

**Waskada Unit No. 14**

**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**

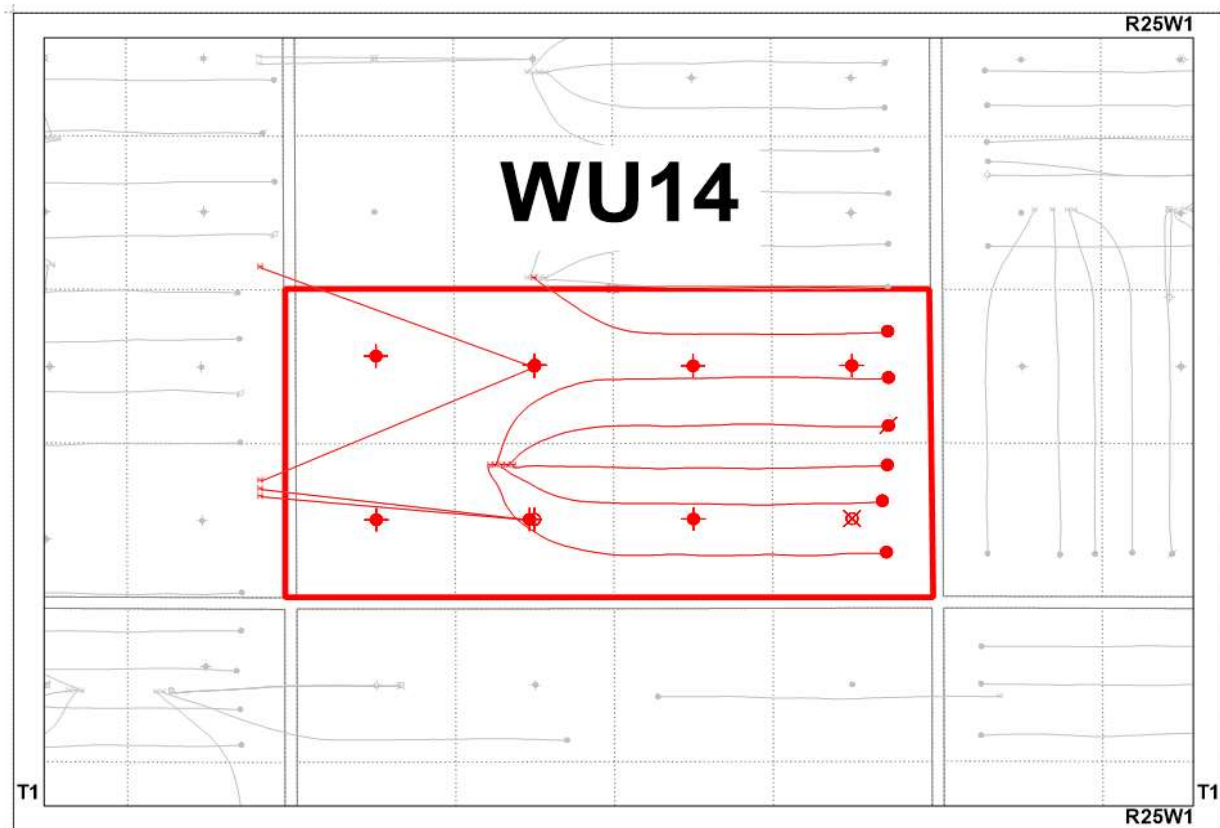
**March 25, 2019**

## INTRODUCTION

Waskada Unit No. 14 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Board Order No. PM 58 effective February 1988. The Unit area contains 10 abandoned/inactive wells, including 3 abandoned injectors, and 4 producing horizontal wells and 4 horizontal wells waiting to be completed, in 8 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. 14 Area Outline**





## Waskada Unit No. 14

Tundra Oil and Gas (Tundra), as the operator of the Waskada Unit No. 14 Enhanced Oil Recovery (EOR) project hereby submits the 2018 EOR report as per section 73 of the Drilling and Production Regulations.

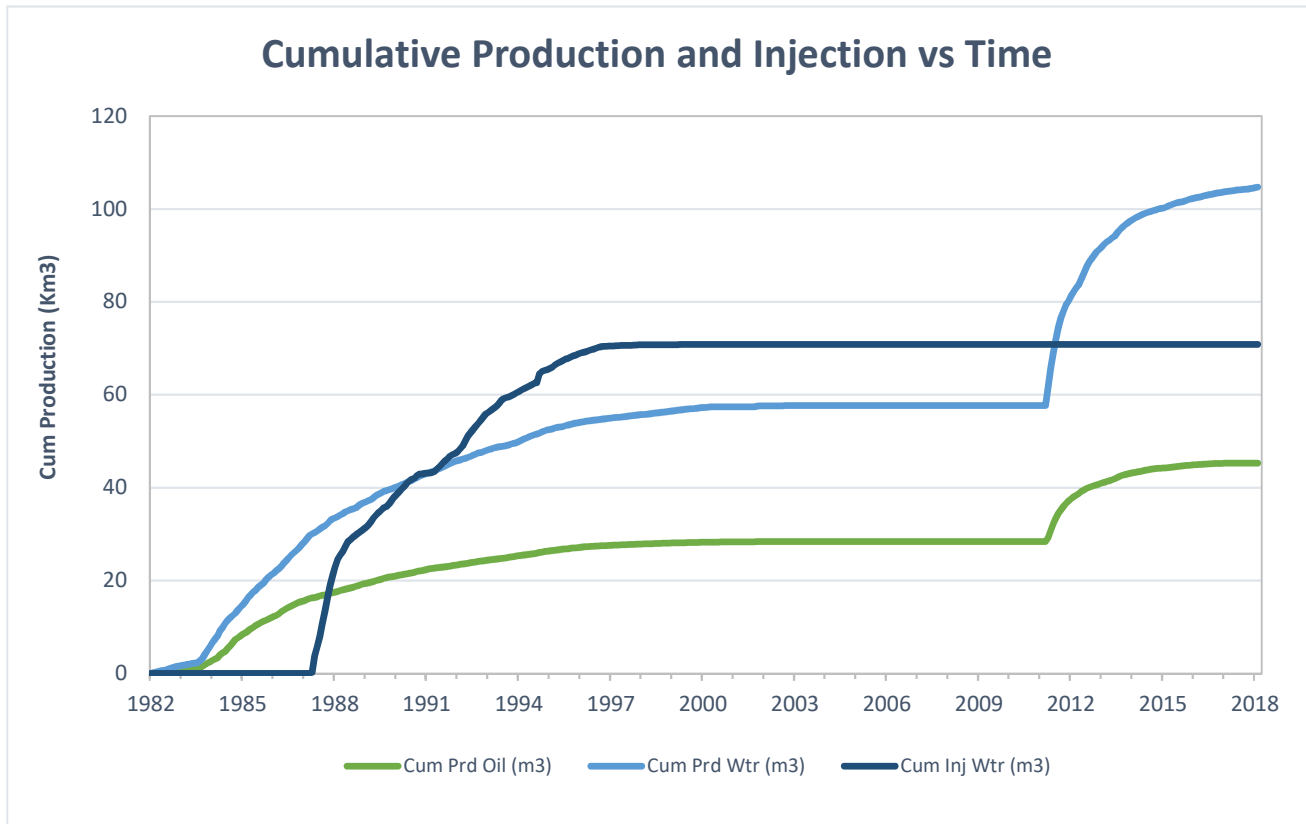
**a) Monthly oil and water production rates, injection rate, GOR and WOR**

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	0.22	2.69	0.00	12.25	0
Feb-2018	0.14	1.93	0.00	13.87	0
Mar-2018	0.21	3.45	0.00	16.23	0
Apr-2018	0.19	3.19	0.00	16.79	0
May-2018	0.08	1.61	0.00	20.79	0
Jun-2018	0.07	1.50	0.00	21.48	0
Jul-2018	0.04	1.50	0.00	42.18	0
Aug-2018	0.04	1.50	0.00	42.18	0
Sep-2018	0.08	3.14	0.00	37.72	0
Oct-2018	0.06	3.45	0.00	56.32	0
Nov-2018	0.02	3.47	0.00	208.40	0
Dec-2018	0.01	4.04	0.00	417.67	0

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

2018 PRODUCTION	
Produced Oil (m <sup>3</sup> )	35
Produced Gas (m <sup>3</sup> )	0
Produced Water (m <sup>3</sup> )	959
Fluid Injected (m <sup>3</sup> )	0
CUMULATIVE PRODUCTION	
Produced Oil (m <sup>3</sup> )	45,288
Produced Water (m <sup>3</sup> )	104,706

## Waskada Unit No. 14



## c) Well List

## Waskada Unit No. 14 Well List

<i><b>UWI</b></i>	<i><b>Type</b></i>	<i><b>Status</b></i>	<i><b>Future Plans</b></i>
100/01-32-001-25W1/0	Vertical	Abandoned	-
102/01-32-001-25W1/0	Horizontal	Producing	-
103/01-32-001-25W1/0	Horizontal	Producing	-
104/01-32-001-25W1/0	Horizontal	Producing	-
100/02-32-001-25W1/0	Vertical	Abandoned	-
102/03-32-001-25W1/0	Vertical	Abandoned	-
103/03-32-001-25W1/0	Horizontal	Drilled & Cased	-
104/03-32-001-25W1/0	Horizontal	Drilled & Cased	-
100/04-32-001-25W1/0	Vertical	Abandoned Zone	-
100/05-32-001-25W1/0	Vertical	Abandoned	-
100/06-32-001-25W1/0	Vertical	Abandoned	-
102/06-32-001-25W1/0	Horizontal	Drilled & Cased	-
103/06-32-001-25W1/0	Horizontal	Drilled & Cased	-
100/07-32-001-25W1/0	Vertical	Abandoned	-
100/08-32-001-25W1/2	Vertical	Abandoned	-
102/08-32-001-25W1/0	Horizontal	Producing	-
103/08-32-001-25W1/0	Horizontal	Suspended	-
104/08-32-001-25W1/0	Horizontal	Producing	-