Area have been continued throughout the year with the aid of the 120 R.B. Bucyrus Erie electric shovel, with bulldozers, Athey wagons, and Tournapulls used for transportation of the overburden to the stop-bank at the lake edge. It is estimated that some 600,000 tons of coal are available for mining in this area, the coal attaining a thickness of 28 ft. An average of 28 men was engaged on this project.

Kemp's State Opencast Mine (T. Bigwood (Quarry Certificate), Mine-manager).—Production from this mine was continued intermittently until November, when all available coal was extracted and the mine abandoned.

Hillcrest State Opencast Mine (T. Bigwood (Quarry Certificate), Mine-manager).—Seven men were employed with bulldozers and carryalls on stripping operations, with a further 10 men engaged on winning a 6 ft. seam. The ratio of overburden to coal thickness averaged 5 to 1. Very little coal was left for extraction at the end of the year.

Heworth Coal-mining Syndicate, Glen Massey (J. Corness (Deputy), Mine-manager).—A small output was obtained from a 5 ft. seam by 3 men. All workable coal was exhausted in March and the mine closed down.

## Taranaki District

Mangapehi State Colliery (H. Quinn (First Class), Mine-manager).—Output from this mine for the year was obtained solely from development work, with the majority of working faces on double shift. The main No. 2 East Level headings reached a distance of 3,500 ft. from the main dip and were at the end of the year in faulty ground. This disturbance, however, was considered to be of local extent and not extensive. Five panel entries have been formed to the rise ready for further development when required. No. 3 East Level headings have been driven 800 ft. to the east of the slant dip and are continuing in good coal. Westerly development from the lower end of the slant dip has reached 300 ft. from this point with a view to eventual connection with the Main Dip Extension. A further 1,100 ft. require to be driven to reach this objective. Dewatering of the dip section in No. 1 East Level has been completed, but no attempt as yet has been made to extract the pillars in this section. A substantial concrete air-crossing was erected at the head of the No. 3 East Section, and this section is now ventilated on a separate split. Several units of fluorescent lighting have been installed in the main laybye at the entrance to No. 2 East Level, effecting a marked improvement in the standard of lighting at this junction. There was a marked improvement in the condition and size of the return airways, with the result that an appreciable improvement in the standard of ventilation at the faces was noted. Considerable improvements were made in the main east return at the approach to the fan drift. The airway was cleaned out, and rebuilt in a semi-circular form with the use of specially-shaped concrete blocks. One hundred men were employed underground and 30 on the surface.

Tatu State Celliery (J. McLelland (First Class), Mine-manager).—During the year pillar-extraction was continued with excellent results in No. 3 Rise Panel. The main south headings were extended a further 5 chains. Further development was suspended owing to haulage difficulties. Four headings, two of which were entries for the proposed No. 4 Rise Panel, were commenced, but a downthrow fault retarded progress. This fault was found to be running almost parallel with the south headings and 2 chains to the east. A propecting drive, 4 chains outbye from the south heading faces, was set away in an easterly direction to prove the extent of the Victory Fault. This drive proved the fault to be approximately 12 ft. displacement. The coal beyond the fault was found to be 8 ft. thick. Development of this coal is to be commenced as soon as satisfactory haulage arrangements can be made. The stone drive for a new east side return airway was completed and 1,000 ft. of airway cleaned out where this airway had become blocked by falls and heaving floor. This latter work was greatly assisted by the use of a Gardner-Denver shovel loader. An improvement in the general ventilation of the mine was thus achieved. Floor heave, however, will continue to adversely affect the condition of airways in this mine. These difficulties will increase as the workings extend. Considerable repairs were effected to the aerial ropeway to Mangaparo, a number of breakdowns resulting in a depletion of buckets in service. Sixty men were employed underground and 35 on the surface.

Mognihan's Lease, Mangakara, Ohura (D. Moynihan (Deputy), Mine-manager).—This is an opencast project where 5 ft. of coal is won by hydraulic means with the overburden stripped by bulldozer. Dry weather periods retard coal-winning operations in the summer, but nevertheless a good average output is obtained by 3 men.

Sunnyside Mine, Waitewhena (J. Wilson (Deputy), Mine-manager).—Six men are employed working 13 ft. of coal by underground methods. The mine is situate approximately 2 miles north of the Waitewhena State Opencast Mine. Towards the end of the year approximately 5,000 tons of coal were stripped along the northern outcrop ready for opencasting.

Aria Coal-mine (R. Gillespie (Permit), Mine-manager).—Three men were employed underground mining a 13 ft. seam of coal dipping at an average gradient of 1 in 3. Output was obtained principally from development on level course to the south.

Stockman Colliery (H. W. Jones (Deputy), Mine-manager).—A small output was obtained by 2 men developing a 4 ft. 6 in. seam of coal situated 27 miles from the mouth of the Mokau River. The output is transported from the mine down the river to the township of Mokau.