

*Kaitangata Colliery, Kaitangata* (New Zealand Coal and Oil Company (Limited), owners; F. O. G. Lockhart, secretary, Dunedin; W. Carson, mine-manager).—Operations throughout the year may fairly be considered to have been successfully conducted. The area of coal to eastward of No. 7 fault has been extensively developed, and proved to be greater in extent than had been previously experienced in the colliery. There is thus a large quantity of coal in sight, with every indication of continuance of the main seam to south and eastward of present workings. Only the main seam is being worked, there being ample coal for requirements; therefore the 18 ft. and 6 ft. seams are not approached meanwhile. Owing to the alteration of dip from steep to comparatively flat seam on the anticline, haulage is accomplished more conveniently than formerly. Sections of work are opened on the panel system, and subsequently pillared and robbed as rapidly as convenient, then stopped off permanently, thus minimising danger from spontaneous ignition, to which the coal is extremely liable. It is also found that the method of "shovel-filled" adopted, whereby all dross is filled away with the coal, is an important factor in reduction of spontaneous heating. No work proceeding to northward of main haulage-road. Districts producing coal are Winch heading pillars and No. 2 heading pillars—both almost exhausted—pillars in No. 6 level off No. 3 heading, and the new work eastward of No. 7 fault and new-shaft area. The roof of No. 18 dip drive is being brushed preparatory to restarting. Ventilation usually adequate throughout the mine, an average of 30,000 cub. ft. of air per minute being in constant circulation, and air generally well conducted to working-faces by brattice when required. In advancing places in the solid, traces of gas are occasionally reported as occurring at the coal-faces. Seldom, however, do these interfere with working or warrant withdrawal of workmen. Safety-lamps only are allowed in the mine, about three hundred lamps being in daily use. These are in charge of an experienced and trustworthy official at the lamp-cabin near the mine-mouth. The lamps are carefully tested with compressed air before being handed to the workmen. The lamps are numbered, and a register kept of each issue. An unusual occurrence happened on the 16th January, 1908, when a quantity of gas became ignited at a spontaneous fire in No. 3 bord, No. 19 dip section. What was considered a slight fire had started in a fall on return air-course, which a gang of men had stopped off with three single-bord stoppings. As the men were putting on their clothes preparatory to leaving the work, an explosion occurred in the waste, blowing out the stoppings, and burning one man rather severely about face and arms, while two others escaped with slight burns and bruises. It appeared that sufficient atmospheric air had been imprisoned within the stoppings to supply the ignited fire with fuel, and that this occurred just before sufficient time had elapsed to allow of gases being generated whereby an ignition would have been impossible. It is worthy of note that the heating had been considered of such little import that water which was available had not been applied to the "fire." Had this been done the accident would not have happened. Owing to the successful manner in which the reinforced steel tubes have stopped off the worked portions of the coal-seams, the management decided to restore the main haulage-road at the brick wall, known as No. 3, where the deviation was made some years ago. This has been done efficiently, and the intention is to re-establish wire-rope haulage on the main ways. Steam winding-engine and appliances for hoisting men at second outlet and upcast air-shaft are tested frequently, and kept in order so as to be available for case of emergency. An ample supply of mining-timber is kept on the colliery premises for use as required. The mine is under careful management and supervision, both above and below ground, day and night continuously. For greater safety, shot-firing by electricity, and the use of only permissible explosives under the British Order have been again suggested. Separate magazines are provided for storage of explosives. Rules posted, report-books kept, and plan to date.

*Castle Hill Colliery, Kaitangata* (New Zealand Coal and Oil Company (Limited), owners; W. Carson, mine-manager).—(19/8/08): As has been usual, this mine was worked for output during the winter months only. Stone crosscut level pillars fast drawing to a close. Pillaring places in carriage heading crosscut are being gradually brought backward. No. 7 dip north and Jordan's seam working-places in good working-order. Travelled main return air-course to furnace upcast air-shaft, examined stoppings *en route*, which bore evidence of being well maintained. Water-balance apparatus at the second-outlet shaft was tested, and proved capable of raising and lowering persons, and is kept ready for use when required. Seventeen thousand cubic feet of air per minute is circulated throughout the mine. Only safety-lamps in use in all working-places, which were found free from gas. Open lights and electric lighting are allowed on the main haulage-roadway. Approved magazines on surface for storage of explosives. Rules posted, and requirements of the Act generally well observed.

*Benhar Colliery, Stirling* (Messrs. P. McSkimming and Son; Colin Murdoch, permit, manager).—(20/8/1908): Workings conducted in third and lowest seam worked; thickness not ascertained, but presumably 20 ft. and over. Fault met at dip face extends along the line of easterly workings, but displacement not serious so far as can be seen. Working safely conducted. Approved magazine erected for storage of explosives. Sanitary glazed ware and pipe factory on the premises is developing rapidly. During the year 2,300 tons of fireclay was produced.

*Mount Wallace Colliery, Stirling* (F. Park, lessee).—(30/8/1908): Seam strong; thickness not ascertained, but is seen to be 20 ft. or over. I drew the workman's attention to the necessity for using sprags where holing in a wide place; also suggested that area of pillars should not be less than that of the places driven.

*Mainholm Colliery, Conical Hills, Waipahi* (William Lischner, owner and manager).—(19/12/1908): Opencast pit. Stripping kept exceedingly well ahead of working-face, and mine worked in a safe manner. Seam 20 ft., all being won. A brick and tile manufacturing works is attached to the colliery. The powder-magazine is to be shifted to a place of greater safety, and new construction to be carried out as agreed upon. Report-book kept.