

The places are driven very narrow and to a coal-stone roof-parting some 6 in. off the soft sandstone main roof, which of late has not been as firm as that previously met.

*Fernhill Mine* (M. Hewitson (Deputy), Manager).—Pillar work, with excellent results, continued until January, 1949, in the No. 4 Mine, when the last pillar was extracted.

No. 3 Mine: Development resumed in this limited area following the abandonment of No. 4 Mine, and is confined to a narrow strip.

Four places are being developed in the top seam 6 ft. in thickness, this being the same seam as that worked in the No. 4 Mine adjacent, and the seam beneath has been worked some years ago.

The work will be confined to development and a system of splitting, as protection must be made for the City Council's water-race on the hillside above.

It is intended to pipe the water by a direct route, for which preliminary excavations have been completed, and when the deviation is arranged, orthodox extraction can be adopted.

*Willowbank Mine No. 1* (E. Edmond (Deputy), Manager).—Pillar-work has continued along the level, and is now proceeding with satisfactory results adjacent to the lower portion of the main dip. The width of the area is narrow and floor heave is present, but the pillars stand well and good recovery is made.

In the No. 4 Mine (Wingatui), (R. D. Clark (Deputy), Manager) a short adit struck the coal within 2 chains, and a pair of headings is now being developed.

The seam of good hard quality with well-defined backs is 7 ft. to 8 ft. in thickness and the measures are at a low angle, but inclined to undulate.

Places are driven narrow with large pillars, and a good second egress has been formed.

Bins and screening plant have been erected, and a good road, 30 chains, formed to the mine portal from the county road. This company continued prospecting work at Saddle Hill adjacent to Bryce's and Dunnery's old workings, but during the latter part of the year the work has been intermittent only to suit seasonal trade at the other mines.

A pair of well-timbered dips (5 chains) have been driven and met old workings flushed with sand, and a prospecting drive projected 400 ft. at a bearing 45° to the west of that of the dip.

The measures, a low anticline, passed through are not promising, and it would appear that the edge of the field of Saddle Hill has been met, and boring in advance has been recommended.

*Akatore Mine (Milton)* (W. McDowell (Deputy), Manager).—Pillar-extraction has continued from a line where development ceased to the north and west owing to a thinning of the seam with stone bands present, and six pillars of this inferior class were left.

The retreat has now reached to within a chain of the jig-head, with the seam 9 ft. to a coal-stone parting, with sandstone immediately above.

A small opencast section was opened up, but this was not up to expectations, but as the overburden thickened and hardened a pair of headings was set away parallel with and to the dip of the former adit drive, and clean coal of 12 ft. in thickness has been met throughout.

*Lovells Flat Opencast* (T. Harris (Deputy), Manager).—Operations of a very limited scale have been undertaken at this opencast pit, with practically no output during the latter half of the year.

Good reserves have been stripped, but an improvement in supplies of coals of better quality has lessened the demand for lignite of this class.

*Viuebank Mine* (J. H. Lowrey (Deputy), Manager).—Formerly operated as an opencast pit, owing to increased overburden and difficulty in operating bulldozers on the irregular surface of the seam and grade, in August a change to underground mining was made, although part of the opencast face still operated. This face is 30 ft. to 35 ft. in thickness, but the stripping will rapidly increase onward.

These underground headings are being driven as levels from the lowest point reached with the opencast face, and are to the dip of a section of former workings which operated some years ago, and are intact and open to the upper fringe of the opencast pit.

*Benhar Mine* (J. Findlater (Underviewer), Manager).—Development in the bottom seam was concentrated on with a dip and companion and good progress made, operating double shift.

By August development had reached a point immediately beneath the extreme point of the workings in the top seam and the necessary sumpage established, and by a bore from this point the water, which had been allowed to accumulate in the upper workings following the sealing of a fire in that area in October, 1947, was drawn off under control.

A larger pump, 5,000 to 6,000 G.P.H., had been installed in readiness and an armoured cable fitted. Development is now being undertaken to the north side off the dip, with four levels advancing in a north-easterly direction, and six places, worked single shift, are available, from which a daily output of 50 tons is produced.

*Taradale Mine* (C. D. Nichol (Permit), Manager).—The section of the old Taratu Mine (McKenzie's) has been unwatered, and by splitting and driving through an area where the old workings had been driven in the upper part and middle of the seam a suitable haulage road has been established.

Development has commenced to the north immediately past the fringe of the old workings, where two places are operating in good coal, and conditions here and in the area on pillars look very favourable.

*Kaituna Mine (New)* (T. Harris (Deputy), Manager).—Following some prospecting on this area an adit was opened out and the coal-seam of excellent quality struck after 30 ft. of driving.