

Waskada Unit No. 4

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

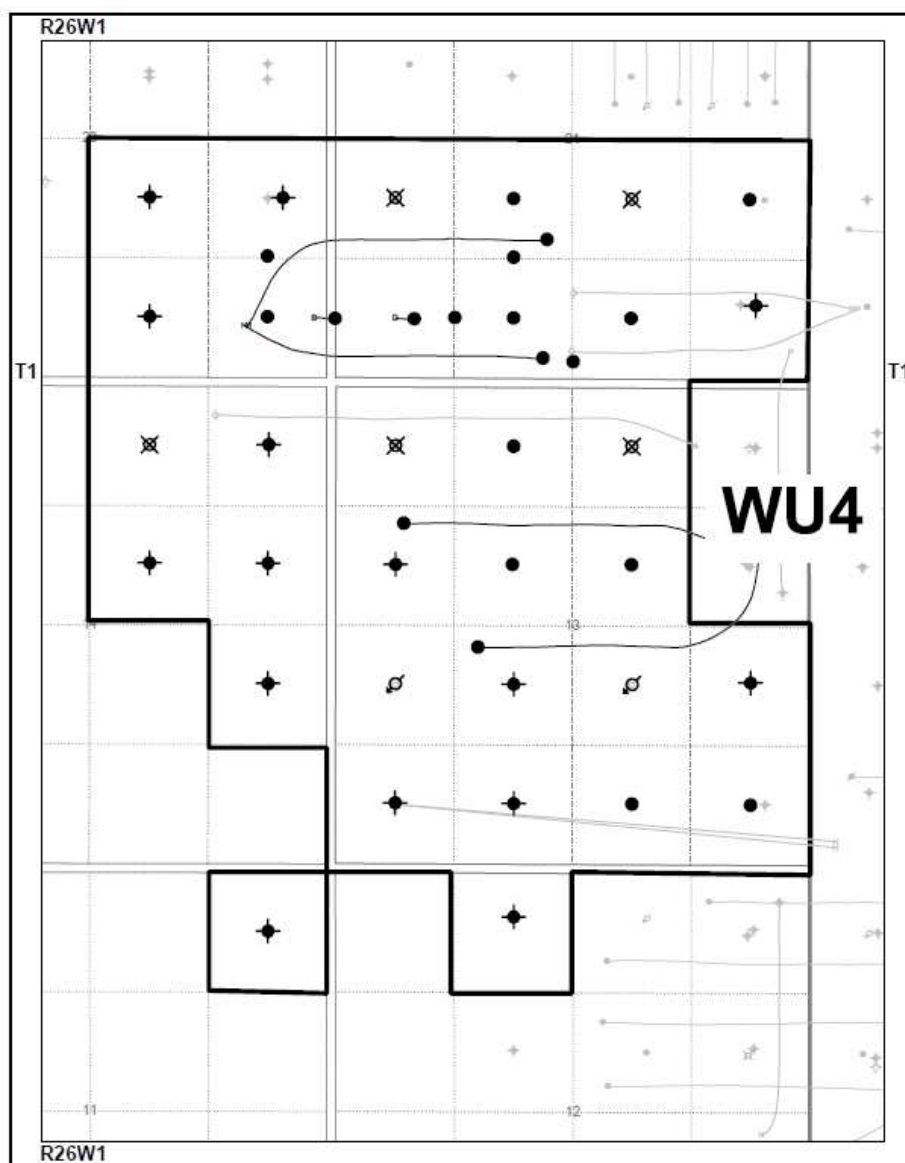
July 31, 2018

INTRODUCTION

Waskada Unit No. 4 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Board Order No. PM58 effective June 1984. The Unit area contains 22 abandoned/inactive wells, including 9 inactive/abandoned injectors, and 20 producing wells in 33 LSDs in Township 1 Range 26 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. 4 Area Outline



Waskada Unit No. 4

Tundra Oil and Gas (Tundra), as the operator of the Waskada Unit No. 4 Enhanced Oil Recovery (EOR) project hereby submits the 2017 EOR report as per section 73 of the Drilling and Production Regulations.

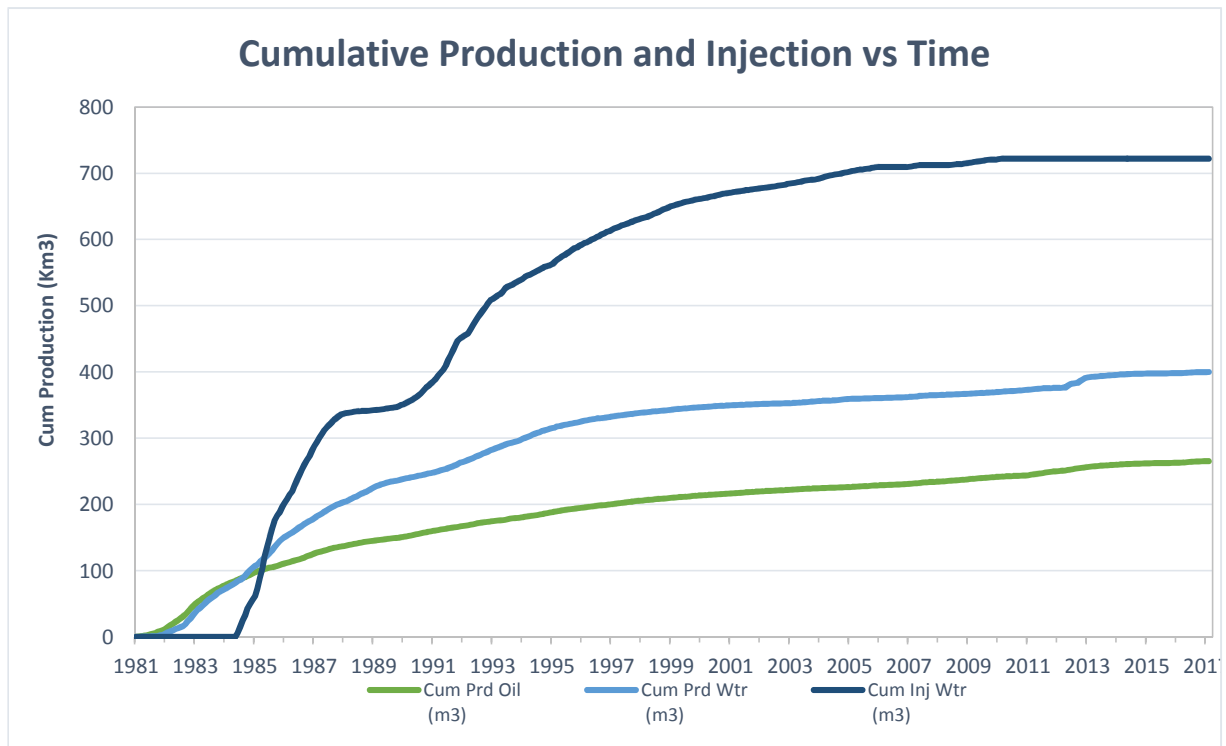
a) Monthly oil and water production rates, injection rate, GOR and WOR

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	7.68	4.01	0.00	0.52	0
Feb-2017	9.38	8.37	0.00	0.89	0
Mar-2017	10.87	7.22	0.00	0.66	0
Apr-2017	11.54	7.38	0.00	0.64	0
May-2017	9.00	6.61	0.00	0.73	0
Jun-2017	5.77	6.02	0.00	1.04	0
Jul-2017	5.71	3.45	0.00	0.60	0
Aug-2017	4.64	2.82	0.00	0.61	0
Sep-2017	3.76	2.47	0.00	0.66	0
Oct-2017	3.29	2.11	0.00	0.64	0
Nov-2017	1.67	1.38	0.00	0.83	0
Dec-2017	1.97	1.25	0.00	0.63	0

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

2017 PRODUCTION	
Produced Oil (m ³)	2,283
Produced Gas (m ³)	0
Produced Water (m ³)	1,603
Fluid Injected (m ³)	0
CUMULATIVE PRODUCTION	
Produced Oil (m ³)	265,306
Produced Water (m ³)	399,919

Waskada Unit No. 4



<i>UWI</i>	<i>Type</i>	<i>Status</i>	<i>Future Plans</i>
100/16-11-001-26W1/0	Vertical	Abandoned	-
100/14-12-001-26W1/0	Vertical	Abandoned	-
100/01-13-001-26W1/0	Vertical	Producing	-
100/02-13-001-26W1/0	Vertical	Producing	-
100/03-13-001-26W1/0	Vertical	Abandoned	-
100/04-13-001-26W1/0	Vertical	Abandoned	-
100/05-13-001-26W1/0	Vertical	Injection	-
100/06-13-001-26W1/0	Vertical	Abandoned	-
102/06-13-001-26W1/0	Horizontal	Producing	-
100/07-13-001-26W1/0	Vertical	Injection	-
100/08-13-001-26W1/0	Vertical	Abandoned	-
100/10-13-001-26W1/0	Vertical	Producing	-
100/11-13-001-26W1/0	Vertical	Producing	-
100/12-13-001-26W1/0	Vertical	Abandoned	-
102/12-13-001-26W1/0	Horizontal	Producing	-
100/13-13-001-26W1/0	Vertical	Abandoned	-
100/14-13-001-26W1/0	Vertical	Producing	-
100/15-13-001-26W1/0	Vertical	Abandoned	-
100/08-14-001-26W1/0	Vertical	Abandoned	-
100/09-14-001-26W1/0	Vertical	Abandoned	-
100/10-14-001-26W1/0	Vertical	Abandoned	-
100/15-14-001-26W1/0	Vertical	Abandoned	-
100/16-14-001-26W1/0	Vertical	Abandoned	-
100/01-23-001-26W1/0	Vertical	Producing	-
100/02-23-001-26W1/0	Vertical	Abandoned	-
100/07-23-001-26W1/2	Vertical	Abandoned	-
102/08-23-001-26W1/0	Vertical	Abandoned	-
1A0/08-23-001-26W1/0	Vertical	Producing	-
102/01-24-001-26W1/0	Vertical	Abandoned	-
100/02-24-001-26W1/0	Vertical	Producing	-
1B0/02-24-001-26W1/0	Vertical	Producing	-
100/03-24-001-26W1/0	Vertical	Producing	-
102/03-24-001-26W1/0	Horizontal	Producing	-
1C0/03-24-001-26W1/0	Vertical	Producing	-
100/04-24-001-26W1/0	Vertical	Producing	-
1C0/04-24-001-26W1/0	Dir/Dev	Producing	-
100/05-24-001-26W1/0	Vertical	Abandoned	-
100/06-24-001-26W1/0	Vertical	Producing	-
102/06-24-001-26W1/0	Horizontal	Producing	-
1A0/06-24-001-26W1/0	Vertical	Producing	-
100/07-24-001-26W1/0	Vertical	Abandoned	-
102/08-24-001-26W1/0	Vertical	Pumping	-