

In order to ascertain the coal possibilities of the Dobson Flat somewhat numerous bores are necessary. One or two bores would be useless until supplemented by others, for the reasons that they could neither define the area of workable coal nor enable an estimate of the throw of the Buckley fault (probably a variable quantity) to be made. Other faults may also exist, and, if so, more bores will be needed to ascertain their directions and throws.

In selecting bore-sites the chief difficulty is to avoid the Buckley fault as well as other dislocations that possibly traverse the area. The bores ought not to be more than 20 or at most 25 chains apart, and ought to be so placed as to prove not only the area of workable coal, but also the throw of the faults.

I would tentatively suggest the following sites for preliminary bores :—

- (a.) Close to Dobson Railway-station, preferably between the railway and the river.
- (b.) 20 chains to the south-east of (a). There may be a fault at the foot of the terrace here, but some risk must be taken, for a bore in this locality is necessary.
- (c.) On bank of Grey River, near mouth of Mill Creek, but a little up-stream.
- (d.) Near old sawmill on Mill Creek, 20 to 25 chains south-east of Greymouth Harbour Board No. 2, and about 30 chains south-east of proposed bore (c).

If the results of these preliminary bores are favourable, additional bores to the south-west and on the low hilly country to the south-east of Dobson (Mill Creek valley, &c.) will be necessary. In no case after the first bore or two should a new bore-site be selected until the advice of a trained geologist has been obtained.

The accompanying map, on a scale of 40 chains to the inch, shows all the known details of the geology of Dobson Flat and the surrounding country.

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