I am informed, however, that there is a fair prospect of capital to develop the mine being forthcoming

18. As it is still a matter of doubt whether any of the low birl coal, though possessing other excellent qualities, will be found sufficiently hard for export purposes, and the high birl coal, though good in this respect, will require works of considerable magnitude and ingenuity to bring it to the railway line, it seems to be of the utmost importance that no time should be lost in at once proceeding to develop the vast stores of mineral wealth on the plateaux of Mounts Rochfort and Frederick. Unless a great change takes place shortly in the action of the various parties amongst whom the whole of the known coaliferous ground on this coal field is at present divided, it will be many years before the object for which the railway and harbour works have been undertaken is attained. th the railway and narrour works have seen and other particulars.

I enclose map showing portions surveyed and other particulars.

W. M. Cooper,

Westport, 30th June, 1875.

Topographical Surveyor.

## No. 2.

Mr. DENNISTON to the ENGINEER-IN-CHIEF.

## BULLER COAL FIELD.

GENERAL REPORT OF COAL EXPLORATIONS ON MOUNTS FREDERICK, WILLIAM, AND ROCHFORT, FROM JANUARY TILL JUNE, 1875.

Since my last general report I have continued my explorations from southern boundary of Ngakawau section, viz. T. 20, working my way south and east on to the summit and along the eastern slopes of Mount Frederick, likewise along the western base, slopes, and top of Mount William ridge, on to summit of same mount, continuing my work south from summit of Frederick and William up the N.N.E. and N.W. slopes of Rochfort till reaching summit of same. The position of the crops and sections found, together with the various breaks and faults throughout the areas and levels, will be found marked on the map together with their heights, the result of my labours being as follows:-

## Area 5.

The greater portion of this area, having been previously reported upon in Ngakawau section, calls for few further remarks more than there stated, the only coal line found being a few crops marked on map, a little to the westward of station T.8, in face of fault 10, showing coal of a thickness of from 7, 8, 10, and 12 feet, dip N.E. to E. 8°, for most part faulted, attributable to its closeness to face of fault, bearing every appearance of being the crop of coal held in western part of this area (see Ngakawau report, area 5), the surface grits being even and regular. On the S.W. or upper corner of this area the surface grits appear much shaken, not broken, throwing open many backs or breaks in the stone, yet having appearance of holding coal in a somewhat similar proportion to that reported upon in high level A.

Area 8.

In this area I have failed to trace coal of any exent, the only coal traceable being sections marked in face of break 15, showing coal 4 feet thick, dip N.E. 10°, bearing appearance of being crushed. Also in face of break close to station 8, four sections are marked showing thus: Coal, 3, 4, 6, and 8 feet thick, dip N.E. 12°. A small part of this area I have marked as containing coal, the centre portion being much disturbed and broken, while on the northern and eastern side it contains numerous surface outcrops of coal, shale and blaze. Evidently, from their general appearance of dip, together with surface indications, they are the surface outcrops of coal contained in area 517, Ngakawau section; the surface to the eastward being cut up into small hillocks or mounds, surrounded by creeks, showing coal of a thickness of from 3, 4, 5, and 6 inches, the dip of the coal here being very irregular and broken, the coal itself inferior in quality. On the eastern side face of fault 9, close to junction of Fly Creek with Ngakawau, a section is got showing a face of coal 6 feet thick, dip E. 10°, which crops to surface about 15 chains to westward of fault. I have, as may be noticed, marked here a small area as holding coal-

that is, so far as surface indications bear me out in doing so.

High Level A (Frederick).—Bounded by fault 10 on the north, No. 11 on the east, main break of mount on the south, and sea fault on the west. Throughout this part of the field, between break 16 and sea fault, I have been successful in tracing the continuance of the coal south from area 6, which appears to run through this part with great solidity and evenness, lying at easy angles, which, together with the numerous creeks (being gorgy) having worn down the top grits on to the coal, has facilitated much in the prospecting of this part. On this level going south, I have noticed the putting on of a second (upper) through this part.

The various sections of coal found show thus:other lower levels.

Section S Coal in bed of small creek, top only noticed. Dip S.E. 5°.

	Surface, fine Quartz Grits						Ft. 20	in. ()	
Section No. 7.	Soft Sandstone			•••		•••		10	Ō
	√ Blaze		•••					6	0
	Coal		•••					25	0
	Shale Blaze		• • •	•••		• • •		4	0
								65	0