

EWART UNIT NO. 1
WATERFLOOD EOR PROJECT
ANNUAL REPORT FOR 2014

March 23, 2015

Tundra Oil and Gas Partnership

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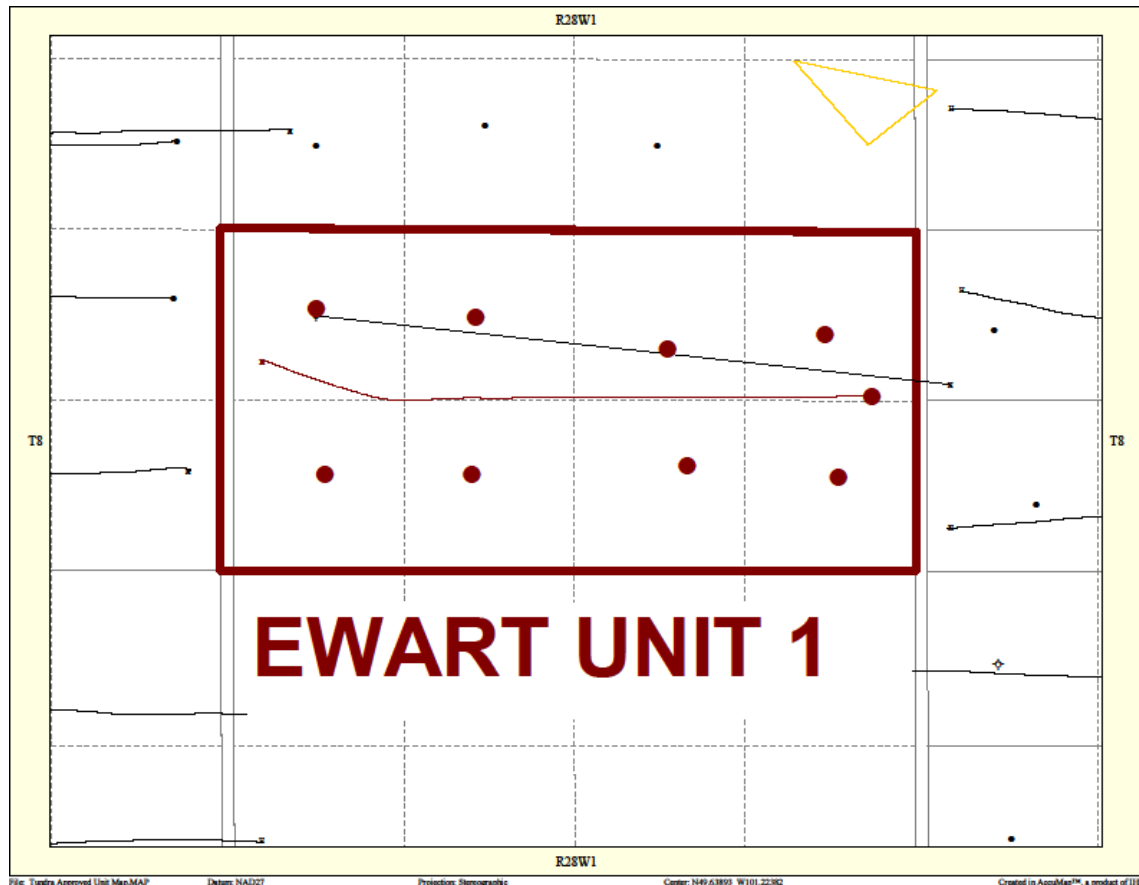
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102/08-09-008-28W1

INTRODUCTION

Ewart Unit No. 1 was approved on November 1, 2012 with Tundra Oil and Gas Partnership (Tundra) as Operator. The Unit area contains 8 producing vertical wells in 8 LSDs in Township 8 Range 28 W1 as shown in the figure below.

Figure 1: Ewart Unit No. 1 Area Outline



In accordance with Section 73 of the Manitoba Drilling and Production Regulation, Tundra hereby submits the following 2014 Annual Progress Report for Ewart Unit No. 1.

DISCUSSION

Production History

For the wells included in Ewart Unit No. 1, production started in November 2005 with the 00/02-09-008-28W1 well. Average oil production peaked at 3.68 m³/d per well in March

2008. This production was coming from 8 wells and totaled 29.44 m³/d for the whole Unit. In December 2014, the Unit was producing 3.97 m³/d of oil and 8.05 m³/d of water. Water injection commenced in Ewart Unit No. 1 in July 2013. The rates and WOR are presented in Figure 2.

Figure 2: Ewart Unit 1 Production/Injection Rates and WOR vs Time

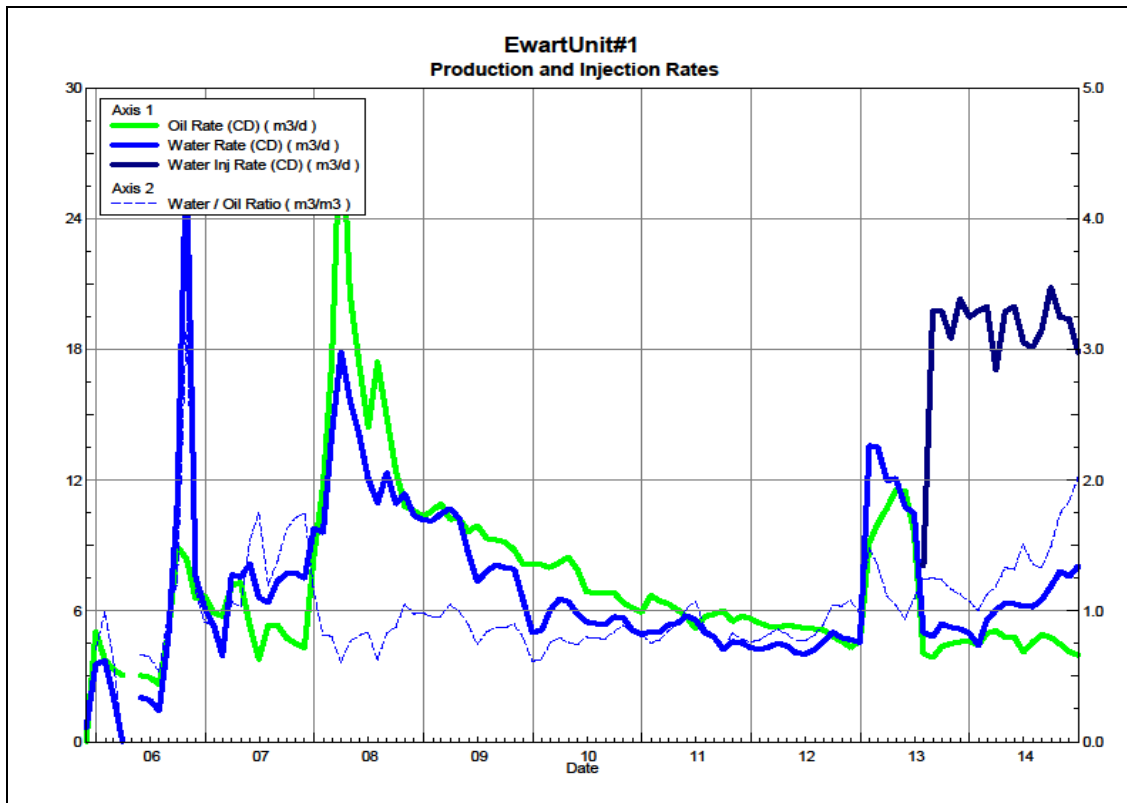
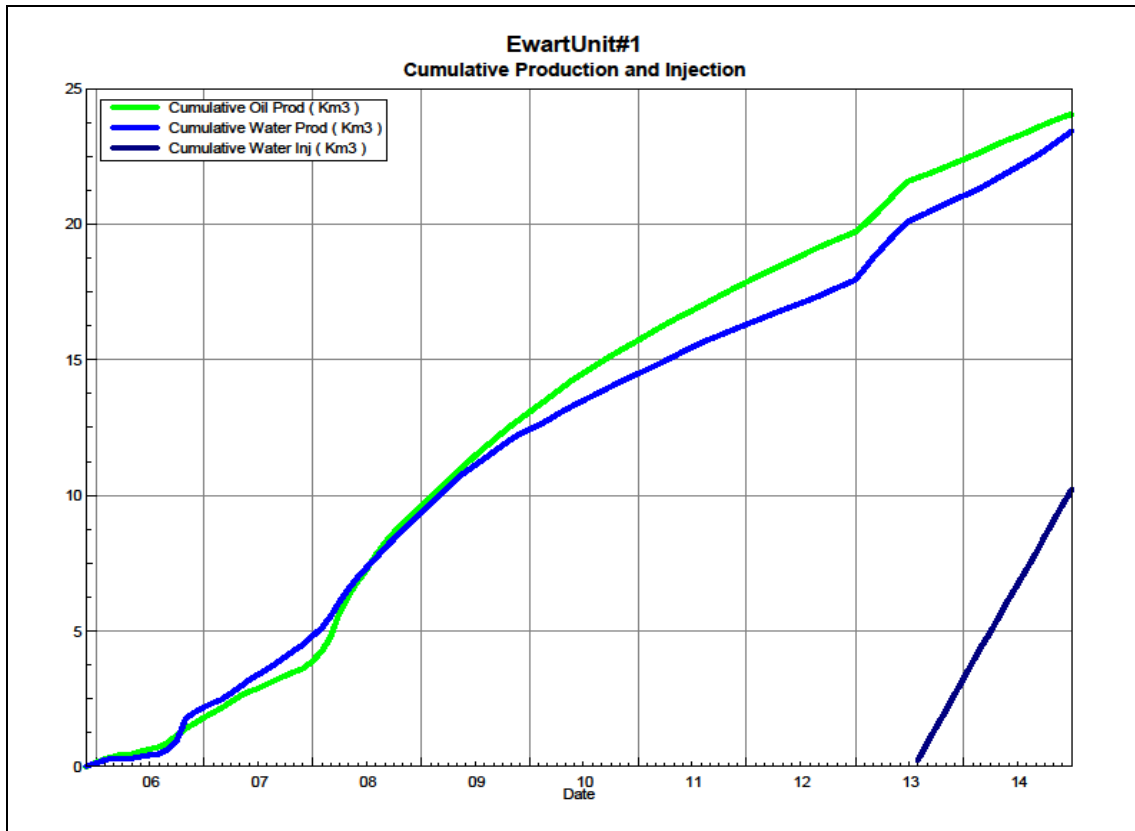


Figure 3 shows the cumulative production for Ewart Unit No. 1 to the end of December 2014 as 24.1 e³m³ of oil, and 23.4 e³m³ of water, representing a 9.97% recovery factor of the OOIP.

Figure 3: Ewart Unit 1 Cumulative Oil, Water and Water Injected vs Time



Waterflood Development Plan

Ewart Unit No. 1 Waterflood (WF) Development Plan

Ewart Unit No. 1 is still in the development phase at the end of 2014. In November 2012, the single proposed horizontal injector for the unit was drilled (02/08-09-008-28W1/0) and put on production January 2013. In July 2013, the 02/08-09 well was converted to an injector. All horizontal wells are fracture stimulated to improve the injection rates.

Production performance by injector pattern are summarized in Appendix A.

Any future revisions to the waterflood development or surveillance plan would be based on new production or performance response data, technical studies, or observed reservoir behavior and reserves recovery interpretations.

Waterflood EOR Operating Strategy and Performance

Water Source and Quality

The injection water for Ewart Unit No. 1 will be sourced from the 16-32-007-29W1 well (Lodgepole formation). The water is treated at the 03-04-008-29W1 battery where it is filtered to 0.5 microns and has scale inhibitor added. The injection water is then distributed to the injectors through the dedicated infrastructure system.

Injection Wellhead Pressures

Injection started in this Unit in July 2013. The average monthly wellhead injection pressure for the single injector in this Unit is summarized in Appendix C. Since injection in this Unit is still in the early stages, the injectors are still building up to a target injection pressure of 6300 kPaa.

Reservoir Pressure

Where practical, Tundra is committed to collecting pressure data from newly drilled injection wells. For Ewart Unit No. 1, pressure data is currently available for the 02/08-09-008-28W1 location. A summary table is presented in Appendix B. Pressures are corrected to a common datum of -450 m SS for comparison with other units in the area.

Well Servicing

No maintenance was required on the 8 wells in Ewart Unit No. 1 in 2014.

Waterflood Performance Discussion

At the end of 2014, Ewart Unit No. 1 had 1 injection pattern in place. Since water injection started in July 2013, there is no waterflood analysis that can be done at this time.

A summary table of the injector pattern is presented in Appendix A. Plots of the production and injection data along with the VRR information are presented in Appendix D for each injector pattern(s).

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Appendix A: Ewart Unit No. 1 Injection Pattern Summary

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Appendix D: Injector Pattern Production/Injection Rates, Cumulative and VRR Plot
for the following injector:

102/08-09-008-28W1

Appendix A

Ewart Unit No. 1 Injection Pattern Summary as of December 2014

Pattern Name	Injector BH Location (008-28W1)	Injector Surf. Location (008-28W1)	Status	Supported Wells (008-28W1)	No. of Supported Wells	Allocation Factor	Pattern Prod Start Month	Inj Start Month	Oil Rate (m ³ /d)	Water Rate (m ³ /d)	WOR (m ³ /m ³)	Water Injection (m ³ /d)	Cum Oil Water (E ³ m ³)	Cum Inj Water (E ³ m ³)	Monthly VRR	Cum VRR	
02/08-09-008-28W1 Injector	02/08-09	02/05-09	Water Injection	01-09, 02-09, 03-09, 04-09, 05-09, 06-09, 07-09, 08-09	8	1	Nov 2005	Jul 2013	4.0	8.1	2.03	17.8	24.1	23.4	10.2	1.5	0.21

APPENDIX B

Ewart Unit No. 1 - Pressure Summary

Location	Test Date	Final Pressure (kPaa)	MPP (mTVD)	KB	Datum Depth	Gradient	Pressure @ -450 masl
102/08-09-008-28W1/00	Nov 15 - Dec 8, 2012	4432.5	912.26	501.65	-450	8.25	4757

Appendix C

Average Monthly Injection Pressure (kPag)

Month	102/08-09
Apr-14	160
May-14	479
Jun-14	756
Jul-14	756
Aug-14	1099
Sep-14	1387
Oct-14	1576
Nov-14	1764
Dec-14	1850

Appendix D

Rates and VRR Plots

Pattern: 02/08-09-008-28Inj Set: EwartUnit#1

Oil Formation Vol Factor : 1.07100 m3/m3

Water Formation Vol Factor : 1.00150 m3/m3

Water / Oil Ratio : 2.03 m3/m3

March 23, 2015

Operator: Tundra_O&G_Prtshp

Oil Rate (CD) : 3.97 m3/d

Water Rate (CD) : 8.05 m3/d

Water Inj Rate (CD) : 17.84 m3/d

