C.—3a. 5

All these coals are almost precisely the same character, and belong to the class of semi-bituminous coals, as they do not form a compact lustrous coke like a bituminous coal. In purity and usefulness as fuel they are equal to the average West Coast coal, and superior to the coal first mined at Hikurangi, and also to the Kawakawa coal. The following results of analysis have been supplied by Mr. Skey:-

·				1	2	3	4	5
Fixed carbon			53.29	53.28	54.03	54.26	57.16	
Gas and oil			•••	41.82	41.89	39.94	38.91	35.70
$_{ m Water}$		•••		3.62	3.60	3.82	3.01	4.01
Ash				1.27	1.23	2.21	3.82	3.13
				100.00	100.00	100.00	100.00	100.00

"The evaporative powers are as follows:-

1	2	3	4	5
6.90	6.90	7.00	$7 \cdot 05$	7.43
or	or	or	or	or
11.68	11.68	11.91	11.93	12.62

"The first entry of evaporative power gives the pounds of boiling water which the coal will evaporate as computed on the old formula, and the second is the result computed by the formula now used in New South Wales. Nos. 1, 2, 3, and 5 are compact laminated coals, with bright lustre and black shining streak. The colour of the ash is light reddish brown. The brilliant iridescence, or 'peacock coal bloom,' on No. 5 is caused by thin films of silica on the joints of the coal. No. 4: Splint coal; is very compact and hard, so that it would stand handling well. It has a bright pitchy lustre, is without lamination, but is cut by joints coated with lime and films of pyrites. Its ash is light grey, and the streak is dull brown.

The mine was inspected on the 2nd June and 27th November, and on both occasions the ventilation was good and the workings safe. A good supply of timber was on the ground.

West Bryan's and Phanix Coal-mines.—These two mines, which adjoin each other, were closed down for some time, but operations have been resumed, Mr. S. C. Brown and others, of Auckland, having secured the rights from the owners of the land to work the coal conjointly by the stipulated royalty per ton. In the West Bryan's section the work has been principally confined to taking out pillars, from which 5,989 tons of coal has been won since the mine was unwatered, and an average of ten men have been employed. In the Phœnix section a good deal of trouble was at first experienced in trying to pump the water out, the boiler supplied not being of sufficient power to work the pump. On the coal being worked out from the dip in the West Bryan's section the engine and boiler were no longer required at that place, and were removed to the Phœnix, when the difficulty of unwatering this section was got over. The work is principally directed to taking pillars out of this section, which will in a short time be exhausted. Since operations were again commenced the output of coal has amounted to 992 tons. An average of nine men are employed. The two mines are under the management of Mr. A. L. Goold. The mines were inspected twice during the year, and operations were being carried on in a satisfactory manner.

Hikurangi Collieries Company (Limited).—Operations in this mine were carried on in the early part of the year (up till the month of April), when it was closed down pending arrangements being made with the owners of the adjoining property. As no agreement could be arrived at, the company again commenced prospecting operations on the north-east portion of their property. It was found to be necessary to do this as the coal in the former workings was nearly worked out. 3,786 tons of coal was obtained from this mine during the year.

Ngunguru Coal-mine.—This mine has been working for a period of nine years, and is situated on the south side of, and at an altitude of 150 ft. above, the Ngunguru River. The mine is opened up from the surface of the hill by three adit inclines or headings, but these are some distance apart and at different levels. In the A district (or main portion of the mine) the main heading was extended in a southerly direction for a distance of nearly 2,000 ft. from the mouth of the tunnel, and the bords carried east and west of the heading for a few chains until either the seam became too small to work or was cut off by a fault, and for some time past the operations have been chiefly in the direction of extracting the pillars, which are of small size, and by this means the coal is being rapidly exhausted.

B district, west: A dip incline was put down on the coal for nearly 500 ft. The haulage from here is being done by a vertical portable engine of 6-horse power. In this district bords are being extended on thin coal, but the pillars are also being operated upon, and it will only be a short time before most of the coal is worked out. There is an excellent band of fireclay on the top of the coal, some of which is occasionally sent to Auckland to be made into bricks, &c., and it is to be regretted that a considerable quantity of this valuable clay will be completely lost as the pillars of coal are

C district: This is opened up by a dip incline, but so far the coal-seam has been very much disturbed by faults. At present a crosscut drive is being driven through a fault to a point where a borehole was put down to a depth of 120 ft., and 4 ft. of coal was met with. As this is a new dis-

covery, it is fully expected a large area of coal will be eventually opened up here.

The output of coal during the year was 17,789 tons, and the average number of men employed was forty-seven. The mine was inspected on the 28th June and 28th November; the ventilation was good, and great care is taken by the manager to prevent accidents to the men, a plentiful supply of props and timber always being at hand. Three accidents were reported during the year, one of which turned out more serious than was at first anticipated. The injured workman was on the Coal-miners' Accident Relief Fund for seven months and a half, and, as the medical officer attending him gave a certificate to the effect that he was permanently disabled, it was recommended that a sum of £50 be paid to him in full satisfaction of all further claims on the fund.