

On the 21st April, in company with Mr. E. Barber, I visited his coal prospect, situated in the foothills of the St. Pauls Range, about 2½ miles south of the road from Fingal to St. Marys, where it crosses the Break O' Day River. Not far from this latter point is the Frodsley Siding on the Fingal Railway Line.

The only reasonable access to the lease is to cross private property for about 2 miles and I understand there has been some difficulty in obtaining thoroughfare over portion of this.

The prospecting done to date consists of an adit 81 feet in length driven on the coal seam, which here is practically horizontal, on a bearing of 170°.

A section of the coal is as follows:-

	Shaley sandstone
	Coal 6'
	1" Band
	Coal 2'6"

At 30 feet in the adit a small fault with a 1 foot upthrow to the south is encountered. The adit for the first 30 feet has been driven with the 1" band as the floor and a fairly solid roof of shaley sandstone, after the fault the floor is portion of the 2'6" coal and the roof is still in coal. Looking at the coal all the way in the adit, no light bands, other than the 1" band at the floor are visible. Two samples were taken across the seam one at the end of the drive and the other at 42 feet and the results are as follows.

	End of Drive (81').	42'
Moisture at 105°C.	5.2%	7.9%
V.C.M.	25.4	25.5
F.C.	43.1	43.5
Ash	26.3	24.1
Sulphur	0.27	0.26
Calorific Value	9110 B.Th.Us.	8620 B.Th.Us.

It can be seen that these analysis conform to these generally obtained in the Fingal - St. Marys Field. The ash content is fairly high, especially as no bands were visible and this is due to black shale or low grade coal that appears sporadically in the better grade material. The heating qualities of the coal is not high, especially in the sample closer to the entrance but this is doubtless due to the excess moisture on this sample and the B.Th.U's. of the coal may be expected to improve as it becomes farther from the surface. There is much staining by iron of the coal but again this is usual in these seams and should improve farther from the entrance.

It would thus appear that further prospecting is justified at this locality to determine adequate reserves. Although no surface expression of faulting can be seen close to the adit, the presence of small faults

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in the area to be developed must be expected and the layout of the workings would depend on these. Otherwise the site is ideal for mining, with the seam, practically horizontal, outcropping along a contour of a fairly steep hill. The railway line is within three miles and no difficulty, as far as the terrain is concerned, should be experienced in constructing a road.

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