



**Minister of
Agriculture and Resource Development**

Legislative Building
WINNIPEG, MANITOBA, CANADA
R3C 0V8

MINISTERIAL ORDER

**Subsection 116(2)
THE OIL AND GAS ACT**

WATERFLOOD ORDER NO. 84

**Pertaining to Waterflood Operations
in North Virden Scallion Unit No. 3**

- 1.0 The Unit Operator shall conduct waterflood operations by injecting water into the Virden Lodgepole Pool underlying North Virden Scallion Unit No. 3 ("the Unit"). The Director may approve the conversion of additional wells in the Unit to water injection.
- 1.1 Every injection well shall be completed as approved under Section 47 of the Drilling and Production Regulation ("the Regulation").
- 1.2 The maximum wellhead pressure at which water may be injected is 7 200 kPa.
- 1.3 The Director may, from time to time, establish a maximum or minimum rate at which water may be injected into a well.
- 1.4 The annulus of each injection well shall be pressure tested in accordance with Section 50 of the Regulation.
- 2.0 The Unit Operator shall conduct an annual survey to determine the level and distribution of reservoir pressure in the Unit. A summary of the results of any pressure surveys conducted during the year are to be included in the annual waterflood progress report required under Section 73 of the Regulation.
- 2.1 The frequency of pressure surveys may be reduced where the Director is satisfied that more frequent surveys will not assist the Unit Operator in monitoring the effectiveness of the waterflood.
- 2.2 The Unit Operator is responsible for monitoring the effectiveness of the waterflood and for collecting such reservoir data and other information as is necessary to evaluate and optimize waterflood performance.

- 2.3 The Unit Operator shall advise the Petroleum Branch of the suspension of water injection at any well, any indication of channelling or breakthrough of injected water to a producing well or out of zone and any other detrimental effects that may be attributable to the waterflood operations.
- 3.0 The Unit Operator shall file a report of production or injection for each well in the Unit in accordance with Section 120 of the Regulation.
- 4.0 The Unit Operator shall file an annual waterflood progress report in accordance with Section 73 of the Regulation.
- 5.0 Only Lodgepole Formation source water is approved to be injected into the Unit. Any other source of water must be approved by the Petroleum Branch prior to injection.

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Jan. 28, 2021

Date

Director of Regulatory Services for
Minister Agriculture and Resource Development