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G.F. Joklik and S.A. Tomich

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DEPARTMENT OF NATIONAL DEVELOPMENT

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BUREAU OF MINERAL RESOURCES, GEOLOGY & GEOPHYSICS

RECORD: 1951/53

REPORT ON AN INSPECTION OF THE MOSQUITO CREEK,

NORTHERN TERRITORY, WOLFRAM FIELD

by

G.F. JOKLIK & S.A. TOMICH

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MBBattett

Senior Information Officer

Information Section

REPORT ON AN INSPECTION OF THE MOSQUITO CREEK,

NORTHERN TERRITORY, WOLFRAM FIELD

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RECORD NO. 1951/53

INTRODUCTION

The Mosquito Creek Wolfram Field was visited on 6th and 7th October.

The field is situated thirty miles east of the Stuart Highway. Access is by means of a road from the MacLaren Creek crossing, approximately fifty miles south of Tennant Creek. The track is in poor condition, winding over numerous "bull-dust" patches and traversing several rocky creeks. The terrain surrounding the mining leases is fairly flat with occasional rock outcrops.

Timber for mining purposes is scarce.

There is no supply of water on the field, consequently it has to be carted from Tennant Creek.

GENERAL GEOLOGY

The country rock is a coarse porphyritic granite, the boundaries of which against possibly Proterozoic quartzite have not been determined. Several occurrences of fine-grained basic intrusives were noted.

THE ORE-BEARING REEFS

The principal reefs strike in three main directions, viz. (a) N62°W, (b) N-S, (c) N35°W. Reefs in group (a) dip north at 40° to 65° ; those in group (b) dip east at 65° to 70° ; and reefs in group (c) dip northeast at 60° to 80° .

The individual reefs are widely separated and narrow, each is associlated with a pronounced shear.

The vein material is white quartz, resembling the vein material from Hatches Creek. Scheelite and wolfram occur in patches in the producing reefs.

The width of the reefs varies from 2 to 9 inches. The maximum outcropping length was measured as 300'.

THE MINING LEASES

The leases are described in their estimated order of importance.

MacDonald's Lease:-

The reef strikes $N62^{O}W$. The dip is 40^{O} north, steepening to 48^{O} at the eastern end. The maximum width is 9 inches. Scheelite appears to be slightly more abundant than wolfram in this reef.

The workings extend over 300'; the maximum depth at any working is 38' on the underlay. Surface indications extend over another 300' at the eastern end: westwards the reef has not yet been prospected.

Some short, rich patches of tungsten ore were noted in the central portion of the reef. The reef as a whole is being sent to the battery; it is claimed that even those portions of the vein material which do not show visible scheelite or wolfram are sufficiently rich to warrant this practice. Battery returns are claimed to have averaged over one bag of 65% concentrates per ton.

Six tributing parties of two men each are at present engaged on driving and stoping to a depth of 30'.

The Doris Lease:-

On this lease open cut workings extend over 310' to a maximum depth of 11'.

The reef strikes north, and dips east at 70° . The width varies from three to six inches.

A yield of a bag per ton has been claimed for a parcel sent to the Wauchope battery. The tungsten mineral is scheelite.

The Old Ghan's Lease:

The reef strikes $N62^{O}W$ and dips north at 65^{O} . The workings consist of an open cut to a depth of 5' over a length of 200'. At the time of the inspection this mine was not in production. Little tungsten ore was noted on the mines dumps.

Mrs Makinson's Lease:-

The reef strikes N62°W and dips north at 65°. This lease has an open cut 60' long and 5' deep. The thickness of the reef was claimed to be 15"; however, very little vein material was observed in the workings. Continuing on from the open cut on the west side for several hundred feet, quartz rubble of doubtful value lay exposed.

Curtis's Lease:

Seven narrow trenches varying in length from 20' to 120' had been cut to a depth of 5'. The reefs which these expose strike $N35^{O}W$, with the exception of one, whose strike is $N62^{O}W$. The maximum width of reef is 4". Two tons of ore have been treated at the battery; the yield is claimed to be one bag per ton.

CONCLUSIONS AND RECOMMENDATIONS

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At the time of the inspection, no reefs had been explored at depth, although considerable testing had been carried out on the surface.

On MacDonald's Lease a rich shoot of ore was being exploited by a party of tributors.

The reefs are narrow, and press reports of their width are grossly exaggerated. It is considered that a company would find it difficult to maintain production on the widths so far revealed.

Although at present the field is only in the prospecting stage, lack of water supply is hampering development. It is recommended that as soon as reasonable depth has been reached by the mine workers, efforts should be made to ensure them a water supply.

10/10/51