

GEOLOGICAL SURVEY

In 1946-47 new areas have been regionally surveyed at Motatau, in North Auckland; Waitotara-Wanganui; d'Urville Island-Dun Mountain, including the so-called "Mineral Belt" of Nelson; Moeraki-Kakanui; Monowai-Sandhill Point. White Island was examined by Mr. Healy and Mr. Fleming from 7th to 14th January, and later again visited by Mr. Healy.

The coalfields have been continuously examined at Greymouth, Reefton, Wangaloa, and on occasions at Kamo, Tatu, Retaruke, Burke's Creek, Pike River, Mount Davy, Paparoa, Blackball, Elliotvale, Kaitangata, and Ohai.

Mr. Willett has prepared a map of the limestones of Southland and written a report on them and how they are being worked.

The natural-gas field at Greymouth was measured and reported on by Mr. Ower and shown to be not worth opening up.

Water-supplies have been investigated and reported on at several places in North Auckland, parts of Auckland City and suburbs, Otahuhu, Wairakei, Tongariro, Mangatainoka, Blenheim, Picton, many parts of Canterbury, Goodwood, Southland, Stewart Island. Hot-water supplies have been reported on at several centres, including Helensville, Rotorua, Wairakei, Maruia.

The active volcano, Ruapehu, has been examined periodically, and on the evidence available shown to be waning normally. Not enough work is being done in volcanology to ascertain what is likely to happen here or elsewhere in New Zealand in the future.

Titaniferous iron-sands have been mapped in detail and reported on at Waitara and Wanganui, and a duplicate collection of a hundred samples has been deposited at the Geological Survey.

The clay deposits near Wellington have been systematically collected and tested, and a report is being prepared. Many samples have been collected throughout New Zealand.

Bentonites were mapped and reported on at Blue Slip, Kekerangu, and Clarence, and more were sampled at Oaro and Waipara.

Stones for quarrying for building, roadmaking, &c., have been reported on at many places, including North Auckland, Piako, Waikato, Bluff.

Gem-stones, dredge-concentrates, building-stone, cement materials, concrete aggregate, &c., have been tested petrographically.

Dam-sites throughout the country have been reported on geologically and, where advisable, geophysically as well; and data for engineering works have been supplied at Bay of Plenty, Manawatu, Rimutaka, Wanaka.

Many small economic reports have been issued; the major reports include Dr. Marwick's bulletin on Te Kuiti Subdivision and Mr. Macpherson's memoir on "An Outline of Late Cretaceous and Tertiary Diastrophism in New Zealand."

Data is being collected on stratigraphy, palaeontology, petrography, volcanology, &c.

COAL SURVEY

The Coal Survey Laboratory has co-operated with the field staffs of the Mines Department, and the Geological Survey in continuing the physical and chemical survey of the coal resources of the Dominion. Special investigations have been made in the Westport, Stockton, Reefton, Greymouth (Rewanui and Pike River), Kaitangata, Matura, and Ohai districts, and a total of 569 samples from headings, outcrops, and bores throughout New Zealand have been analysed.

The possibility of briquetting Matura lignite was specially investigated by a Coal Survey Officer at the Yallourn Works, Australia, and a report on the analyses of coals from all producing mines in New Zealand was prepared.

During the year Mr. R. L. Andrew retired, and Mr. W. A. Joiner, Director of the Dominion Laboratory, was elected to fill the position of Chairman of the Coal Survey Committee.