On the west coast of the South Island, on the low coastal range in close proximity to and northward of the Point Elizabeth State Colliery, between Seven-mile and Nine-mile Creeks, at a distance of about two miles and a half from Runanga, a workable area of semi-bituminous coal of about 300 acres has been proved by recent boring and surface prospecting carried out by the Mines Department. The coal-seam, averaging 8 ft. in thickness, occurs at altitudes between 200 ft. and 350 ft. above the sea. The construction of a branch railway thereto from Runanga presents no engineering difficulty; a short incline tramway would connect a mine with such railway. This coal area is situated on the State Colliery Reserve.

For the purpose of obtaining an average sample for analysis of the coal contained in this area short drives were put in at six different places, and from these twelve samples were obtained. The following is the average analysis of such samples, and for comparison there are given from the Fortieth Annual Report of the Dominion Laboratory the analyses of some of the principal household coals mined in the Dominion, all analyses being made by the Dominion Analyst:—

	Point Elizabeth Extended Area. Per Cent.	Point Elizabeth Colliery. Per Cent.	Taupiri Extended Colliery. Per Cent.	Kaitangata Colliery. Per Cent.	Nightcaps Colliery. Per Cent.
Fixed carbon	40·45	48·70	43·73	38·00	31·04
Hydrocarbon	51·12	41·52	42·12	39·96	39·24
Water	6·00	8·36	11·72	18·22	24·80
Ash	2·43	1·43	2·43	3·82	4·92
	100·00	100·00	100·00	100·00	100·00
Sulphur, per cent.	3·40	0·82	0·32	0·40	0·23
Calories, per gram	7,254	7,143	6,129	5,553	4,767
British thermal units, per pound ..	13,057	12,857	11,032	9,995	8,581
Evaporative power in pounds of water at 212° F.	13·53	13·33	11·44	10·36	8·89

It will be seen from the above that in hydrocarbon and evaporative power the coal from the new area is the highest of all, in water-contents it is the lowest, and in ash the lowest but one; it is somewhat high in sulphur, however, but not prohibitively so. The coal may be classed as a superior household coal useful also for steam-production. Any areas of coal high in sulphur could be left unworked, as is customary.

In Canterbury, near Avoca, the Mount Torlesse Collieries (Limited) commenced operations on the 23rd May on their lease from Canterbury College situated on the north side of Broken River, but in October work was discontinued thereon owing to faulting after an output of only 2,020 tons was obtained. Mining operations were then transferred to the Crown lease on the south side of Broken River, where several coal-seams, including one of considerable thickness, outcrop. These seams occur at very high angles, varying up to 75°. The area of workable coal is thus restricted, and mining is rendered somewhat difficult. From the mine-mouth to the screens at Avoca Station, distant three miles, five changes in the haulage system occur. The coal may be classed as a superior brown coal, and is in considerable demand in Canterbury for household requirements. The company's employees mostly live in tents near the mine, but it is proposed to erect cottages and a boardinghouse upon a town-site about midway between the mine and Avoca Station.

At Liverpool State Colliery, Rewanui, important development of the Morgan seam is being carried out by the construction of a low-level tramway and stone drive about three-quarters of a mile in length, from the middle hydraulic brake on the main haulage incline to intersect the Morgan seam near the forks of Seven-mile Creek, thus enabling the 17 ft. seam to be worked haulage and drainage free, in addition to reducing the distance of haulage by the avoidance of the upper section of the main haulage incline. The area of coal thus rendered available will be adequate to supply requirements for a number of years.

In the Wairio district, near Nightcaps, Southland, several small collieries have been established to work a thick seam of brown coal, an extension of the Nightcaps Coalfield. The coal areas thus being developed have hitherto proved of small extent, being isolated fragments of erosion, insufficient in area to warrant the installation of large mining plants.

(*b.*) Safety Provisions.

Ventilation.—In most of the mines, especially those at which thick seams are worked, the ventilation has been good. At practically all the collieries of any importance modern fans have been installed, and the officials understand the methods of distribution of the air; it therefore is their duty to see that the air is properly distributed. In some mines, however, a dullness in the ventilation at the working-faces has been observed. At Hikurangi Colliery, owing to the length of the intake and the smallness of its sectional area, the fan of small capacity has at times been found inadequate to provide adequate ventilation. At Kaitangata collieries the ventilation was in some places found dull owing to defective distribution, short-circuiting, and failure to properly erect and maintain the brattice. At Nightcaps, owing possibly to a parsimonious policy, no brattice at all was used in the mine to carry air to the faces on the occasion of my inspection this year. The management informed me that none could be procured, but as every other colliery of importance obtained it I am unable to understand why such a prosperous company as the Nightcaps Coal Company should tender such an explanation for neglect to comply with the law.