

**Sinclair Unit No. 19**

**Waterflood Progress Report 2017**

**January 1<sup>st</sup> through December 31<sup>st</sup> 2017**

**Prepared for:**

**Manitoba Industry, Economic Development and Mines**

**Petroleum Branch**

**Prepared by:**

**Tundra Oil and Gas**

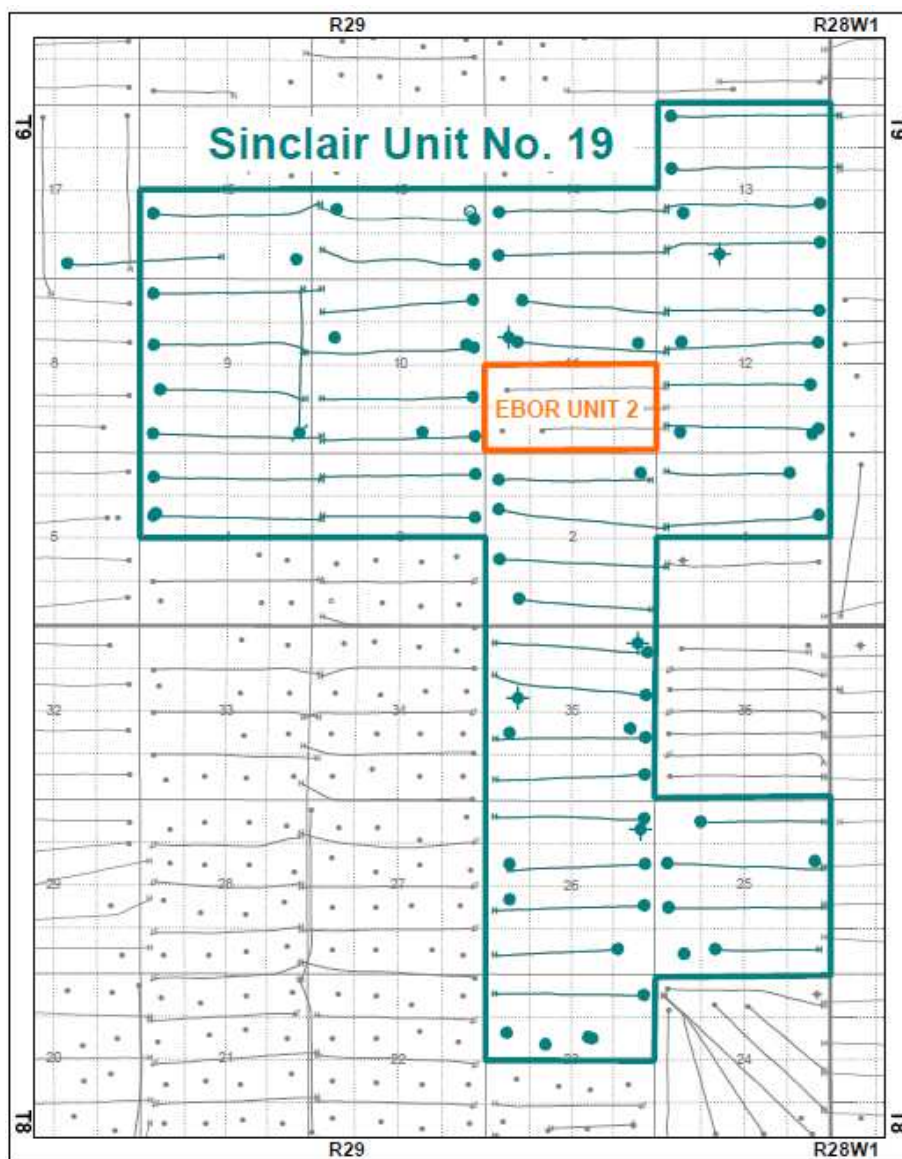
**August 9, 2018**

## INTRODUCTION

Sinclair Unit No. 19 Enhanced Oil Recovery (EOR) Waterflood Project was approved on October 1, 2017 with Tundra Oil and Gas (Tundra) as Operator. The EOR Unit area, outlined in blue, contains 76 wells (6 abandoned/suspended wells, 23 producing vertical wells and 47 producing horizontal wells) in 192 LSDs in Townships 8 & 9 Range 29 W1 as shown in the figure below.

**This unit is currently not on injection.**

**Figure 1: Sinclair Unit No. 19 Area Outline**



## Sinclair Unit No. 19

Tundra Oil and Gas (Tundra), as the operator of the Sinclair Unit No. 19 Enhanced Oil Recovery (EOR) project hereby submits the 2017 EOR report as per section 73 of the Drilling and Production Regulations.

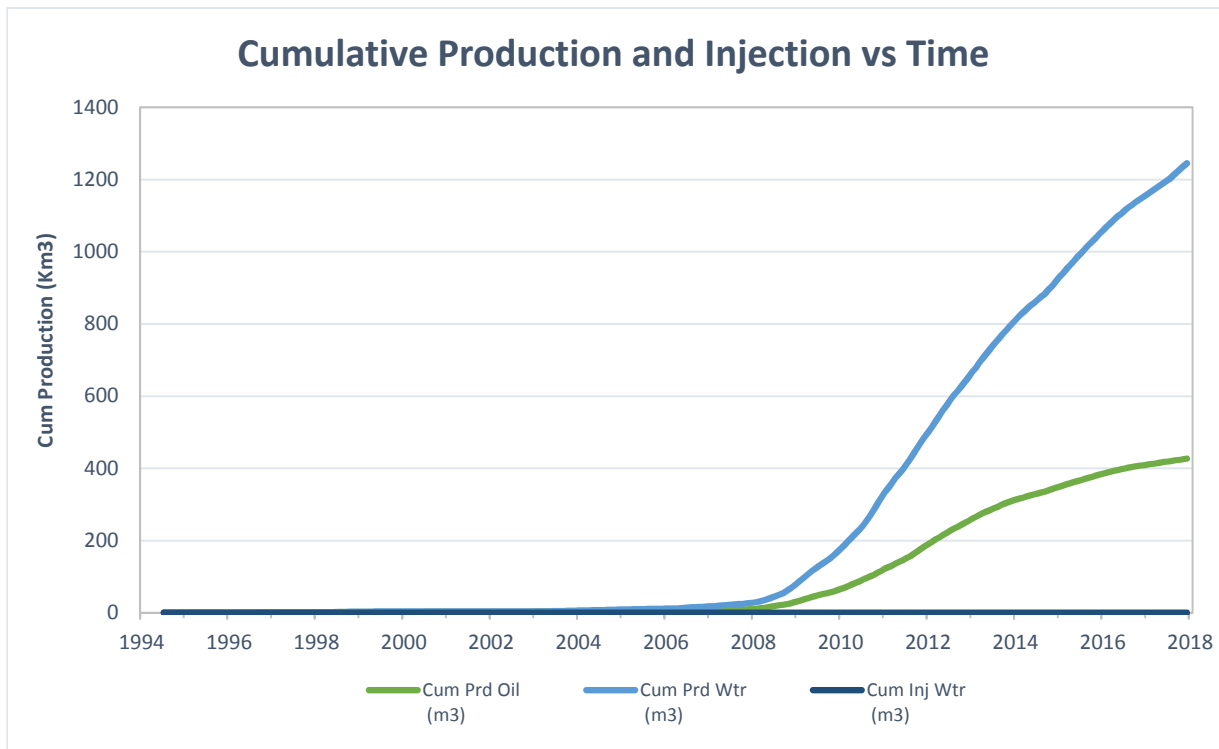
### a) Monthly oil and water production rates, injection rate, GOR and WOR

MONTH	Cal Dly Oil m <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-2017	48.16	224.40	0.00	4.66	0
Feb-2017	53.05	248.24	0.00	4.68	0
Mar-2017	50.83	237.15	0.00	4.67	0
Apr-2017	54.47	241.19	0.00	4.43	0
May-2017	48.70	212.71	0.00	4.37	0
Jun-2017	48.97	212.30	0.00	4.34	0
Jul-2017	47.93	236.56	0.00	4.94	0
Aug-2017	48.67	280.42	0.00	5.76	0
Sep-2017	50.21	305.44	0.00	6.08	0
Oct-2017	52.31	302.89	0.00	5.79	0
Nov-2017	55.19	298.64	0.00	5.41	0
Dec-2017	49.36	273.42	0.00	5.54	0

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

2017 PRODUCTION	
Produced Oil (m <sup>3</sup> )	18,476
Produced Gas (m <sup>3</sup> )	0
Produced Water (m <sup>3</sup> )	93,472
Fluid Injected (m <sup>3</sup> )	0
CUMULATIVE PRODUCTION	
Produced Oil (m <sup>3</sup> )	426,847
Produced Water (m <sup>3</sup> )	1,244,900

## Sinclair Unit No. 19



<i><b>UWI</b></i>	<i><b>Type</b></i>	<i><b>Status</b></i>	<i><b>Future Plans</b></i>
100/09-23-008-29W1/0	Vertical	Producing	-
100/10-23-008-29W1/0	Vertical	Producing	-
100/11-23-008-29W1/0	Vertical	Producing	-
100/12-23-008-29W1/0	Vertical	Producing	-
100/16-23-008-29W1/0	Horizontal	Producing	-
100/03-25-008-29W1/0	Horizontal	Producing	-
100/04-25-008-29W1/0	Vertical	Producing	-
100/05-25-008-29W1/0	Horizontal	Producing	-
100/09-25-008-29W1/0	Vertical	Producing	-
100/12-25-008-29W1/0	Horizontal	Producing	-
100/13-25-008-29W1/0	Horizontal	Producing	-
100/01-26-008-29W1/0	Horizontal	Producing	-
100/05-26-008-29W1/0	Vertical	Producing	-
100/08-26-008-29W1/0	Horizontal	Producing	-
100/09-26-008-29W1/0	Horizontal	Producing	-
100/12-26-008-29W1/0	Vertical	Producing	-
100/16-26-008-29W1/0	Vertical	Abandoned Zone	-
102/16-26-008-29W1/0	Horizontal	Producing	-
100/01-35-008-29W1/0	Horizontal	Producing	-
100/05-35-008-29W1/0	Vertical	Producing	-
100/08-35-008-29W1/0	Vertical	Producing	-
102/08-35-008-29W1/0	Horizontal	Producing	-
100/09-35-008-29W1/0	Horizontal	Producing	-
100/12-35-008-29W1/0	Vertical	Abandoned Zone	-
100/16-35-008-29W1/3	Vertical	Abandoned Zone	-
102/16-35-008-29W1/0	Horizontal	Producing	-
100/09-01-009-29W1/0	Horizontal	Producing	-
100/16-01-009-29W1/0	Horizontal	Producing	-
100/04-02-009-29W1/0	Horizontal	Producing	-
100/05-02-009-29W1/0	Horizontal	Producing	-
100/12-02-009-29W1/0	Horizontal	Producing	-
100/13-02-009-29W1/0	Horizontal	Producing	-
100/16-02-009-29W1/0	Vertical	Producing	-
100/09-03-009-29W1/0	Horizontal	Producing	-
100/16-03-009-29W1/0	Horizontal	Producing	WIW Conversion
100/12-04-009-29W1/0	Vertical	Producing	-
102/12-04-009-29W1/0	Horizontal	Producing	-
100/13-04-009-29W1/0	Horizontal	Producing	WIW Conversion
100/01-09-009-29W1/0	Horizontal	Suspended	-
100/04-09-009-29W1/0	Horizontal	Producing	-
100/05-09-009-29W1/0	Horizontal	Producing	-
100/12-09-009-29W1/0	Horizontal	Producing	-
102/13-09-009-29W1/0	Horizontal	Producing	-
100/01-10-009-29W1/0	Horizontal	Producing	-
100/02-10-009-29W1/0	Vertical	Producing	-

<i>UWI</i>	<i>Type</i>	<i>Status</i>	<i>Future Plans</i>
100/08-10-009-29W1/0	Horizontal	Producing	-
100/09-10-009-29W1/0	Vertical	Producing	-
102/09-10-009-29W1/0	Horizontal	Producing	-
100/12-10-009-29W1/0	Vertical	Producing	-
100/16-10-009-29W1/0	Horizontal	Producing	-
100/09-11-009-29W1/0	Vertical	Producing	-
100/12-11-009-29W1/0	Vertical	Abandoned Zone	-
102/12-11-009-29W1/0	Horizontal	Producing	-
100/13-11-009-29W1/0	Horizontal	Producing	-
100/01-12-009-29W1/0	Vertical	Producing	-
102/01-12-009-29W1/0	Horizontal	Producing	-
100/04-12-009-29W1/0	Vertical	Producing	-
100/08-12-009-29W1/0	Horizontal	Producing	-
100/09-12-009-29W1/0	Horizontal	Producing	-
100/12-12-009-29W1/0	Vertical	Producing	-
100/16-12-009-29W1/0	Horizontal	Producing	-
102/01-13-009-29W1/0	Horizontal	Producing	-
100/03-13-009-29W1/2	Vertical	Abandoned Zone	-
100/05-13-009-29W1/0	Vertical	Producing	-
100/08-13-009-29W1/0	Horizontal	Producing	-
100/12-13-009-29W1/0	Horizontal	Producing	-
100/13-13-009-29W1/0	Horizontal	Producing	-
100/04-14-009-29W1/0	Horizontal	Producing	-
100/05-14-009-29W1/0	Horizontal	Producing	-
100/01-15-009-29W1/0	Horizontal	Producing	-
100/05-15-009-29W1/2	Vertical	Pumping	-
100/08-15-009-29W1/2	Vertical	Potential	-
102/08-15-009-29W1/0	Horizontal	Producing	-
100/01-16-009-29W1/2	Vertical	Commingle	-
100/05-16-009-29W1/0	Horizontal	Producing	-
100/02-17-009-29W1/0	Horizontal	Producing	-