

APPLICATION FOR MINE LEASE
F&DHS DOCUMENT ARCHIVE
Title: BROWN DOWNS HISTORY
Brown Downs
Source: CLARRIE GREEN
DOC. 0052

Notice of Application for a Mining Lease.

* Insert date of marking out. WITHIN twelve days from the* Twenty-first day of March 192 2 I We, shall lodge with the SECRETARY FOR MINES, MELBOURNE, an application for a Lease, the particulars of which are:—

Name (in full) and address of each applicant { Benjamin George Nicholl,
414 Flinders Lane,
Melbourne

Name by which mine will be known ... Barwon Coal Mining Co

Area ... About 200 acres. Whether on or below the surface, or both both on + below

Full description and precise locality of the land ... Parish of Marroon County of Colwarth, Lot 68 + about 81 acres of lot 67.

Owners { Wm E Green + Chas Green Lot 68 + John Taylor Lot 67

Name of each owner and each occupier of the land, so far as applicant has been able to learn ... Occupier Wm E Green + Chas Green John Taylor

Whether the boundaries of the land include any river, creek, deposit of permanent water, spring, or artificial reservoir ...

Nature of proposed mining operations ... Shafts + tunnels

Term required ... 15 years Estimated expenditure, £ 15000

Metal or mineral to be worked ... Coal Quartz or alluviums

Where it is private land, state whether a prospecting area is required ... No.

General remarks ...

Signature of Applicant B. G. Nicholl,
By his Agent, W. C. Morrison.
Place and Date Barwon Downs 2/3/22

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F&DHS DOCUMENT ARCHIVE DOC.....Date.....

Title.....

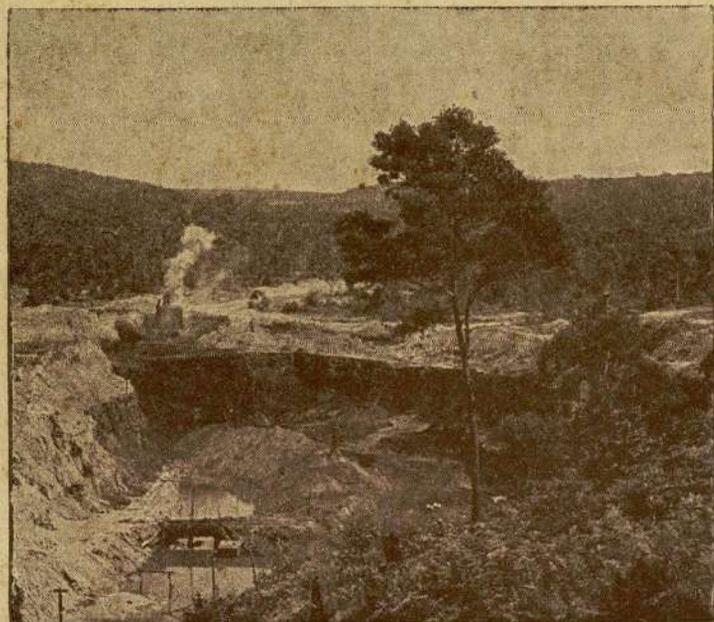
0534

Subject Category.....

Key Words.....

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GOVERNMENT OF VICTORIA, DEPARTMENT OF MINES



MINING AND GEOLOGICAL JOURNAL



MARCH 1948

VOL. 3 No 3

Published Half-Yearly - - Price One Shilling.

Registered at the General Post Office, Melbourne, for transmission by post as a periodical

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The Wensley Bray Brown Coal Mine

By David Swift

The Wensley Bray Brown Coal Mine was visited in 1946 by Mr. J. P. L. Kenny, B.C.E., Geological Consultant, who prepared a report which appeared in Volume 3, No. 1 of this Journal.

Although Mr. Kenny dealt in some detail with the history and development of this open-cut, a few of the points he made will be restated here, in order to give a complete picture of operations as they appeared at the end of January, 1948.



SKETCH MAP SHOWING LOCATION OF WENSLEY BRAY COAL MINE

The open-cut is situated in heavily timbered country, beside Wormbete Creek, $3\frac{1}{2}$ miles from the Wensleydale Station (now closed) and 25 miles from Geelong. A new road connects the open-cut with the railway station at Winchelsea, a distance of $7\frac{1}{2}$ miles. The accompanying sketch plan shows the position of the workings in relation to the roads and railway lines leading to Geelong.

The coal deposit was worked by two earlier companies from 1921 to 1935, during which time the open-cut was connected with the Wensleydale Station by an aerial cableway. As the Wormbete Creek flowed where the open-cut now stands, a diversion channel was constructed, and the creek now flows around the southern side of the workings.

When operations ceased in 1935 the plant was not removed, but in 1939 the hoppers and cableway housing at the Wensleydale Station were destroyed by fire.

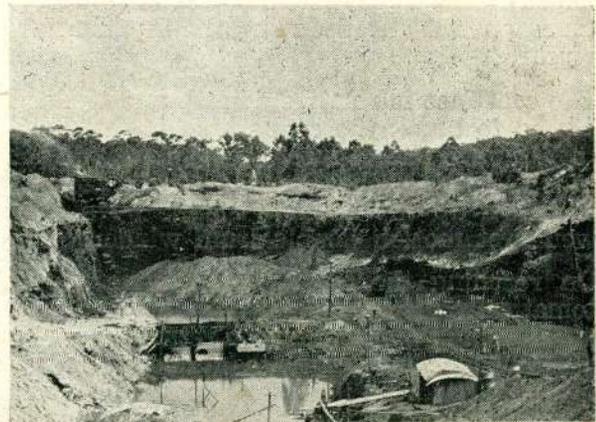
Present operations are carried on by the Wensley Bray Brown Coal Company which took over the old open-cut and plant and commenced mining brown coal in 1943.

THE COAL DEPOSIT.

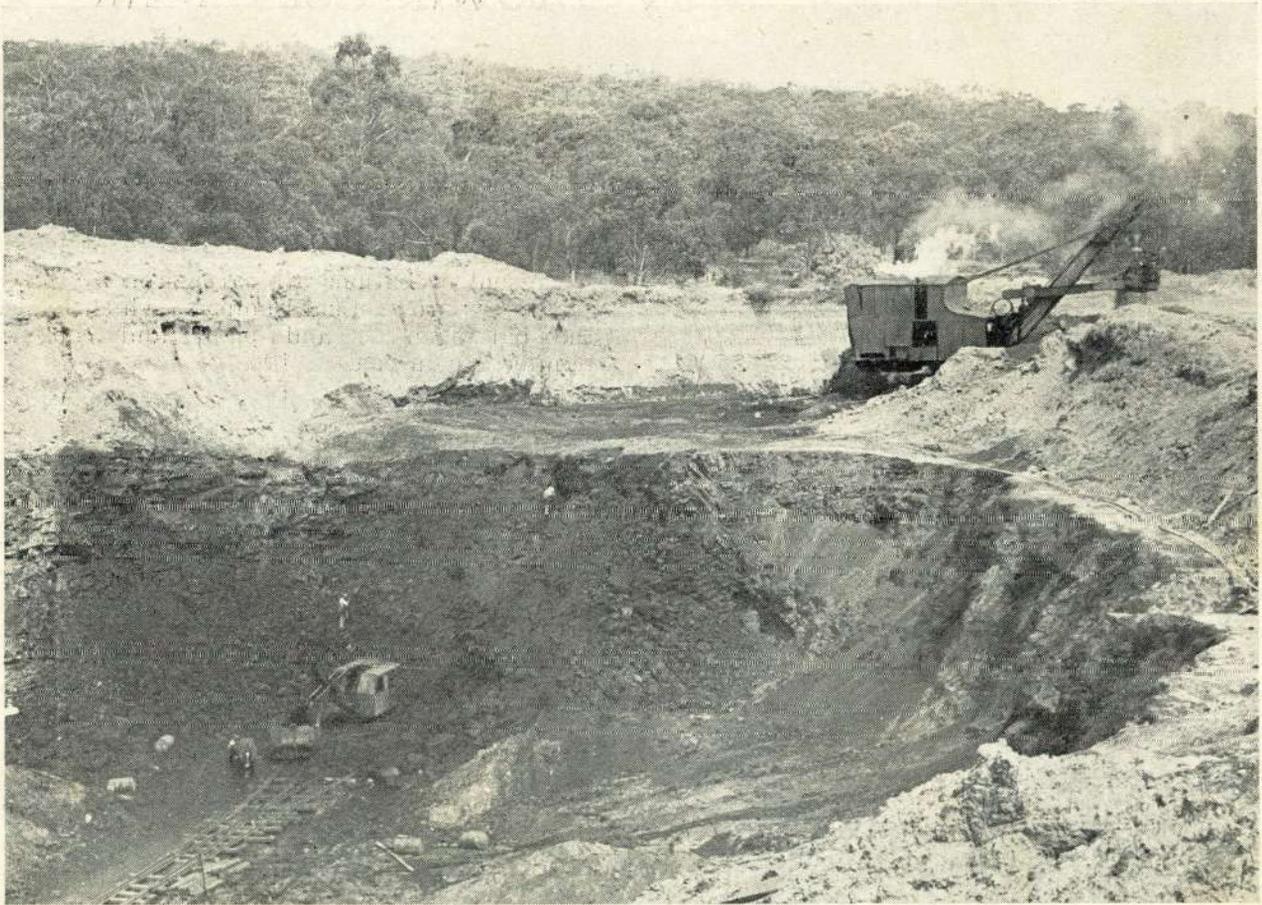
The coal is bounded on the north-west by the Wormbete Creek and was from 110 to 120 feet in thickness where originally worked, i.e., near the centre of the open-cut as it appears today—and thins out in a south-westerly direction. At present the company is working back into a shallower section of the coal bed, the height of the coal face being 45 feet, with an overburden thickness averaging 15 feet.

The coal is of good quality and is rated at 5,800 B.T.U.'s (gross) as mined, and when dried to a 15 per cent moisture content the rating increases to 9,666 B.T.U.'s.

A Mines Department drilling plant is at present at work, and bores are being sunk from 120 to 150 feet in depth in an endeavour to determine with greater certainty the north-western limits of the coal area. It is also intended to provide a basis for a revised estimate of the reserves available in the coal deposit. Originally about 4,000,000 tons of coal were proved by boring, but present indications are that this estimate is conservative.



View from beside haulage incline, looking towards working face.



Coal skip being loaded at the working face. The large shovel at the right is removing overburden.

MINING OPERATIONS.

The overburden is stripped by means of a steam-driven, 4-yard Ruston-Procter shovel which loads into motor trucks, and by a large bulldozer and 14-yard carryall. As overburden stripping becomes almost impossible during the winter, this work is pushed ahead during the dry months of the year.

The coal face is relatively hard, and explosives are used to break the coal which is then loaded by a 3/8 yard shovel into 3-yard skips. When a skip is full it is hooked to the end of a steel rope and drawn up the haulage incline by a steam-driven first motion double-drum winder.

On reaching the top of the incline the skip automatically discharges its coal into the hopper of the crushing plant, and then returns by gravity to the coal face, by-passing, as it does so, a second skip which has been filled in the meantime and is awaiting haulage at the foot of the incline. The two-way journey of a skip takes approximately $1\frac{3}{4}$ minutes, and the total distance covered is about $\frac{1}{4}$ mile.

When more room is available on the floor of the open-cut, the management intends to install further loop lines which will enable two more skips to be placed in operation.

In order to keep the open-cut free from water, a steam-driven 4-inch pump is working continuously from a sump near the centre of the workings. Except during the winter season, no difficulty is experienced in keeping the water under control.

CRUSHING AND GRADING.

The entire output from the open-cut is crushed and elevated by a bucket chain to a revolving screen which separates it into three grades, classified as dust, nuts (where the pieces are up to 2-inch size) and cobbles. The crushing and grading plant is operated by a small steam engine.

POWER SUPPLY.

Below the winding house and near the abandoned engine house is a boiler house equipped with a large marine-type boiler. It is fired by brown coal won from the open-cut, and provides



Steam shovel stripping overburden.

steam at a pressure of 100 lbs. per square inch to the winding engines, the crushing and grading plant, the pumping engine, and the engine which drives the electrical generating set. A new locomotive-type boiler is on the site and is awaiting installation. The large steam shovel which strips overburden is powered by its own locomotive-type boiler.

DISTRIBUTION.

After crushing and screening, the coal is loaded into motor trucks and transported to consumers by road through Winchelsea. This road, which is $7\frac{1}{2}$ miles in length, had originally a rough gravelled surface, but during 1947 the Country Roads Board remade the road, and the new surface greatly assists the company in effecting coal deliveries, saving fuel and tyres, and reducing the general wear and tear which previously had been extremely heavy.

Approximately 40 per cent of the coal output goes by road to consumers at Geelong, including the Ford motor plant and several woollen mills. A substantial quantity is transported by rail to consumers in Melbourne, and the remainder goes



Loading a skip at the coal face.

to various industrial centres in the Western District including the Kraft Walker Cheese Company at Allansford near Warrnambool.

PRODUCTION.

Figures supplied by the Company to the State Coal Committee show that since the commencement of operations in 1943, approximately 100,000 tons of coal have been delivered to consumers. The highest weekly production figure—excluding coal burnt at the open-cut for steam-raising—was recorded in 1946 when 1,272 tons were despatched. The highest weekly figure for 1947 was 1,141 tons, and during the past twelve months the average weekly total was a little over 600 tons.

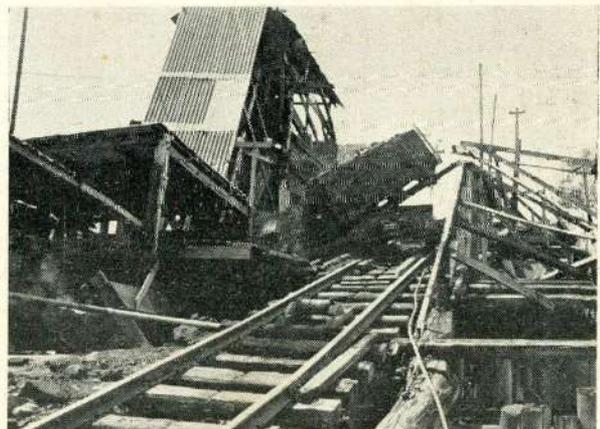
The management is at present planning to increase the output from this open cut.

ACKNOWLEDGMENT.

Acknowledgment is made of the courtesy of the Wensley Bray Brown Coal Mine management in providing ready assistance in the preparation of this article. (31/1/48)



Hauling a skip up the incline.



Skip discharging at crusher.

DIAMONDS IN VICTORIA

Compiled from Records by W. Baragwanath, Geological Consultant

The discovery of diamonds in Victoria amongst alluvial gravels appears to have been first noted early in the sixties although it would appear they were predicted many years earlier. The following article comprises the various published and unpublished records of discovery.

In the Annual Report of the Director of the Geological Survey, May, 1861, A. R. C. Selwyn stated that "the fact of the occurrence of diamonds in the gold drifts of Victoria" was one of the "additions made during the past year to our previous knowledge of the commercially valuable mineral products of the State."

In the *Argus* of June 22nd, 1863, appeared: "Diamonds have been accidentally found in the Buckland district . . . The district in which the diamonds have been found stretches from the foot of the Beechworth Hills to Chiltern and further in even more strongly marked features between Chiltern and Rutherglen."

At a meeting of the Royal Society of Victoria on 23rd November, 1863, the Rev. John J. Bleasdale, D.D., presented a paper and exhibited "three diamonds, two from Beechworth and one from Collingwood Flat . . . Of the Beechworth diamonds the diamond which Mr. Murray has brought in is the largest yet found. It weighed in the rough about three carats, it now weighs little less than two and is a magnificent gem. It was sent to Amsterdam to be cut . . . Its fair value I take to be from £35 to £40 . . . All the Beechworth diamonds I have seen—about a dozen—were beautifully distinct in their crystalline features."

Dickers Mining Record of October, 1863, p. 232, referring to diamonds quotes:—"Mr. Crisp, Jeweller and Lapidary of Queen Street, Melbourne, recently purchased one weighing three grains from a digger ignorant of its character and who had found it at Chiltern. One of the working jewellers in the establishment said he had found a little stone in the red gravel of Collingwood Flat. On examination it turned out to be a veritable little diamond although of little value; its weight was only 1/32nd. Mr. Crisp has still in his possession the Australian diamond weighing three grains found at Yackandandah and shown in London at the International Exhibition of 1862. Whilst there it was tested in every way as to hardness, specific gravity, etc., and pronounced to be a true diamond."

From Dickers Mining Record, August, 1864, p. 149, comes the reference that another discovery of two diamonds is reported in the Ovens

and Murray Advertiser: "They were found by a man named McGill in Finn's claim on the Woolshed . . . These made seven diamonds found in the same claim."

From the "*Argus*," 24th June, 1864, Mr. G. Milner Stephen of Beechworth reports the discovery of more Victorian diamonds: "Two miners from the Woolshed Creek brought me a fine diamond for examination weighing upwards of a carat which they found in their sluicing boxes. In shape it was an oblong form not unusual among diamonds and its colour was that known as straw colour. It was without flaws . . . I am glad that my prediction made before the Geological Society of London in 1854, viz., that Victoria would prove a great gem producing country, is every day becoming verified."

In Mineral Statistics for Victoria for the year 1864, p. 39, appears the following item: "Diamonds. Locality Beechworth. Mr. Warden Barnard having been requested to make a statement relative to these gems states in his first report as follows: 'The fact of diamonds being found in this district is affirmed on the most reliable authority . . . and there cannot be any doubt of their being procured during the ordinary sluicing operations of the creek claim holders in the Woolshed mining division, viz., at Reid's Creek, Woorragee, Upper Woished, Sebastopol and Eldorado . . .'" In a later report he listed the localities from which 40 diamonds were found.

In the Mining Surveyors' Report for the Beechworth sub-division for the year ending 31st December, 1864, appears the following "Nothing particular has occurred in mining matters in the Woolshed sub-division except the finding of a diamond by a Chinaman at Sebastopol; it is, I believe, a very beautifully-shaped one and will require very little cutting; it weighs 17.64 carats. This was later referred to by the Warden, but a year later (1866) Mr. Le M. Carey the Warden at Beechworth "draws attention to a misplacement of the decimal point in the published weight of one specimen in last year's Mineral Statistics. Instead of 17.64 it should have read 1.764 carats."

At the Intercolonial Exhibition held in Melbourne 1866-7 was an exhibit comprising four cases containing diamonds, sapphires, etc., collected and exhibited by Mr. George Milner Stephen, F.R.S. of Beechworth.

In the Intercolonial Exhibition essays of 1866-67, p. 4, on gems and precious stones found in Victoria, the Rev. John J. Bleasdale, D.D., F.G.S.,