

sulphate, which comes from highly concentrated brines and from alkali lakes in southwestern Saskatchewan, remained good but output was affected by unfavourable weather. Prairie Salt Company Limited, wholly-owned subsidiary of Dominion Tar and Chemical Company Limited, recorded a new high of 34,000 tons in the production of fine salt from its vacuum plant at Unity. The brine comes from a salt bed 3,500 feet underground.

Oil drilling has brought extensive deposits of potash to light in several areas of the Province. Exploratory activity on these has been widespread with over 1,000,000 acres covered by pre-exploration permits. Western Potash Corporation Limited has commenced shaft-sinking operations on a deposit near Unity and Potash Corporation of America is investigating a deposit in the Quill Lake area.

**Manitoba.**—Most of the interest in mineral developments in Manitoba during the review period has been centred in the Lynn Lake area, 500 miles northwest of Winnipeg, where Sherritt Gordon Mines Limited has been busily engaged in preparing its copper-nickel orebodies for production, and in southwestern Manitoba where the discovery of crude oil a few years ago has been followed by the successful drilling of a number of wells and by a daily production of 1,200 bbl. (March 1953).

Indications are that production from the Lynn Lake deposits will commence before the close of 1953. In the underground work, major attention has been given to preparing the "A" orebody for mining. By the end of June, foundations for the mill had been laid and construction of the plant was in progress. The Laurie River power development was completed, construction of the refinery at Fort Saskatchewan in Alberta was proceeding, and construction of the 147-mile railway from Sherridon to Lynn Lake was scheduled for completion before the close of 1953.

Initially, the nickel concentrate from the Lynn Lake deposits will be shipped to Fort Saskatchewan for refining and the copper concentrate to Noranda Mines Limited, Noranda, Que., for smelting. Eventually, however, both the copper and nickel will be refined at Fort Saskatchewan. Present plans call for an annual production of 8,500 tons of nickel, 4,500 tons of copper, 150 tons of cobalt and 70,000 tons of ammonium sulphate for fertilizer. The leach process to be used to treat concentrates is expected to result in higher recoveries at lower costs than would be possible by use of conventional methods. Most of the sulphur in the concentrates will be converted into ammonium sulphate. Natural gas will be used as fuel at the Fort Saskatchewan plant and the Company has contracted for its requirements from Midwestern Industrial Gas Limited.

Aside from developments at Lynn Lake, exploration in northern areas of Manitoba has revealed extensive deposits of low-grade nickel which, in the light of a continued heavy demand for the metal and improved metallurgical practices, may some day prove mineable on a commercial basis. Canadian Nickel Company Limited, subsidiary of the International Nickel Company of Canada Limited, is exploring low-grade nickel bodies in the area about Mystery Lake and in the Grass River area. Berens River Mines Limited has also been exploring a deposit in the Mystery Lake area and is having tests made of the ore using the Sherritt Gordon leach treatment.

From its operations at Flin Flon, Hudson Bay Mining and Smelting Company Limited and its subsidiary, Cuprus Mines Limited, in 1952 produced 61,783 tons of refined zinc at its electrolytic zinc plant at Flin Flon, about 7,000 tons more than was produced in 1951. The output of zinc oxide from the slag fuming plant