

Goodlands Unit No. 3

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

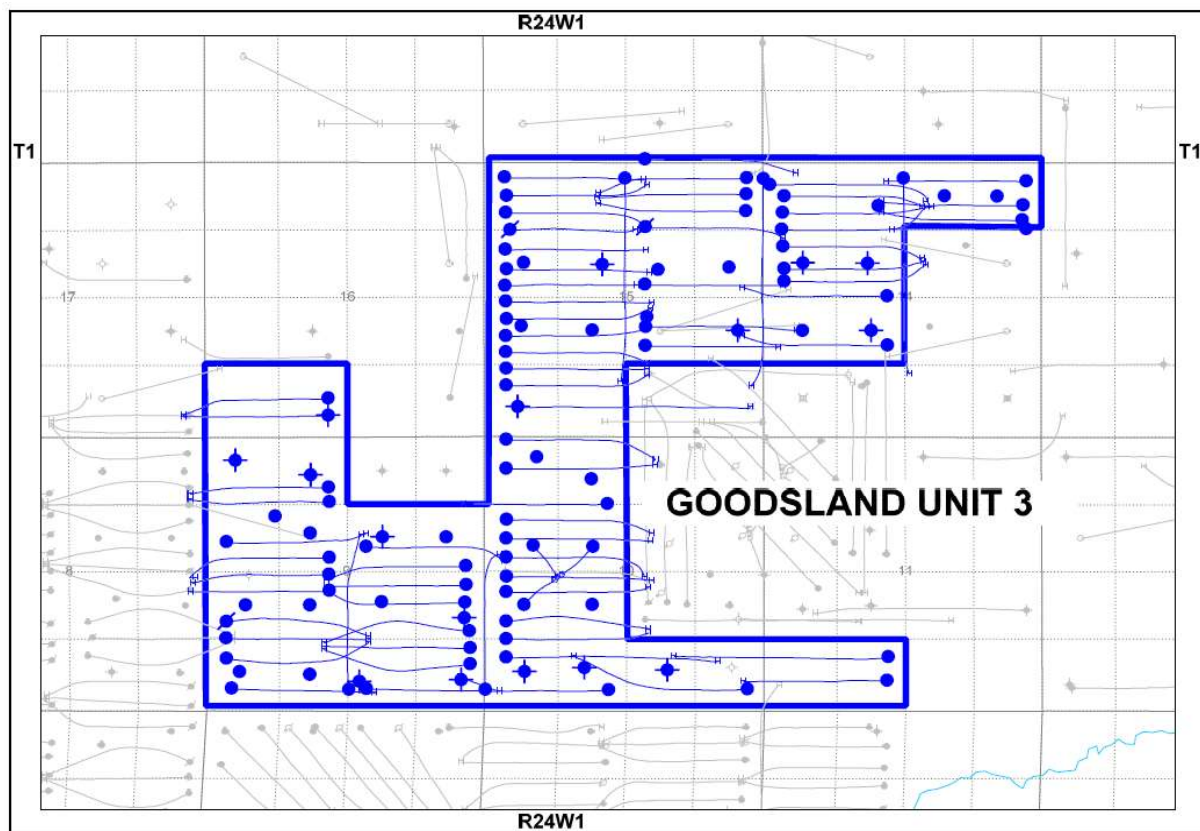
April 8, 2019

INTRODUCTION

Goodlands Unit No. 3 Enhanced Oil Recovery (EOR) Waterflood Project was approved August 1, 2017. Goodlands Unit No. 3 area contains 35 vertical wells (14 abandoned, 21 producing), 3 deviated producing wells and 75 horizontal wells (5 abandoned/suspended, 70 producing) in 50 Legal Sub Divisions (LSD) in Township 1, Range 24 W1 as shown in the figure below.

This unit is currently not on injection.

Figure 1: Goodlands Unit No. 3 Area Outline



Goodlands Unit No. 3

Tundra Oil and Gas (Tundra), as the operator of the Goodlands Unit No. 3 Enhanced Oil Recovery (EOR) project hereby submits the 2018 EOR report as per section 73 of the Drilling and Production Regulations.

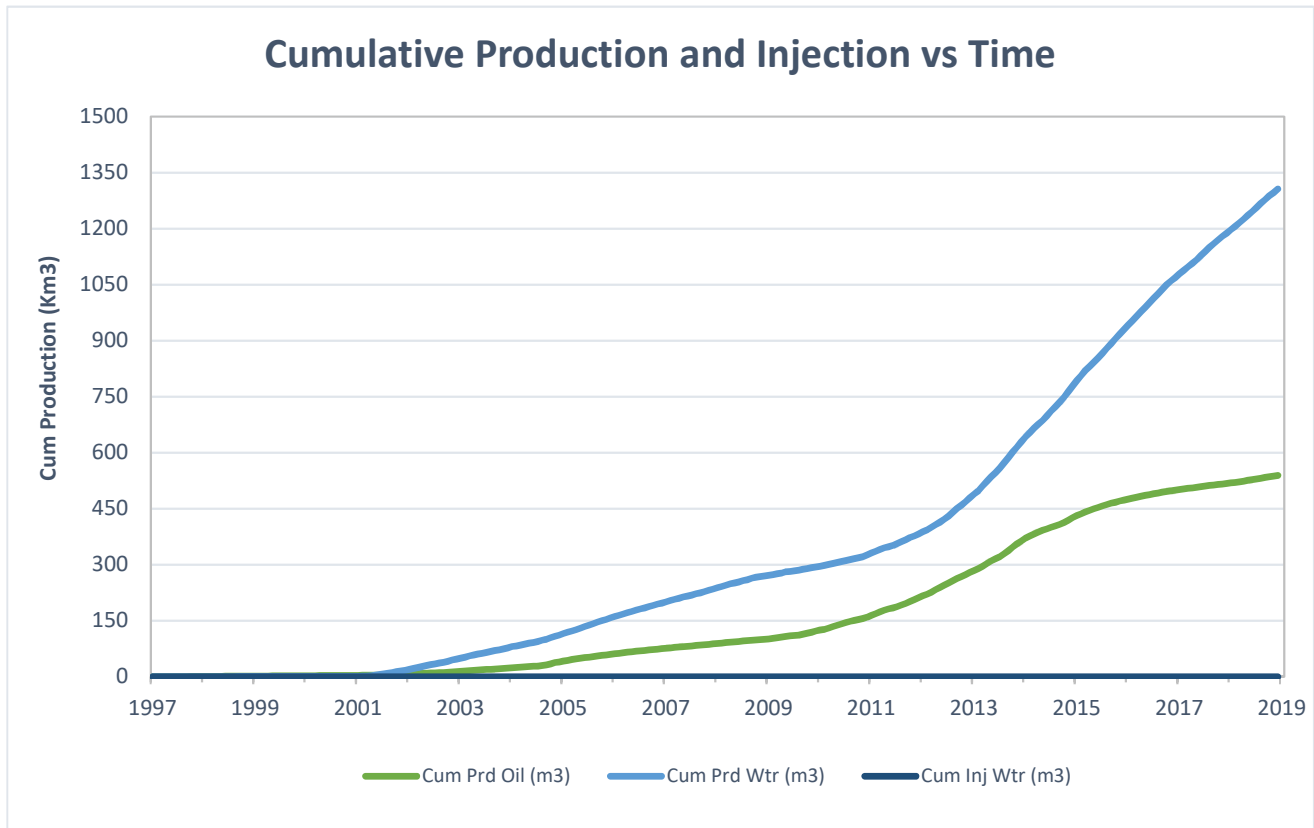
a) Monthly oil and water production rates, injection rate, GOR and WOR

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	43.19	284.78	0.00	6.59	0
Feb-2018	48.03	308.75	0.00	6.43	0
Mar-2018	61.64	325.93	0.00	5.29	0
Apr-2018	60.24	339.17	0.00	5.63	0
May-2018	63.14	323.85	0.00	5.13	0
Jun-2018	58.00	327.85	0.00	5.65	0
Jul-2018	63.39	332.48	0.00	5.24	0
Aug-2018	67.49	359.61	0.00	5.33	0
Sep-2018	68.13	356.76	0.00	5.24	0
Oct-2018	57.42	314.52	0.00	5.48	0
Nov-2018	61.73	313.69	0.00	5.08	0
Dec-2018	58.74	295.58	0.00	5.03	0

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

2018 PRODUCTION	
Produced Oil (m ³)	21,653
Produced Gas (m ³)	0
Produced Water (m ³)	118,108
Fluid Injected (m ³)	0
CUMULATIVE PRODUCTION	
Produced Oil (m ³)	539,257
Produced Water (m ³)	1,306,323

Goodlands Unit No. 3



<i>UWI</i>	<i>Type</i>	<i>Status</i>	<i>Future Plans</i>
100/01-09-001-24W1/0	Vertical	Abandoned Zone	-
102/01-09-001-24W1/0	Horizontal	Producing	-
103/01-09-001-24W1/0	Horizontal	Producing	-
104/01-09-001-24W1/0	Horizontal	Producing	-
100/02-09-001-24W1/0	Vertical	Abandoned Zone	-
102/02-09-001-24W1/0	Horizontal	Producing	-
103/02-09-001-24W1/0	Horizontal	Producing	-
100/03-09-001-24W1/0	Vertical	Producing	-
100/04-09-001-24W1/0	Vertical	Producing	-
102/04-09-001-24W1/0	Horizontal	Producing	-
103/04-09-001-24W1/0	Horizontal	Producing	-
100/05-09-001-24W1/0	Vertical	Producing	-
102/05-09-001-24W1/0	Horizontal	Producing	-
103/05-09-001-24W1/0	Horizontal	Suspended	-
100/06-09-001-24W1/0	Vertical	Producing	-
102/06-09-001-24W1/0	Horizontal	Producing	-
103/06-09-001-24W1/2	Horizontal	Producing	-
100/07-09-001-24W1/0	Vertical	Producing	-
100/08-09-001-24W1/0	Vertical	Abandoned Zone	-
102/08-09-001-24W1/0	Horizontal	Producing	-
103/08-09-001-24W1/0	Horizontal	Producing	-
104/08-09-001-24W1/0	Horizontal	Producing	-
100/09-09-001-24W1/0	Vertical	Producing	-
102/09-09-001-24W1/0	Horizontal	Producing	-
100/10-09-001-24W1/0	Vertical	Abandoned Zone	-
102/10-09-001-24W1/0	Horizontal	Producing	-
100/11-09-001-24W1/0	Vertical	Producing	-
102/11-09-001-24W1/0	Horizontal	Producing	-
100/12-09-001-24W1/0	Vertical	Producing	-
102/12-09-001-24W1/0	Horizontal	Producing	-
100/13-09-001-24W1/0	Vertical	Abandoned Zone	-
100/14-09-001-24W1/0	Vertical	Abandoned Zone	-
102/14-09-001-24W1/0	Horizontal	Producing	-
103/14-09-001-24W1/0	Horizontal	Producing	-
102/01-10-001-24W1/0	Horizontal	Producing	WIW Conversion
100/02-10-001-24W1/0	Vertical	Abandoned Zone	-
100/03-10-001-24W1/0	Vertical	Abandoned Zone	-
102/03-10-001-24W1/0	Horizontal	Producing	-
100/04-10-001-24W1/0	Vertical	Abandoned Zone	-
102/04-10-001-24W1/0	Horizontal	Producing	-
103/04-10-001-24W1/0	Horizontal	Producing	-
100/05-10-001-24W1/0	Dir/Dev	Producing	-
102/05-10-001-24W1/0	Horizontal	Producing	-
103/05-10-001-24W1/0	Horizontal	Producing	WIW Conversion
105/05-10-001-24W1/0	Horizontal	Producing	-

c) Well List

Goodlands Unit No. 3 Well List

<i>UWI</i>	<i>Type</i>	<i>Status</i>	<i>Future Plans</i>
100/06-10-001-24W1/0	Vertical	Pumping	-
100/11-10-001-24W1/0	Dir/Dev	Producing	-
102/11-10-001-24W1/0	Horizontal	Producing	-
100/12-10-001-24W1/0	Dir/Dev	Pumping	-
102/12-10-001-24W1/0	Horizontal	Producing	-
103/12-10-001-24W1/0	Horizontal	Producing	-
104/12-10-001-24W1/0	Horizontal	Producing	-
100/13-10-001-24W1/0	Vertical	Producing	-
102/13-10-001-24W1/0	Horizontal	Suspended	-
103/13-10-001-24W1/0	Horizontal	Producing	-
100/14-10-001-24W1/0	Vertical	Producing	-
100/03-11-001-24W1/0	Horizontal	Producing	-
102/03-11-001-24W1/0	Horizontal	Producing	-
100/05-14-001-24W1/0	Vertical	Pumping	-
100/06-14-001-24W1/0	Vertical	Abandoned Zone	-
102/06-14-001-24W1/0	Horizontal	Producing	-
100/11-14-001-24W1/0	Vertical	Abandoned Zone	-
102/11-14-001-24W1/0	Horizontal	Producing	-
100/12-14-001-24W1/0	Vertical	Abandoned Zone	-
102/12-14-001-24W1/0	Horizontal	Producing	-
103/12-14-001-24W1/0	Horizontal	Producing	-
104/12-14-001-24W1/0	Horizontal	Producing	-
100/13-14-001-24W1/0	Horizontal	Producing	-
102/13-14-001-24W1/0	Horizontal	Producing	-
103/13-14-001-24W1/0	Horizontal	Producing	-
104/13-14-001-24W1/0	Horizontal	Producing	-
100/14-14-001-24W1/0	Vertical	Producing	-
102/14-14-001-24W1/0	Horizontal	Producing	-
100/15-14-001-24W1/0	Vertical	Producing	-
100/16-14-001-24W1/0	Vertical	Producing	-
102/16-14-001-24W1/0	Horizontal	Producing	-
103/16-14-001-24W1/0	Horizontal	Producing	-
104/16-14-001-24W1/0	Horizontal	Producing	-
105/16-14-001-24W1/0	Horizontal	Producing	-
100/04-15-001-24W1/0	Horizontal	Abandoned Zone	-
102/04-15-001-24W1/0	Horizontal	Producing	-
103/04-15-001-24W1/0	Horizontal	Producing	-
100/05-15-001-24W1/0	Vertical	Producing	-
102/05-15-001-24W1/0	Horizontal	Producing	-
103/05-15-001-24W1/0	Horizontal	Producing	-
104/05-15-001-24W1/0	Horizontal	Producing	-
105/05-15-001-24W1/0	Horizontal	Producing	-
100/06-15-001-24W1/0	Vertical	Producing	-
100/07-15-001-24W1/0	Vertical	Producing	-
102/07-15-001-24W1/0	Horizontal	Producing	-
103/07-15-001-24W1/0	Horizontal	Producing	-

c) Well List

Goodlands Unit No. 3 Well List

<i>UWI</i>	<i>Type</i>	<i>Status</i>	<i>Future Plans</i>
100/08-15-001-24W1/0	Vertical	Abandoned Zone	-
100/09-15-001-24W1/0	Vertical	Producing	-
100/10-15-001-24W1/0	Vertical	Pumping	-
102/10-15-001-24W1/0	Horizontal	Producing	-
100/11-15-001-24W1/0	Vertical	Abandoned Zone	-
100/12-15-001-24W1/0	Vertical	Producing	-
102/12-15-001-24W1/0	Horizontal	Suspended	-
103/12-15-001-24W1/0	Horizontal	Producing	-
104/12-15-001-24W1/0	Horizontal	Suspended	-
105/12-15-001-24W1/0	Horizontal	Producing	-
100/13-15-001-24W1/0	Horizontal	Producing	-
102/13-15-001-24W1/0	Horizontal	Producing	-
103/13-15-001-24W1/0	Horizontal	Producing	-
100/14-15-001-24W1/0	Horizontal	Producing	-
100/15-15-001-24W1/0	Horizontal	Suspended	-
100/16-15-001-24W1/0	Horizontal	Producing	-
102/16-15-001-24W1/0	Horizontal	Producing	-
103/16-15-001-24W1/0	Horizontal	Producing	-
104/16-15-001-24W1/0	Horizontal	Producing	-
100/03-16-001-24W1/0	Horizontal	Abandoned Zone	-
102/03-16-001-24W1/0	Horizontal	Producing	-
102/02-22-001-24W1/0	Horizontal	Producing	-