

**Waskada Unit No. 7**

**Waterflood Progress Report 2018**

**January 1<sup>st</sup> through December 31<sup>st</sup> 2018**

**Prepared for:**

**Manitoba Industry, Economic Development and Mines**

**Petroleum Branch**

**Prepared by:**

**Tundra Oil and Gas**

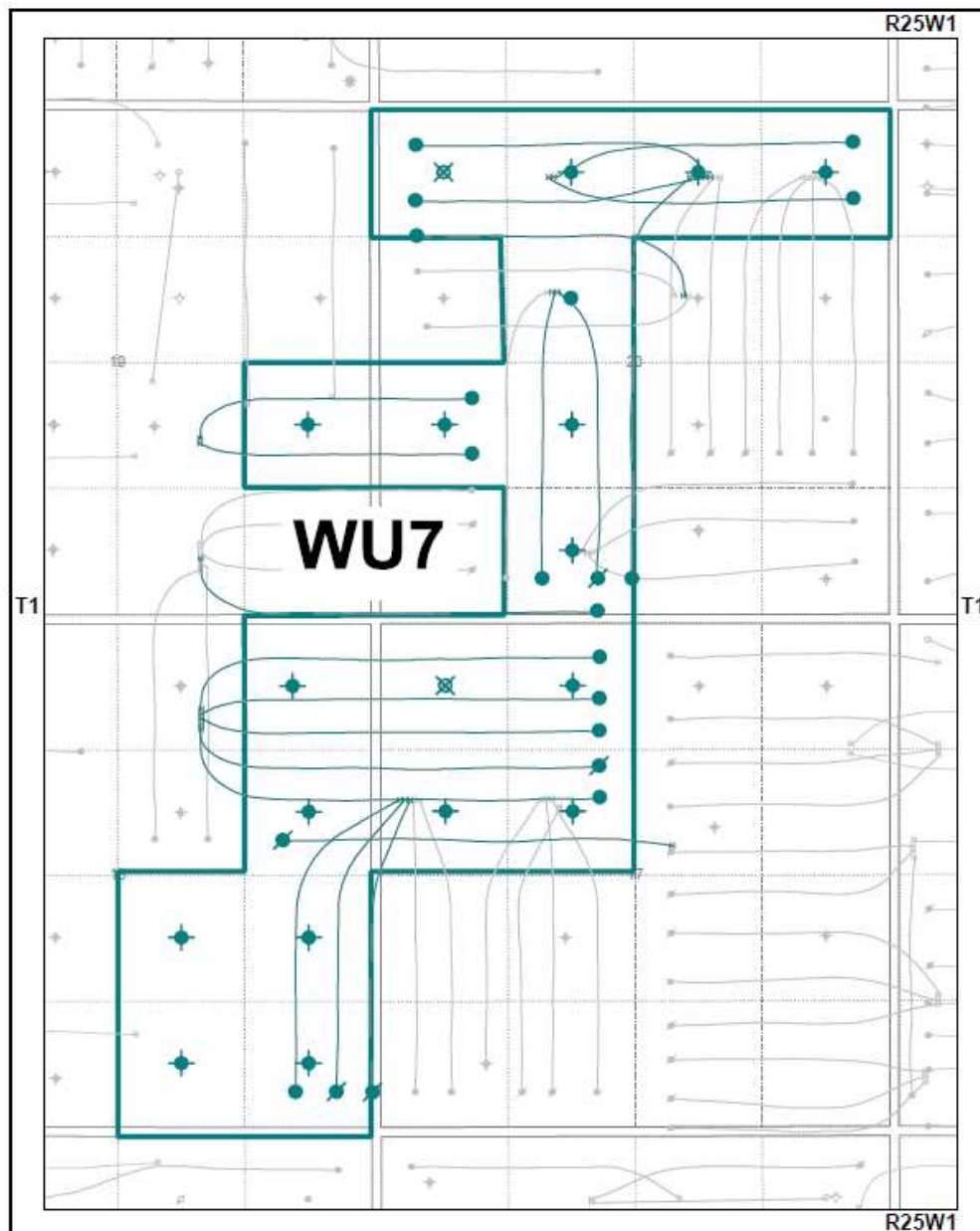
**March 8, 2019**

## INTRODUCTION

Waskada Unit No. 7 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Board Order No. PM 58 effective January 1987. The Unit area contains 24 abandoned/suspended wells, including 5 abandoned injectors, and 15 producing/inactive wells in 19 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. 7 Area Outline**



## Waskada Unit No. 7

Tundra Oil and Gas (Tundra), as the operator of the Waskada Unit No. 7 Enhanced Oil Recovery (EOR) project hereby submits the 2018 EOR report as per section 73 of the Drilling and Production Regulations.

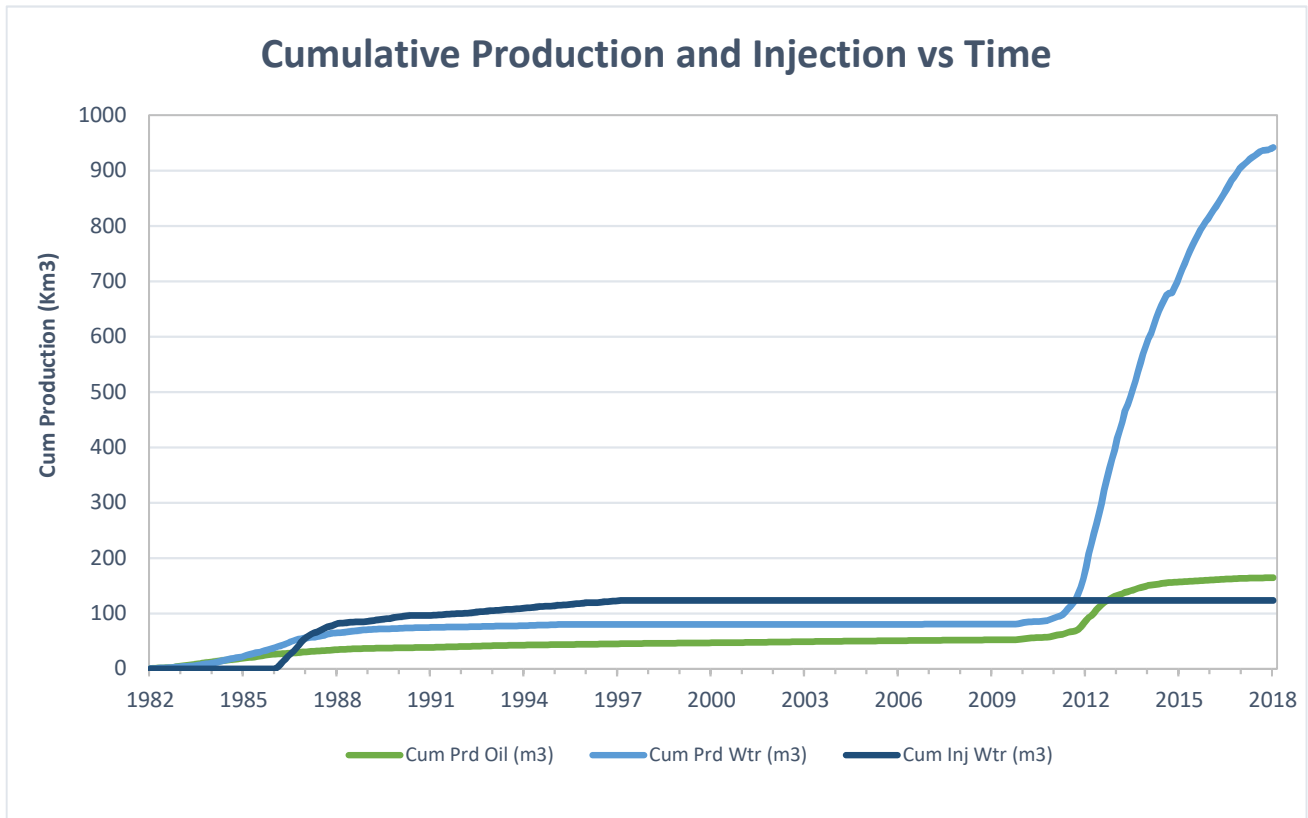
**a) Monthly oil and water production rates, injection rate, GOR and WOR**

MONTH	Cal Dly Oil m <sup>3</sup> /day	Cal Dly Wtr m <sup>3</sup> /day	Cal Inj Wtr m <sup>3</sup> /day	WOR m <sup>3</sup> /m <sup>3</sup>	GOR m <sup>3</sup> /m <sup>3</sup>
Jan-2018	4.34	143.50	0.00	33.07	0
Feb-2018	5.05	141.22	0.00	27.98	0
Mar-2018	4.68	142.12	0.00	30.38	0
Apr-2018	4.21	124.63	0.00	29.58	0
May-2018	3.93	86.58	0.00	22.04	0
Jun-2018	3.95	124.92	0.00	31.65	0
Jul-2018	3.11	112.42	0.00	36.11	0
Aug-2018	1.82	57.97	0.00	31.87	0
Sep-2018	2.46	17.82	0.00	7.25	0
Oct-2018	2.77	25.12	0.00	9.05	0
Nov-2018	4.74	63.32	0.00	13.36	0
Dec-2018	3.82	83.60	0.00	21.91	0

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

2018 PRODUCTION	
Produced Oil (m <sup>3</sup> )	1,361
Produced Gas (m <sup>3</sup> )	0
Produced Water (m <sup>3</sup> )	34,065
Fluid Injected (m <sup>3</sup> )	0
CUMULATIVE PRODUCTION	
Produced Oil (m <sup>3</sup> )	164,607
Produced Water (m <sup>3</sup> )	941,918

## Waskada Unit No. 7



## c) Well List

## Waskada Unit No. 7 Well List

<i>UWI</i>	<i>Type</i>	<i>Status</i>	<i>Future Plans</i>
100/11-17-001-25W1/0	Vertical	Abandoned	-
102/11-17-001-25W1/0	Horizontal	Suspended	-
103/11-17-001-25W1/0	Horizontal	Producing	-
100/12-17-001-25W1/0	Vertical	Abandoned	-
100/13-17-001-25W1/0	Vertical	Abandoned	-
100/14-17-001-25W1/0	Vertical	Abandoned	-
102/14-17-001-25W1/0	Horizontal	Producing	-
103/14-17-001-25W1/0	Horizontal	Producing	-
104/14-17-001-25W1/0	Horizontal	Producing	-
100/01-18-001-25W1/0	Vertical	Abandoned	-
102/01-18-001-25W1/0	Horizontal	Producing	-
103/01-18-001-25W1/0	Horizontal	Suspended	-
104/01-18-001-25W1/0	Horizontal	Suspended	-
100/02-18-001-25W1/0	Vertical	Abandoned	-
100/07-18-001-25W1/2	Vertical	Abandoned	-
100/08-18-001-25W1/0	Vertical	Abandoned	-
100/09-18-001-25W1/0	Vertical	Abandoned	-
102/09-18-001-25W1/0	Horizontal	Suspended	-
100/16-18-001-25W1/0	Vertical	Abandoned	-
100/08-19-001-25W1/2	Vertical	Abandoned	-
100/03-20-001-25W1/0	Vertical	Abandoned	-
102/03-20-001-25W1/0	Horizontal	Suspended	-
103/03-20-001-25W1/0	Horizontal	Producing	-
104/03-20-001-25W1/0	Horizontal	Suspended	-
105/03-20-001-25W1/0	Horizontal	Producing	-
100/05-20-001-25W1/0	Vertical	Abandoned	-
102/05-20-001-25W1/0	Horizontal	Producing	-
103/05-20-001-25W1/0	Horizontal	Producing	-
100/06-20-001-25W1/0	Vertical	Abandoned Zone	-
100/11-20-001-25W1/0	Vertical	Producing	-
104/12-20-001-25W1/0	Horizontal	Producing	-
100/13-20-001-25W1/2	Vertical	Abandoned	-
102/13-20-001-25W1/0	Horizontal	Producing	-
103/13-20-001-25W1/0	Horizontal	Producing	-
100/14-20-001-25W1/0	Vertical	Abandoned Zone	-
100/15-20-001-25W1/0	Vertical	Abandoned	-
100/16-20-001-25W1/0	Vertical	Abandoned	-
102/16-20-001-25W1/0	Horizontal	Producing	-
103/16-20-001-25W1/0	Horizontal	Producing	-