

**North Ebor Unit No. 2**

**Waterflood Progress Report 2019**

**January 1<sup>st</sup> through December 31<sup>st</sup> 2019**

**Prepared for:**

**Manitoba Industry, Economic Development and Mines**

**Petroleum Branch**

**Prepared by:**

**Tundra Oil and Gas**

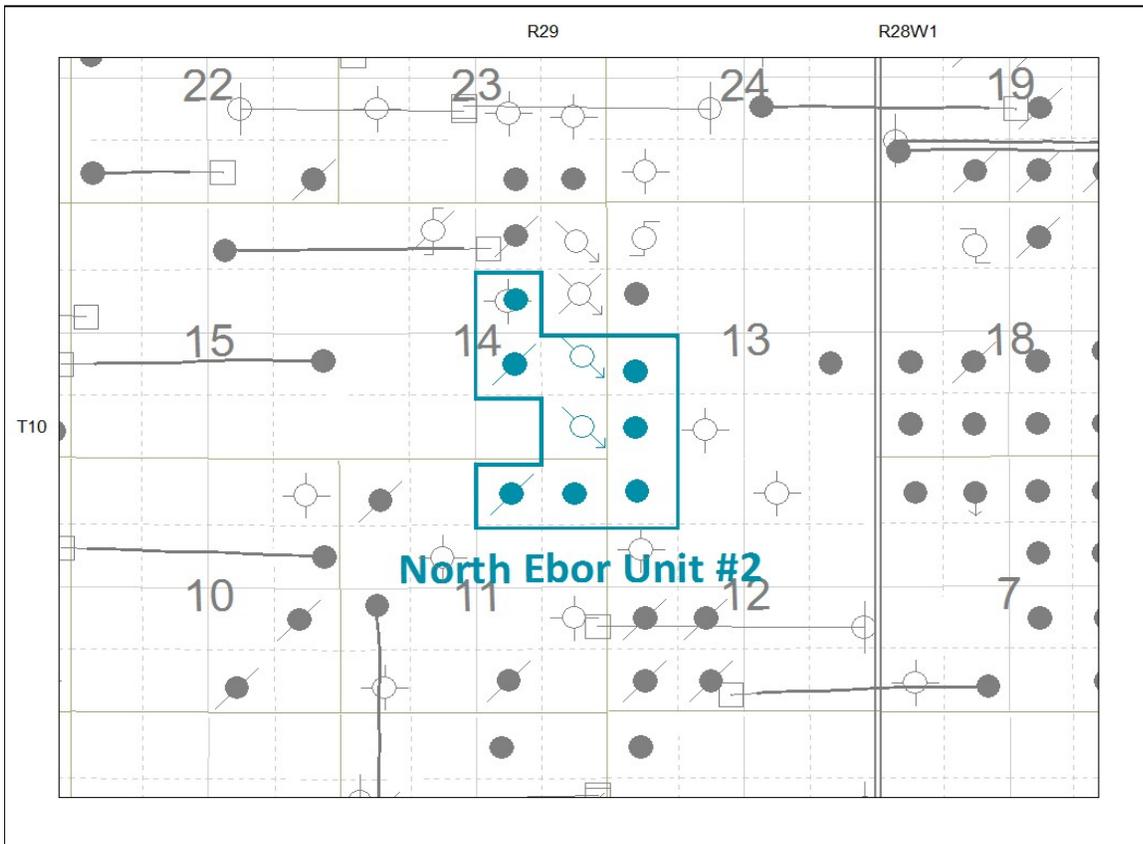
**March 17, 2020**

# INTRODUCTION

North Ebor Unit No. 2 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Board Order No. PM 67 effective Oct. 1, 1991, with Tundra Oil and Gas as Operator. The EOR project area contains 9 wells in 9 LSDs in Township 10, Range 29 W1 as shown in the figure below.

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

**Figure 1: North Ebor Unit No. 2 Area Outline**



## North Ebor Unit No. 2

Tundra Oil and Gas (Tundra), as the operator of the North Ebor Unit No. 2 Enhanced Oil Recovery (EOR) project hereby submits the 2019 EOR report as per section 73 of the Drilling and Production Regulations.

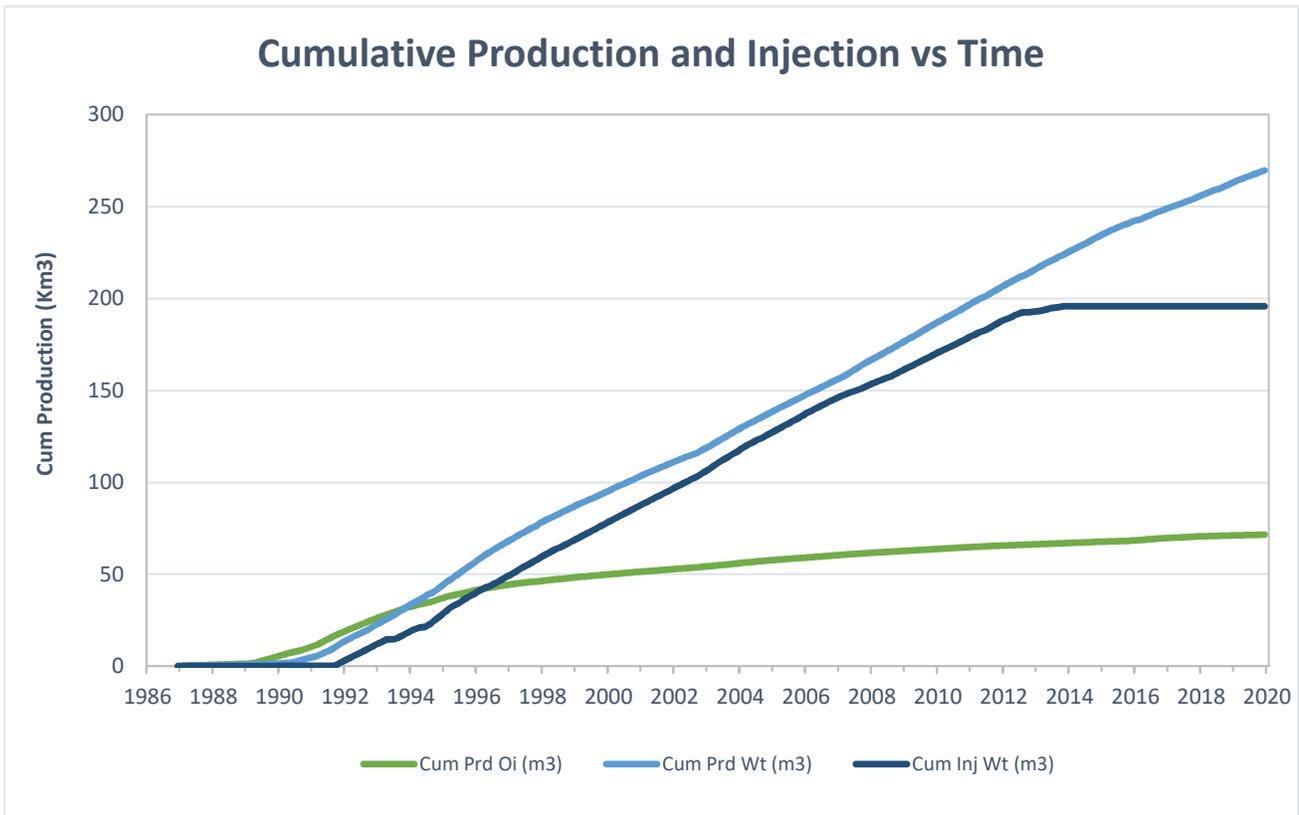
**a) Monthly oil and water production rates, injection rate, GOR and WOR**

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-2019	1.35	24.43	0.00	18.07	0
Feb-2019	1.32	22.22	0.00	16.81	0
Mar-2019	1.18	18.88	0.00	15.99	0
Apr-2019	1.16	15.70	0.00	13.49	0
May-2019	1.32	19.29	0.00	14.58	0
Jun-2019	1.35	19.94	0.00	14.81	0
Jul-2019	1.35	18.86	0.00	14.02	0
Aug-2019	1.08	17.56	0.00	16.25	0
Sep-2019	0.66	16.88	0.00	25.57	0
Oct-2019	0.73	18.26	0.00	25.16	0
Nov-2019	0.73	18.38	0.00	25.29	0
Dec-2019	0.68	17.19	0.00	25.38	0

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

<b>2019 PRODUCTION</b>	
Produced Oil (m <sup>3</sup> )	392
Produced Gas (m <sup>3</sup> )	0
Produced Water (m <sup>3</sup> )	6,918
Fluid Injected (m <sup>3</sup> )	0
<b>CUMULATIVE PRODUCTION</b>	
Produced Oil (m <sup>3</sup> )	71,508
Produced Water (m <sup>3</sup> )	269,655

## North Ebor Unit No. 2



## c) Well List

## North Ebor Unit No. 2 Well List

<i>UWI</i>	<i>Type</i>	<i>Status</i>	<i>Future Plans</i>
100/15-11-010-29W1/0	Vertical	Abandoned	-
100/16-11-010-29W1/2	Vertical	Producing	-
100/13-12-010-29W1/0	Vertical	Producing	-
100/04-13-010-29W1/0	Vertical	Producing	-
100/05-13-010-29W1/0	Vertical	Pumping	-
100/01-14-010-29W1/0	Vertical	Injection	-
100/07-14-010-29W1/0	Vertical	Abandoned	-
100/08-14-010-29W1/0	Vertical	Injection	-
102/10-14-010-29W1/0	Vertical	Producing	-

## North Ebor Unit No. 2

### d) Discussion

Water injection started in October 1991. North Ebor Unit No. 2 had 2 injection patterns in place, one vertical injector on the north side 00/08-14-010-29W1/00 (00/08-14), the other vertical injector on the south side at 00/01-14-010-29W1/00 (00/01-14). In November 2013, the 00/01-14 and 00/08-14 injectors were suspended pending system modifications.