Kemp's State Opencast, Glen Massey.—Total spoil shifted to the end of 1945 was 643,790 cubic yards, including 501,790 cubic yards during 1945. Work on the top seam was abandoned owing to its thinning, but has been continued in the two lower seams, which have been somewhat disappointing owing to their varying thickness and quality. Output for the year was 32,177 tons of coal, giving a total output of 34,062 tons.

## Taranaki Districts

Mangapehi State Colliery.—No. 1 East: The main headings have been driven 42 chains from the main haulage and are standing in good coal, though development to the rise has been stopped by the east fault, which here approaches the headings. The endless rope haulage has been extended nearly to the face.

No. 2 East: The main headings have been extended to  $2\frac{1}{2}$  chains from the State boundary. In order to pass a series of rolls in the roof, a dip was driven in coal and has now reached the floor of the seam beyond the troubled area. Pillar-extraction of the eastern half of A Panel was started in March and has proceeded since, though a bad fire in the return airway from the section on 14th March caused considerable delay and loss of output.

No. 2 West: Pillar-extraction in this panel has proceeded throughout the year, though this work has been interrupted considerably during the period by heatings in the waste. Owing to bad conditions due to this cause and to wastage of pillar coal in sealing off, a heavy loss of both output and of developed coal has occurred in this and in the East pillars, in spite of all efforts of the management to deal with the difficulties arising through the thick seam, steep grade, and fiery nature of the coal. It is evident that a better method of extracting such seams should be adopted to avoid these losses, but owing to the general shortage of coal, enough men cannot be spared at this time to push experimental work ahead, and progress in this direction started during the year, has been discouragingly slow.

Development: A coal dip west of and parallel with the main drive had reached a point 2 chains ahead of the main dip and was in coal 6 ft. thick. There has been no further development here since July.

A slant dip is being driven in a north-east direction from near the bottom of the main dip to pass the troubled area met with in the bottom level. The face is  $2\frac{1}{2}$  chains from the main haulage and is partly coal.

The mine ventilation has been improved by the completion of an airshaft to the surface to serve the western side of the mine. A small Sirocco fan has been installed.

In August a bogey was put into service at the mine for the haulage of men.

Tata State Colliery.—In the No. 1 north-west Pillar Section, pillar-extraction continued until July, when further work here was stopped owing to the difficulty of maintaining the haulage owing to heaving floor.

Development of the No. 2 north-west Section continued throughout the year, being limited to the north-west by a fault line proved by boring to be a 50 ft. upthrow. Pillar-extraction at the north end of the section commenced late in the year and is continuing. A pair of headings has been set away from the main haulage beyond No. 2 north-west headings in a west-north-west direction with the idea of crossing the 50 ft. fault at a better angle, but it seems likely that the coal-seam beyond the fault might be better reached and developed by fresh drives from the surface.

Coal Lease (T. Moynihan), Upper Mangakara Stream, Ohura.—No work has been done on the access road to this lease nor on the lease itself since it was granted in August, 1943.

Aria Colliery.—Another good year has been experienced at this small mine, and a steady output has been produced by the three men employed. A fair quantity of coal is now standing in rise pillars to the west of the main drive, and is is intended during 1946 to prospect the dip coal by another dip heading from the surface.

Stockman Colliery.—This small mine is situated twenty-five miles up the Mokau River, the coal being brought down by launch and distributed from Mokau. The seam is 4 ft. 6 in. of good-quality coal with sandstone roof and floor, and a regular output has been kept up from development by the three men employed.

Paparata Colliery (Libline and Williams).—Preparations are being made by this party to work a 4 ft. 8 in. seam of clean coal on a coal lease held by them near the Paparata Saddle, Tangarakau Gorge. No coal has yet been produced, but an access road, a bridge, and a bin have been constructed, and the mine should produce in 1946.

Fongere's Opencast, Tangarakau Gorge.—A seam of clean coal 3 ft. 6 in. thick is being worked by stripping. Owing to a very wet winter, little was done until late in the year, when a small amount of coal was won. This seam was formerly worked by the Tangarakau Coal Co.

Waitewhena State Opencast.—The output for 1945 was 28,756 tons, giving a total output to date of 38,269 tons. Production during 1945 was steady, but a particularly wet season and difficulties due to the steep country causing slips caused a drop both in quality and in quantity. The seam is 8 ft. to 11 ft. thick and contains some small stone bands which vary in thickness. Strip mining, particularly in the Waitewhena conditions, does not allow of the complete cleaning of the coal at the face, and processing is required to clean this coal thoroughly.

By October a large area, estimated to produce 30,000 tons, had been stripped to the west of the

Lee Stream area, and will provide a large amount of the 1946 output.