

NATURAL WATERS.

Lake and river
waters from
North-west
Territory.

The following lake and river waters from the North-west Territory, were collected at the instance of Mr. A. S. Cochrane, whilst conducting a survey in the section of country in question, and handed to me by him for examination.

Mr. Frank D. Adams has conducted a qualitative analysis of these waters, and also estimated the amount of total dissolved solid matter contained in them. The results obtained by him were as stated below.

Examination of
water from
Reindeer Lake.

1.—Reindeer Lake.—This water was taken from an open space between the islands, about ten miles above the outlet of the lake. Date of collection, July 25th, 1881.

There was a small quantity of flocculent suspended matter of a yellowish-brown color. After filtration the water had a faint brownish-yellow tinge. The specific gravity at 15.5° C. was found to be 1000.04, and the total dissolved solid matter dried at 100° C., amounted to 2.02 grains to the Imperial gallon.—It contained:

Potassa and soda.... A very small quantity, potassa predominating.
Lime A slight trace.
Magnesia..... A trace.
Silica A very small quantity.
Carbonic acid..... A mere trace.
Chlorine A trace.

Examination of
water from
Churchill
River.

2.—Churchill or English River.—This sample was taken from the centre of the river, about six miles above the Kettle Falls. Date of collection, July 28th, 1881.

There was a large quantity of flocculent suspended matter of a light brown color. After filtration the water had a pale brownish-yellow tinge. Its specific gravity at 15.5° C., was 1000.17. The total dissolved solid matter—dried at 100° C.,—amounted to 7.96 grains per Imperial gallon.—It contained:

Potassa and soda.... A rather large quantity, potassa predominating.
Lime..... A small quantity.
Magnesia A very small quantity.
Silica..... A somewhat large amount.
Carbonic acid..... A very small quantity.
Chlorine A small quantity.

Examination of
water from
Saskatchewan
River.

3.—Saskatchewan River.—Taken from the centre of the river, about a quarter of a mile below the junction of the Big-Stone River. Date of collection, August 3rd, 1881.