

Cromer Unit No. 3

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

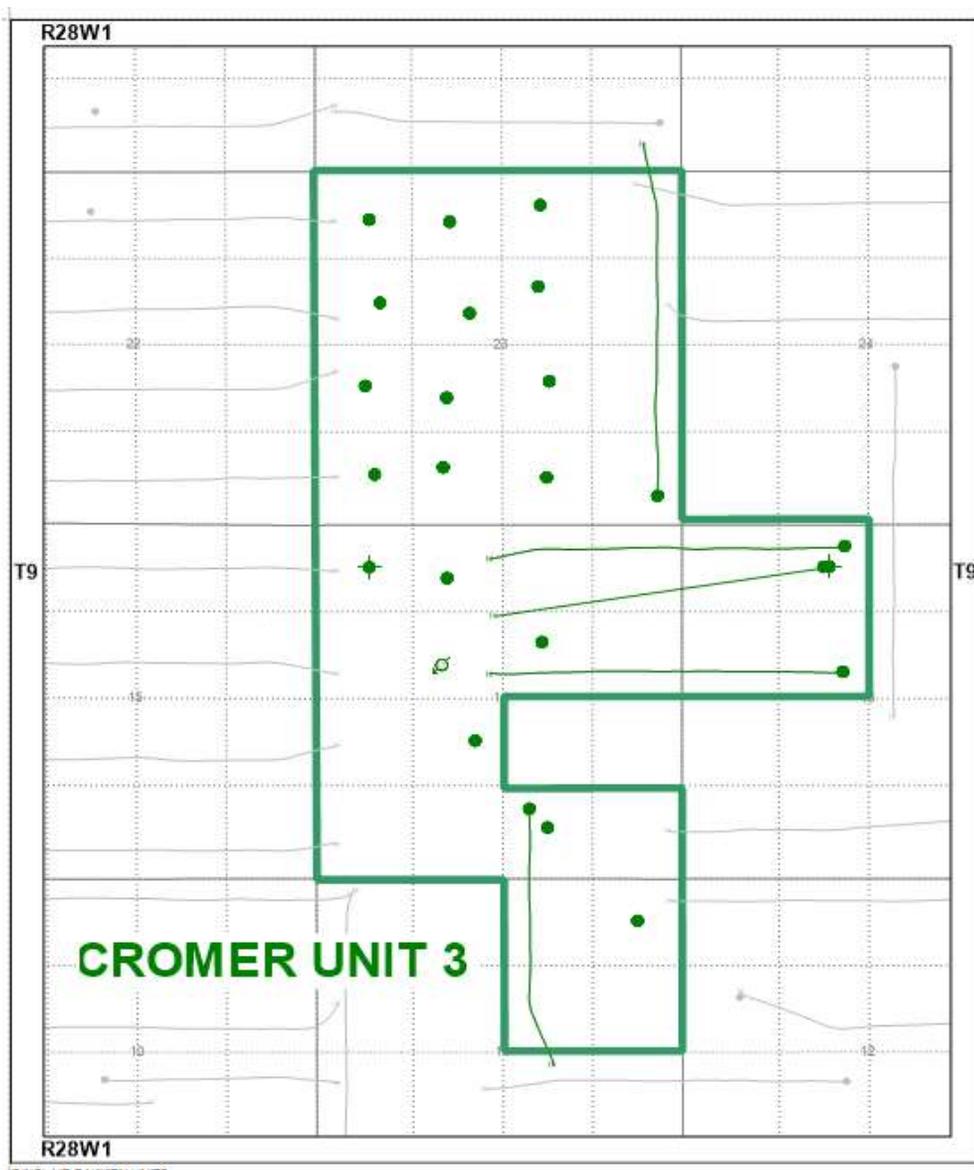
April 1, 2019

INTRODUCTION

Cromer Unit No. 3 Enhanced Oil Recovery (EOR) Waterflood Project was approved on June 30, 2016. It succeeded as an expansion of the now cancelled Cromer Unit No. 1, which was approved under Waterflood Order No. 6 effective November 1, 1998 with Tundra Oil and Gas as Operator. The EOR project area, outlined in green in Figure 1, contains 25 wells in 38 LSDs in Township 9, Range 28W1.

This unit is currently not on injection.

Figure 1: Cromer Unit No. 3 Area Outline



Cromer Unit No. 3

Tundra Oil and Gas (Tundra), as the operator of the Cromer Unit No. 3 Enhanced Oil Recovery (EOR) project hereby submits the 2018 EOR report as per section 73 of the Drilling and Production Regulations.

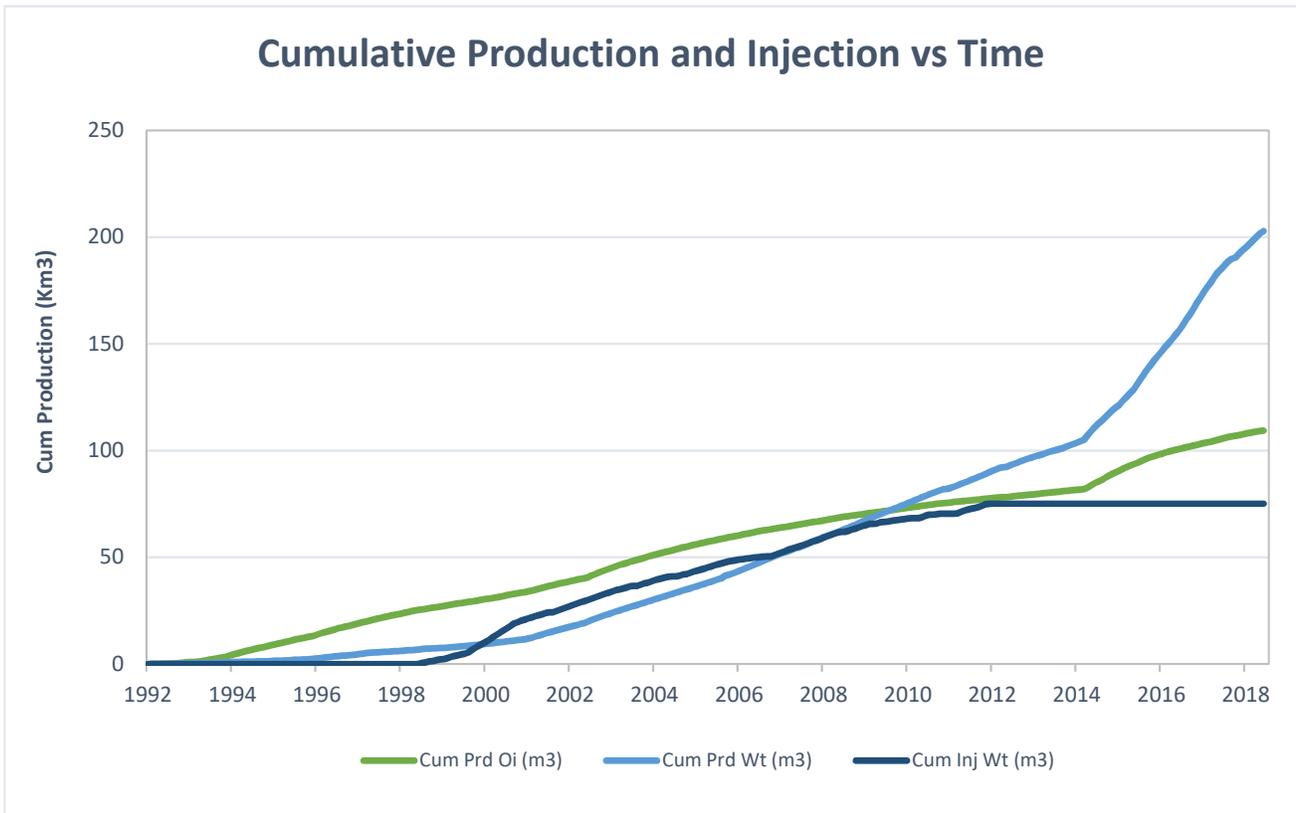
a) Monthly oil and water production rates, injection rate, GOR and WOR

| 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 | 14.51 | 58.16 | 0.00 | 4.01 | 0 |
| Feb-2018 | 13.40 | 59.46 | 0.00 | 4.44 | 0 |
| Mar-2018 | 10.75 | 38.90 | 0.00 | 3.62 | 0 |
| Apr-2018 | 8.95 | 24.17 | 0.00 | 2.70 | 0 |
| May-2018 | 11.00 | 57.31 | 0.00 | 5.21 | 0 |
| Jun-2018 | 10.77 | 50.50 | 0.00 | 4.69 | 0 |
| Jul-2018 | 10.27 | 45.53 | 0.00 | 4.43 | 0 |
| Aug-2018 | 11.05 | 53.42 | 0.00 | 4.83 | 0 |
| Sep-2018 | 10.79 | 54.78 | 0.00 | 5.08 | 0 |
| Oct-2018 | 9.11 | 53.76 | 0.00 | 5.90 | 0 |
| Nov-2018 | 8.18 | 52.47 | 0.00 | 6.41 | 0 |
| Dec-2018 | 6.73 | 34.81 | 0.00 | 5.17 | 0 |

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

| 2018 PRODUCTION | |
|----------------------------------|---------|
| Produced Oil (m ³) | 3,812 |
| Produced Gas (m ³) | 0 |
| Produced Water (m ³) | 17,721 |
| Fluid Injected (m ³) | 0 |
| CUMULATIVE PRODUCTION | |
| Produced Oil (m ³) | 109,365 |
| Produced Water (m ³) | 202,851 |

Cromer Unit No. 3



c) Well List

Cromer Unit No. 3 Well List

| <i>UWI</i> | <i>Type</i> | <i>Status</i> | <i>Future Plans</i> |
|----------------------|-------------|----------------|---------------------|
| 100/16-11-009-28W1/2 | Vertical | Pumping | - |
| 100/11-13-009-28W1/0 | Horizontal | Producing | - |
| 100/14-13-009-28W1/2 | Vertical | Abandoned Zone | - |
| 102/14-13-009-28W1/0 | Horizontal | Producing | - |
| 103/14-13-009-28W1/0 | Horizontal | Producing | - |
| 100/02-14-009-28W1/2 | Vertical | Producing | - |
| 102/02-14-009-28W1/0 | Horizontal | Producing | - |
| 102/06-14-009-28W1/2 | Vertical | Commingled | - |
| 100/10-14-009-28W1/0 | Vertical | Commingled | - |
| 100/11-14-009-28W1/0 | Vertical | Injection | - |
| 100/13-14-009-28W1/3 | Vertical | Abandoned Zone | - |
| 100/14-14-009-28W1/0 | Vertical | Commingled | - |
| 100/01-23-009-28W1/0 | Horizontal | Producing | - |
| 100/02-23-009-28W1/2 | Vertical | Commingled | - |
| 100/03-23-009-28W1/0 | Vertical | Producing | - |
| 100/04-23-009-28W1/3 | Vertical | Commingled | - |
| 100/05-23-009-28W1/0 | Vertical | Producing | - |
| 100/06-23-009-28W1/2 | Vertical | Commingled | - |
| 100/07-23-009-28W1/2 | Vertical | Pumping | - |
| 100/10-23-009-28W1/2 | Vertical | Producing | - |
| 100/11-23-009-28W1/0 | Vertical | Producing | - |
| 100/12-23-009-28W1/0 | Vertical | Pumping | - |
| 100/13-23-009-28W1/0 | Vertical | Pumping | - |
| 100/14-23-009-28W1/0 | Vertical | Pumping | - |
| 100/15-23-009-28W1/2 | Vertical | Producing | - |