REPORT ON THE STRATHBLANE COAL MINE

Location and Access :

The Strathblane Coal Mine is situated about 7 miles to the south-west of the township of Dover in south-eastern Tasmania.

Access can be gained from Dover, Raminea, Strathblane, or other settlements around Port Esperance by the road from Dover to Catamaran. This road traverses the district 1 to 2 miles east of the mine which is then reached by track and tram. Timber tramways connect the area in the vicinity of the mine with the various settlements on Port Esperance, and would form the most ready means of transport for coal.

Dover and the other settlements are connected by good motor road with Hobart - a distance of 54 miles. River boats, making several trips per week, trade between Port Esperance and Hobart.

Leases :

The Esperance Coal Mining N.L. holds two mineral leases, viz. 9747/M of 640 acres, and 9651/M of 25 acres. In addition a licence to search (161 L.S.) over 1000 acres is held in the same interests to the north of 9747/M.

Topography :

The country between the main road and the mining leases consists of a wide plain along the course of the Creekton Rivulet. The leases embrace low hills rising to heights of several hundred feet above the plain, and probably connecting towards the west with the foothills of Adamson's Peak.

Geology :

Silicous sandstones probably of the Ross series of the Trias-Jura System, outcrop at two localities - on Anderson's road between the main road and Creekton Rivulet and to the north-east of the north-east corner of 9747/M. These underlie to coal measures and so no coal will be found where they outcrop.

The hills embraced in the leases and licence to search consist largely of felspathic sandstones and mudstones of the felspathic sandstone series of the Trias-Jura System. These beds form the upper coal measures of Tasmania. It is probable that these extend throughout the greater part, if not all, of the above leases and a large proportion of the licence to search area.

It appears that practically all of these Strata have been denuded from the plains along the Creekton Rivulet.

Diabase appears in the east central part of the licence to search area.

Boulders of basalt and probably also diabase occur on the south-eastern part of the same area, but do not occur in situ.

Mine Workings :

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The mine workings consist of seven adits, three shafts, and several large trenches, totalling in all some 300 feet of underground/workings.

Two of these adits are situated on the 25 acre lease near its NW corner. Four adits and two or three shafts are situated on the south-eastern part of 9747/M, while one adit and two trenches are situated on the licence to search area.

THE COAL SEAMS

South-western area :

The most southern exposure is in an adit driven recently by Mr. J. Smith approximately two chains SSE of the NW corner of 9651/M. The adit is 5 feet by 4 feet, and is 45 feet long with a bearing of 69°. A coal seam was met about 20 feet in and was then carried to the face. It has a dip of 5° - 10o to the ENE and its thickness ranges from 9 inches to 3 feet 6 inches. Short drives were driven left and right from the end of the adit. At the face of the south drive the seam is 3'6" thick with a 2" band of soft clay.

The coal is a dull, black dense type with numerous bright bands. A sample was taken but has not yet been assayed.

Another adit (an old one) occurs 20 feet to the north. It has a bearing of 50° and is stated to follow a seam on the dip (19°) for 20 feet and then to continue horizontal. The seam is stated to range from 2 to 3½ feet in thickness. A drive to the south from the bottom of the dip adit almost connects with the first workings described. At the face of the adit it is stated that another seam was intersected with a thickness of 3'. This seam would underlie that first cut and be 5 to 7 feet above it.

About 20 feet north-east of the NW corner of 9651/M is the Main Adit. It has a bearing of 45° and is stated to have been driven for 72 feet. It is said to be level for 20 feet where it connects with another adit to the north. It is also stated that it was then driven on the dip of the seam to 72 feet and that the seam was 4'3" thick at the face. This seam should be the upper of the two seams referred to above, or even a higher one still.

About one chain to the north, another adit is visible, and is stated to connect with the Main Adit. It has a bearing of 145° and was driven along the strike of the seam. The seam outcrops in the creek bed at the entrance and has a dip to the north-east. The coal and the dump at the mouth is a dense, dull black coal with bright bands in it. It appears to have weathered extrememly well during the years of exposure. A small amount of pyrite is visible in the coal.

South Eastern Area :

It is stated that a shaft was sunk on the plain several chains to the north-west of the SE corner of 9747/M. It is said to have been 30' deep and to have cut a seam 2½ feet thick. This would be one of the lowest seams of the series.

On the hill 5 or 6 chains to the west, two old adits and a shaft exist. In the adit nearest the shaft

a coal smudge occurs in the approach, and it is stated that a 4 foot seam was followed. The adit has a bearing of 270° and followed the seam on its westerly dip. The shaft is situated 10 feet south of the adit and does not appear to connect with it. It is stated that the shaft cut a 4 foot seam at a depth of 40 feet. This seam should be below that in the adit.

Other adits and shafts are reported by the late W.H. Twelvetrees, but were not located.

Licence to Search (161) :

About 20 chains NW of the NE corner of 9747/M a coal seam was recently exposed by Mr. J. Smith. A long trench has exposed a seam striking north and south and dipping west a few degrees. It is stated to be 3'7" thick at its thickest part. The coal is similar to that in the south-western area, but is probably 50 to 100 feet higher.

An adit was commenced with the object of cutting this seam but was not continued far enough.

About 40 chains further to the north, another opening on coal exists. This exposure is 25 feet higher than the above. The seam has a strike of 115° and a dip to the south of 10° and is said to have a maximum thickness of 4 feet.

Quality :

Very few places were available to take samples of the coal seams for analyses. Two were taken but have not yet been analysed.

From past analyses the coal appears to have the following range of composition :

	Per Cent
Fixed Carbon	50 to 55
Volatile Combustible Matter	21 to 30
Ash	8 to 20
Moisture	3 to 8
Sulphur	0.48 to 1

The coal is therefore generally similar to the Trias-Jura coals of the Eastern and South-eastern parts of the State.

A test of the ash showed that it fused at 2100° C.

CONCLUSIONS AND RECOMMENDATIONS

The above descriptions show that coal seams have been opened up along a tract of country two miles in length from north to south. At least 2 or 3 seams are present, but correlation is impossible owing to the few exposures of the rocks and seams. The dips of the seams varies in direction from place to place throughout the above tract. The geological structure is therefore not simple, and for the above reasons cannot be elucidated. It is essential that the number of seams and geological structure should be determined before any attempt is made to install a plant and to mine coal on a large scale.

This would involve further prospecting work preferably by boring the area. Of course, coal could be mined on a small scale, but even this would not be advisable without a small amount of work in the limited area to be worked.

The facilities for mining are favourable, and the coal could probably be won from dip adits. The transport arrangments could be easily provided to Port Esperance, and the coal could then be shipped to any place required.

Signed P.B. Nye

GOVERNMENT GEOLOGIST

Mines Department,
HOBART.

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