Greenhaugh Mining Company, Limited.

REPORT.

Referring to the General Report on work done during last year, I pointed out there that it will be absolutely necessary to provide more up-to-date plant.

During the month of December a very careful test was carried out with regard to the cost of working, ore production, &c. As this test occupied the whole of the month before fully completed on December 30th, the results of the test could not be placed before the shareholders earlier.

From a financial point of view the test was disappointing, but the results show, that with more economical working, the loss which we suffered would have been converted into a profit, which can be expected to continue in the future, provided the veins continue in their present strength. As, however, we are now working in virgin ground, and we know that the veins for certain are equally good at the depth where the Bradford Corporation Aqueduct is driven, which is several hundred feet below the bottom of our mine, there is little doubt that with proper plant the mine will pay. It should in this connection be borne in mind that during the last 9 years, when lead mining was carried on in this neighbourhood, 4,830 tons of pig valued at £69,398 at an average price of £14 7s. per ton, was raised in the ground we lease or have preferential claim on, which according to Professor Henry Louis is not worked to any extent except in its N.E. corner, where we are now working at a depth of about 150 feet below the surface. This represents per week over the period in question (for which there are Board of Trade figures available) an average of 10 tons, all mined by means of hand boring and not by means of drilling machines. The present price per ton of pig lead is £30.

The test shows that three items of expenditure in the main determine the working costs under present working conditions, these are : Pumping, Mucking, and Dressing, representing 55% of the working costs.

Pumping.—This item of expense depending on the rainfall is therefore not constant, but basing my estimate on our past experience and the resvlt of the test, I think it reasonable to assume that it directly accounts for an outlay of about £700 to £750 per annum. Indirectly by preventing us from keeping work going through flooding of the mine it affects our earning capacity, but this I am at present unable to estimate.

This expenditure can be entirely got rid of by driving a neighbouring level through underneath our workings and sink down. The cost of this I can only estimate approximately, but I don't anticipate it will amount to more than £2,000, and it may only cost half this sum.

Mucking.—This item also affects the earning capacity of the mine in two ways, through actual expenditure and through retarding other work which depends on it.

As regards the first, mucking represents 26¹% of the total working cost including stores, and 46½% of the labour costs. When labour is so dear as now, it is not reasonable to expect otherwise than a loss, when one works with a plant as inefficient as ours.

As regards retarding other work, we were unable to work the hammers to a higher percentage than 22% of what they could have done, owing to the impossibility of removing the blasted material.

If adequate plant was available, a saving on mucking costs is expected, and the increased output would be 100%—22%, 78%.

Dressing.—This item represents about 13% of the total costs, and about 22% of the labour costs, and per ton of ore won it represents £3, whereas it ought not to cost us more than about £1 per ton.

During the test 5 tons 5 cwt. 3 qrs. of lead ore was won, which I estimate is worth at the present price we get for our ore, £18 per ton, allowing for moisture, &c., £91 18s. 4d., the loss on the test being £32, and per ton £6 1s.

If the hammers had worked full time and the costs of mucking and dressing had been reduced as indicated above, the output would have been 9 tons 8 cwts. 1 qr., worth £163 12s. 2d., with a profit of £2 15s. per ton.

If pumping costs were extinguished through driving the above-mentioned level at a cost of say £2,000, at 5%, this represents £100, or a reduction of our working expenses by £750—£100, £650, which annual sum represents 16% on our present capital.

Note that in the above calculations office expenses, royalties, &c., have not been included, but these imposts do not come to a great deal. As regards superintendence, it has been included in the present costs, and amounts to a fair percentage, but with the employment of greater numbers of workmen and heavier expenses all round with increased output, this item will not materially increase.

Although the results of the test have not been favourable, still, when it is remembered that the mucking and dressing are carried on in exactly the same way and with the same kind of tools, it was done in this neighbourhood a hundred years ago, and without better appliances there will be no certainty of the Company doing well. To meet this, fresh capital must be subscribed, which Professor Louis in his report foreshadows ; if amongst the shareholders so much the better.

The position of the Company is at the present moment delicate, apart from the above-mentioned difficulties, as the continuous frost and enormous quantities of snow, to find the equal of which one must go back more than 40 years in this district, has frozen up the dressing place, which is also, owing to its not being covered in, buried in places under 12 feet of snow. For the same reason it has been practically impossible to keep the roads open to enable us to get coal, so that the mine has been standing idle on several occasions. As a consequence nothing has been earned and expenses have been heavy.

Given normal conditions the Directors expected when the test was concluded that ample time for subscription of further Capital would have been available to correct the Company's position gradually, as the working costs with improved plant would have decreased, but with the present adverse weather conditions the position is such that without immediate response, the Directors may find themselves in the position to be compelled to stop all work at the mine at once, with a view to reconstruction of the Company, or the taking over of the Company by the Government. Steps in both directions have been taken.

Engineer's Office,
Greenhow Hill,
January 30th, 1917.

(Signed) HAROLD BRUFF,
Managing Director.