPOSED:

It is proposed that investigation of the property be continued along the previously approved lines.

1) Continue the diamond drilling on a grid pattern with a line $25^{\prime}$ to the north and one $25^{\prime}$ to the south of that which is already completed. Additional lines may be spaced at greater intervals but this decision must await the completion of the 25 ft. spacing.
2) Drill at least one additional hole at each end of the first section.
3) Prepare and ship another 20 tons to the smelter. This shipment should be selected from the section in the area that is presently being drilled.
4) Run a test I.P. line across the zone in the area where mineralization occurs. This is not considered to be an exceptionally good tool for this type of mineralization, but in view of the difficulty in visually estimating the ore, one test line is justified.

## COST ESTIMATE:

In view of the fact that the present programme must be conducted on a week to week basis, an overall cost estimate..... cannot be made. I recommend that provision be made for ati least an additional five drill sections, each with an estimaterisi

500 ft. of drilling. Total cost of this programme, including supervision, assaying and other auxiliary costs will be approximately $\$ 25,000$.

On or before the completion of the five diamond drill sections, the results should be critically reviewed and a general programme recommended if such is deemed to be justified.


## LEGEND

## Overburden

Breccia-Quartz Fragments; matrix-light color index
$\square$ Breccio-Quartz Fragments; Black-dark green or grey matrix
$\square$ Andesite Breccic
$\square$ Porphyritic Andesite Breccia-Matrix and frogments porphyritic
Porphyritic Andesite
E880 Foult Breccia
$\square$ Breccia-Andesite and porphyry. Andesite fragments predominant. Matrix not porphyritic Breccia-Felsite and/or porphyritic felsite fragments. Matrix not porphyritic

## $\square$ Porphyritic felsite

- Fracture

CANNON-HICKS ASSOCIATES LTD
vancouver b.c.

## DUSTY MAC MINES LTD.

## SECTION THROUGH DDH'S 1-7

## LOOKING NORTH

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Logons: wane ans rimy for puritan
DUSTY MAC MIMES LTD okanagan Falls. Be.
Profile $N^{\circ} 2$.
D.D.H.S e, 9,10

Logged by P. Rope.

