

Waskada Unit No. 5

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

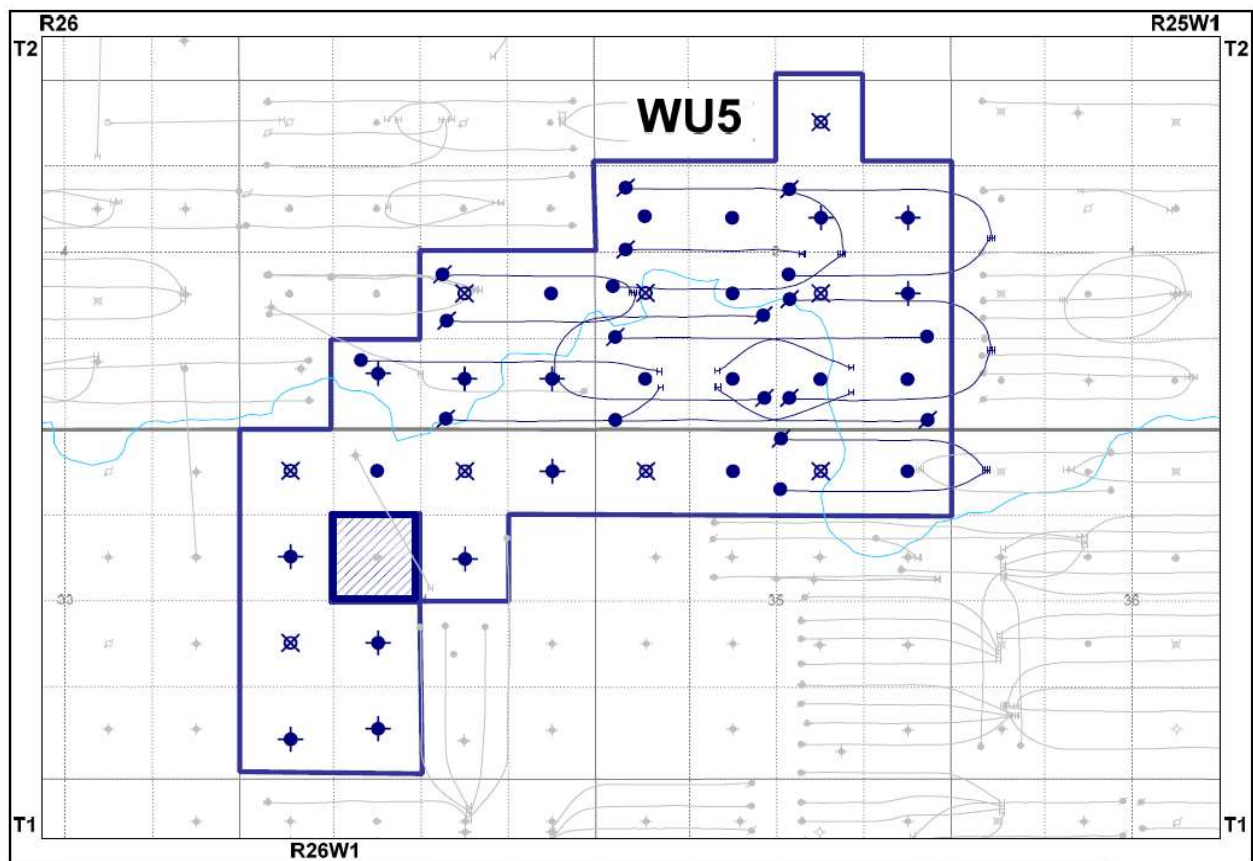
March 8, 2019

INTRODUCTION

Waskada Unit No. 5 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Board Order No. PM58 effective January 1985. The Unit area contains 39 abandoned/suspended wells, including 9 inactive/abandoned injectors, and 14 producing wells in 32 LSDs in Townships 1 and 2, 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. 5 Area Outline



Waskada Unit No. 5

Tundra Oil and Gas (Tundra), as the operator of the Waskada Unit No. 5 Enhanced Oil Recovery (EOR) project hereby submits the 2018 EOR report as per section 73 of the Drilling and Production Regulations.

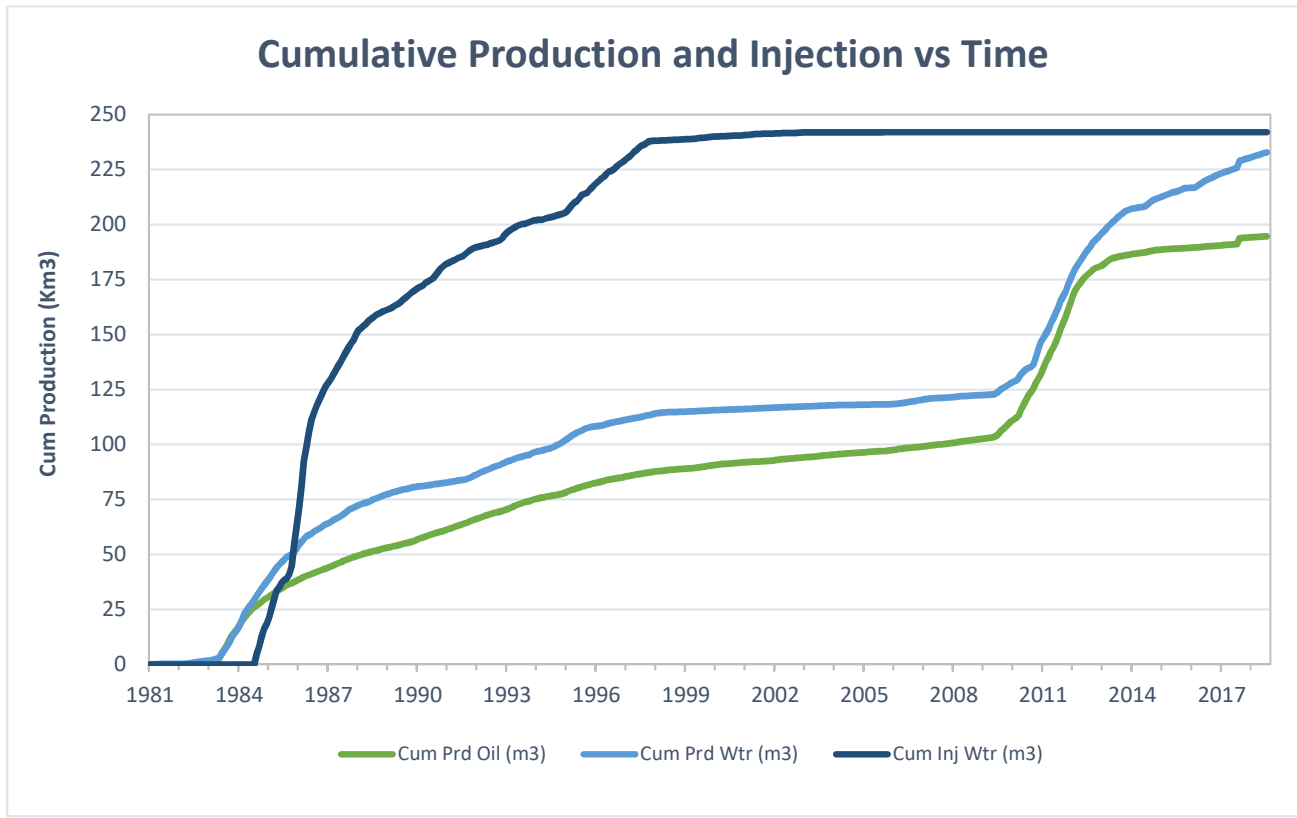
a) Monthly oil and water production rates, injection rate, GOR and WOR

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	2.26	12.49	0.00	5.53	0
Feb-2018	2.26	12.23	0.00	5.40	0
Mar-2018	3.10	11.42	0.00	3.69	0
Apr-2018	3.04	11.12	0.00	3.65	0
May-2018	2.67	11.16	0.00	4.17	0
Jun-2018	2.84	12.19	0.00	4.29	0
Jul-2018	2.23	11.78	0.00	5.29	0
Aug-2018	2.98	11.54	0.00	3.87	0
Sep-2018	2.38	11.34	0.00	4.77	0
Oct-2018	1.94	11.17	0.00	5.76	0
Nov-2018	1.96	10.18	0.00	5.19	0
Dec-2018	1.48	11.23	0.00	7.58	0

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

2018 PRODUCTION	
Produced Oil (m ³)	886
Produced Gas (m ³)	0
Produced Water (m ³)	4,192
Fluid Injected (m ³)	0
CUMULATIVE PRODUCTION	
Produced Oil (m ³)	194,629
Produced Water (m ³)	232,758

Waskada Unit No. 5



c) Well List

Waskada Unit No. 5 Well List

<i>UWI</i>	<i>Type</i>	<i>Status</i>	<i>Future Plans</i>
100/03-34-001-26W1/0	Vertical	Abandoned	-
100/04-34-001-26W1/0	Vertical	Abandoned	-
100/05-34-001-26W1/0	Vertical	Abandoned	-
100/06-34-001-26W1/0	Vertical	Abandoned Zone	-
102/10-34-001-26W1/0	Vertical	Abandoned	-
100/12-34-001-26W1/2	Vertical	Abandoned	-
100/13-34-001-26W1/0	Vertical	Abandoned	-
100/14-34-001-26W1/2	Vertical	Abandoned Zone	-
100/15-34-001-26W1/0	Vertical	Abandoned	-
100/16-34-001-26W1/0	Vertical	Abandoned	-
100/13-35-001-26W1/0	Vertical	Abandoned	-
100/14-35-001-26W1/2	Vertical	Abandoned Zone	-
100/15-35-001-26W1/0	Vertical	Abandoned	-
102/15-35-001-26W1/0	Horizontal	Suspended	-
103/15-35-001-26W1/0	Horizontal	Producing	-
100/16-35-001-26W1/0	Vertical	Producing	-
100/02-04-002-25W1/0	Horizontal	Producing	-
100/01-02-002-26W1/0	Vertical	Producing	-
102/01-02-002-26W1/0	Horizontal	Suspended	-
103/01-02-002-26W1/0	Horizontal	Producing	-
100/02-02-002-26W1/0	Vertical	Abandoned Zone	-
102/02-02-002-26W1/0	Horizontal	Suspended	-
100/03-02-002-26W1/0	Vertical	Producing	-
102/03-02-002-26W1/0	Horizontal	Suspended	-
100/04-02-002-26W1/0	Vertical	Producing	-
102/04-02-002-26W1/0	Horizontal	Suspended	-
103/04-02-002-26W1/0	Horizontal	Producing	-
100/05-02-002-26W1/0	Vertical	Abandoned	-
102/05-02-002-26W1/0	Horizontal	Producing	-
100/06-02-002-26W1/0	Vertical	Producing	-
102/06-02-002-26W1/0	Horizontal	Suspended	-
100/07-02-002-26W1/0	Vertical	Abandoned	-
102/07-02-002-26W1/0	Horizontal	Producing	-
103/07-02-002-26W1/0	Horizontal	Suspended	-
100/08-02-002-26W1/0	Vertical	Abandoned Zone	-
100/09-02-002-26W1/0	Vertical	Abandoned	-
100/10-02-002-26W1/0	Vertical	Abandoned Zone	-
102/10-02-002-26W1/0	Horizontal	Suspended	-
100/11-02-002-26W1/0	Vertical	Producing	-
100/12-02-002-26W1/0	Vertical	Abandoned Zone	-
102/12-02-002-26W1/0	Horizontal	Suspended	-
103/12-02-002-26W1/0	Horizontal	Suspended	-
100/15-02-002-26W1/0	Vertical	Abandoned	-
100/01-03-002-26W1/0	Vertical	Abandoned	-
102/01-03-002-26W1/2	Horizontal	Suspended	-

c) Well List

Waskada Unit No. 5 Well List

<i>UWI</i>	<i>Type</i>	<i>Status</i>	<i>Future Plans</i>
100/02-03-002-26W1/0	Vertical	Abandoned	-
102/02-03-002-26W1/0	Horizontal	Suspended	-
100/03-03-002-26W1/0	Vertical	Abandoned	-
102/03-03-002-26W1/0	Horizontal	Producing	-
100/07-03-002-26W1/0	Vertical	Abandoned	-
102/07-03-002-26W1/0	Horizontal	Suspended	-
103/07-03-002-26W1/0	Horizontal	Suspended	-
100/08-03-002-26W1/0	Vertical	Producing	-