

East Roxburgh Mine (Corcoran and Whites) (F. J. Kemp (Permit), Manager).—Only a small amount of work has been done on the lease during the year, this being confined to driving a level in the seam from which a total output of 309 tons was mined, and the conditions of the lease are not being complied with.

The amount of plant is negligible, while the methods are of a very primitive nature, and as dip development will have to be undertaken, suitable plant is urgently required.

An area suitable for opencast mining is available, but this requires capital for drainage, stripping of overburden, and opening out a suitable face, and provision of this finance appears to be beyond the lessees.

Shepherd's Creek Mine (S. Hewison (Second Class), Manager).—This mine, which was within a few weeks of ceasing production following the death of the mine-manager, did not resume, and the pump and gear, which were back to within a chain of the portal, were withdrawn.

In December a party, with Mr. S. Hewison as manager, under an arrangement with the owners and using material available at the mine, commenced to unwater a mine about a quarter of a mile to the south of the abandoned mine.

This mine has not worked for some years, and I understand a run of wet sand was experienced. Reasonable progress was made, using a rotary electrically-driven pump, 4 in. pipes, and by the end of January 3½ chains of dip headings (16 chains of roadways) had been unwatered, and arrangements were in trend to install a larger pump.

The total length of the dip is 800 ft. at a grade of 1 in 5 approximately, and the roadways unwatered and 2 chain arched stone adit are in excellent condition.

As the water recedes the daily progress made has gradually diminished, and this is no doubt due to the overlying sand-beds becoming saturated during the years the mine has been flooded.

The run of sand, previously referred to, will influence the inflow, while pillar-work in the recently abandoned mine, now full of water, may also be responsible.

The larger-stage turbo-pump, 15,000 to 20,000 G.P.H., recommended will soon prove whether the concern can be unwatered and economically worked.

Cairnmuir Mine (W. Hodson (Deputy), Manager).—This mine has continued to be operated by a co-operative party and the work has been confined to pillar-extraction to the south and development in this direction to intersect Gibson's old dip drive and workings, lying full of sand.

The seam is almost vertical, and from the system adopted good recovery is obtained, and the sand packs the goaf tightly immediately behind the face.

Dropping tops, or stoping to the rise along the rill of sand-spill, the pillars are breasted back in a safe manner to the extent predetermined, when the upper bridge is blasted and a further run of sand packs the open ground, and the cycle is resumed.

The programme was to project the dip at 1 in 2 grade for a further 120 ft. to furnish additional levels and a sump, but a sand run from the hanging-wall occurred, while an accident to the leader of the party also interfered with the proposed development.

OTAGO AND SOUTH OTAGO DISTRICTS

Barclay's Mine (Fairfield) (F. Barclay (Second Class), Manager).—Operations continued in the old Walton Park area, mainly dropping top-coal and driving to the dip, but difficulty was experienced as these old places were closed or heaved, while the pillars were small.

As the water was lowered, and prospects looked good in June, excessive damp and a humid atmosphere caused the section to be sealed off, and an attempt to furnish a new access by crosscutting off the dip (Christies) was made.

Coal-stone bands present in the face of the old dip also cut across the line of the crosscut, and as the line of inferior coal follows this course the place was abandoned, and a decision made to prove this stony band with a minimum of driving by a prospecting drift off the opposite side of the dip, and extend through the Crown lease.

The single-phase pump proved inadequate, and three-phase equipment was installed at the mine with armoured cable underground and the surface winch converted to electric drive, but the centrifugal pump, 600 G.P.H., after a trial was replaced by a bulldozer pump of 2,000 G.P.H. capacity, which at a later period failed to make any advancement for about two months, but later the water commenced to be lowered.

Good progress was then made towards the old Prince of Wales shaft workings, when a large fall caused fully a chain of the dip drive at the face to be lost, for the sandy over-measures, due to the area being flooded for years, are waterlogged, while the floor heaves readily and the country is treacherous.

Driving parallel with and to the south of the fallen dip is now progressing satisfactorily in a seam 7 ft. in thickness, while a rise to the upper seam (approximately 7 ft. above) has been formed, and development commenced in this 5 ft. seam.

Victor Mine (Brighton) (L. Tikey (Deputy), Manager).—Development continued to the south-west, with the seam increasing to 5 ft. and in parts 6 ft. in thickness, but places driven to the south at 3 chains become stony with only 3 ft. of coal workable.

With development confined to a narrow area and the thin seam, the extension of the main roadway is rapid and transport will soon be a problem, for the measures are irregular.