

PETROLEUM AND NATURAL GAS RESOURCES OF CANADA.

Frederick G. Clapp and L. G. Huntley.

SCOPE OF THE REPORT.

The instructions were to write a report on the petroleum and natural gas resources of the Dominion, which will outline the history of developments, status of production, stratigraphy, drilling methods, markets, methods of transportation, quality, utilization, and such other technical details as are necessary in exploiting these resources to the best advantage. Such a report is of value to an operator in one field who may wish to be informed on conditions or methods existing in some other field, and it is needed furthermore for a layman who may intend entering the petroleum or natural gas business or associated enterprises, and who may demand truthful information regarding conditions or methods in various parts of the Dominion.

WORK DONE TO DATE.

The work referred to in this report has, up to the present, consisted chiefly of field-work. This work was commenced in May, 1912, and was prosecuted intermittently during the summer and autumn. All provinces in Canada which have produced any petroleum or natural gas were visited, and references thereto will be included in the report. The statements outlining existing conditions are corrected up to the summer of 1912.

SUMMARY OF RESULTS.

The conclusions arrived at and information obtained may be summarized under the following outline:—

Uses of Petroleum.—Ever since the discovery of petroleum in commercial quantities in America, the number of uses of both the crude and refined products have been growing, until at present the production is far from sufficient to supply the demand. In a work such as the present one, it seems essential to give an outline of the uses of petroleum, in order to make clear what may be done by the industry in meeting the present demand; consequently this consideration will be taken up in a special chapter. It will include a discussion of the growing demand for gasoline, and of the methods used for extracting this substance from certain types of natural gas in the oil fields. Natural gasoline plants are in frequent use in the United States, but are very rare in Canada.

Classification and Value of Petroleum.—It may not be generally understood that a great difference exists in the character of petroleum in various parts of the Dominion, and between the Canadian oils and those of other countries. Most oils are suitable for special purposes, and consequently the pipe line companies have classified them into a number of grades depending on the character and demand in different fields, and have set a price for each particular grade. This price is changed from time to time according to the changing supply and demand.

Geological Occurrence of Petroleum and Natural Gas.—While the oil business has very generally been viewed by the public as a gambling enterprise, and while many companies have conducted it as such, we are now able to say that the days of taking great chances are past. A careful study of local conditions will now enable an expert to judge to a considerable extent what may be expected of any particular property. While it is not possible to absolutely predict whether a well drilled at a particular point