

**WASKADA UNIT NO. 7
WATERFLOOD EOR PROJECT**

ANNUAL WATERFLOOD PROGRESS REPORT FOR 2016

May 11, 2017

Tundra Oil and Gas Partnership

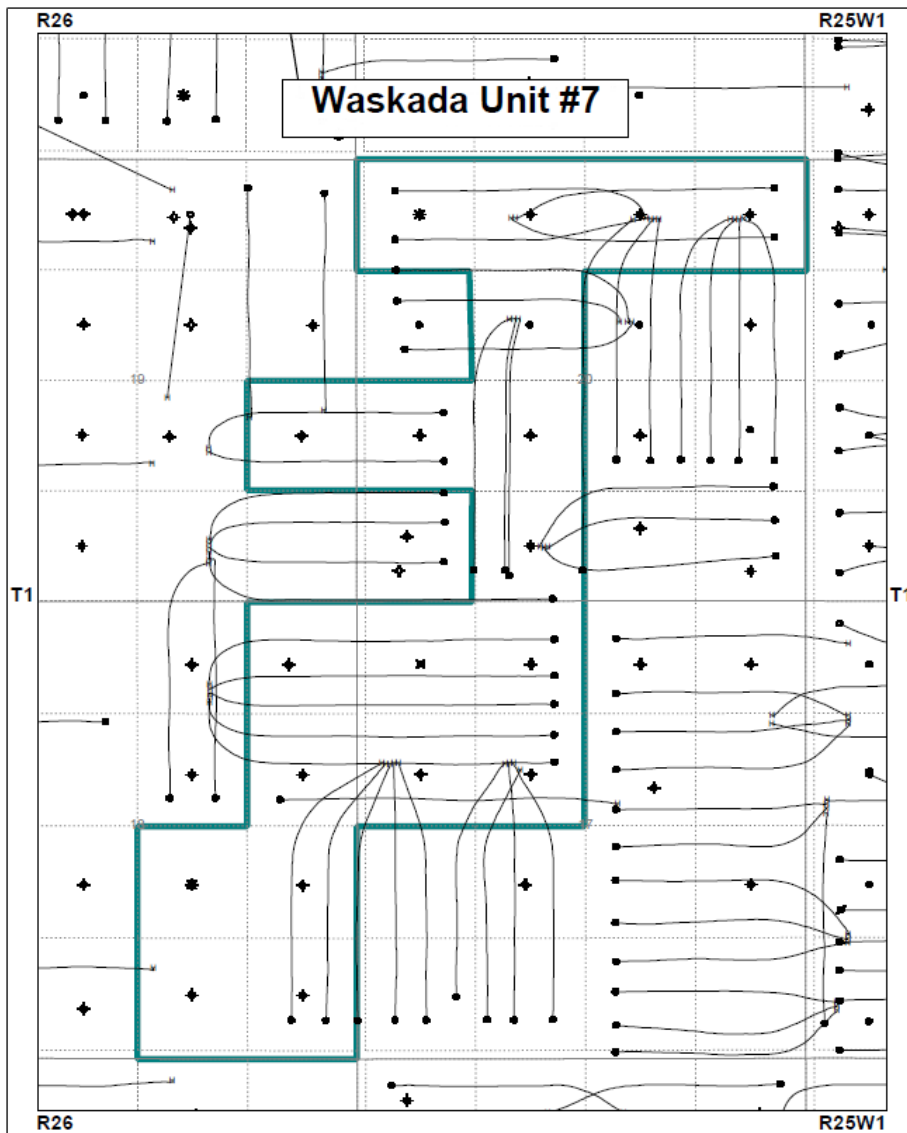
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INTRODUCTION

Waskada Unit No. 7 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Board Order No. PM 58 effective January 1987. The Unit area contains 22 abandoned/suspended wells, including 5 abandoned injectors, and 17 producing/inactive wells in 19 LSDs in Townships 1 and 2, Range 26 W1 as shown in the figure below.

Figure 1: Waskada Unit 7 Area Outline



In accordance with Section 73 of the Manitoba Drilling and Production Regulation, Tundra hereby submits the following 2016 Annual Progress Report for Waskada Unit No. 7.

DISCUSSION

Production History

For the wells included in Waskada Unit No. 7, production started in December 1982 with the 00/14-17-001-25W1/0 and 00/15-20-001-25W1 Vertical wells. Average oil production peaked for the first time at 4.6 m³/d per well in October 1983. This production was coming from 7 wells and totaled 32.0 m³/d for the whole Unit. The production at the end of December 2016 averaged 1.1 m³/d per well, totaling 11.7 m³/day for the Unit. Water injection commenced in Waskada Unit No. 7 in January 1987 until February of 1998. The rates and WOR are presented in Figure 2. There was no water injection through 2016, and there are no plans for injector re-activation.

Figure 2: Waskada Unit 7 Production/Injection Rates and WOR vs Time

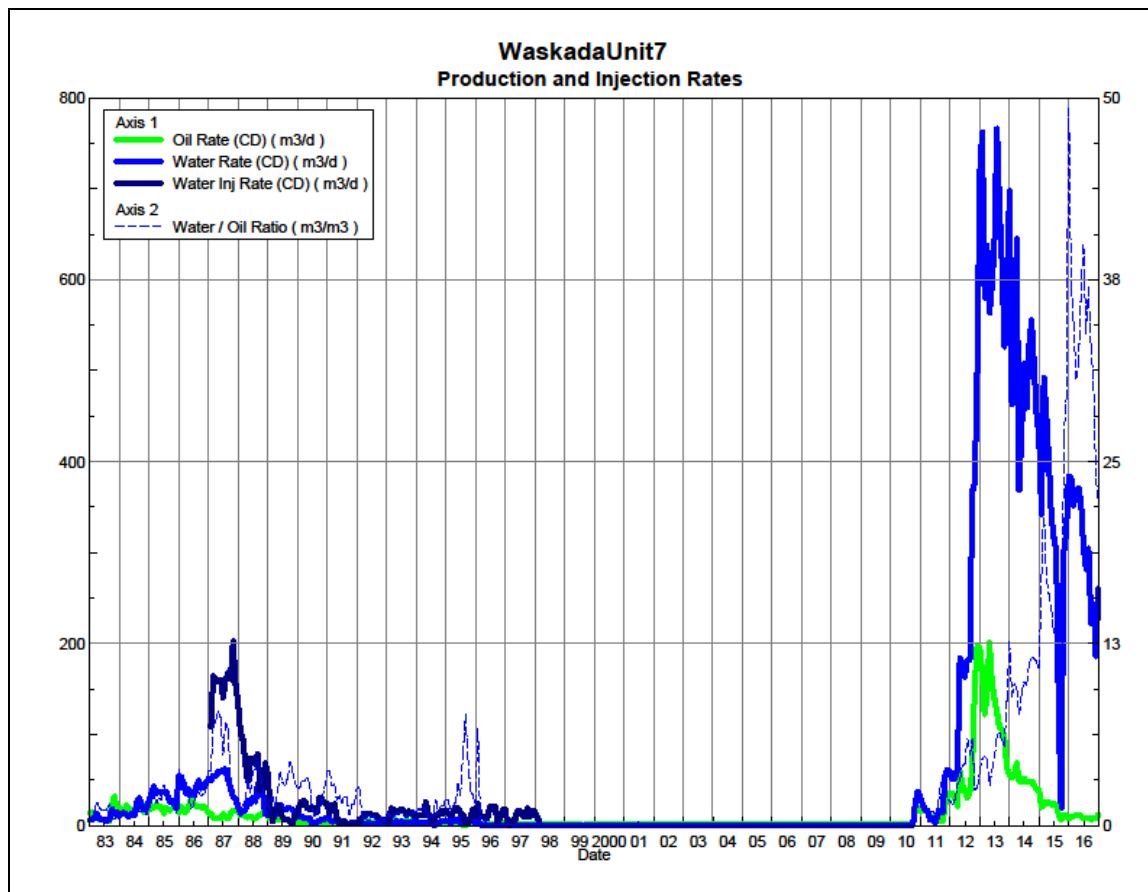
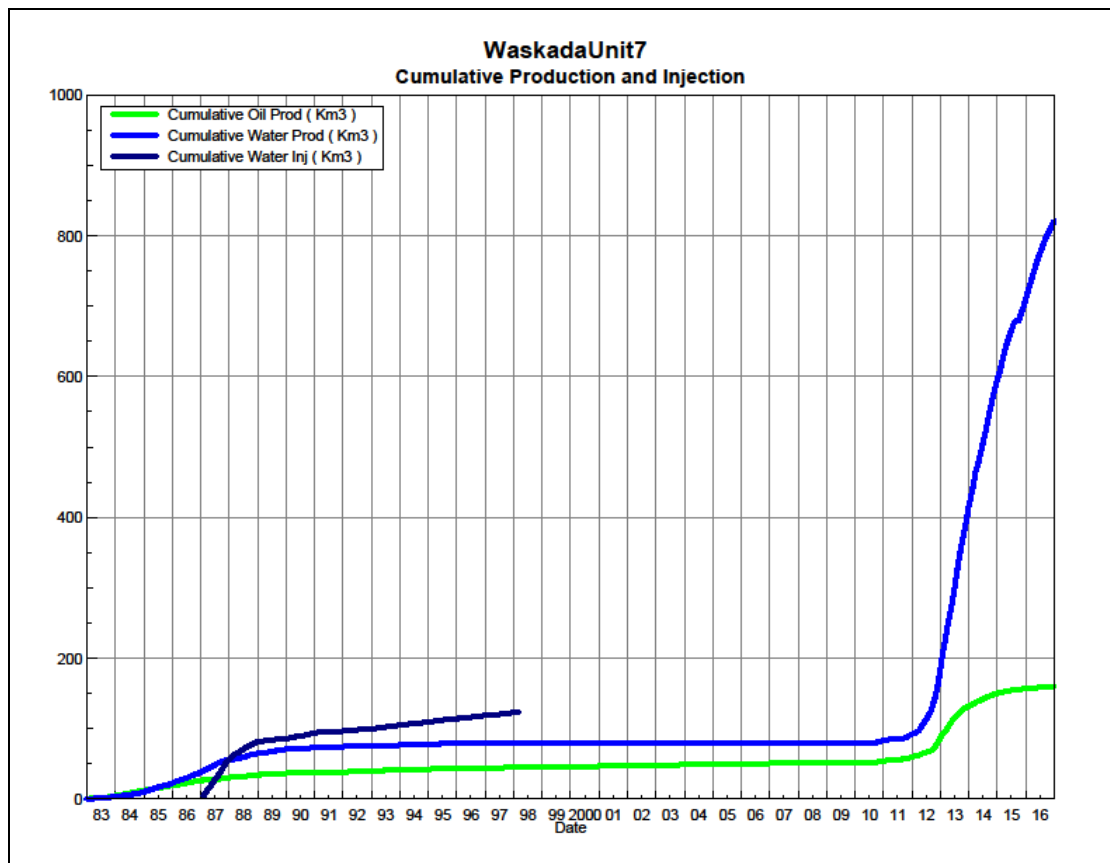


Figure 3 shows the cumulative production for Waskada Unit No. 7 to the end of December 2016 as 160.2 e³m³ of oil, and 821.0 e³m³ of water.

Figure 3: Waskada Unit 7 Cumulative Oil, Water and Water Injected vs Time



Waterflood EOR Operating Strategy and Performance

Corrosion and Scale Prevention

The facilities in Unit 7 are currently using cathodic and chemical protection against corrosion and scale in the new horizontal wells. All facilities are monitored every 3 months to assess the corrosion and ensure that proper electrical current is being supplied. There have been no issues with corrosion or scale to date.

Injection Wellhead Pressures

No injection wellhead pressures were recorded in 2016.

Reservoir Pressure

Where practical, Tundra is committed to collecting pressure data from newly drilled injection wells. Since no new wells were drilled in the Unit, therefore, no pressure surveys were conducted in 2016.

Well Servicing

The following table illustrates the maintenance done on the Waskada Unit 7 wells in 2016.

UWI	Workover Type	Date
105.03-20-001-25W1.00	Cemented Liner Cleanout	20-Nov-16
103.05-20-001-25W1.00	Pump Change	17-Jun-16
104.12-20-001-25W1.00	Pump Change	29-Sep-16
102.13-20-001-25W1.00	Pump Change	23-Jun-16

Waterflood Performance Discussion

From January 1 to December 31 in 2016, Waskada Unit No. 7 produced 114.2 e3m3 of fluid (3.4 e3m3 of Oil, 110.8 e3m3 of Water). There is no active injection in this Unit, and Tundra Oil and Gas has no plans to reactivate injection in the near future. Due to the horizontal wells being produced and no pressure support occurring in the Unit, the cumulative VRR has dropped in the last 18 years, down to 0.122.

Table 2 summarizes the yearly and cumulative VRR for Waskada Unit No. 7.

Figure 4: Waskada Unit 7 Production and Injection Rate

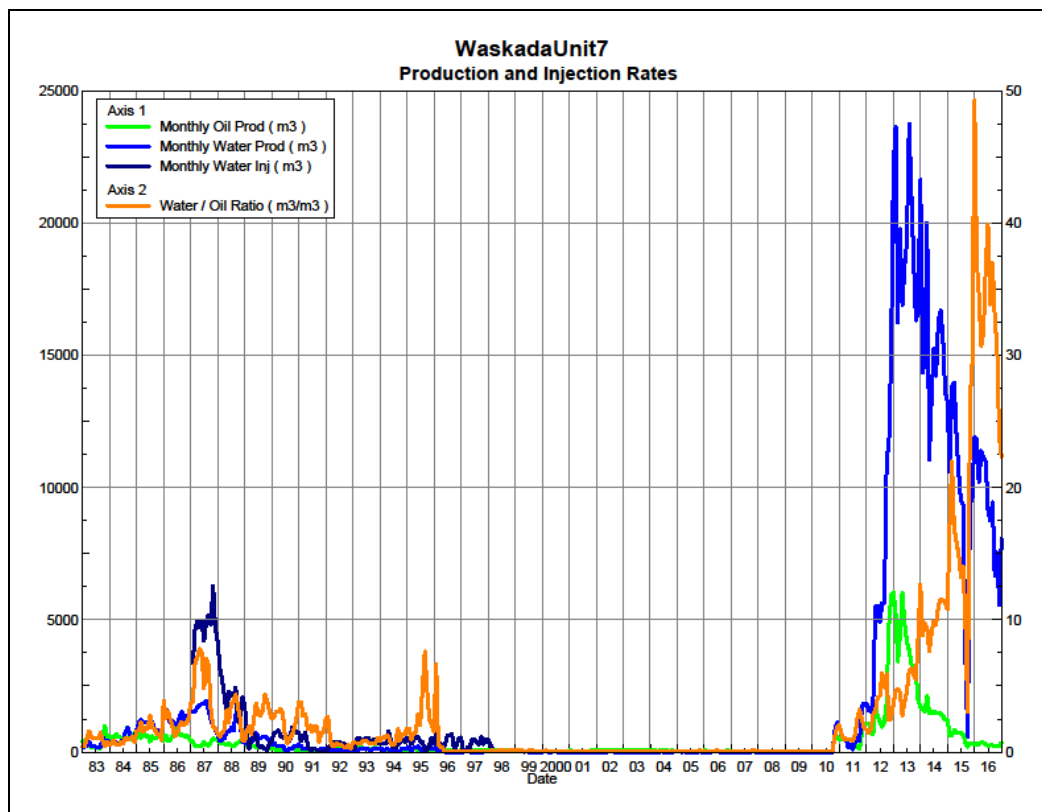


TABLE NO. 1: WASKADA UNIT NO. 7 WELL SUMMARY

<i>UWI</i>	<i>Type</i>	<i>Status</i>	<i>On Prod Date</i>	<i>Cum Prd Oil (m3)</i>	<i>Cum Prd Water (m3)</i>	<i>Last Prod Date</i>	<i>Cum Inj Water (m3)</i>	<i>Last Inj Date</i>
100/11-17-001-25W1/0	Vertical	Abandoned	9/1/1983	3113.6	2822.8	3/31/1991	0	
102/11-17-001-25W1/0	Horizontal	Suspended	10/1/2012	4520.6	7585.8	10/31/2015	0	
103/11-17-001-25W1/0	Horizontal	Producing	10/1/2012	2472.7	4550.7	12/31/2016	0	
100/12-17-001-25W1/0	Vertical	Abandoned	9/1/1983	2445.2	3725.2	1/31/1991	0	
100/13-17-001-25W1/0	Vertical	Abandoned	8/1/1983	575.3	546.1	11/30/1986	18710.4	3/31/1991
100/14-17-001-25W1/0	Vertical	Abandoned	12/1/1982	3329.5	3407.1	2/28/1991	0	
102/14-17-001-25W1/0	Horizontal	Producing	10/1/2012	2809.2	8371.5	12/31/2016	0	
103/14-17-001-25W1/0	Horizontal	Producing	10/1/2012	2670.8	9301.5	12/31/2016	0	
104/14-17-001-25W1/0	Horizontal	Producing	10/1/2012	3803.2	17632.4	12/31/2016	0	
100/01-18-001-25W1/0	Vertical	Abandoned	7/1/1984	1218.6	4170.4	9/30/1989	0	
102/01-18-001-25W1/0	Horizontal	Producing	3/1/2013	2170.1	7439.7	12/31/2016	0	
103/01-18-001-25W1/0	Horizontal	Suspended	3/1/2013	2294.6	6287.9	8/31/2015	0	
104/01-18-001-25W1/0	Horizontal	Suspended	3/1/2013	2387.2	8228.6	11/30/2015	0	
100/02-18-001-25W1/0	Vertical	Abandoned	7/1/1984	470.5	2009.9	1/31/1989	0	
100/07-18-001-25W1/2	Vertical	Abandoned	7/1/1984	552	1360.1	11/30/1986	22094.1	6/30/1989
100/08-18-001-25W1/0	Vertical	Abandoned	1/1/1984	994.9	1770.7	6/30/1989	0	
100/09-18-001-25W1/0	Vertical	Abandoned	12/1/1983	471.5	801.2	5/31/1989	0	
102/09-18-001-25W1/0	Horizontal	Suspended	10/1/2010	5691.2	10498.9	11/30/2014	0	
100/16-18-001-25W1/0	Vertical	Abandoned	8/1/1983	392.4	1633.1	9/30/1987	0	
100/08-19-001-25W1/2	Vertical	Abandoned	9/1/1985	1429.7	680.5	2/28/1993	0	
100/03-20-001-25W1/0	Vertical	Abandoned	3/1/1984	619.1	1304.7	7/31/1988	0	
102/03-20-001-25W1/0	Horizontal	Producing	3/1/2012	4118.7	76661.1	12/31/2016	0	
103/03-20-001-25W1/0	Horizontal	Producing	8/1/2012	4112.8	54570.9	12/31/2016	0	
104/03-20-001-25W1/0	Horizontal	Producing	9/1/2012	5958.6	114908.9	8/31/2016	0	
105/03-20-001-25W1/0	Horizontal	Producing	9/1/2012	5101.5	12363.9	12/31/2016	0	
100/05-20-001-25W1/0	Vertical	Abandoned	9/1/1985	301.4	33.9	11/30/1986	19243.9	1/31/1998
102/05-20-001-25W1/0	Horizontal	Producing	9/1/2012	4494.3	35048.3	12/31/2016	0	
103/05-20-001-25W1/0	Horizontal	Producing	9/1/2012	5631.4	4456	12/31/2016	0	
100/06-20-001-25W1/0	Vertical	Abandoned Zone	12/1/1985	1739.1	15353.4	11/30/1989	0	
100/11-20-001-25W1/0	Vertical	Producing	3/1/1983	17020.4	2242.2	11/30/2013	0	
104/12-20-001-25W1/0	Horizontal	Producing	8/1/2012	8041.9	55992.4	12/31/2016	0	
100/13-20-001-25W1/2	Vertical	Abandoned	12/1/1983	1796.3	3158	11/30/1986	26629.6	2/28/1998
102/13-20-001-25W1/0	Horizontal	Producing	3/1/2012	16300.9	37676.1	12/31/2016	0	
103/13-20-001-25W1/0	Horizontal	Producing	4/1/2012	13060	222668.4	12/31/2016	0	
100/14-20-001-25W1/0	Vertical	Abandoned Zone	11/1/1984	14474.7	31844.6	2/29/1996	0	
100/15-20-001-25W1/0	Vertical	Abandoned	12/1/1982	2110.6	1140.3	11/30/1986	36758.5	2/28/1998
100/16-20-001-25W1/0	Vertical	Abandoned	8/1/1984	470.6	2593.2	8/31/1989	0	
102/16-20-001-25W1/0	Horizontal	Producing	10/1/2011	5883.8	9907.8	12/31/2016	0	
103/16-20-001-25W1/0	Horizontal	Producing	10/1/2011	5154.2	36218.2	12/31/2016	0	
				160203.1	820966.4		123436.5	

TABLE NO. 2 - VRR Calculations

Date	Mth Oil Prod m3	Cum Oil Prod Km3	Mth Water Prod m3	Cum Water Prod Km3	Water Oil Ratio m3/m3	Mth Water Inj m3	Cum Water Inj Km3	VRR	Cum VRR
12/31/1982	409	0.409	175	0.175	0.43		0.000	0.000	0.000
12/31/1983	4630	5.040	3544	3.719	0.77		0.000	0.000	0.000
12/31/1984	7337	12.377	6433	10.152	0.88		0.000	0.000	0.000
12/31/1985	6906	19.283	12628	22.780	1.83		0.000	0.000	0.000
12/31/1986	7259	26.542	15666	38.446	2.16		0.000	0.000	0.000
12/31/1987	4083	30.625	17409	55.855	4.26	56975	56.975	2.577	0.626
12/31/1988	3990	34.615	9108	64.963	2.28	24688	81.663	1.802	0.779
12/31/1989	2167	36.782	5783	70.746	2.67	4055	85.718	0.490	0.758
12/31/1990	1090	37.872	2399	73.145	2.20	8295	94.013	2.271	0.806
12/31/1991	781	38.653	1533	74.678	1.96	2560	96.573	1.053	0.811
12/31/1992	1420	40.074	871	75.548	0.61	3335	99.908	1.332	0.821
12/31/1993	1698	41.772	1271	76.819	0.75	5099	105.007	1.582	0.841
12/31/1994	962	42.733	1065	77.884	1.11	4636	109.644	2.135	0.863
12/31/1995	806	43.540	1750	79.635	2.17	4386	114.030	1.638	0.879
12/31/1996	700	44.240	270	79.905	0.39	5135	119.165	4.774	0.911
12/31/1997	855	45.095	54	79.959	0.06	3863	123.028	3.725	0.933
12/31/1998	762	45.857	89	80.047	0.12	409	123.437	0.423	0.930
12/31/1999	492	46.350	49	80.097	0.10		123.437	0.000	0.925
12/31/2000	525	46.874	40	80.136	0.08		123.437	0.000	0.921
12/31/2001	505	47.379	28	80.164	0.05		123.437	0.000	0.917
12/31/2002	796	48.175	39	80.203	0.05		123.437	0.000	0.910
12/31/2003	774	48.949	34	80.236	0.04		123.437	0.000	0.904
12/31/2004	661	49.611	42	80.278	0.06		123.437	0.000	0.899
12/31/2005	562	50.172	47	80.325	0.08		123.437	0.000	0.894
12/31/2006	602	50.774	43	80.369	0.07		123.437	0.000	0.890
12/31/2007	497	51.271	37	80.405	0.07		123.437	0.000	0.886
12/31/2008	481	51.752	34	80.440	0.07		123.437	0.000	0.882
12/31/2009	430	52.181	29	80.469	0.07		123.437	0.000	0.879
12/31/2010	2053	54.234	2896	83.365	1.41		123.437	0.000	0.847
12/31/2011	5473	59.707	8828	92.193	1.61		123.437	0.000	0.767
12/31/2012	27678	87.385	92244	184.437	3.33		123.437	0.000	0.433
12/31/2013	45054	132.439	232319	416.756	5.16		123.437	0.000	0.217
12/31/2014	17956	150.396	178770	595.526	9.96		123.437	0.000	0.161
12/31/2015	6383	156.778	114669	710.195	17.97		123.437	0.000	0.138
12/31/2016	3425	160.203	110772	820.966	32.34		123.437	0.000	0.122

TABLE NO. 3

**Tundra Oil and Gas
Waskada Unit No. 7
2016 Injection Volumes**

Well Location	Date	Hours On	H ₂ O Inj Cal-d avg (m ³ /d)	Monthly Injected H ₂ O (m ³)
Unit No. 7 Total:				
	Jan-16	0	0.0	0.00
	Feb-16	0	0.0	0.00
	Mar-16	0	0.0	0.00
	Apr-16	0	0.0	0.00
	May-16	0	0.0	0.00
	Jun-16	0	0.0	0.00
	Jul-16	0	0.0	0.00
	Aug-16	0	0.0	0.00
	Sep-16	0	0.0	0.00
	Oct-16	0	0.0	0.00
	Nov-16	0	0.0	0.00
	Dec-16	0	0.0	0.00
2016 Group Totals:				0.00
Unit No. 7 Total:				
	1981	0	0	0.00
	1982	0	0	0.00
	1983	0	0	0.00
	1984	0	0	0.00
	1985	0	0	0.00
	1986	0	0	0.00
	1987	0	156.1	56,975.40
	1988	0	67.6	24,687.90
	1989	0	11.1	4,055.00
	1990	0	22.7	8,295.00
	1991	0	7.0	2,560.10
	1992	0	9.1	3,335.00
	1993	0	14.0	5,098.70
	1994	0	12.7	4,636.40
	1995	0	12.0	4,386.40
	1996	0	14.1	5,135.30
	1997	0	10.6	3,862.80
	1998	0	6.8	408.50
	1999	0	0.0	0.00
	2000	0	0.0	0.00
	2001	0	0.0	0.00
	2002	0	0.0	0.00
	2003	0	0.0	0.00
	2004	0	0.0	0.00
	2005	0	0.0	0.00
	2006	0	0.0	0.00
	2007	0	0.0	0.00
	2008	0	0.0	0.00
	2009	0	0.0	0.00
	2010	0	0.0	0.00
	2011	0	0.0	0.00
	2012	0	0.0	0.00
	2013	0	0.0	0.00
	2014	0	0.0	0.00
	2015	0	0.0	0.00
	2016	0	0.0	0.00
Group Totals:				123,436.50

TABLE NO. 4

**Tundra Oil and Gas
Waskada Unit No. 7
2016 Production Volumes**

Date	Hours On	Oil Rate (CD) m3/d	Monthly Oil Prod m3	Water Rate (CD) m3/d	Monthly Water Prod m3	Water Oil Ratio m3/m3	Well Count
Jan-16	9,456	10.32	320	381.69	11,832	37	13
Feb-16	9,384	10.18	295	351.94	10,206	35	13
Mar-16	9,648	11.96	371	367.24	11,384	31	13
Apr-16	9,072	11.70	351	371.37	11,141	32	13
May-16	9,744	9.64	299	354.35	10,985	37	13
Jun-16	9,192	7.67	230	306.16	9,185	40	13
Jul-16	10,248	8.33	258	282.01	8,742	34	14
Aug-16	10,512	8.23	255	304.47	9,439	37	14
Sep-16	8,952	6.75	203	222.48	6,675	33	12
Oct-16	10,032	7.99	248	243.47	7,548	30	13
Nov-16	8,256	7.79	234	185.59	5,568	24	11
Dec-16	7,632	11.67	362	260.24	8,067	22	10
	112,128		3,425		110,772		

Date	Hours On	Oil Rate (CD) m3/d	Monthly Oil Prod m3	Water Rate (CD) m3/d	Monthly Water Prod m3	Water Oil Ratio m3/m3	Well Count
31/12/1982	984	13.20	409	5.66	175	0.43	1
31/12/1983	28008	12.65	4,630	9.72	3544	0.94	3
31/12/1984	91944	20.04	7,337	17.53	6433	0.88	11
31/12/1985	117078	18.92	6,906	34.62	12628	1.92	13
31/12/1986	147711	19.86	7,259	42.91	15666	2.27	17
31/12/1987	103318	11.18	4,083	47.76	17409	4.97	12
31/12/1988	85680	10.90	3,990	24.87	9108	2.43	10
31/12/1989	62808	5.93	2,167	15.82	5783	2.81	7
31/12/1990	33864	2.98	1,090	6.58	2399	2.25	4
31/12/1991	25608	2.14	781	4.19	1533	2.06	3
31/12/1992	24456	3.88	1,420	2.38	871	0.71	3
31/12/1993	17904	4.64	1,698	3.48	1271	0.76	2
31/12/1994	16536	2.63	962	2.91	1065	1.13	2
31/12/1995	15984	2.21	806	4.78	1750	2.82	2
31/12/1996	9024	1.91	700	0.73	270	0.69	1
31/12/1997	8760	2.34	855	0.15	54	0.07	1
31/12/1998	8760	2.09	762	0.24	89	0.12	1
31/12/1999	8064	1.35	492	0.14	49	0.10	1
31/12/2000	8184	1.43	525	0.11	40	0.07	1
31/12/2001	8568	1.38	505	0.08	28	0.06	1
31/12/2002	8472	2.18	796	0.11	39	0.05	1
31/12/2003	8496	2.12	774	0.09	34	0.04	1
31/12/2004	8760	1.81	661	0.12	42	0.06	1
31/12/2005	8760	1.54	562	0.13	47	0.09	1
31/12/2006	8633	1.65	602	0.12	43	0.07	1
31/12/2007	8,760	1.36	497	0.10	37	0.07	1
31/12/2008	8,782	1.31	481	0.09	34	0.07	1
31/12/2009	8,760	1.18	430	0.08	29	0.07	1
31/12/2010	10,142	5.59	2,053	7.89	2896	0.49	1
31/12/2011	18,934	14.98	5,473	24.10	8828	1.59	2
31/12/2012	66,425	75.53	27,678	251.52	92244	3.57	8
31/12/2013	161,881	123.47	45,054	635.60	232319	5.85	19
31/12/2014	152,316	49.21	17,956	489.91	178770	10.03	18
31/12/2015	141,971	17.52	6,383	315.06	114669	19.35	16
31/12/2016	112,128	9.35	3,425	302.58	110772	32.59	13
	1,556,463		160,203		820,966		