

APPENDIX E.

REPORT ON THE COAL FIELDS OF NEW ZEALAND BY DR. HECTOR.

MEMORANDUM by Dr. HECTOR for the Hon. the MINISTER for PUBLIC WORKS.

I HAVE the honor to furnish, for your information, a brief abstract of the reports and correspondence relative to the development of Coal Fields during the past year.

J. HECTOR.

AUCKLAND.

Wangaroa.

THE exploration of the coal seams in the Kaeo district not having been effected for the reasons stated in my last report, a further grant of £200 was placed at the disposal of a Local Committee in October last.

On the 24th December, it was represented by the Committee that more favourable indications existed, in their opinion, close to Wangaroa Harbour, which they desired to explore; and in consequence, the grant was increased to £300, upon the understanding that both localities were to be explored.

On the 23rd May, the Chairman of the Committee reported as follows:—

“Hitherto our operations have not been attended with success, although the prospects continue to be encouraging, and the probability of ultimately finding a payable coal field in this district has been increased rather than diminished. We engaged, in February last, the services of Mr. Henworthy, a man who has had great experience in these matters, and placed in his hands the practical management of the operations to be carried out. A hole was put down on Bell’s property, at a spot recommended by Dr. Hector, but when sunk to a depth of 65 feet—owing to continuous wet weather—it caved in and had to be abandoned. Another bore was commenced, and has reached a depth of 95 feet; but as the ground still continues to be of a very loose and yielding character, it has been found necessary to encase the hole with iron tubing throughout its whole depth. This is necessarily expensive work, and as we are anxious to expend our grant to the best advantage, it has been deemed advisable to delay further operations pending a visit of Dr. Hector, when the present hole may be continued or a fresh one commenced, as he recommends.

“Efforts have been made to find coal in the Kaeo district, but hitherto without any successful result, although a reward has been offered for the discovery of a seam of coal there. The cost of the exploration referred to has not been ascertained.”

The important results that would accrue from the discovery of coal in the vicinity of such an excellent harbour as Wangaroa, is the only reason for prosecuting the search, as the results obtained up to the present time have not been encouraging.

Kawa Kawa.

The borings formerly recommended, to prove the extent of this important coal field, have been carried out, under the direction of the Company, at an expenditure of £943 5s. 2d., and the result is stated in general terms to be favourable, but no details have been communicated to the department.

At Wangarei, Mangawai, and other localities in the north of Auckland, coal of moderately good quality has been discovered and reported on, but they await further examination before their value can be ascertained.

Coromandel.

Seams of coal have been long known to exist in this district, and samples from four localities were submitted to the Provincial Government, accompanied by the following memorandum by Mr. James Lowe, C.E.:—“The brown coal marked as from Kirita Bay is the only one of the samples which is valuable as fuel. That from Te Hunua Stream would be of valuable quality were it not for the large quantities of ash it contains, but the sample sent may have been exceptional in this respect.” The analysis of these samples was included in the schedule attached to last year’s report.

“*Te Hunua Stream.*—The outcrop of coal on Te Hunua Stream is about 1,200 yards from the junction of this stream with the Waiau River. The outcrop is exposed by a slip on the bank, and is about 20 feet above the bed of the stream, with a dip to the north-east of about 10°. This is a compact anhydrous coal, burns freely with a smoky flame, and does not cake. The seam at the outcrop is 2 feet 6 inches thick, with a bed of fireclay above and below the stream. From the formation and nature of the country, this is very likely to be a good workable coal.

“*Awakanæ River.*—The outcrop of coal on the Awakanæ River is about two miles from the beach. This outcrop is on the edge of the river, with a dip to the north-east of about 10°. This seam also crops out on a small stream lower down the river. The seam is composed of 12 inches of anthracite coal and 2 feet of shale, with a clay formation over and slate rock under the seam. There are several thin seams that crop out lower down the river. The coal burns slowly to a white ash.

“*Parawaha Creek.*—The outcrop of coal on Parawaha Creek, Manaia Harbour, is about 300 yards from the beach. The outcrop is at a fall on the creek, with a dip to the north-east of about 7°. The seam is 20 inches thick, and is an altered coal very much like charcoal, and burns to a red ash. The overlying strata is a conglomerate of hard stone boulders.