

Waskada Unit No. 8

Waterflood Progress Report 2018

January 1st through December 31st 2018

Prepared for:

Manitoba Industry, Economic Development and Mines

Petroleum Branch

Prepared by:

Tundra Oil and Gas

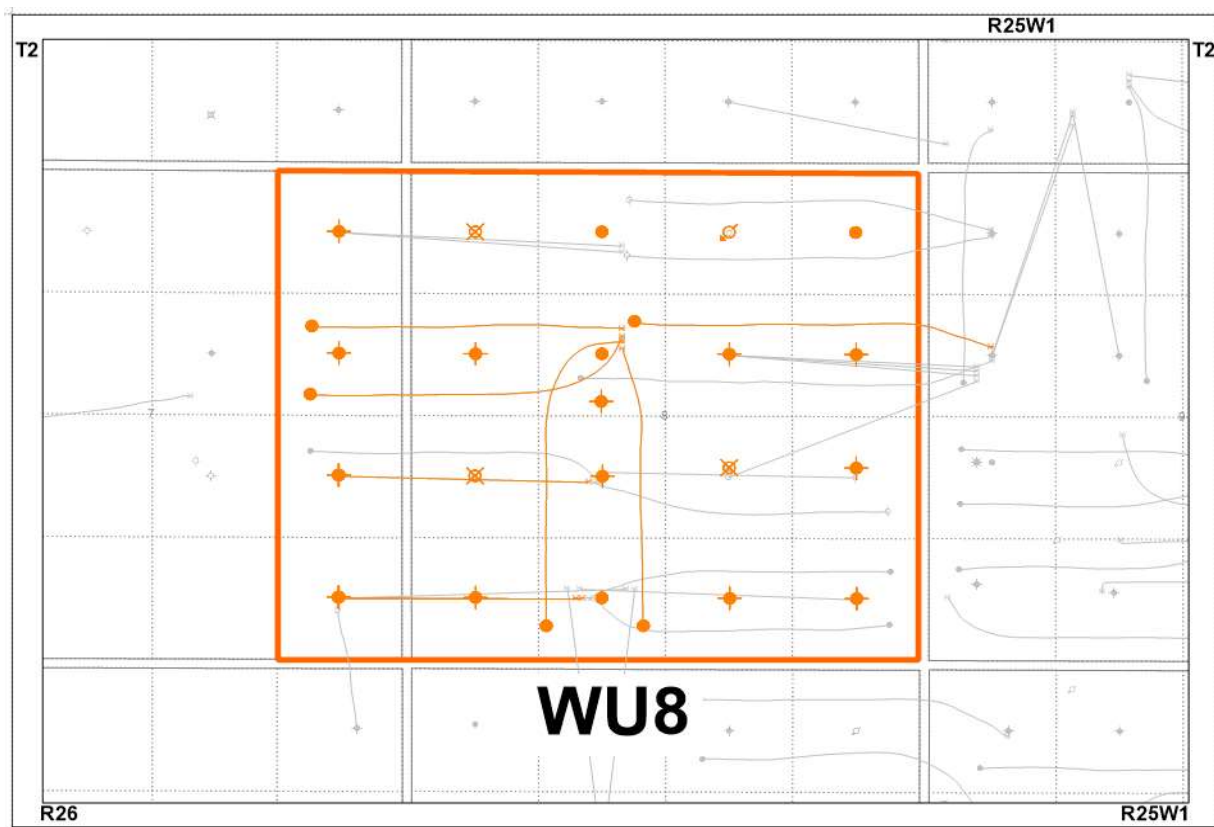
March 25, 2019

INTRODUCTION

Waskada Unit No. 8 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Board Order No. PM 58 effective October 1985. The Unit area contains 17 abandoned/suspended wells, including 4 inactive/abandoned injectors, 9 producing/inactive wells and 3 horizontal wells waiting to be completed, in 20 LSDs in Township 1, Range 25 W1 as shown in the figure below.

This unit is currently not on injection and there are no plans for injector re-activation .

Figure 1: Waskada Unit No. 8 Area Outline



Waskada Unit No. 8

Tundra Oil and Gas (Tundra), as the operator of the Waskada Unit No. 8 Enhanced Oil Recovery (EOR) project hereby submits the 2018 EOR report as per section 73 of the Drilling and Production Regulations.

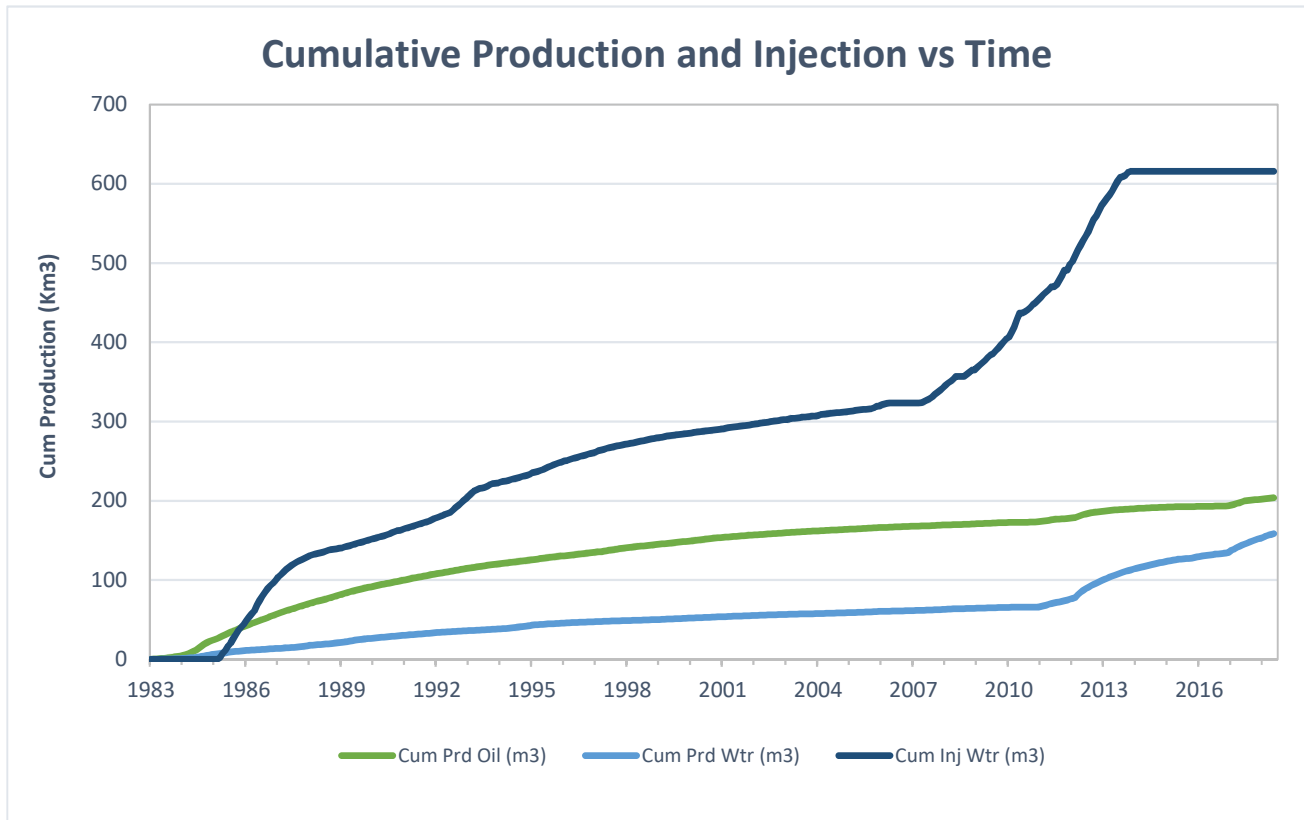
a) Monthly oil and water production rates, injection rate, GOR and WOR

| MONTH | Cal Dly Oil m ³ /day | Cal Dly Wtr m ³ /day | Cal Inj Wtr m ³ /day | WOR m ³ /m ³ | GOR m ³ /m ³ |
|----------|------------------------------------|------------------------------------|------------------------------------|---------------------------------------|---------------------------------------|
| Jan-2018 | 32.81 | 36.72 | 0.00 | 1.12 | 0 |
| Feb-2018 | 17.29 | 40.21 | 0.00 | 2.33 | 0 |
| Mar-2018 | 15.68 | 48.39 | 0.00 | 3.09 | 0 |
| Apr-2018 | 13.37 | 46.82 | 0.00 | 3.50 | 0 |
| May-2018 | 9.22 | 35.25 | 0.00 | 3.82 | 0 |
| Jun-2018 | 8.79 | 35.43 | 0.00 | 4.03 | 0 |
| Jul-2018 | 12.99 | 33.92 | 0.00 | 2.61 | 0 |
| Aug-2018 | 10.89 | 31.48 | 0.00 | 2.89 | 0 |
| Sep-2018 | 11.13 | 54.34 | 0.00 | 4.88 | 0 |
| Oct-2018 | 13.77 | 44.11 | 0.00 | 3.20 | 0 |
| Nov-2018 | 13.20 | 30.52 | 0.00 | 2.31 | 0 |
| Dec-2018 | 9.89 | 27.26 | 0.00 | 2.76 | 0 |

b) Cumulative volume of oil, gas and water produced and fluid injected

| 2018 PRODUCTION | |
|----------------------------------|---------|
| Produced Oil (m ³) | 5,142 |
| Produced Gas (m ³) | 0 |
| Produced Water (m ³) | 14,110 |
| Fluid Injected (m ³) | 0 |
| CUMULATIVE PRODUCTION | |
| Produced Oil (m ³) | 203,809 |
| Produced Water (m ³) | 158,403 |

Waskada Unit No. 8



c) Well List

Waskada Unit No. 8 Well List

| <i>UWI</i> | <i>Type</i> | <i>Status</i> | <i>Future Plans</i> |
|----------------------|--------------------|----------------------|----------------------------|
| 100/01-07-002-25W1/0 | Vertical | Abandoned | - |
| 102/01-07-002-25W1/0 | Horizontal | Drilled & Cased | - |
| 103/01-07-002-25W1/0 | Horizontal | Drilled & Cased | - |
| 100/08-07-002-25W1/0 | Vertical | Abandoned Zone | - |
| 103/08-07-002-25W1/0 | Horizontal | Drilled & Cased | - |
| 100/09-07-002-25W1/0 | Vertical | Abandoned Zone | - |
| 102/09-07-002-25W1/0 | Horizontal | Producing | - |
| 103/09-07-002-25W1/0 | Horizontal | Producing | - |
| 100/16-07-002-25W1/0 | Vertical | Abandoned | - |
| 100/01-08-002-25W1/0 | Vertical | Abandoned | - |
| 100/02-08-002-25W1/0 | Vertical | Abandoned | - |
| 100/03-08-002-25W1/2 | Vertical | Producing | - |
| 102/03-08-002-25W1/0 | Horizontal | Producing | - |
| 103/03-08-002-25W1/0 | Horizontal | Producing | - |
| 100/04-08-002-25W1/0 | Vertical | Abandoned Zone | - |
| 100/05-08-002-25W1/0 | Vertical | Abandoned | - |
| 100/06-08-002-25W1/0 | Vertical | Abandoned Zone | - |
| 100/07-08-002-25W1/0 | Vertical | Abandoned | - |
| 100/08-08-002-25W1/2 | Vertical | Abandoned Zone | - |
| 100/09-08-002-25W1/0 | Vertical | Abandoned | - |
| 100/10-08-002-25W1/0 | Vertical | Abandoned | - |
| 100/11-08-002-25W1/0 | Vertical | Producing | - |
| 103/11-08-002-25W1/0 | Horizontal | Producing | - |
| 1A0/11-08-002-25W1/0 | Vertical | Abandoned Zone | - |
| 100/12-08-002-25W1/0 | Vertical | Abandoned | - |
| 100/13-08-002-25W1/0 | Vertical | Abandoned | - |
| 100/14-08-002-25W1/0 | Vertical | Producing | - |
| 100/15-08-002-25W1/0 | Vertical | Injection | - |
| 100/16-08-002-25W1/0 | Vertical | Producing | - |