

Report on the Coal Sections situated at Mount Malcolm, Fingal Tasmania, and Known as the Cardiff Coal Company.

Position

The above property of about 1700 acres in extent is situated in the hills in the south side of the valley, through which the Fingal Railway runs.

Distance

From Launceston to the siding on the Fingal Railway, joining the branch line to the coal seams, the distance is 74 miles, and from the above siding at the coal seams it is 2 miles and 31 chains.

Means of Transport

The Fingal Railway has been specially made for the transport of coal from the Fingal District. It's nearest point is 789 feet above sea level; and a branch line of under two miles with a self acting tram of about 30 chains would connect the mine with the railway. There would be no difficulty in construction of each, the ground in both cases being most favourable and an unlimited supply of suitable timber available. The Cardiff mine is about 4 miles nearer Launceston than any other mine. The quantities for economical and expeditions winning of coal in the mine cannot be surpassed as one deep deposit would suffice; on shafts, pumps, winding gear or steam machinery being required thus reducing cost of mining to a minimum.

Geology

The works of the area under notice, mostly sandstone and shale with several interbedded coal seams. These coal bearing stratified rocks are identical with the carboniferous seams of Australia.

The surface of the country under notice is surface soil mixed with loose rock; wherever an exposure of live rock occurs in the various water courses, the strata were found lying in a nearly horizontal position. With the exception of, at the top of the hill which are capped by thick sheets of dolerite; the foot hills are comprised of a detritus of dolerite and this major rock in every probability covering other seams of coal more easily accessible could in no case detect any intrusive rock amongst the sedimentary rocks, nor could I observe any disturbance likely to affect either the quality or the workings of the coal seams. Several seams of coal exist on this property, but my attention was given to the seams as mentioned under.

No.1 Seam

Is about 340 feet above the creek where the branch line would cross from St Mary Railway; and about half a mile to the south. A level has been driven in about 30 feet from the creek, disclosing a seam of about 4 feet 3 inches. Both roof and floor are of shale. On the floor there is a band of coal 2 feet 10 inches then a parting of 2 inches of shale, then about 1 foot 2 inches of coal. It must be borne in mind that the seam of coal not under observation has been subject for ages to deterioration from exposure; and a constant drip of water during the wet seasons; consequently the coal as exposed can not be looked upon as a sample of what the coal really is, in it's normal state; where it has sufficient cover and has in no way suffered deterioration from exposure in any way. The coal in the seam, although quite rotten, burns freely, firing out a great heat and flame, and in its normal state is undoubtedly a first class coal fit for any purpose. The remarks as above, to the deterioration of the quality of the coal through exposure apply more or less to all the seams examined by me.

No.2 Seam

About 2 chains higher up the creek; known as Coal Creek, and 20 feet higher in elevation than No.1 seam is No.2 seam of about 2 feet 9 inches consisting of 2 feet 11 inches of coal, then a band of 1 inch, then 10 inches of coal and 18 the roof coal and bands. The 2 feet 11 inches at the bottom is really good fit for steam, household or any other work. In my opinion the bands and other impurities in this seam will disappear as cover is formed and I have not gone as minutely into the exact measurements as I should do; even I examining normal coal; and where no change would be likely, roof; solid poly sandstone, floor; shale.

No 3 Seam

Is 6 chains higher up the creek and about 125 feet higher in elevation than No.2. This is undoubtedly a most valuable seam, and the seam of the property. On the floor there is a band of 2 feet of coal, which will be unaltered by exposure a first class coal, then 1 foot 8 inches shale, then 5 feet 6 inches of really good coal, without band or parting. Nothing better could be desired for commercial working than 5 feet 6 inches of clean coal. Both roof and floor are of shale.

No.4.Seam

The level in this seam is about 7 chains in an easterly direction from No.3 seam, and about 200 feet higher in elevation. The coal in this seam is of excellent quality and favourable for working.

No.5 Seam

This opening is a short distance higher up the slope than No.4 seam. There is some excellent coal in it, but the seam is too much disturbed and the level not far enough in, to form an opinion on it. Above this seam are other seams cropping out of the hill and in the creek, and such is also the case below the seam known as No. 1. I am informed that there are 14 seams altogether exposed, and I have no doubt such is the fact.

Quantity of Coal

The quantity is particularly unlimited; and nor the slightest apprehension need be feared on this account. The sections taken up by the Cardiff Co; are the key to a large extent of country, which can only be of use to the holders of the Cardiff sections should they ever require. The coal crops out in the range in various places for about 12 miles on the face and the range goes gradually back to the sea in an easterly direction some 18 miles away.

Quality of Coal

The coal as now seen in the various levels, is of equal to the best New Castle. Through causes as mentioned in report on No.1 seam, but I feel certain that the coal in its normal state will be found of first class quality, for export and for purposes of consumption.

Conclusion

I have no hesitation in stating that the sections known as the Cardiff Coal Company are a great value, and when the seams are opened up in a proper and systematic manner, and the coal is reached free from any disturbance the company will be able to deliver coal cheaper than any mine not worked in Tasmania, and will be well able to compete with New Castle coal in Melbourne, Adelaide and all parts west of Melbourne. The consumption in Tasmania is limited, but on the Continent of Australia there are large and even increasing requirements. The output of coal at New Castle N.S.W. is about 80,000 tons per week and the demand is greater than the output. There is an abundance of suitable timber required for the mine.

G. Thureau F.G.S.
Mining Geologist;
Inspector of Mines to the Tasmanian Government.
25/1/1887

Memo

Don't you think your making too much of the Cornwall Coal because the parties who are to be approached in London will naturally think that with the report of New Castle that (Cornwall) mine would with our present limited demand of consumption suffice for the present.