

Cromer Unit No. 3

Waterflood Progress Report 2017

January 1st through December 31st 2017

Prepared for:

Manitoba Industry, Economic Development and Mines

Petroleum Branch

Prepared by:

Tundra Oil and Gas

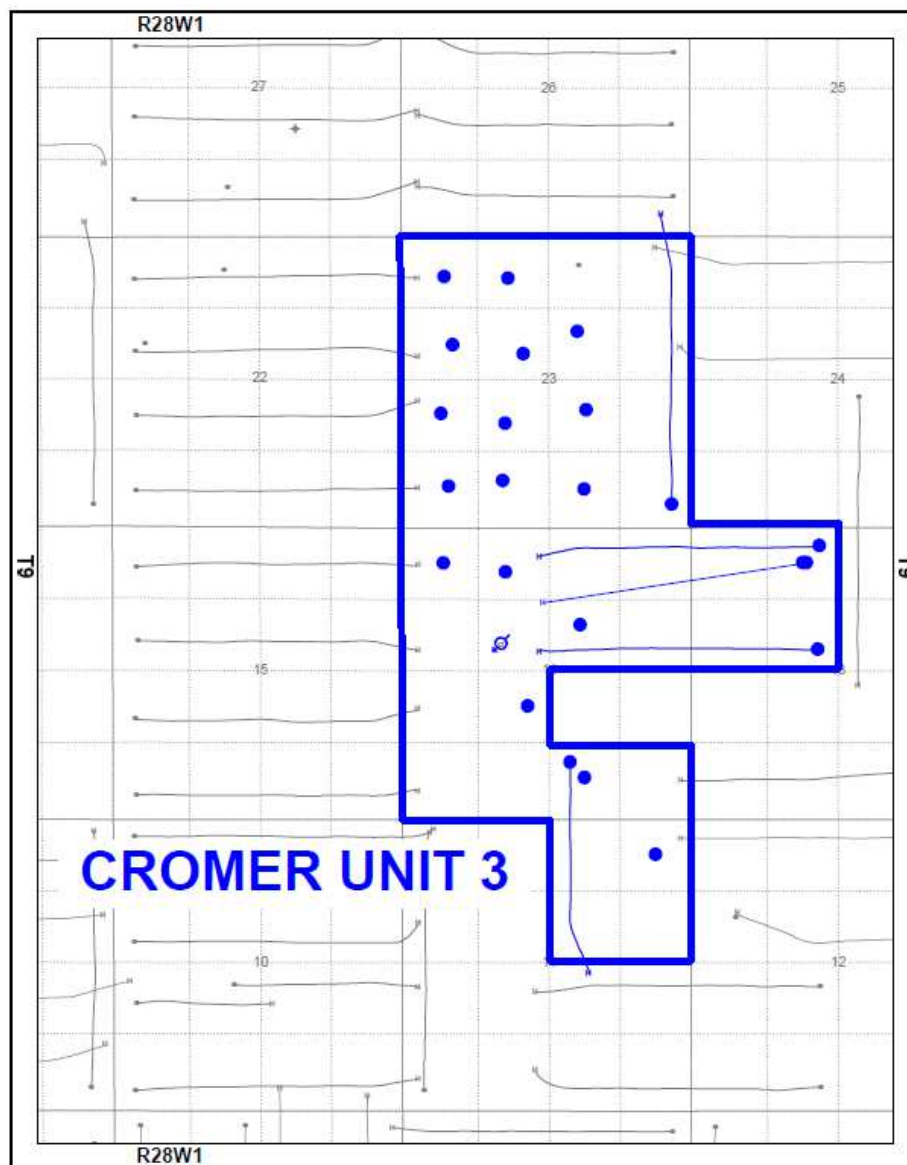
August 2, 2018

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 blue in Figure 1, contains 24 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 2017 EOR report as per section 73 of the Drilling and Production Regulations.

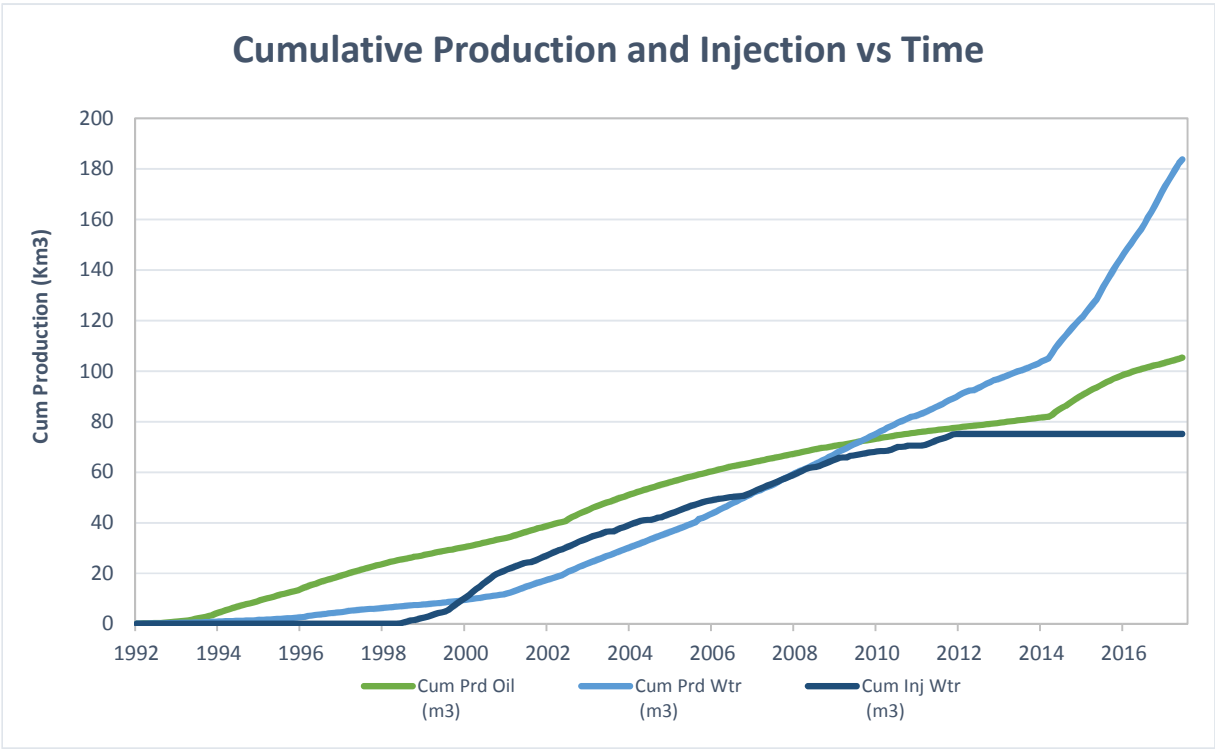
a) Monthly oil and water production rates, injection rate, GOR and WOR

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-2017	12.82	70.85	0.00	5.53	0
Feb-2017	13.34	88.04	0.00	6.60	0
Mar-2017	11.58	69.92	0.00	6.04	0
Apr-2017	11.73	85.94	0.00	7.33	0
May-2017	11.55	85.22	0.00	7.38	0
Jun-2017	11.93	83.70	0.00	7.02	0
Jul-2017	12.43	81.52	0.00	6.56	0
Aug-2017	11.75	74.18	0.00	6.32	0
Sep-2017	10.00	67.38	0.00	6.74	0
Oct-2017	13.41	77.35	0.00	5.77	0
Nov-2017	12.74	76.10	0.00	5.97	0
Dec-2017	15.97	49.85	0.00	3.12	0

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

2017 PRODUCTION	
Produced Oil (m ³)	4,540
Produced Gas (m ³)	0
Produced Water (m ³)	27,633
Fluid Injected (m ³)	0
CUMULATIVE PRODUCTION	
Produced Oil (m ³)	105,287
Produced Water (m ³)	183,766

Cromer Unit No. 3



<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	Producing	-
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	Commingle	-
100/10-14-009-28W1/0	Vertical	Commingle	-
100/11-14-009-28W1/0	Vertical	Injection	-
100/13-14-009-28W1/3	Vertical	Producing	-
100/14-14-009-28W1/0	Vertical	Commingle	-
100/01-23-009-28W1/0	Horizontal	Producing	-
100/02-23-009-28W1/2	Vertical	Commingle	-
100/03-23-009-28W1/0	Vertical	Producing	-
100/04-23-009-28W1/3	Vertical	Commingle	-
100/05-23-009-28W1/0	Vertical	Producing	-
100/06-23-009-28W1/2	Vertical	Commingle	-
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	-