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Brief notes on the Hart's Range mica mines

by

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C/- Mines Department,
ALICE SPRINGS.

24th August, 1942.

1942/3.

Memorandum for:-

The Director,
Mineral Resources Survey,
Census Building,
CANBERRA CITY.

The following notes on the number of the mica mines in the Harts Range area were collected on a recent water survey. They are very incomplete but it is thought that they may be of interest in view of the possibility of stepping up production in this area. Complete data concerning production, etc. of the mines seems to be impossible to obtain.

Brief Notes on Harts Range Mica Mines which may be Capable of being Re-Opened.

(a) The Caruso Mine: Until recently this mine was worked by Vendramini and party comprising three men. During the five months ended approximately mid-June, this party obtained about 1,150 lbs. of mica of hard clear quality comprising about 812 lbs. of washer, 212 of strip, 49 of large and 69 of medium, that is, 330 lbs. of large, medium and strip). Recently the mine was briefly inspected and it was found that most of the mica-bearing pegmatite had apparently been stoped above the level of the lowest adit. Two shafts from 15 to 20 ft. in depth had been sunk below this adit, but apparently little mica was obtained. Above the level of the lower adit, the workings would be practically impossible to re-open on account of their very dangerous nature. Below this level it would be comparatively simple to test and mine the lode. At present motor vehicles can approach only within 1 to 1½ miles of the mine and only this far by a very rough road. Probably a road could be made to the mine, but considerable effort would be involved. On account of the particularly valuable nature of the mica for use in condensers and considering the fact that the mine could be re-opened relatively easily, it is thought that some attention could well be paid to this deposit.

(b) The Central Mine: This mine is at present being worked by G. Muratori. Briefly its more recent history seems to be that during the past three years an average of two men have been engaged on this mine and during this time about 7,000 lbs. of mica (1/3rd washers) have been produced. At the present price this mica would average approximately 7/-d per lb., hence the present value of the mica produced would be approximately £2,400. It was found also that during this time about 200 ft. of driving with some stoping and 80 ft. of shaft sinking have been carried out. From these figures, it was estimated that 760 tons of lode material have been mined, hence the average value per ton of ore mined is about 60/-d. It is emphasised that the large pegmatite body from which the mica was obtained would by no means be of this grade and the above results were obtained by selective mining. Muratori states that after paying wages from time to time, he has not averaged wages himself. However, the workings are readily accessible; the mica is of clear to commercial-clear quality and the deposit has been a regular producer in the past; hence it is thought that a larger number of men could readily be employed here, although in most other cases it is not anticipated that profits would be made at the present price. A good road (for these parts) leads to a point about one mile from the mine from whence it is approached by walking up a rather steep gorge. The construction of a road up this gorge would involve the expenditure of very considerable time and effort.

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(c) B.Rech's Mine (Rex?- Owen): This is situated about two miles north of Mt. Palmer (see plan) and is reached by a rather rough motor road 3.2 miles in length which turns eastward off the Spotted Tiger road near where it crosses Ulgarna Creek. The mine is now abandoned; it was visited in company with D.Strappazon of the Spotted Tiger mine who is thought to be very reliable with regard to any information which he offers. He stated that about £3,000 worth of clear and commercial-clear mica was obtained by the late owner; about 50% of this was washer. In the workings, the lode appears to be 4 to 10 ft. in width although its apparent width on the surface is up to 30 ft. It is a very irregular body (as is the Spotted Tiger and many other useful lodes on this field) and relatively little work has been done. It is believed that Rech abandoned the lease partly because of difficulties over payments for mica; if the position with regard to these matters improved, he intended to return. His mining implements, etc. are at present stored at the Harts Range. Of course nothing of value is showing at the present time, but faces exist where mining operations could begin immediately under fairly hopeful conditions. It is thought that there is a fair chance of obtaining water within about four miles of this mine and test boring will be commenced here in the near future. The deposit appears to be one of the most hopeful prospects available on the field.

(d) The Hit and Miss Mine: This mine, whose position is shown on the accompanying plan, occurs about half a mile from the main Harts Range road and is readily accessible by motor vehicles. It has apparently been held by several companies in the past, all of whom have lost money. The lode is very extensive, being at least 500 ft. in length and varying in width from 6 to 70 ft. The mining so far carried out consists of a shaft about 15 ft. in depth, an open cut about 60 ft. in length at right angles to the lode, and a few pits. Most of the miners on the field consider that the money spent here was entirely wasted as the testing was not carried out on the walls where the greater portion of the mica usually occurs in this area. An open cut to a maximum depth of 15 ft. was put down on a small cross reef which branches off from the above main lode, and D.Strappazon stated that some good mica was obtained here. No record of the amount of mica produced has been found, but several others have stated that from time to time small parties obtained a case or two of mica here (clear and commercial-clear) with very little effort. It is thought that the deposit should be kept in mind and some testing may be warranted. One of the most favourable water prospects occurs within half a mile of this deposit.

(e) Jenkins' Mine: This is readily accessible by motor vehicles, and it is thought that there is a good chance of obtaining water nearby. The lode is large and has produced clear and commercial-clear mica. So far the lode mined has averaged only 12/-d per ton at the present price of mica. However, a fair tonnage of backs could be obtained by continuing the present lower adit into the hill: mining should be relatively cheap by overhead stoping methods. Some 2,000 lbs. of mica (mostly washer, small and medium) have been obtained by the present party so that the lode is a proved producer although the grade is low. The workings are in good condition and mining on an increased scale could be begun immediately if so desired. The party at present manning the lease has opened up another prospect in the vicinity and it is thought possible that they will transfer their attention to the latter leaving the present mine available for exploitation by the Government if so desired.

(f) The Eldorado Mine: (Position shown on accompanying Plan). The main Harts Range road passes over this lode. Strappazon reported that a Sydney Company spent a good deal of money here and

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that a second company with compressor, later spent one month here and abandoned the lease. Two Italians then sunk a shaft to about 20 ft. with no results. In "Mineral Resources of Australia, Summary Report No.4: Mica", it was stated (page 8) that during 1941, 533 lbs. of commercial-clear mica, valued at £134, were received by the Government agent at Alice Springs from this mine. No-one on the field mentioned the production of this mica. On inspection it was found that the lode strikes at 75 to 80° and has a length of about 1,000 ft.; the width varies from 6 to 20 ft. The lode is more tabular than most others seen on the field. Smaller branch lodes forming a definite pattern strike off the main lode. Two shafts 15 and 20 ft. respectively in depth were noted. There appeared to be some ruby mica lying in the dump.

A considerable quantity of muscovite is present in most of the lode in crystals approximately 1 inch by 1 inch but little mica of commercial size could be seen. It is thought that a good deal of the mica would be fishboned and fractured. However, this lode has merely been "scratched" and it is worth keeping in mind. If 533 lbs. of commercial-clear mica have been obtained from the present workings, more development is probably warranted. A small book of mica was noted in the lode towards its eastern end.

(g) The Spotted Tiger Mine: It may be noted that it would not be an easy matter to increase the scale of operations on this mine immediately. The present party is largely carrying out prospecting work and they believe that the main lens has been mined out. There is of course a possibility of a repetition below the above lens but testing for this would involve considerable effort. The problem of stepping up production here is by no means straight-forward.

General.

Other localities which may warrant attention are the Plenty River Area, The Eastern Chief Mine (Harts Range) and the Carrarra locality. In the latter place, J. Spurio is reported to be obtaining some mica of commercial-clear quality.

(C. J. Sullivan)
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