

E P I T O M E

of

REPORT ON FINGAL COAL AREA

A. - LOCATION AND EXTENT

Situated to the south and south-west of the Mount Nicholas area, the southern boundary of which it adjoins, the Fingal area stretches along the northern slope of the Fingal Range from the Township of Fingal to the Township of Gray. The Fingal Railway marks the northern boundary of the area, whilst the Dalmayne area lies immediately to the south-east. Some 80 square miles are included in the area, of which only a comparatively narrow strip on the southern boundary is coal-bearing.

B. - ACCESS

The transport facilities for the Fingal area are identical with those of the Mount Nicholas area. The Fingal Railway will be the means by which the coal from the whole of this area will be transported to the main centres and is for all parts comparatively easily accessible. As the main workings of the Fingal range are similarly situated, with respect to the railway, as are the workings of the Mount Nicholas Range the arrangements for transporting the coal from the mines to the Main line will be identical with those employed at present in the northern area. Very little work has so far been done, but in the event of further operations being undertaken it is not anticipated that greater difficulties will be met than have already been overcome in the former area. On the eastern extremity of the Fingal Range the coal is found at a level generally much lower than on the west, and as the altitude of the surrounding country is slightly greater than on the west the difficulties of transport will be more readily overcome. In no place do the main outcrops occur at a greater distance than three miles from the main line, and over the greater portion of the area railway sidings could easily be constructed to within a comparatively short distance of the mines.

C. - THE MINING PROPERTIES

(1) The Fingal Coal Prospecting Syndicate

(a) Number and Area of Leases - The above Syndicate is at present the holder of 680 acres situated on the northern fall of the Fingal Range at a distance of about two miles from the Fingal Railway. The Syndicate has four leases, the number and areas of which are as follows:-

<u>8607</u> M	320 acres
<u>8621</u> M	20 acres
<u>8690</u> M	20 acres
<u>8724</u> M	320 acres

Of these 680 acres, the coal-bearing area has been taken as 500 acres. The remaining area is valueless due to proximity of diabase.

(b) Extent and Method of Mining Operations - The mining operations carried out by the Fingal Syndicate up to the present time have only been developmental in character. At the time of the writer's visit a tunnel had been driven for a distance of approximately 120 feet into the main seam. Since that time a second tunnel has been driven and it is in this second tunnel that the work is at present being done. The mine has not yet been opened up systematically, but as the seam is one which will easily lend itself to the Bord and Pillar system it is probable that this method will be adopted when production on a large scale is contemplated.

(c) Quality of Coal - The analyses of the Fingal coal would indicate that the quality of the coal is in all respects equal to the coals from the Mount Nicholas Range. The seam at Fingal has been sampled in four sections with the idea of showing any variations which may exist from top to bottom. The following sections of this seam were noted at the various positions indicated:-

At the main workings on the Fingal Syndicate's property the section is as follows:-

		Sandstone roof
4½ ins.		Bright coal
½ "		Clay band
11 "		Bright coal
1½ "		Shale band
5 "		Bright coal
1½ "		White band
5½ "		Stony Coal
17 "		Dull coal
¼ "		White band
1 1/8 "		Dull coal
8 "		White band
2½ "		Dull coal
		penny band
53¾ "		Dull coal
2 "		Blackstone band
5 "		Bright coal
¼ "		White band
1¼ "		Bright coal
½ "		White band
3½ "		Coal
1 "		Band
18 "		Bright coal with one penny band
		Shale Bottom.

In Crouch's Creek tunnel the following section is seen at an altitude of 1580 feet:-

		Sandstone Roof
7½ ins.		Coal
½ "		Blackstone band
½ "		White band
1 "		Coal
½ "		White Band
1 "		Coal
3 "		Band
2 "		Coal
¾ "		White band
3 "		Coal
½ "		Band

1½	ins.	Coal
¾	"	Band
4½	"	Coal
½	"	Band
8½	"	Coal
1½	"	Band
13	"	Coal
1¼	"	Band
1½	"	Coal
1½	"	Band
9½	"	Coal
5½	"	Band
4	"	Coal
		Penny band
1¼	"	Coal
4¼	"	Blackstone band
3	"	White band
5	"	Coal
1	"	White band

In a creek south of Aulich's property the seam occurs at an altitude of 1490 feet above the sea with the following section:-

		Sandstone Roof
12	ins.	Coal
8	"	White band
4	"	Coal
½	"	White band
14	"	Coal
2½	"	White band
4	"	Coal
½	"	White band
8	"	Coal
½	"	White band
3	"	Coal
½	"	White band
6	"	Coal

Bottom indefinite but coal could be seen for at least 3 ft. lower.

The analyses of these four samples are as follows:

Moisture at 105°C.	2.70	per cent
Volatile Matter	26.82	" "
Fixed Carbon	48.18	" "
Ash	22.30	" "
Sulphur	0.03	" "
Moisture at 105°C	2.40	" "
Volatile Matter	26.10	" "
Fixed Carbon	48.29	" "
Ash	23.21	" "
Sulphur	0.37	" "
Moisture at 105°C	1.00	" "
Volatile Matter	24.00	" "
Fixed Carbon	48.80	" "
Ash	26.20	" "
Sulphur	0.24	" "

Moisture at 105°C	2.54	per cent
Volatile Matter	26.36	" "
Fixed Carbon	42.00	" "
Ash	29.10	" "
Sulphur	0.41	" "

It is found, on reference to these analyses, that practically no variation in quality takes place in the seam. From the analyses it is reasonable to assume that the whole thickness of the seam is of such quality as to be marketable.

The main drawback to this coal is the physical property of decrepitation of spitting. With each application of fresh coal to a fire this property is exemplified. For use in the kitchen range or any closed fire place the decrepitation cannot be regarded as a disadvantage and the quality must be stated as being at least equal to the coals of the Mount Nicholas Range.

(d) Production - At the present time only sufficient coal is being produced from this mine to supply the demand caused by a few local orders received by the syndicate. No transport facilities exist, and no preparation has so far been made to increase the output over a few tons per week.

(e) Quantity of Coal Available - Although the full eight seams are known to exist in the area insufficient data are available in regard to the thickness of most of them to allow of reliable calculations of coal reserves.

The Gamma, Delta and Theta seams, however, would give a total thickness of 13 feet over an area of 500 acres held by this Syndicate. This would give a coal reserve of 7,000,000 tons to which will ultimately be added the reserve contained in the remaining seams.

(Sgd.) H.G.W. Reid

LAUNCESTON

10th August, 1922