

PRELIMINARY REPORT

004302

ON THE

WHITEWATER MINES

W. H. Burgess, Esq.,
Managing Director,
Whitewater Mines, Ltd.,
Kaslo, B. C.

PROPERTY FILE

Dear Sir:

In accord with your instructions I made preliminary examination of Whitewater mines, giving special attention to (1) manner in which funds have been expended since starting operations in 1925, (2) conditions that have restricted shipment of ore in quantity to date, (3) general estimate of possibilities by further development of known ore bodies and, (4) the future prospects of the mine in general. Two trips were made to the property. The first inspection suggested important results might be attained by short crosscuts into the ore bodies at 12 level and it was thought best to defer the report until these results were known. Gratifying results were got as detailed in the body of this report.

You state that you intend to present this report to stockholders not familiar with the conditions on the ground. For this reason I have had to go into considerable detail in order to present the matter in an intelligible manner. For convenience I have summarized as follows:-

Expenditure of funds

The first job was to recondition the workings and equipment which had deteriorated considerably after the years of neglect and lack of maintenance. In addition of the more important repairs was accumulation of minor breakages which in an operating property would be attended to as they occurred but make a good sized job if neglected for a time.

Reconditioning of surface equipment included replacements to flume, repair of pipe lines, construction of new buildings at the portal of the Deep Tunnel - which is the main outlet of the mine - construction of a fine new camp to replace the old camp destroyed by forest fire, and a large number of minor repairs whose aggregate cost was proportionately large.

Reconditioning underground workings included clearing caved ground and retimbering in 10, 11, 12, and 13 levels, reconditioning and retimbering 1950-ft. of the Deep Tunnel from the portal to the Main Raise, repairing compressed air piping through the mine, repairing and renewing hoist, re-aligning the skipway up the Main Raise, and numerous minor repairs to track and underground equipment.

New machine drills were purchased, electric lighting plant put into commission, shop equipment bought etc.

You now have one of the best camps and mine plants in the Slocan district. If a spur is put in from the railway to the ore bins at the Deep Tunnel you would be in shape to mine and transport 60-tons or more of mill ore per day f.o.b. cars for shipment to custom mill at Trail, B. C.

The Main Raise is the chief outlet for ore and waste in the mine and is the only outlet between 10th and Deep levels. Originally it was two compartments, one a chute and the other combining skipway, manway, with airpipe, etc. The combination of manway and skipway in the same compartment is against the Safety Regulations of the British Columbia Mines Act, hence came under official censure. It was soon evident that one chute was insufficient for both ore and waste therefore lack of another chute restricted the output of ore. In view of the extensive bodies of milling ore on 12 and 13 levels that may now be shipped profitably it was imperative that the Main Raise be enlarged from the Deep Tunnel level up to 12 level. This was therefore the major operation from Nov. 10th, 1925 to latter part of January 1926. Now that it is done you are in position to ship not less than 900-tons of milling ore per month with indications that thereby the company should net from \$10,000 to \$20,000 per month. In view of these conditions it is evident that enlargement of the raise was entirely justified. Immediate benefits will result that otherwise would not have been possible.

Before milling facilities referred to were available the natural object was to get into the areas most promising for high grade ore so as to start shipping high grade ore as soon as possible. The most promising were considered (1) possible hangingwall vein in western part of the mine at 11, 12, and 13 levels and (2) downward continuation of the big ore shoot found at the juncture of the footwall and hangingwall veins in the eastern part of the mine.

With this in view a crosscut was driven southerly 140-ft. at 12 level to encounter the possible downward continuation of the hangingwall vein in position suggested in report of R. H. Stewart, August 1919. The hangingwall was not got at the point expected and the face of the crosscut was extended some distance past the point without success. This failure may be due to a number of causes, some of which are detailed in the body of this report.

At the 100-ft. point of this crosscut a wall was struck extending NW from which was a large mineralized crossvein (Crossvein A-C, exhibit F) goes to the footwall vein about 220-ft. distant where this vein is over 15-ft. wide with good milling values in lead, silver, and zinc. Thus this crosscut succeeded in indicating possibility of a large tonnage of mill ore which may now be profitably handled, and also affords a ready means of mining this ore. This work may thus be considered important and successful even though it did not reach its original objective. Further search for this may be conducted at some future date after more detailed examination elsewhere in the mine on lines suggested herein. Wall "B" was followed SE for 35-ft. showing indications that cross vein A-C goes out to the SE beyond the wall, though the rake takes it downward below the level. It may be further attacked from 13th. level as this vein appears to have excellent ore possibilities.

It was also considered important that No. 11 drift be driven east into the downward extension of the big ore shoot so profitably worked in the upper levels. Up to January 27th this drift had been advanced 215-ft. making a total distance from the Main Raise more than 460-ft. The 215-ft. has been along good vein but in barren area apparently lying between the East and West ore zones. This drift should be kept going as it promises to open up possibly the best ore shoot in the mine. The east rake of the ore body appears to me to be at lower angle than previously estimated which would possibly mean a longer drive than first anticipated. When the ore body is reached the Main Raise will have to be enlarged from 11 to 12 levels. This may be done without interfering with ore production from 12 and 13 levels on account of the two chutes connecting them to the Deep Tunnel level.

Raises were put up in 13 level and 2-cars of high grade zinc ore stoped in vicinity of point "J", exhibit G. A small amount of crosscutting was done towards the east extension of the footwall but did not extend far enough.

Re-establishment of camp, recondition the mine and plant, the described exploration and development work, enlargement of the Main Raise, and numerous minor repairs have all been done for less than \$30,000 which is an excellent record. The neat condition of the plant and condition of the equipment reflect a high state of efficiency of your employoos.

The outstanding feature of the past year has been installation of the custom's mill by the Consolidated M. & S. Co. at Trail, whereby at a cost of \$3.00 per ton they make efficient differential flotation products from low grade mill ore into (1) high grade silver-lead concentrate and (2) high grade zinc concentrate so that with the present favorable markets the large bodies of low grade ore on 12 and 13 levels may be mined profitably. Without these facilities your company could not have benefited from these ore bodies until milling equipment was provided on the ground at a cost approximately \$100,000 for a 100-ton plant. Before this plant could be built probably more than a year would have elapsed. The railway freight on mill ore from Retallack to Trail is \$1.75 per ton, the cost of hauling from the bins at Deep Tunnel and loading aboard the cars is about 50¢ per ton. On a basis of 900-tons per month it is estimated that from \$10,000 to \$20,000 net may be got by your company. The lower grade ore according to recent sampling will afford \$5,000 profits per month without the help of the better grade which is strongly indicated in the 12 and 13 levels.

Another outstanding feature is the fact that the recent work and investigations have disclosed large possibilities of this character of ore on the 12 and 13 levels, at present only partially developed but with every indication that further development will prove them sufficient for years of operation on the basis suggested. Thus the property may go on a profit basis that could not be expected for more than a year later under the conditions that prevailed when your operations were resumed at the mine.

In addition to these immediate resources for mill ore there is good reason for belief that extension of workings in 12 and 13 levels will show up additional and important tonnage of this character of ore with likelihood that appreciable amounts of high grade galena and zinc blende will be got also. Thus it is indicated that these two levels alone in this West ore body should provide profitable tonnage for considerable time during which period the exploration in 11 level for the East ore body should result successfully with production therefrom augmenting the profits. If the East ore body is found as expected the area from 11 to 10 levels is virgin and there would remain the possibilities therein down to the Deep level. If the ore bodies are in any way comparable with past showings the ore and values from this area would amount to a considerable sum. There is geologic reason for expectancy of formation conditions at 11th level and below that will be more favorable for deposition of large ore bodies than those that prevailed in the upper levels surrounding this east ore zone. This condition is surmise at present but it is probable that the work of the next few months will supply proof.

The ore bodies in 12 and 13 are in the West ore zone which is entirely virgin from 12 level to the surface. Neither level has been driven the full extent of the ore possibilities along the main footwall vein. The cross veins

have proven to be of commercial importance with good tonnage potentialities. For these reasons an estimate of the possibilities of this zone cannot be made except to say that indications are that they will prove very large.

Indications are that some of the upper workings may have left the vein and gone into either foot or hangingwall of the vein in vicinity of ore shoots which suggests places where short crosscuts or raises might prove additions to the ore reserves.

The above conditions have been detailed in the body of this report.

In view of the facilities afforded by the custom's mill, the favorable market conditions, and the fact that good tonnage of milling ore is immediately available in the mine, and in view of the possibilities for extension of the known ore bodies and the excellent indications regards development of new ore I consider that Whitewater Mines afford better opportunities for future profits than any mine in the Slocan at the present time. Indications are that the future holds better promise than the past good performance of this property.

Arthur Lakes

Mining Engineer.

Nolson, B. C.
January 31, 1926.

75 yrs

3 5th Avenue Reaforth Conf

4- Intimate knowledge of apparent source
early 40's

5 (b) No far as I know he down

6- Yes (B)

9 No info on this

10

11 No

12 No info

13 Yes

14 Bank employees

15 No

16 - Anyone prominent in Reaforth when
in any way was brought up
Alex Frank Langier
official & business def A