

located by Mr. Whitehorn's party. Analyses by the Dominion Laboratory of the coal from the outcrops are as follows :—

	(1.)	(2.)	
Fixed carbon.. .. .	35.40	36.35	per cent.
Volatile hydrocarbons	49.49	46.76	"
Water	12.16	14.34	"
Ash	2.95	2.55	"
	100.00	100.00	"
Total sulphur	4.38	3.86	per cent.
Calories per gram	6,257	5,936	
British thermal units per pound	11,262	10,685	
Evaporative power per pound from calorimeter	11.67	11.08	lb.
Practical evaporative power* (assuming 60 per cent. efficiency)	7.00	6.65	lb.

Each of these coals gives a dark-coloured ash. The various seams all show a bright, hard coal, which evidently withstands weathering excellently. The samples analysed were necessarily obtained from the outcrops, and it may be anticipated that at a little depth even higher-grade coal will be found.

Mr. Richardson has submitted the following special report on the coal occurrences :—

COAL-SEAMS IN TURIMAWIWI-ANAWEKA DISTRICT.

A number of coal-seams have been discovered, extending from a point situated about half a mile to the north-east of trig. Centre Peak to the Raukawa Stream, three miles away to the west. About a mile and a half up the Raukawa Stream from the sea coal outcrops in a small tributary about 10 chains to the east of the main stream. One seam is 2 ft. in thickness, and two 9 in. each. Coal outcrops again in Jackson's Creek, about a mile and a quarter to the east of the Raukawa Creek seam. Three seams are exposed, one being 5 ft. to 6 ft. in thickness, another about 3 ft., whilst a small seam seen on the hillside above the stream is 9 in. in thickness.

In the vicinity of trig. Centre Peak quite a number of seams are exposed, varying from 3 ft. to 4 ft. in width. About 25 chains to the north of trig. Centre Peak three seams are visible, two of which are from 3 ft. to 4 ft. in thickness. The third seam is in the stream-bed, and the width has not yet been ascertained. Some 30 chains to the north-east of trig. Centre Peak a seam of 3 ft. is exposed along the bank of the Pukatea Stream, and in the stream-bed another seam is visible. The thickness of this seam has not yet been ascertained.

All the seams mentioned have a slight dip to the west, and appear to be fairly uniform. The altitude of the Centre Peak outcrops is about 1,100 ft. to 1,200 ft., while those in Jackson's and Raukawa Streams range from 200 ft. to 300 ft. Roughly speaking, the known coal-bearing area is about three square miles. The Turimawiwi and Anaweka rivers have cut through this area, making the actual extent somewhat less. It will, however, be difficult to state accurately the coal-bearing area until the geological survey of the district has been made.

* Practical evaporative power is calculated on a boiler efficiency which is obtained under good working-conditions.

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