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1986/22. The history of coal mining in Tasmania

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The first recorded discovery of coal in Tasmania was made by the French explorer Labillardiere and his party in February 1793 (Besford, 1958). Labillardiere's expedition, which anchored in Rocky Bay, sent a party to attempt a climb of the highest mountain in the area, now known as Mt La Perouse, but owing to the difficult nature of the terrain they did not explore further north. On the return journey, coal was discovered cropping out in cliffs close to the sea. The explorer records:

> ".... the side of the mountains being exposed for a considerable extent we observed a horizontal vein of coal the greatest thickness of which did not exceed one decimeter (0.10 m). We noticed it for a space of more than 300 m. The stratum beneath it was sandstone and above it a dark schist. From these indications I presume that excellent coal may be found in abundance at greater depth. It is well known that the richest mines of this fuel are commonly found beneath sandstone ..... Cliffs became more and more steep, and some of them were perpendicular more than 200 m in height above the level of the sea."

Coal was discovered on the banks of the Coal River near Pitt Water between September 1803 and February 1804 when the early settlement at Risdon Cove was under the command of Lieutenant John Bowen. Governor Collins wrote to Governor King:

> ".... At the head of it is a run of water which leads to a stratum of coals that was discovered during Mr Bowen's command, and which, when more at leisure, I mean to examine." (Collins to King, 25-2-1805; HRA 111 i 347).

In 1809, a shipwrecked sailor discovered coal on Schouten Island, south of Freycinet Peninsula on the east coast of Tasmania (GO 39/4, p. 29).

Governor Collins wrote to Governor Macquarie in 1810 that:

> "veins of coal are found in various places; in the interior are several salt lagoons and the existence of a rich iron ore has been ascertained." (Collins to Macquarie, HRA 111 i 433).

Samples of various Tasmanian coals were sent to Governor Macquarie in 1813. That year, the Governor refused to grant land to a Major Geils at the Coal River, reserving instead the coal-bearing land for the Crown.

Brown coal was discovered on the northern shore of Macquarie Harbour in 1815 by Captain James Kelly. These discoveries were promptly visited by Mr D. McCarthy whose visit was documented in the *Hobart Town Gazette* of 15 June 1816:

> "On the 5th day we came to anchor outside the harbour in seven fathoms water to wait for the tide as the current runs at the rate of six or seven knots an hour and there not being one and a half fathoms over the bar, ... we then continued our course up the harbour in a whale boat; having advanced about 10 miles (16 km) further we found on the northern shore a quantity of

> coal. The first we observed was on the beach and washed by salt water, an immense bed, but how deep we could not ascertain. On further inspection we found the bank from the river was nearly all coal in strata 6 ft (1.8 m) thick then a few feet strata of clay then coal again; we much lamented the impossibility of proceeding with the brig to this place."

A map engraved by Chas Thompson, Edinburgh, from the original survey taken to England by Captain Dixon in the ship *Skelton of Whitby* is marked "plenty of coal here" at the head of Coal River above Jerusalem. The presence of coal is indicated on the northern shore of Adventure Bay on Bruny Island, and at Macquarie Harbour. These discoveries had been made prior to the visit of Captain Dixon in 1823 (Besford, 1958).

In September 1824, S. Hobbs set out on a boat expedition around Tasmania, with two boats and a crew of convicts. Hobbs (1824) records that in the head of the bay at South Cape:

> "immense cliffs from 50-100' (15-30 m) in height extend their rugged fronts for nearly a mile (1.6 km) along the sea, which breaks against them with great violence. In the highest of these I observed three different strata of coal extending in a line perfectly horizontal all on beds of sandstone. The first stratum is close to the water's edge, about five feet (1.5 m) over the surface and probably five feet under it. The next stratum about two feet (0.6 m) thick, is separated from this by a body of sandstone at least eight feet (2.4 m) thick. The upper stratum is in the same manner placed on sandstone and is about the same thickness as the second" (Hobbs, 1824).

The coal at South Cape and at Adventure Bay was examined in 1826 by T. Scott (Assistant Surveyor), R. Roberts and J. Hobbs. However this expedition returned with the opinion that the coal was of poor quality (LSD 1/48/208, 25 October 1826). Of the seams in the cliff, one 1.02 m thick was of the most interest, and of better quality than the other two seams. However even this coal was full of pyrite and stony material.

Seams of coal were discovered at New Town in 1827 and again in 1829 (Booth, 1962).

The first successful coal mining operation to take place in Tasmania was the Government-run coal mine at Saltwater River, at which production began in 1834 following the discovery of coal in Norfolk Bay by two surveyors in 1830 (GO 33/16/265).

However a small scale coal mining operation at Macquarie Harbour is mentioned in the narrative of the convict/cannibal Alexander Pearce. The account of Pearce's interrogation by the Reverend Knopwood reads in part:

> ".... seven prisoners forcibly seized two boats at Kelly's Basin, where they were employed in cutting timber under the charge of an overseer, and proceeded to the coal works where they were accompanied by Robert Greenhill ....".

Similarly, Pearce's confession to Lt Cuthbertson, commandant of the Macquarie Harbour Penal Settlement, refers to the mine:

> " .... had to call for Greenhill who was at the Miners Hut, he was good navigator ....". (Sprod, 1977).

The Macquarie Harbour mining venture was unsuccessful and short-lived, as a despatch from Lt Governor Sorell to Under Secretary Horton dated 29 November 1824 reads:

> ".... At the penal settlement of Macquarie Harbour where the indications of coal were so strong as to induce the Deputy Surveyor-General (Evans) to report its existence there, the want of professional research had deprived the local Government of the means of working it." (HRA III p. 583).

The coal mine at Saltwater River began producing coal for the Hobart market in 1834. The workforce comprised convict labour, and conditions in the mine were most unpleasant. The mine headings were only 1-2 m high and the ventilation was poor (Ford, 1932; Burn, 1892). A steam engine was installed in 1842 to raise the coal to the surface. Prior to this the coal was raised up shafts by a winch which used convict labour. Two pumps, which drew water from the workings, also used convict labour.

Until 1840 convicts were sent to work at the coal mine as punishment, although only a small number of those at the mine actually worked underground. The work was no more severe than at Port Arthur and the rations were the same (Besford, 1958). From 1840 to 1848 the convicts working at the mine were those on probation, and were released at the end of their probationary periods (Booth, 1962).

However conditions at the coal mine were certainly unpleasant, as described by D. Burn in a visit to the mine in 1842:

> "Next morning I descended the main shaft along with Captain Booth; it is 52 yards (47.5 m) deep. The winch was manned by convicts under punishment. One stroke of the knife might sunder the rope, and then .... however it has never been tried, deeds of ferocity being very infrequent. A gang on the surface worked the main pump and another below worked a horizontal or slightly inclined draw pump which threw water into the chief well ..... The seam has been excavated 100 yards (100 m) from the shaft several chambers diverging left and right. The height of the bore is four feet (1.2 m). The quality of the coal partakes much more of anthracite than of bitumen, it flies a great deal but produces intense heat. The miners are esteemed the most irksome punishment the felon encounters because he labours night and day eight hours on a spell. Continuous stooping and close atmosphere caused our party to be bedewed with perspiration. I cannot therefore wonder at the abhorrence of the compulsory miner in loathing what I conceive to be a dreadful vocation ....".

The Reverend H.P. Fry visited the mine in 1848 and recorded that the shaft was 92.5 m deep, and that 400 convicts were employed at the mine site, although only 83 actually worked underground. Fry (1850) described the workings in detail:

> ".... we groped our way with difficulty along passages which were said to be five miles (8 km) in length. The roof in many places was so low that we were obliged to creep along the passage beneath it. The air was so confined that our lamps could with difficulty be kept burning and several of them went out. A few lamps at long intervals were attached to the walls, but seemed only like sparks glimmering in the mist, and not many yards

from them the passage was in perfect darkness. There were 83 men at work in the mines when I visited them, the greater number employed in wheeling the coal to the shaft to be hoisted up. They worked without any other clothing than their trousers and perspired profusely. The men in the mine were under the charge of a prisoner-overseer and a prisoner constable."

To be sent to work at the coal mine was regarded as a punishment by the convicts at Port Arthur, although the work at the mines was no more severe than at Port Arthur and the rations were the same (Besford, 1958). The punishment rate was, however, high. Hartwell (1954) notes that for the year 1847, 1400 punishments were meted out to the 400 employees. These included 728 sentences of solitary confinement with bread and water, given out by the Superintendent, while the Magistrate imposed 672 punishments of flogging, sentencing to chains, or periods of solitary confinement.

In September 1848 the mine was leased to Alexander Clark who was forbidden to use convict labour underground (CGF 10591/4, 30 September 1848). From 1860 to 1867 the mine was leased to James Hurst (CON 1/1) and finally closed in 1877. The coal was used as a domestic fuel in Hobart although throughout there were constant complaints regarding the quality of the coal. All extraction was done using the bord and pillar method, initially using shafts for access. An adit was driven into the seam to facilitate access after Clark leased the mine.

A venture into coal mining was made in 1840 by Charles Swanston and eight others, who formed a syndicate and approached the Government of the day for assistance in sinking a shaft near Southport. The target of this venture was seams in the Cygnet Coal Measures of Permian age.

The proposal by Swanston was that the Government provide the labour for sinking the shaft and operating the mine, with the company to provide materials, and if successful, the company (The Van Diemens Land Coal Company) would lease the mine for 99 years at a cost of 2½% of the profits. (Executive Council Minutes, 19 May 1840). The scheme was proposed again in 1841 and 1842 (Hartwell, 1954).

The Government partly agreed with the proposal, and a shaft was sunk in 1842. Some 1300 tons of coal were brought to the Hobart Market (*Colonial Times*, 17 May 1842). The Government Surveyor, Jones, claimed that most of this coal was obtained from the outcrop on the foreshore, and not from any regular winning, so the coal was dirty (CSO 8/108/2279, 13 July 1844).

The mining operation was not profitable and collapsed, owing the Government £4,316 ($8,632) for the services of convict miners, an overseer, and for tools and stores supplied by the Government (GO 1/54, 9 May 1844, p. 90).

The company had a brief period of paper prosperity in 1840, when the shares rose from ten shillings ($1) to £10 ($20) each. However, on the collapse of the company, the shareholders could not be traced and the Government was forced to forfeit the sum owing (GO 33/78, 31 March 1853, p. 713-717). The affair became known as the 'Southport Swindle' (Booth, 1962). Swanston was, at the time, one of two Attorneys General and was later involved in coal mining on Schouten Island as well as many other industrial ventures.

An outcrop of coal near Richmond was opened by a Mr Bonney, and tests made on the coal in 1836 (Booth, 1962). The mine was offered for sale in 1840, but no buyers accepted the offer. The Government also declined to take the mine over, although in 1841 Government equipment was loaned to Mr Bonney, who worked the mine for a short time. However little coal was produced (Hartwell, 1954).

The Government Surveyor, Jones, visited this mine and additional prospecting workings at Jerusalem in January 1844, with a view to the Government taking over the workings. Bonney's Mine at Richmond was described as a drift driven for six metres on the dip of the seam, now full of water. The coal was only 150 mm thick, with 1.2 m of shale above the coal (CSO 8/108/2279, 2 January 1844).

Work had commenced near Jerusalem in 1842, when James Clare sank a trial shaft on behalf of the Government (Booth, 1962). Jones was sent to inspect the Jerusalem workings, and recorded one 1.2 m thick outcrop in Wallaby Creek (a tributary of the Coal River) and another outcrop 790 mm thick into which an adit had been driven for 90 metres. Two shafts had also been sunk, both of which intersected coal seam (CSO 8/108/2279, 15 January 1844).

As a result of Jones' inspection, the Government decided to open up the Jerusalem mine and work started in March 1844 (CSO 8/10/2279, 11 March 1844). Jones reported that two more seams had been opened up by August 1844 (CSO 8/108/2279, 10 August 1844) but the quality of the coal was apparently too poor to warrant further investigation and the operation closed later that month (CSO 8/108/2279, 21 August 1844).

Some 200 tons of coal from Schouten Island were on sale in Hobart in September 1844 (*Colonial Times*, 27 August 1844). Governor Franklin had granted to Jesse and Isaac Garland a lease to mine coal on Schouten Island for six months from 16 September 1843 (CSO 22/84/1807, p. 149). The lease was extended for an additional six months, but a further extension was refused on the grounds that the Government planned to set up a probation station on the island (CSO 22/84/1807, p. 165-167). However the probation station was not built.

The Australasian Smelting Company was formed in August 1848 by Charles Swanston (of the Southport coal venture), with the object of procuring copper or other ore to be refined in or near Van Diemens Land. The company had a local board of directors and a committee in Adelaide (*Hobart Guardian*, 3 July 1850). In 1848 offers were made by South Australian smelting companies to take 25,000 tons of coal per year for 21 shillings ($2.10) per ton (Denison to Grey, 18 May 1849).

Swanston's smelting company formed the Schouten Island Coal Company in response to this offer, and began mining even before a lease was issued. Sixty tons of coal from Schouten Island were unloaded in Hobart in November 1848 (CSO 24/78/2496). A lease to mine coal for 21 years on payment of a royalty of 2d/ton was issued in December 1848. Interest in the venture declined, and no mining operation actually started in earnest.

With the offer from the Adelaide smelting companies, enquiries were made about coal south of the Douglas River, found by the Garlands in 1843. Governor Denison offered this coal on the same terms as the lease for the Schouten Island coal (Denison to Grey, 18 May 1849).

Dr Joseph Milligan, who had inspected the Tasmanian coalfields in 1848 (Milligan, 1849), set up the Douglas River Coal Company in May 1849 to exploit the seams south of the Douglas River. Under the terms of the lease, the payment of 2d/ton royalty was to be used by the Government to erect a wharf at Bicheno and lay a tramway to the mine (CSO 24/104/3280). Work commenced close to the Denison Rivulet, about 1.6 km from the sea. Two seams were mined from two shafts for a short time. Transporting the coal to Bicheno (a distance of 6.5 km) was very costly, and after 800 tons had been raised, interest was transferred to an area closer to the coast (near Old Mines Lagoon), where four shafts and a number of bores were sunk. These workings were known as the Outer Mines (Gould, 1861). Coal from this area was on sale in Hobart in 1850, when 10 tons were sold by auction (*Hobart Town Courier*, 30 October 1850).

The company spent large sums building the tramway from Bicheno to the mines, as the Government failed to complete the job. The tramway was opened in December 1854. A 20 horse-power engine was erected in 1855 at the Outer Mines (Selwyn, 1855). Despite the substantial investment, production was small (100-200 t per month) and in 1858 the company folded (*Hobart Town Courier*, 8 March 1858). Twenty-one young English colliers brought out especially to work the mine found their services not wanted (*Hobart Town Gazette*, 2 March 1858).

Coal was discovered in the Bott Gorge, near Latrobe, in 1850 (Ramsay, 1958) and mining soon began in the Mersey-Don coalfield. A large number of small collieries were opened up, but most had ceased working by the late 1880s. Zachariah Williams, a convicted chartist, was instrumental in opening up the New Town Coalfield and sold his New Town venture to open a mine in the Mersey Coalfield. The mine was worked for only a short time and he retired from mining to become a publican at Ballyhoo (Ramsay, 1958). The last mine to close in this field was the Illamatha No. 2, owned by the Bound brothers, which closed in 1962.

Mining in the New Town area began in the 1850s (*Hobart Town Courier*, 9 August 1851) but interest lapsed and the activity did not last. During the 1870s another burst of interest in coal mining occurred and a few small mines were opened (Thureau, 1883). Coal was sold for domestic purposes. The seams mined were very thin, and the quality of the coal was apparently poor (Krause, 1884).

In 1861 mining began at Seymour, north of the ill-fated Douglas River Coal Mining Company's workings near the Denison Rivulet (CSD 4/6/40, 11 December 1861). A.H. Swift formed the Seymour Coal Mining Company in 1863 to mine coal, followed by the Australian Coal and Kerosene Company in 1868, with the aim of retorting kerosene from the 'slack' (waste) coal produced from mining. Vast sums were expended on the building of a railway, storage bins and a long jetty. The first phase of mining lasted 17 years (Hills *et al.*, 1922). A new company operated the mine from 1923 to 1931.

A dip tunnel was driven to intersect the old, masonry-lined circular shaft of Swift's mine. This enterprise folded when the 400 m long loading jetty was partially demolished by a storm in 1931. The dip tunnel was dewatered in 1959, and the coal mined was transported to St Marys by road. This venture closed in 1964.

While coal seams had been known to occur in the Mt Nicholas area since the 1840s, no real mining occurred there until 1886. Minor

prospecting works extracted some coal in the 1840s and tests of the coal were made by the railways in the early 1880s. However high transport costs to a suitable market precluded this field from being worked, until a railway line from St Marys to Conara (then known as Corners) was opened in 1886. The Mt Nicholas area is the premier coalfield in the State, and mining has been virtually continuous in this field since 1886, when the Cornwall Colliery was opened by the Cornwall Coal Company. Two years later the Mt Nicholas Colliery was opened nearby by a rival company. This mine closed in 1958, with the Cornwall Colliery closing in 1964. The Jubilee Colliery, much smaller than the first two mines, was worked from 1920-1960. Recently (in 1980) the Cornwall Coal Company opened the Blackwood Colliery, close to the old Cornwall workings. The Blackwood Colliery currently produces some 168,000 tonnes of coal per year.

In the early days of mining the longwall, or more commonly the step-longwall, was the favoured mining method. This was used at the Cornwall Colliery until 1914 and at the Mt Nicholas Colliery until 1925, whereafter all mining reverted to the bord and pillar method of extraction. Mining was all done by hand, with pit ponies pulling the loaded coal skips to the surface. Mechanisation of the mines started in 1943 when an arc-wall coal cutting machine was installed at the Cornwall Colliery. The neighbouring mines also became mechanised, although hand mining was carried out in various parts of the mines for a time.

Mining started at Kaoota, south of Hobart, in 1881 and continued in a variety of small workings until 1971. In 1906 an extremely elaborate railway was built from Kaoota to Margate, having ten large wooden bridges in a distance of 19.5 kilometres (Whitham, 1973).

At Cygnet, south of Kaoota, small scale mining began in 1881, and continued in a haphazard and intermittent fashion until the 1940s. The Cygnet coal is of Late Permian age, as is the coal at Adventure Bay on Bruny Island. A very thin seam, approximately 500 mm thick, was worked from a series of shafts and adits by W. Zschachner over the period 1879 to the early 1890s at Adventure Bay. Zschachner had previously held mining leases in the New Town coalfield. At Gordon, a Mr Abbot opened up an outcrop of coal on the foreshore calling the adit the Rockwood Coal Mine. Abbot tried to interest the Victorian Chamber of Commerce in his coal (LSD 1/48/310) and complained bitterly in 1879 that he could not compete with the mining at Adventure Bay (LSD 1/48/214).

Coal in the lower Midlands area was described by Gould (1869). Mining at York Plains started around 1883 and continued until 1947. The coal was sold mainly for use in hop kilns. Mining was done by hand on a modified (step) longwall system.

A small mine was worked at Ida Bay in 1892 (Hills *et al.*, 1922). At Catamaran, south of Ida Bay, coal was discovered in 1900. A number of companies worked mines in this field, the last closing in 1939 (Whitham, 1983). Most of the early work in this field consisted of the construction of enormous bins, expensive tramways, and jetties, leaving little capital for mine development proper. Most of the early investing companies in this area collapsed due to over-spending on infrastructure.

Coal was discovered at Strathblane, north of Ida Bay, in 1908. Prospecting work was carried out for some years, and a small scale

mining operation extracted coal from 1926 to 1933. The average seam thickness was about one metre.

Mining in the Avoca district, in the north-eastern part of the State, began at Mt Christie in 1904. Coal had previously been discovered on the slopes of Ben Lomond in 1864. An adit was driven into this coal cropping out high up in Storys Creek by R. Stevenson in 1882 (Montgomery, 1892), although the distance to market was too great for any mining to be profitable. The initial attempts at mining were shortlived (Twelvetrees, 1906) although in later years several successful coal mines were in operation. The Excelsior (later known as the Stanhope) was producing in 1923, and mining continued until 1957. Extraction was mostly by the bord and pillar system, although the longwall system was adopted briefly in 1944. In 1960 a bushfire swept across the mine site, and the seam outcrop at the portals caught alight. The old workings are still smouldering, and parts of the ground surface over the mine workings have collapsed. The New Stanhope colliery, 1.3 km north of the (old) Stanhope, opened in 1957. A washing plant was installed in 1959 and mining continued until 1973.

The Mt Christie Colliery was opened in 1959 in the vicinity of older prospecting adits on the southern flank of Greenstone Hill. This mine, which produced around 1800 tonnes of coal per year, closed in 1965.

Recently a new mine has been opened in this area. The Fenhope Colliery was opened in 1980 close to the (old) Stanhope workings. The mine is owned and operated by Mr D. Fenton. The seam is 3.6 m thick and mining is all done by hand. Coal is wheeled by hand along an impressive wooden gantry to a large wooden storage bin.

The Dalmayne coalfield lies south of Mt Nicholas and south-east of Fingal. Outcrops of coal had been known since before 1860 (Gould, 1861) and reward leases were issued in 1887, but no mining eventuated until the ambitious Dalmayne Colliery Company was floated in 1914. The company built an aerial ropeway from the mine site to Piccaninny Point, a distance of 5.5 km. A jetty 180 m long was built at Piccaninny Point for loading the coal. Substantial mine development work occurred and the mine was officially opened by Sir Elliot Lewis, Minister for Mines, on 24 August 1917. However a shortage of boats for shipping the coal (owing to the war) hampered progress and in 1918 the jetty was washed away in a storm. The mine was forced to close, but re-opened in 1939. Coal was transported by road to St Marys until the operation closed in 1953.

At Fingal, south-west from Mt Nicholas, coal had been discovered in the 1840s (Milligan, 1849) but no mining started. The Government of the day financed the digging of an adit in 1864 (HAJ 1867(95), p. 7). Mining on a small scale continued intermittently for some years. Activity was renewed in 1920 when the Fingal Coal Prospecting Syndicate drove two adits into the outcrop of the Duncan seam on Cat and Kitten Creek. These workings were acquired in 1942 by H.J. Yeates, who opened the Fingal Colliery. The Duncan Colliery opened adjacent to Yeates in 1945 and the Tasmanian Mine opened in 1954, on the same seam and adjacent to the Fingal Colliery, and work continued here until 1957. Minor activity in 1962-63 was halted due to poor ventilation.

The Fingal Colliery closed in 1965, but was re-opened in 1969 by the management of the Duncan Colliery and the Fingal (Cat) tunnel

was retimbered to provide access to the Duncan workings following the closure of the adjacent Duncan tunnel.

The mine was partly mechanised in 1955 with the introduction of an arc-wall coal cutter and two shuttle cars. A washing plant was installed in 1960 to wash coal from the Duncan and Cornwall collieries. Currently the mine is fully mechanised and has the standard modern pit-top facilities of office, bath house, first aid centre, workshop, etc. Production in 1984/85 was 305 865 tonnes. The Duncan seam is approximately three metres thick.

Very thin seams of coal were mined at Preolenna, on the north-west coast, early this century. Following the discovery of outcrops of coal in 1903 by two track-cutters, small scale mining of the coal occurred intermittently from 1921 to 1931. Considering that the seams were no more than 0.5 m thick and dipped at up to 25°, the attempts at mining were certainly industrious. The coal is of Early Permian age and the Preolenna Coal Measures in which the seams occur may be correlated with the Mersey Coal Measures further to the east.

In the Derwent Valley, near Hamilton, the Langloh (Lawrenny) Colliery began operations in 1938, continuing until 1963. Coal had been known from this locality since 1855 (Selwyn, 1855) and minor prospecting activity occurred in the 1890s (Montgomery, 1894). Small reserves of coal adjacent to the old colliery and suited for open-cut extraction have been evaluated in recent years.

South of Fingal the Merrywood Colliery opened in 1945, with coal being extracted by both underground and open cut methods until 1963. A washing plant was installed in 1957 and coal hauled by road to the railway at Avoca. Recently open-cut extraction on a small scale (1500 tonnes/week) resumed, although this activity will be for a limited period only.

The Tasmanian coal industry was drastically curtailed in the 1960s when industrial users converted boilers to use oil instead of coal and the railways phased out steam locomotives in preference to diesels. The prime use for the coal was that of a boiler fuel, and with the loss of local markets many small mines were forced to close. In recent years a reversal of this policy, converting boilers from oil to coal feed, has been evident and the demand for coal has grown. Tasmanian coal is now used in a wide variety of secondary industries, such as the manufacture of paper, newsprint, cement, and other minor industries.

Production for 1984/85 was 495 726 tonnes from the two operating collieries in north-eastern Tasmania.

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RECORDS HELD IN TASMANIAN ARCHIVES

CSD - Records of Chief Secretary's Department
CSO - Records of Colonial Secretary's Office
GO - Governor's Office records
LSD - Records of Lands and Surveys Department
CGF - Comptroller General's File
CON - Convict files, State Archives
HRA - Historical Records of Australia

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