

OIL SHALES

242

Extensive deposits of oil-producing shales occur in the northern and north-western part of Tasmania as beds on the horizon of the Greta coal measures of the Carboniferous system. Tasmanite forms the greater part of these deposits, a recent estimate of the reserve at the localities being:-

Latrobe-Railton-Kimberley Area	30,000,000 tons
Beulah Area	3,000,000 tons
Quamby Bluff Area	3,000,000 tons
Nook Area	800,000 tons
Oonah Area	6,000,000 tons
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	42,800,000 tons
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The average yield of crude oil from these shales is estimated at 40 gallons per ton, the oil reserve, therefore, amounts to 1,771,200,000 gallons.

The known deposits are situated in two widely separated fields associated with cannal coal and Kerosene shale. The more important is that extending from Latrobe to Quamby Bluff. Along this belt, 27 miles in length, Tasmanite has been proved to extend 14 miles, and in the section intervening Quamby Bluff and Kimberley it probably occurs as well. Outliers of the main body are found at Beulah and Nook on the west side and at Parramatta on the east. Aside from the known deposits it is considered likely that Tasmanite will be found in neighbouring areas.

The facilities for the development of the oil shale industry in the Latrobe-Railton field are not present at Oonah, which is situated 26 miles from the Coast line and is accessible only by roads of heavy grades. Two companies are erecting distillation works, one at Latrobe, the other at Railton. The process of distillation is comparatively simple as the kerosene from which the oil is derived is encased in arenaceous shale and the ammonia content is negligible.

Kerosene shales and cannal coals occur at Preolenna, Mt. Pelion, and Barn Bluff, but the reserve of these shales is small compared with that of tasmanite.

COAL

Coal seams occur in strata belonging to the Permo-Carboniferous from the lower coal measures and are well developed at Preolenna, Barn Bluff, Mt. Pelion and Mersey Fields in the north, and at Cygnet and Bruny Island in the south. These seams do not exceed two feet six inches in thickness. The Trias-Jura coal measures are extensively developed in the eastern midland and south-eastern portion of Tasmania.

These seams constitute the most important coal resources of Tasmania and vary in thickness from three to sixteen feet the most important having an average thickness of twelve feet.

The Tertiary strata also contain important seams, but their extent has not yet been investigated.

The following statement explains the variation in character and composition of the coal found in the several systems:-

Permo-Carboniferous-

Greta Coal Measures : Kerogenites and Humic-Kerogenites
Tomago " " : Sub-anthracites and non-caking humic

Trias-Jura

Sub-anthracites and non-caking humic

Tertiary

Brown Coal and Lignite

The total production of coal is somewhat in excess of 2,000,000 tons with a value of approximately £1,600,000. The present annual production is 69,238 tons valued at £51,016. Development has been greatest in the Mt. Nicholas field where the Cornwall and Mt. Nicholas companies are operating on Trias-Jura Coals. The Preolenna Coal Company has lately become an active producer, and for many years coal has been mined in Mersey River valley.

The coal reserve calculated on the basis of existing economic conditions amount to 134,398,000 tons. On the basis adopted by the International Geological Congress the "actual" reserve is 124,980,000 tons, and the "probable" additional reserve is 123,013,000 tons, with a still further unknown "possible" reserve.

The following figures indicate the composition, evaporative power and calorific value of the average Trias-Jura coal:-

- Moisture 4.36 per cent
- Volatile hydrocarbons 21.27 per cent
- Fixed carbon 51.84 per cent
- Ash 22.64 per cent
- Sulphur 0.60 per cent
- Evaporative power 10.49
- Calorific Value (5636 calories
(10145 B.T.U.

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