

Birdtail Unit No. 4

Waterflood Progress Report 2019

January 1st through December 31st 2019

Prepared for:

Manitoba Industry, Economic Development and Mines

Petroleum Branch

Prepared by:

Tundra Oil and Gas

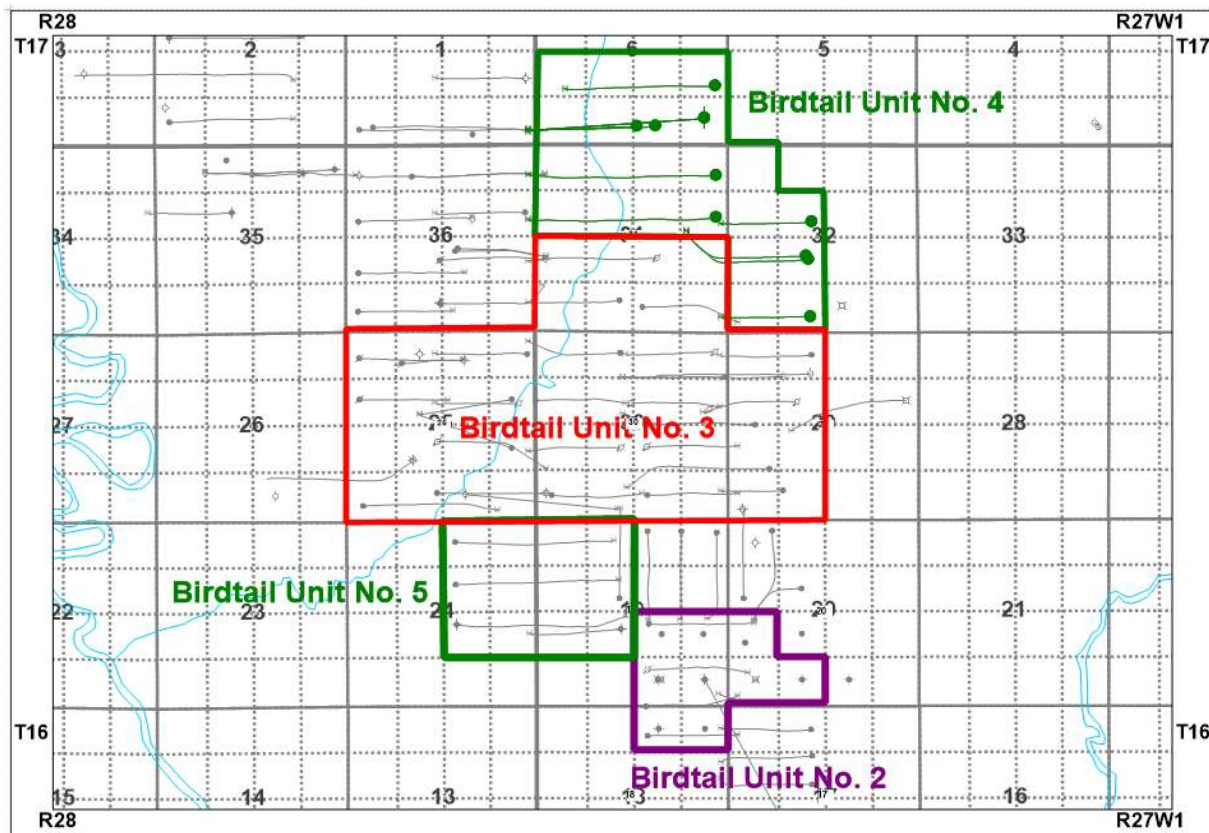
March 30, 2020

INTRODUCTION

Birdtail Unit No. 4 Enhanced Oil Recovery (EOR) Waterflood Project was approved effective June 1, 2019 with Tundra Oil and Gas as Operator. The EOR project area, outlined in Figure 1, contains 11 horizontal wells over 23 LSDs in Townships 16-17, Range 27 W1.

This unit is currently not on injection.

Figure 1: Birdtail Unit No. 4 Area Outline



Birdtail Unit No. 4

Tundra Oil and Gas (Tundra), as the operator of the Birdtail Unit No. 4 Enhanced Oil Recovery (EOR) project hereby submits the 2019 EOR report as per section 73 of the Drilling and Production Regulations.

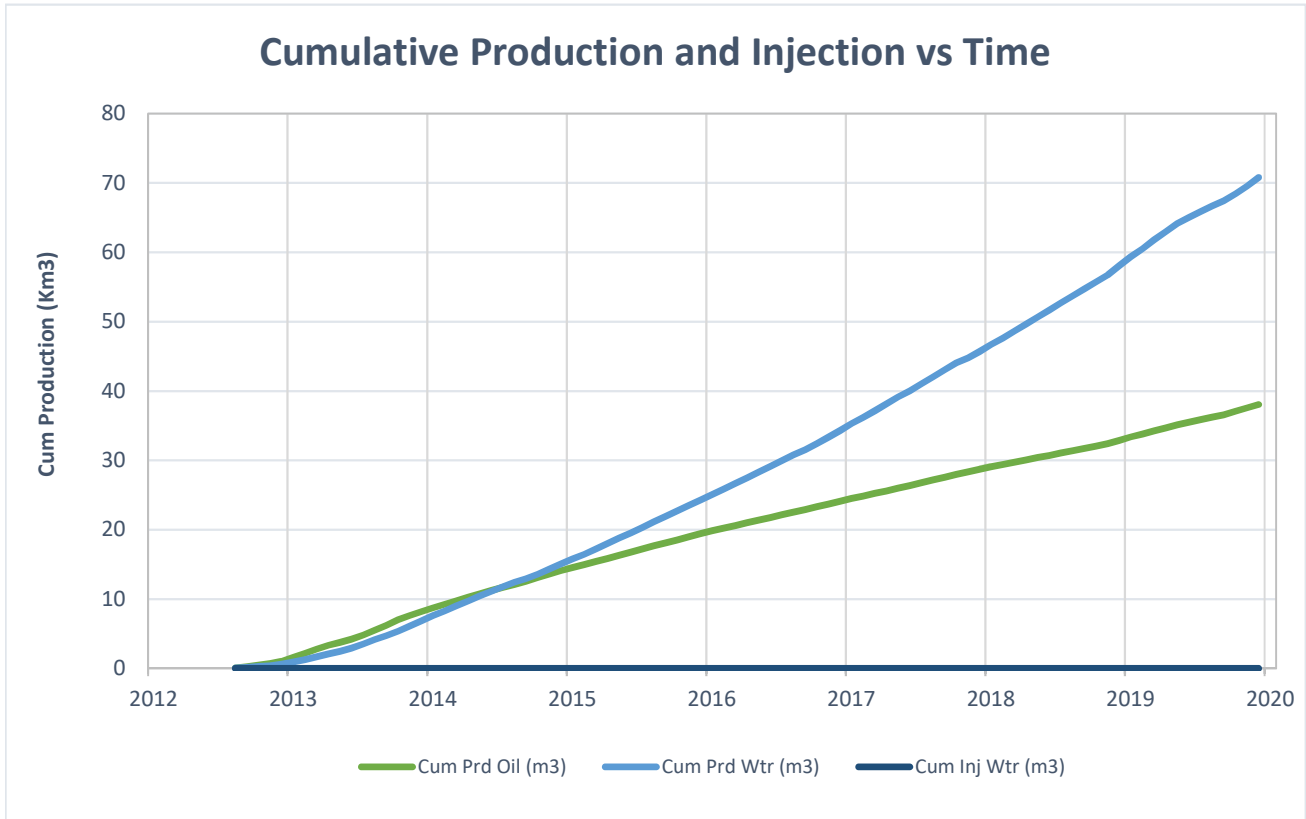
a) Monthly oil and water production rates, injection rate, GOR and WOR

MONTH	Cal Dly Oil m 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-2019	17.18	42.42	0.00	2.47	0
Feb-2019	14.45	41.21	0.00	2.85	0
Mar-2019	14.46	41.30	0.00	2.86	0
Apr-2019	14.70	38.65	0.00	2.63	0
May-2019	14.89	38.47	0.00	2.58	0
Jun-2019	12.58	29.37	0.00	2.34	0
Jul-2019	11.87	27.24	0.00	2.29	0
Aug-2019	10.81	25.75	0.00	2.38	0
Sep-2019	10.78	25.72	0.00	2.39	0
Oct-2019	17.35	32.08	0.00	1.85	0
Nov-2019	16.54	37.40	0.00	2.26	0
Dec-2019	14.75	39.50	0.00	2.68	0

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

2019 PRODUCTION	
Produced Oil (m ³)	5,183
Produced Gas (m ³)	0
Produced Water (m ³)	12,738
Fluid Injected (m ³)	0
CUMULATIVE PRODUCTION	
Produced Oil (m ³)	38,042
Produced Water (m ³)	70,793

Birdtail Unit No. 4



<i>UWI</i>	<i>Type</i>	<i>Status</i>	<i>Future Plans</i>
100/09-31-016-27W1/0	Horizontal	Producing	-
100/16-31-016-27W1/0	Horizontal	Producing	-
100/03-32-016-27W1/0	Horizontal	Producing	-
100/06-32-016-27W1/0	Horizontal	Producing	-
100/06-32-016-27W1/2	Horizontal	Producing	-
100/11-32-016-27W1/0	Horizontal	Producing	-
100/01-06-017-27W1/3	Horizontal	Producing	-
100/01-06-017-27W1/4	Horizontal	Drilled & Cased	-
100/02-06-017-27W1/0	Horizontal	Producing	-
100/02-06-017-27W1/2	Horizontal	Producing	-
100/08-06-017-27W1/0	Horizontal	Producing	-