

BIRDTAIL UNIT NO. 2
WATERFLOOD EOR PROJECT

ANNUAL REPORT FOR 2011

March 7, 2012

Tundra Oil and Gas Partnership

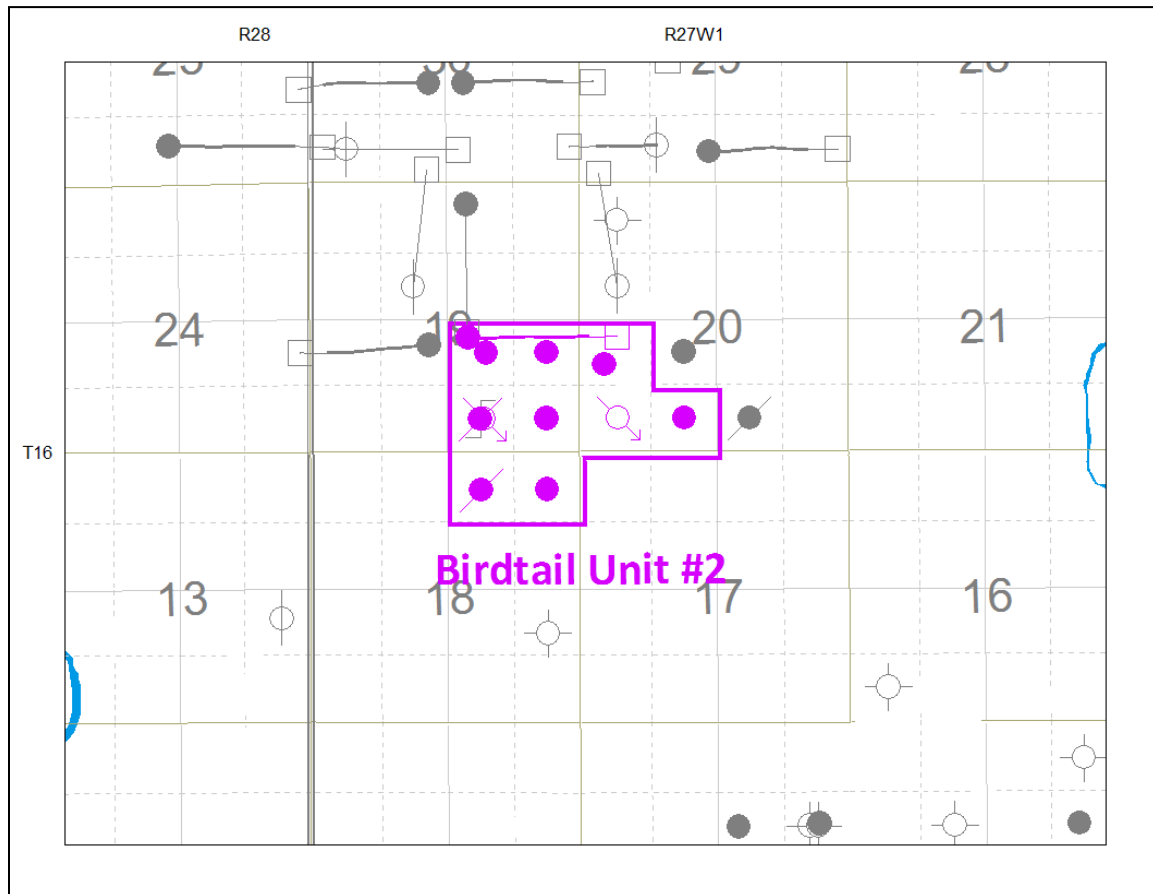
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INTRODUCTION

Birdtail Unit No. 2 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Waterflood Order No. 8 effective December 1, 2000 with Progress Energy Production Partnership as Operator. Tundra acquired the unit from Progress Energy Production Partnership and become operator in October 2003. The EOR project area contains 11 wells in 9 LSDs in Township 16, Range 27 W1 as shown in the figure below. Well list and well status is available in Appendix A.

Figure 1: Birdtail Unit No. 2 Area Outline



In accordance with Section 73 of the Manitoba Drilling and Production Regulation, Tundra hereby submits the 2011 Annual Progress Report for Birdtail Unit No. 2 as required by Board Order No. 8.

DISCUSSION

Production History

For the wells included in Birdtail Unit No. 2, production started January 1997 with 00/05-20-016-27W1/0 well. Oil production peaked at 11.8 m³/d in July 1998. Unit was producing 6.3 m³/d of oil and 20.4 m³/d of water, in December 2011. The oil production

rate, injection rate, and WOR during each month for each injection pattern and for whole project are presented in Appendix D. The rates and WOR are plotted in Figure 2.

Figure 2: Birdtail Unit No. 2 Production/Injection Rates and WOR vs. Time

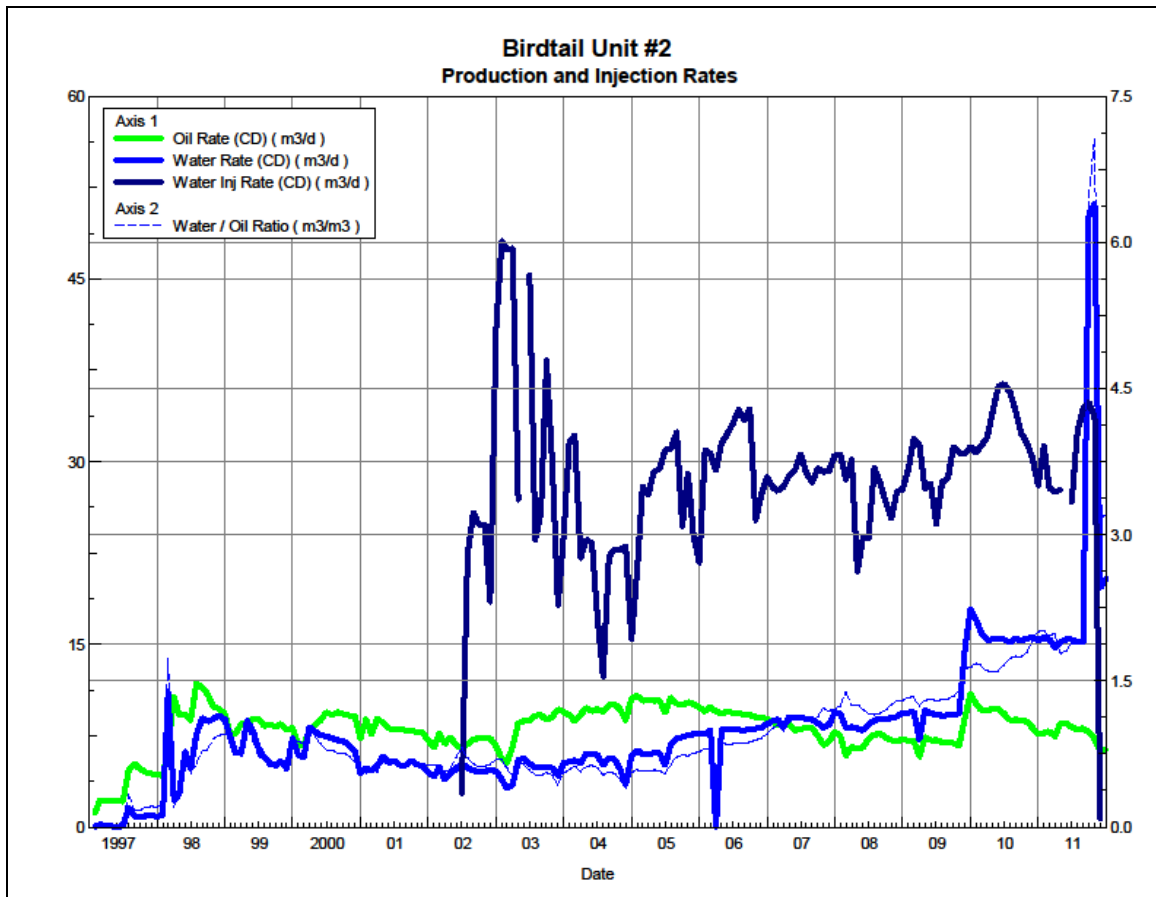
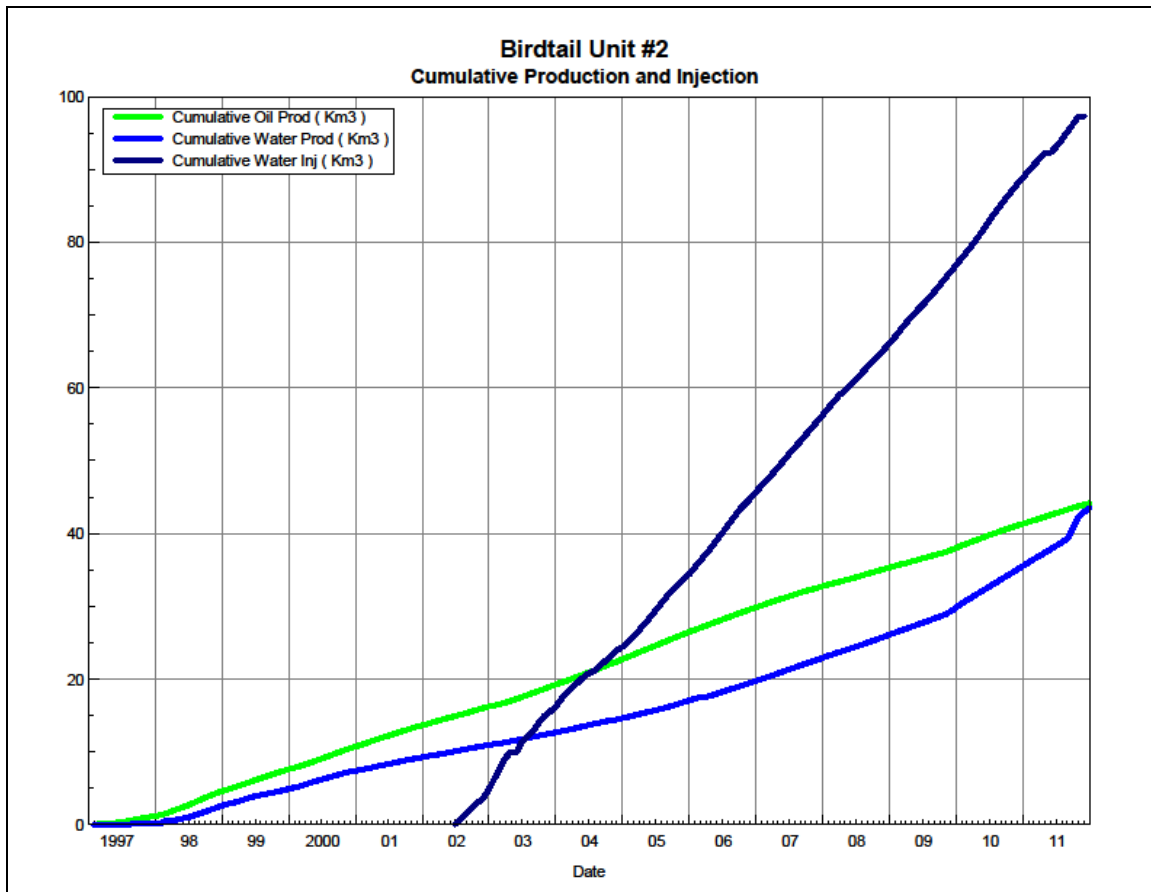


Figure 3 shows the cumulative production for Birdtail Unit No. 2 to the end of December 2011 as 44.2 E³m³ of oil, and 43.6 E³m³ of water. The cumulative water injected is 97.3 E³m³. Original Oil In Place of Birdtail Unit No. 2 is 393 E³m³. At the end of 2011 the recovery factor of Birdtail Unit No. 2 was 11.2%. The cumulative volume of oil, and water produced and fluid injected for each injection pattern and for the whole project for each injection well is presented in Appendix D.

Figure 3: Birdtail Unit No. 1 Cumulative Oil, Water and Water Injected vs. Time



Waterflood History

As of December 2011 the Unit has 2 active vertical injectors and 2 injector patterns in place, one injector on the west side 02/02-19-016-27W1/0, other on the east side at 00/04-20-016-27W1/0. Water injection started in June 2002. An overall summary for each injector pattern is presented in Appendix C.

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 Operations

Water Source and Quality

The injection water for Birdtail Unit No. 2 is sourced from the 00/02-19-016-27W/2 well (Lodgepole formation). The water is treated at the 09-05-16-27W1 battery where it is filtered to 0.5 microns and has scale inhibitor added.

Injection Wellhead Pressures

The monthly wellhead injection pressures for each injection well is summarized in Appendix B, and shows all injection pressure since 2003. In 2011, average injection pressure of injector 00/04-20-016-27W1/0 was 7000 kPag and 7100 kPag for 02/02-19-016-27W1/0.

Reservoir Pressure

No reservoir pressure measurements were taken at Birdtail Unit No. 2 in 2011.

Well Servicing

Table 1 lists the maintenance that was required in Birdtail Unit No. 2, in 2011.

Table 1: Service and Maintenance in Birdtail Unit No. 2

00/02-19-016-27W1/0	Pump Change	03/06/2011
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Voidage Replacement

Cumulative voidage for the Birdtail Unit No. 2 was 1.73 in December 2011. This is reasonable considering that the wells within the unit have been producing for almost fourteen years. Since 2002, monthly voidage is significantly greater than 1, which is why the Birdtail Unit No. 2 has a cumulative VRR of approximately 2. Calculation, plots and tables of the Voidage replacement ratio on a monthly and cumulative basis for each injection pattern and for the project area are presented in Appendix D.

In consideration of the cumulative VRR well in excess of 1, water injection was suspended in October 2011. It will resume with future waterflood optimization and Unit development.

Waterflood Performance Discussion

The original oil-in-place (OOIP) of 393 E³m³ with cumulative oil recovered to date of 44.2 E³m³ results in a recovery factor of 11.2%. The ultimate expected recoverable reserve based on decline analysis is 70 E³m³ or an ultimate recovery factor of 17.8%.

The overall performance of this waterflood has been good as indicated by an expected recovery factor of 17.8% and increased or flattened oil production since water injection began in 2002. It appears that the 2 water injectors are well placed and there are no water breakthrough issues that would lower the sweep efficiency

Trends in production since 2011 have seen a decline in inflow and oil cut in some of the vertical producers. This corresponds to the same timing that the only horizontal well in the pool (well 02/07-19-016-27W1/0) commenced production. Even though total field voidage has been maintained well above unity, it may be that local withdrawals of fluid from the horizontal well are resulting in lower pressures and drainage. Optimization of the waterflood will be evaluated to address localized withdrawal rates, likely at the same time as facility enhancements are made to increase water handling capacity.

List of Appendices

Appendix A: Well Name and Well Status

Appendix B: Monthly Injection Wellhead Pressures Table and Plots

Appendix C: Birdtail Unit No. 2 Injection Pattern Summary

Appendix D: Injector Pattern Production/Injection Rates, Cumulative and VRRs

Plots and Tables for the following injectors:

02/02-19-016-27W1/0

00/04-20-016-27W1/0

Appendix A

UWI	Surface Location	Well Status
100/15-18-016-27W1/00		ABD Producer
100/16-18-016-27W1/00		Capable of OIL Prod
100/01-19-016-27W1/00		Capable of OIL Prod
100/02-19-016-27W1/00		ABD Producer
102/02-19-016-27W1/00		WTR Injection
100/07-19-016-27W1/00		Capable of OIL Prod
102/07-19-016-27W1/00	100/05-20-016-27W1/00	Capable of OIL Prod
100/08-19-016-27W1/00		Capable of OIL Prod
100/03-20-016-27W1/00		Capable of OIL Prod
100/04-20-016-27W1/00		WTR Injection
100/05-20-016-27W1/00		Capable of OIL Prod

Appendix B

Average Monthly Injection Pressure (kPag)

	Injection Pressure			Injection Pressure			Injection Pressure	
Month	100/04-20	102/02-19	Month	100/04-20	102/02-19	Month	100/04-20	102/02-19
			Jan-06	8100	8200	Jan-09	8000	8100
			Feb-06	8100	8200	Feb-09	8000	8100
			Mar-06	8100	8200	Mar-09	8000	8100
			Apr-06	8100	8200	Apr-09	8000	8100
			May-06	8100	8200	May-09	8000	8100
			Jun-06	8100	8200	Jun-09	8000	8100
			Jul-06	8100	8200	Jul-09	8000	8100
			Aug-06	8100	8200	Aug-09	7774	8100
			Sep-06	8100	8200	Sep-09	8000	8100
Oct-03	8400	8600	Oct-06	8055	8155	Oct-09	8000	7747
Nov-03	8147	8220	Nov-06	7900	8050	Nov-09	8000	8100
Dec-03	8310	8410	Dec-06	8000	8100	Dec-09	8000	6974
Jan-04	8300	8400	Jan-07	8000	8100	Jan-10	8000	7084
Feb-04	8300	8400	Feb-07	8000	8100	Feb-10	8000	8100
Mar-04	8300	8400	Mar-07	8000	8100	Mar-10	8000	8100
Apr-04	8240	8340	Apr-07	8000	8100	Apr-10	8000	8100
May-04	8200	8300	May-07	8000	8100	May-10	8000	8100
Jun-04	7390	7363	Jun-07	8000	8100	Jun-10	8000	8100
Jul-04	5732	5581	Jul-07	8000	8100	Jul-10	8000	8100
Aug-04	8200	8297	Aug-07	8000	6984	Aug-10	8000	8100
Sep-04	8200	8300	Sep-07	8000	8100	Sep-10	8000	8100
Oct-04	8200	8300	Oct-07	8000	8100	Oct-10	8000	8100
Nov-04	8200	8300	Nov-07	8000	8100	Nov-10	8020	7963
Dec-04	6997	6774	Dec-07	8000	8100	Dec-10	8003	7968
Jan-05	7013	7000	Jan-08	8000	8100	Jan-11	7900	7800
Feb-05	8000	8200	Feb-08	8000	8100	Feb-11	7882	7818
Mar-05	8000	8200	Mar-08	8000	8100	Mar-11	7594	7777
Apr-05	8000	8200	Apr-08	8000	8100	Apr-11	7743	7943
May-05	8035	8200	May-08	8000	8100	May-11	7761	7897
Jun-05	8100	8200	Jun-08	8000	8100	Jun-11	7057	7207
Jul-05	8100	8200	Jul-08	8000	8100	Jul-11	7800	7900
Aug-05	8100	8200	Aug-08	8000	8100	Aug-11	7800	7900
Sep-05	8203	8303	Sep-08	8000	8100	Sep-11	7800	7900
Oct-05	8300	8400	Oct-08	8000	8100	Oct-11	7129	7974
Nov-05	8300	8400	Nov-08	8000	8100	Nov-11	4347	4157
Dec-05	8197	8297	Dec-08	8000	8100	Dec-11	3767	2583

Appendix C

Birdtail Unit No.2 Pattern Summary as of December 2011

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Appendix D
Rates and VRR
Plots and Tables

Pattern: 02/02-19-016-27 inj Set: Birdtail Unit #2

Oil Formation Vol. Factor : 1.05 m3/m3

Water Formation Vol Factor : 1.00 m3/m3

Water / Oil Ratio : 2.01 m3/m3

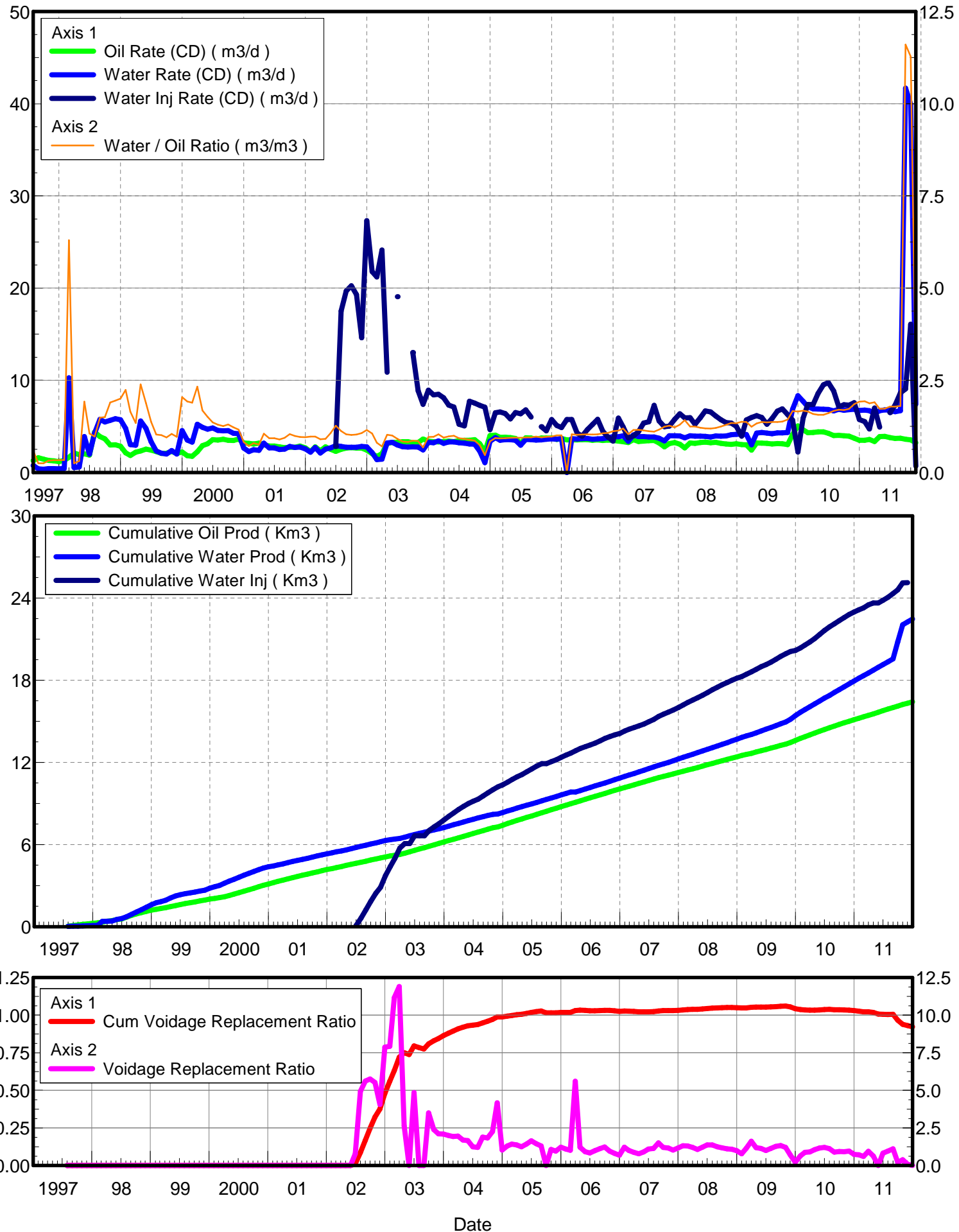
March 07, 2012

Operator: TUNDRA_OIL_&_GAS_LIMITED

Oil Rate (CD) : 3.25 m3/d

Water Rate (CD) : 6.54 m3/d

Water Inj Rate (CD) : 0.69 m3/d



Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
7/31/1997	1.28	0.75	0.59		0.04	0.02	0.00	0.000	0.000
8/31/1997	1.60	0.40	0.25		0.09	0.04	0.00	0.000	0.000
9/30/1997	1.43	0.36	0.25		0.13	0.05	0.00	0.000	0.000
10/31/1997	1.30	0.41	0.32		0.17	0.06	0.00	0.000	0.000
11/30/1997	1.25	0.42	0.33		0.21	0.07	0.00	0.000	0.000
12/31/1997	1.17	0.39	0.33		0.25	0.08	0.00	0.000	0.000
1/31/1998	1.32	0.44	0.34		0.29	0.10	0.00	0.000	0.000
2/28/1998	1.63	10.27	6.30		0.33	0.39	0.00	0.000	0.000
3/31/1998	2.10	0.52	0.25		0.40	0.40	0.00	0.000	0.000
4/30/1998	1.92	0.60	0.31		0.46	0.42	0.00	0.000	0.000
5/31/1998	2.02	3.89	1.92		0.52	0.54	0.00	0.000	0.000
6/30/1998	1.88	1.98	1.05		0.57	0.60	0.00	0.000	0.000
7/31/1998	4.39	4.27	0.97		0.71	0.73	0.00	0.000	0.000
8/31/1998	3.89	5.77	1.48		0.83	0.91	0.00	0.000	0.000
9/30/1998	3.64	5.48	1.50		0.94	1.07	0.00	0.000	0.000
10/31/1998	2.97	5.64	1.90		1.03	1.25	0.00	0.000	0.000
11/30/1998	2.99	5.83	1.95		1.12	1.42	0.00	0.000	0.000
12/31/1998	2.85	5.71	2.00		1.21	1.60	0.00	0.000	0.000
1/31/1999	2.14	4.79	2.24		1.28	1.75	0.00	0.000	0.000
2/28/1999	1.84	3.02	1.64		1.33	1.83	0.00	0.000	0.000
3/31/1999	2.20	2.95	1.34		1.40	1.93	0.00	0.000	0.000
4/30/1999	2.34	5.57	2.39		1.47	2.09	0.00	0.000	0.000
5/31/1999	2.54	4.77	1.88		1.55	2.24	0.00	0.000	0.000
6/30/1999	2.42	3.33	1.37		1.62	2.34	0.00	0.000	0.000
7/31/1999	2.26	2.33	1.03		1.69	2.41	0.00	0.000	0.000
8/31/1999	2.06	2.08	1.01		1.75	2.48	0.00	0.000	0.000
9/30/1999	2.10	1.99	0.95		1.81	2.54	0.00	0.000	0.000
10/31/1999	2.28	2.38	1.04		1.89	2.61	0.00	0.000	0.000
11/30/1999	2.07	2.00	0.97		1.95	2.67	0.00	0.000	0.000
12/31/1999	2.23	4.54	2.04		2.02	2.81	0.00	0.000	0.000
1/31/2000	1.82	3.50	1.92		2.07	2.92	0.00	0.000	0.000
2/29/2000	1.74	3.29	1.89		2.12	3.02	0.00	0.000	0.000
3/31/2000	2.25	5.23	2.32		2.19	3.18	0.00	0.000	0.000
4/30/2000	2.91	4.89	1.68		2.28	3.33	0.00	0.000	0.000
5/31/2000	3.12	4.70	1.51		2.38	3.47	0.00	0.000	0.000
6/30/2000	3.55	4.82	1.36		2.48	3.62	0.00	0.000	0.000
7/31/2000	3.51	4.55	1.30		2.59	3.76	0.00	0.000	0.000
8/31/2000	3.59	4.52	1.26		2.70	3.90	0.00	0.000	0.000
9/30/2000	3.48	4.54	1.30		2.81	4.03	0.00	0.000	0.000
10/31/2000	3.47	4.25	1.22		2.92	4.16	0.00	0.000	0.000
11/30/2000	3.62	4.19	1.16		3.02	4.29	0.00	0.000	0.000
12/31/2000	3.20	2.64	0.82		3.12	4.37	0.00	0.000	0.000
1/31/2001	3.16	2.26	0.71		3.22	4.44	0.00	0.000	0.000
2/28/2001	3.10	2.46	0.79		3.31	4.51	0.00	0.000	0.000
3/31/2001	3.18	2.40	0.75		3.41	4.59	0.00	0.000	0.000
4/30/2001	3.01	3.17	1.05		3.50	4.68	0.00	0.000	0.000
5/31/2001	2.87	2.67	0.93		3.59	4.76	0.00	0.000	0.000
6/30/2001	2.87	2.67	0.93		3.67	4.84	0.00	0.000	0.000

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
7/31/2001	2.78	2.49	0.89		3.76	4.92	0.00	0.000	0.000
8/31/2001	2.69	2.53	0.94		3.84	5.00	0.00	0.000	0.000
9/30/2001	2.73	2.83	1.04		3.92	5.08	0.00	0.000	0.000
10/31/2001	2.74	2.71	0.99		4.01	5.17	0.00	0.000	0.000
11/30/2001	2.87	2.75	0.96		4.09	5.25	0.00	0.000	0.000
12/31/2001	2.67	2.55	0.95		4.18	5.33	0.00	0.000	0.000
1/31/2002	2.27	2.21	0.97		4.25	5.40	0.00	0.000	0.000
2/28/2002	2.78	2.70	0.97		4.33	5.47	0.00	0.000	0.000
3/31/2002	2.34	2.10	0.90		4.40	5.54	0.00	0.000	0.000
4/30/2002	2.79	2.54	0.91		4.48	5.61	0.00	0.000	0.000
5/31/2002	2.50	2.67	1.07		4.56	5.70	0.00	0.000	0.000
6/30/2002	2.29	2.91	1.27	2.82	4.63	5.78	0.08	0.789	0.012
7/31/2002	2.51	2.82	1.12	17.50	4.71	5.87	0.63	4.933	0.087
8/31/2002	2.65	2.74	1.03	19.70	4.79	5.96	1.24	5.622	0.169
9/30/2002	2.69	2.74	1.02	20.24	4.87	6.04	1.85	5.760	0.248
10/31/2002	2.65	2.73	1.03	19.30	4.95	6.12	2.44	5.525	0.323
11/30/2002	2.65	2.83	1.07	14.60	5.03	6.21	2.88	4.058	0.376
12/31/2002	2.41	2.77	1.15	27.32	5.11	6.29	3.73	7.875	0.480
1/31/2003	2.04	2.16	1.06	21.79	5.17	6.36	4.40	7.924	0.561
2/28/2003	1.73	1.40	0.81	21.21	5.22	6.40	5.00	11.167	0.632
3/31/2003	2.03	1.44	0.71	24.12	5.28	6.45	5.75	11.910	0.721
4/30/2003	3.13	3.21	1.02	10.86	5.37	6.54	6.07	2.639	0.750
5/31/2003	3.27	3.27	1.00		5.48	6.64	6.07	0.000	0.738
6/30/2003	3.27	2.98	0.91	19.07	5.57	6.73	6.64	4.861	0.796
7/31/2003	3.34	2.80	0.84		5.68	6.82	6.64	0.000	0.785
8/31/2003	3.34	2.76	0.83		5.78	6.90	6.64	0.000	0.775
9/30/2003	3.23	2.79	0.86	13.01	5.88	6.99	7.03	3.496	0.810
10/31/2003	3.24	2.75	0.85	8.86	5.98	7.07	7.31	2.400	0.830
11/30/2003	3.62	2.45	0.68	7.39	6.09	7.15	7.53	2.114	0.845
12/31/2003	3.40	3.26	0.96	8.92	6.19	7.25	7.81	2.101	0.864
1/31/2004	3.34	3.23	0.97	8.41	6.30	7.35	8.07	2.005	0.880
2/29/2004	3.32	3.43	1.04	8.48	6.39	7.45	8.31	1.930	0.894
3/31/2004	3.35	3.17	0.95	8.09	6.50	7.55	8.56	1.958	0.909
4/30/2004	3.40	3.31	0.98	7.31	6.60	7.65	8.78	1.701	0.919
5/31/2004	3.33	3.30	0.99	7.09	6.70	7.75	9.00	1.663	0.930
6/30/2004	3.46	3.21	0.93	5.24	6.80	7.84	9.16	1.242	0.934
7/31/2004	3.49	3.18	0.91	5.05	6.91	7.94	9.32	1.204	0.937
8/31/2004	3.48	3.10	0.89	7.73	7.02	8.04	9.56	1.883	0.949
9/30/2004	3.56	3.07	0.86	7.53	7.13	8.13	9.78	1.835	0.960
10/31/2004	3.12	2.32	0.74	7.27	7.22	8.20	10.01	2.258	0.972
11/30/2004	2.23	1.05	0.47	7.08	7.29	8.23	10.22	4.167	0.988
12/31/2004	3.99	3.38	0.85	4.65	7.41	8.34	10.36	1.025	0.989
1/31/2005	4.05	3.78	0.93	6.46	7.54	8.46	10.56	1.306	0.993
2/28/2005	3.79	3.50	0.92	6.56	7.65	8.55	10.75	1.428	0.998
3/31/2005	3.83	3.56	0.93	6.40	7.77	8.66	10.95	1.372	1.003
4/30/2005	3.78	3.55	0.94	5.81	7.88	8.77	11.12	1.253	1.006
5/31/2005	3.69	3.49	0.94	6.50	7.99	8.88	11.32	1.426	1.012
6/30/2005	3.15	2.95	0.94	6.37	8.09	8.97	11.51	1.649	1.018

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
7/31/2005	3.76	3.57	0.95	6.78	8.20	9.08	11.72	1.454	1.024
8/31/2005	3.74	3.55	0.95	6.01	8.32	9.19	11.91	1.299	1.027
9/30/2005	3.61	3.51	0.97		8.43	9.29	11.91	0.000	1.015
10/31/2005	3.73	3.53	0.95	4.96	8.54	9.40	12.06	1.076	1.016
11/30/2005	3.73	3.60	0.97	4.52	8.66	9.51	12.20	0.965	1.015
12/31/2005	3.73	3.64	0.98	5.75	8.77	9.62	12.38	1.219	1.018
1/31/2006	3.57	3.60	1.01	5.10	8.88	9.74	12.54	1.102	1.019
2/28/2006	3.68	3.70	1.00	4.86	8.99	9.84	12.67	1.021	1.019
3/31/2006	3.54	0.00	0.00	5.75	9.09	9.84	12.85	5.608	1.031
4/30/2006	3.54	3.66	1.04	5.74	9.20	9.95	13.02	1.225	1.033
5/31/2006	3.54	3.63	1.03	4.27	9.31	10.06	13.15	0.917	1.031
6/30/2006	3.56	3.66	1.03	3.94	9.42	10.17	13.27	0.841	1.029
7/31/2006	3.56	3.69	1.04	4.65	9.53	10.29	13.42	0.986	1.029
8/31/2006	3.49	3.60	1.03	5.20	9.64	10.40	13.58	1.129	1.030
9/30/2006	3.53	3.65	1.04	5.75	9.74	10.51	13.75	1.231	1.032
10/31/2006	3.46	3.67	1.06	4.47	9.85	10.62	13.89	0.956	1.031
11/30/2006	3.50	3.76	1.07	3.85	9.95	10.73	14.01	0.806	1.029
12/31/2006	3.47	3.88	1.12	3.39	10.06	10.85	14.11	0.694	1.025
1/31/2007	3.41	3.87	1.13	5.89	10.17	10.97	14.29	1.213	1.027
2/28/2007	3.34	3.98	1.19	4.94	10.26	11.09	14.43	0.999	1.027
3/31/2007	3.24	3.38	1.04	3.77	10.36	11.19	14.55	0.872	1.025
4/30/2007	3.55	4.07	1.15	3.96	10.47	11.31	14.67	0.777	1.023
5/31/2007	3.36	3.89	1.16	4.43	10.57	11.43	14.80	0.910	1.022
6/30/2007	3.40	3.88	1.14	5.36	10.67	11.55	14.96	1.102	1.022
7/31/2007	3.45	3.85	1.12	5.49	10.78	11.67	15.14	1.132	1.024
8/31/2007	3.47	3.84	1.11	7.27	10.89	11.79	15.36	1.502	1.028
9/30/2007	3.21	3.72	1.16	5.58	10.99	11.90	15.53	1.201	1.030
10/31/2007	2.77	3.43	1.24	4.95	11.07	12.01	15.68	1.170	1.031
11/30/2007	3.13	3.98	1.27	5.02	11.17	12.13	15.83	1.029	1.031
12/31/2007	3.25	3.99	1.23	5.75	11.27	12.25	16.01	1.168	1.032
1/31/2008	3.06	3.96	1.30	6.36	11.36	12.37	16.21	1.312	1.035
2/29/2008	2.66	3.77	1.42	5.92	11.44	12.48	16.38	1.304	1.037
3/31/2008	3.21	3.99	1.24	5.94	11.54	12.60	16.56	1.207	1.039
4/30/2008	3.16	3.94	1.25	5.22	11.63	12.72	16.72	1.077	1.039
5/31/2008	3.25	3.93	1.21	5.94	11.73	12.84	16.90	1.221	1.041
6/30/2008	3.28	3.92	1.20	6.67	11.83	12.96	17.10	1.369	1.044
7/31/2008	3.23	3.85	1.19	6.57	11.93	13.08	17.31	1.373	1.047
8/31/2008	3.28	3.96	1.21	6.12	12.03	13.20	17.50	1.246	1.049
9/30/2008	3.16	3.94	1.25	5.73	12.13	13.32	17.67	1.179	1.050
10/31/2008	3.08	3.97	1.29	5.40	12.22	13.45	17.84	1.111	1.050
11/30/2008	3.05	4.09	1.34	5.35	12.31	13.57	18.00	1.077	1.051
12/31/2008	3.11	4.14	1.33	5.01	12.41	13.70	18.15	0.993	1.050
1/31/2009	3.03	4.16	1.37	3.93	12.50	13.83	18.27	0.781	1.048
2/28/2009	3.01	4.12	1.37	5.69	12.59	13.94	18.43	1.139	1.048
3/31/2009	2.42	2.99	1.24	5.95	12.66	14.03	18.62	1.613	1.052
4/30/2009	3.20	4.26	1.33	6.17	12.76	14.16	18.80	1.190	1.053
5/31/2009	3.17	4.34	1.37	5.96	12.86	14.30	18.99	1.133	1.054
6/30/2009	3.15	4.28	1.36	5.23	12.95	14.42	19.14	1.007	1.054

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
7/31/2009	3.08	4.21	1.37	5.84	13.05	14.56	19.33	1.145	1.054
8/31/2009	3.14	4.29	1.37	6.65	13.15	14.69	19.53	1.279	1.056
9/30/2009	3.12	4.29	1.38	6.90	13.24	14.82	19.74	1.327	1.059
10/31/2009	3.02	4.33	1.43	6.27	13.33	14.95	19.93	1.207	1.060
11/30/2009	4.12	6.85	1.66	5.68	13.46	15.16	20.10	0.707	1.055
12/31/2009	5.04	8.32	1.65	2.21	13.61	15.41	20.17	0.226	1.042
1/31/2010	4.62	7.73	1.67	5.86	13.76	15.65	20.35	0.647	1.037
2/28/2010	4.32	7.13	1.65	7.38	13.88	15.85	20.56	0.881	1.035
3/31/2010	4.35	6.90	1.59	7.37	14.01	16.07	20.79	0.905	1.033
4/30/2010	4.41	6.89	1.56	8.57	14.14	16.27	21.05	1.050	1.033
5/31/2010	4.39	6.86	1.56	9.51	14.28	16.49	21.34	1.170	1.035
6/30/2010	4.24	6.82	1.61	9.74	14.41	16.69	21.63	1.211	1.037
7/31/2010	4.00	6.68	1.67	8.85	14.53	16.90	21.91	1.129	1.038
8/31/2010	4.02	6.85	1.70	7.12	14.66	17.11	22.13	0.888	1.036
9/30/2010	3.99	6.74	1.69	7.35	14.77	17.31	22.35	0.931	1.035
10/31/2010	3.95	6.81	1.73	7.31	14.90	17.52	22.58	0.919	1.034
11/30/2010	3.71	6.86	1.85	7.58	15.01	17.73	22.80	0.955	1.033
12/31/2010	3.50	6.72	1.92	5.74	15.12	17.94	22.98	0.743	1.030
1/31/2011	3.50	6.76	1.93	5.51	15.23	18.15	23.15	0.709	1.027
2/28/2011	3.57	6.70	1.88	4.72	15.33	18.34	23.28	0.611	1.023
3/31/2011	3.35	6.38	1.90	6.99	15.43	18.53	23.50	0.951	1.022
4/30/2011	3.89	6.70	1.72	4.93	15.55	18.73	23.65	0.630	1.018
5/31/2011	3.92	6.80	1.73		15.67	18.94	23.65	0.000	1.007
6/30/2011	3.77	6.75	1.79	6.50	15.78	19.15	23.84	0.830	1.006
7/31/2011	3.69	6.60	1.79	7.31	15.90	19.35	24.07	0.954	1.005
8/31/2011	3.71	6.69	1.80	8.65	16.01	19.56	24.34	1.113	1.006
9/30/2011	3.59	41.68	11.60	9.07	16.12	20.81	24.61	0.212	0.966
10/31/2011	3.54	39.94	11.28	16.07	16.23	22.05	25.11	0.392	0.939
11/30/2011	3.23	7.38	2.29	0.69	16.32	22.27	25.13	0.083	0.931
12/31/2011	3.25	6.54	2.01		16.43	22.47	25.13	0.000	0.923

Pattern: 00/04-20-016-27 inj Set: Birdtail Unit #2

Oil Formation Vol. Factor : 1.05 m3/m3

Water Formation Vol Factor : 1.00 m3/m3

Water / Oil Ratio : 4.52 m3/m3

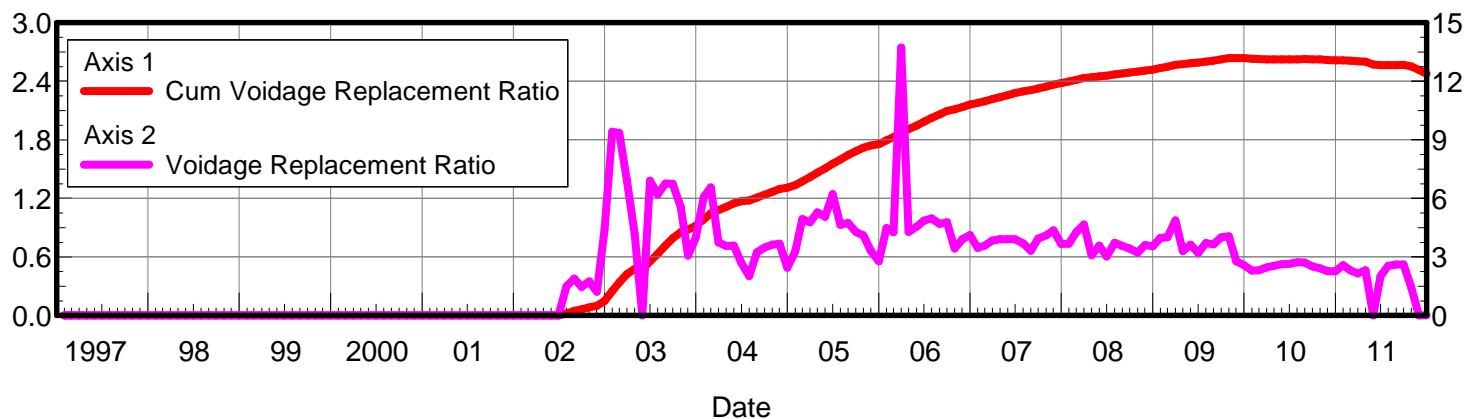
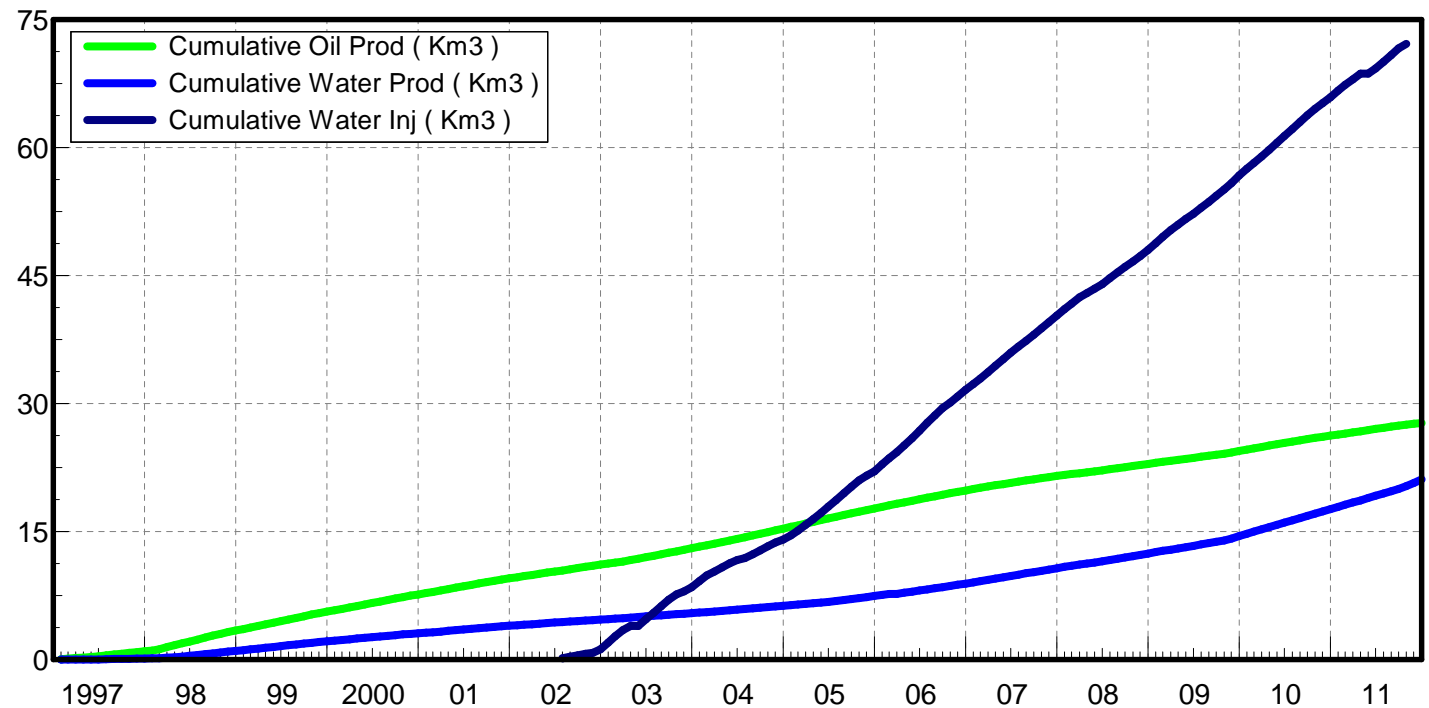
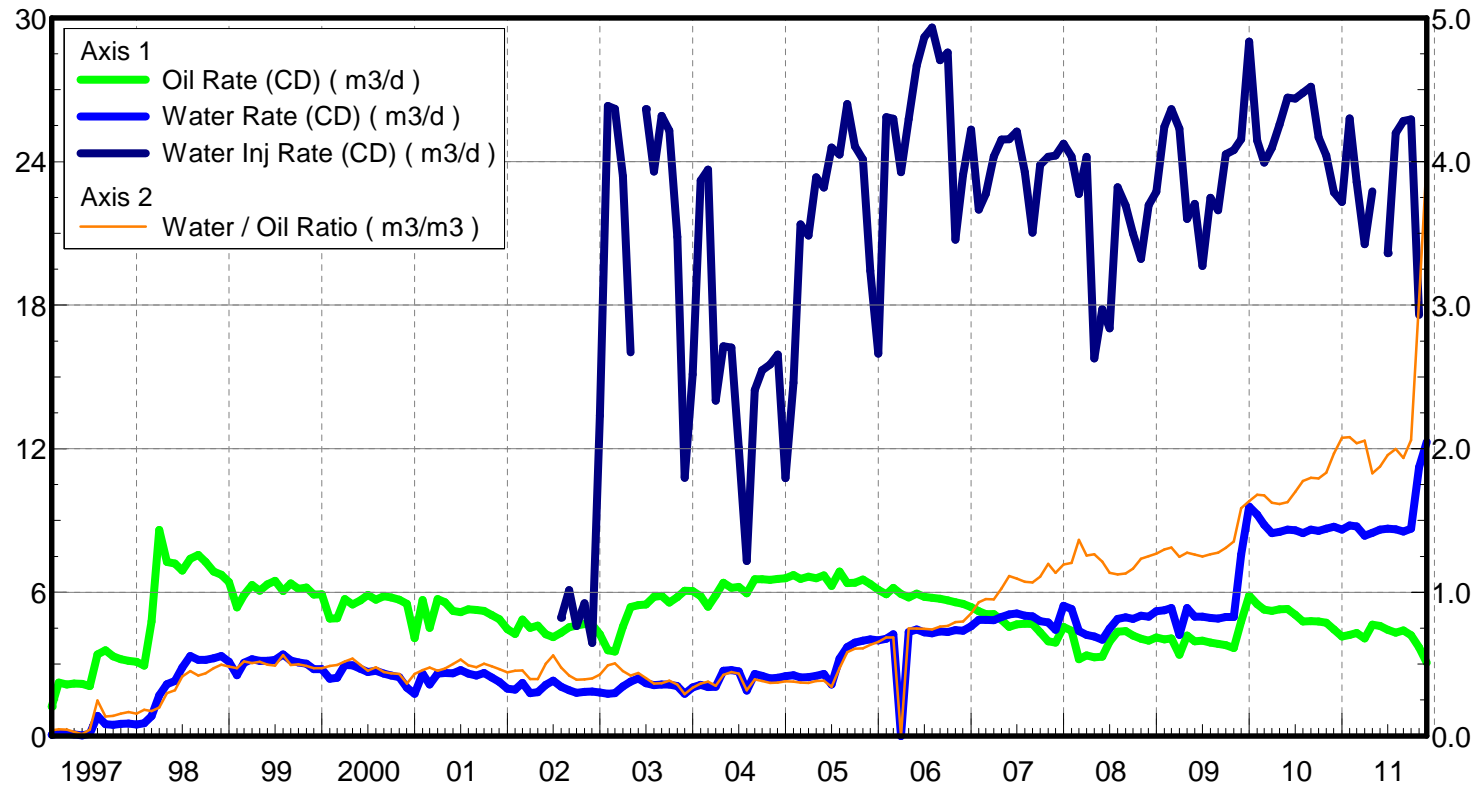
March 07, 2012

Operator: TUNDRA_OIL_&_GAS_LIMITED

Oil Rate (CD) : 3.06 m3/d

Water Rate (CD) : 13.83 m3/d

Water Inj Rate (CD) : 17.59 m3/d



Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1997	1.23	0.05	0.04		0.04	0.00	0.00	0.000	0.000
2/28/1997	2.22	0.10	0.05		0.10	0.00	0.00	0.000	0.000
3/31/1997	2.14	0.09	0.04		0.17	0.01	0.00	0.000	0.000
4/30/1997	2.19	0.06	0.03		0.23	0.01	0.00	0.000	0.000
5/31/1997	2.17	0.03	0.01		0.30	0.01	0.00	0.000	0.000
6/30/1997	2.09	0.09	0.04		0.36	0.01	0.00	0.000	0.000
7/31/1997	3.40	0.84	0.25		0.47	0.04	0.00	0.000	0.000
8/31/1997	3.58	0.49	0.14		0.58	0.05	0.00	0.000	0.000
9/30/1997	3.33	0.46	0.14		0.68	0.07	0.00	0.000	0.000
10/31/1997	3.20	0.50	0.16		0.78	0.08	0.00	0.000	0.000
11/30/1997	3.14	0.52	0.17		0.87	0.10	0.00	0.000	0.000
12/31/1997	3.09	0.48	0.16		0.97	0.11	0.00	0.000	0.000
1/31/1998	2.94	0.53	0.18		1.06	0.13	0.00	0.000	0.000
2/28/1998	4.78	0.83	0.17		1.19	0.15	0.00	0.000	0.000
3/31/1998	8.60	1.70	0.20		1.46	0.21	0.00	0.000	0.000
4/30/1998	7.27	2.16	0.30		1.68	0.27	0.00	0.000	0.000
5/31/1998	7.20	2.29	0.32		1.90	0.34	0.00	0.000	0.000
6/30/1998	6.91	2.86	0.41		2.11	0.43	0.00	0.000	0.000
7/31/1998	7.40	3.34	0.45		2.34	0.53	0.00	0.000	0.000
8/31/1998	7.56	3.17	0.42		2.57	0.63	0.00	0.000	0.000
9/30/1998	7.27	3.17	0.44		2.79	0.72	0.00	0.000	0.000
10/31/1998	6.87	3.24	0.47		3.00	0.82	0.00	0.000	0.000
11/30/1998	6.74	3.34	0.50		3.21	0.93	0.00	0.000	0.000
12/31/1998	6.43	3.10	0.48		3.40	1.02	0.00	0.000	0.000
1/31/1999	5.37	2.54	0.47		3.57	1.10	0.00	0.000	0.000
2/28/1999	5.89	3.05	0.52		3.74	1.19	0.00	0.000	0.000
3/31/1999	6.30	3.20	0.51		3.93	1.28	0.00	0.000	0.000
4/30/1999	6.07	3.13	0.52		4.11	1.38	0.00	0.000	0.000
5/31/1999	6.34	3.14	0.50		4.31	1.48	0.00	0.000	0.000
6/30/1999	6.48	3.17	0.49		4.50	1.57	0.00	0.000	0.000
7/31/1999	6.06	3.40	0.56		4.69	1.68	0.00	0.000	0.000
8/31/1999	6.37	3.15	0.49		4.89	1.77	0.00	0.000	0.000
9/30/1999	6.15	3.07	0.50		5.07	1.87	0.00	0.000	0.000
10/31/1999	6.20	3.02	0.49		5.27	1.96	0.00	0.000	0.000
11/30/1999	5.91	2.79	0.47		5.44	2.04	0.00	0.000	0.000
12/31/1999	5.92	2.80	0.47		5.63	2.13	0.00	0.000	0.000
1/31/2000	4.91	2.39	0.49		5.78	2.20	0.00	0.000	0.000
2/29/2000	4.91	2.42	0.49		5.92	2.27	0.00	0.000	0.000
3/31/2000	5.72	2.97	0.52		6.10	2.37	0.00	0.000	0.000
4/30/2000	5.49	2.96	0.54		6.26	2.46	0.00	0.000	0.000
5/31/2000	5.67	2.80	0.49		6.44	2.54	0.00	0.000	0.000
6/30/2000	5.89	2.67	0.45		6.62	2.62	0.00	0.000	0.000
7/31/2000	5.69	2.73	0.48		6.79	2.71	0.00	0.000	0.000
8/31/2000	5.84	2.60	0.45		6.97	2.79	0.00	0.000	0.000
9/30/2000	5.79	2.52	0.44		7.15	2.86	0.00	0.000	0.000
10/31/2000	5.69	2.46	0.43		7.32	2.94	0.00	0.000	0.000
11/30/2000	5.51	2.01	0.36		7.49	3.00	0.00	0.000	0.000
12/31/2000	4.09	1.76	0.43		7.62	3.05	0.00	0.000	0.000

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/2001	5.67	2.60	0.46		7.79	3.13	0.00	0.000	0.000
2/28/2001	4.51	2.14	0.48		7.92	3.19	0.00	0.000	0.000
3/31/2001	5.72	2.60	0.45		8.09	3.28	0.00	0.000	0.000
4/30/2001	5.59	2.63	0.47		8.26	3.35	0.00	0.000	0.000
5/31/2001	5.23	2.62	0.50		8.42	3.44	0.00	0.000	0.000
6/30/2001	5.17	2.75	0.53		8.58	3.52	0.00	0.000	0.000
7/31/2001	5.29	2.60	0.49		8.74	3.60	0.00	0.000	0.000
8/31/2001	5.26	2.52	0.48		8.91	3.68	0.00	0.000	0.000
9/30/2001	5.23	2.63	0.50		9.06	3.76	0.00	0.000	0.000
10/31/2001	5.04	2.44	0.48		9.22	3.83	0.00	0.000	0.000
11/30/2001	4.87	2.26	0.46		9.37	3.90	0.00	0.000	0.000
12/31/2001	4.45	1.97	0.44		9.50	3.96	0.00	0.000	0.000
1/31/2002	4.26	1.93	0.45		9.64	4.02	0.00	0.000	0.000
2/28/2002	4.87	2.21	0.45		9.77	4.08	0.00	0.000	0.000
3/31/2002	4.51	1.78	0.40		9.91	4.14	0.00	0.000	0.000
4/30/2002	4.60	1.82	0.40		10.05	4.19	0.00	0.000	0.000
5/31/2002	4.25	2.14	0.50		10.18	4.26	0.00	0.000	0.000
6/30/2002	4.13	2.31	0.56		10.31	4.33	0.00	0.000	0.000
7/31/2002	4.31	2.05	0.48	4.94	10.44	4.39	0.15	1.499	0.021
8/31/2002	4.53	1.91	0.42	6.09	10.58	4.45	0.34	1.894	0.046
9/30/2002	4.61	1.80	0.39	4.59	10.72	4.50	0.48	1.464	0.063
10/31/2002	4.68	1.84	0.39	5.54	10.86	4.56	0.65	1.736	0.085
11/30/2002	4.65	1.86	0.40	3.89	11.00	4.62	0.77	1.213	0.098
12/31/2002	4.24	1.81	0.43	13.38	11.13	4.67	1.18	4.403	0.150
1/31/2003	3.58	1.76	0.49	26.32	11.25	4.73	2.00	9.416	0.250
2/28/2003	3.53	1.78	0.50	26.20	11.34	4.78	2.73	9.356	0.339
3/31/2003	4.56	2.06	0.45	23.38	11.49	4.84	3.46	6.914	0.424
4/30/2003	5.38	2.27	0.42	16.02	11.65	4.91	3.94	4.191	0.476
5/31/2003	5.47	2.40	0.44		11.82	4.98	3.94	0.000	0.469
6/30/2003	5.49	2.21	0.40	26.19	11.98	5.05	4.72	6.906	0.555
7/31/2003	5.81	2.12	0.36	23.57	12.16	5.12	5.45	6.206	0.632
8/31/2003	5.86	2.14	0.37	25.91	12.34	5.18	6.26	6.756	0.715
9/30/2003	5.57	2.14	0.39	25.29	12.51	5.25	7.02	6.738	0.792
10/31/2003	5.79	2.08	0.36	20.85	12.69	5.31	7.66	5.556	0.853
11/30/2003	6.06	1.76	0.29	10.78	12.87	5.36	7.99	3.068	0.879
12/31/2003	6.05	2.03	0.34	15.11	13.06	5.43	8.45	3.996	0.919
1/31/2004	5.84	2.13	0.37	23.21	13.24	5.49	9.17	6.073	0.984
2/29/2004	5.40	2.04	0.38	23.66	13.40	5.55	9.86	6.567	1.046
3/31/2004	5.88	2.05	0.35	14.01	13.58	5.62	10.29	3.737	1.079
4/30/2004	6.40	2.72	0.42	16.28	13.77	5.70	10.78	3.562	1.114
5/31/2004	6.18	2.75	0.44	16.23	13.96	5.78	11.29	3.579	1.149
6/30/2004	6.23	2.69	0.43	12.05	14.15	5.86	11.65	2.679	1.170
7/31/2004	5.96	1.90	0.32	7.31	14.33	5.92	11.87	2.017	1.179
8/31/2004	6.55	2.58	0.39	14.45	14.54	6.00	12.32	3.229	1.207
9/30/2004	6.55	2.50	0.38	15.28	14.73	6.08	12.78	3.476	1.236
10/31/2004	6.52	2.40	0.37	15.52	14.94	6.15	13.26	3.620	1.266
11/30/2004	6.56	2.43	0.37	15.93	15.13	6.22	13.74	3.679	1.296
12/31/2004	6.59	2.50	0.38	10.77	15.34	6.30	14.07	2.445	1.311

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/2005	6.72	2.54	0.38	14.75	15.54	6.38	14.53	3.290	1.336
2/28/2005	6.57	2.44	0.37	21.38	15.73	6.45	15.13	4.932	1.376
3/31/2005	6.65	2.46	0.37	20.91	15.93	6.53	15.78	4.772	1.417
4/30/2005	6.58	2.51	0.38	23.34	16.13	6.60	16.48	5.289	1.463
5/31/2005	6.71	2.59	0.39	22.91	16.34	6.68	17.19	5.061	1.507
6/30/2005	6.26	2.15	0.34	24.58	16.53	6.74	17.92	6.211	1.555
7/31/2005	6.87	3.24	0.47	24.29	16.74	6.85	18.68	4.651	1.598
8/31/2005	6.39	3.72	0.58	26.40	16.94	6.96	19.50	4.743	1.644
9/30/2005	6.40	3.89	0.61	24.64	17.13	7.08	20.24	4.290	1.682
10/31/2005	6.54	3.99	0.61	24.08	17.33	7.20	20.98	4.099	1.718
11/30/2005	6.35	4.03	0.63	19.43	17.52	7.32	21.56	3.314	1.741
12/31/2005	6.10	3.99	0.65	15.98	17.71	7.45	22.06	2.774	1.755
1/31/2006	5.91	4.05	0.69	25.85	17.90	7.57	22.86	4.486	1.793
2/28/2006	6.19	4.25	0.69	25.79	18.07	7.69	23.58	4.274	1.826
3/31/2006	5.94	0.00	0.00	23.55	18.25	7.69	24.31	13.720	1.875
4/30/2006	5.79	4.33	0.75	25.78	18.43	7.82	25.09	4.291	1.908
5/31/2006	5.94	4.44	0.75	28.01	18.61	7.96	25.96	4.549	1.946
6/30/2006	5.81	4.33	0.75	29.20	18.79	8.09	26.83	4.857	1.984
7/31/2006	5.77	4.29	0.74	29.60	18.96	8.22	27.75	4.971	2.025
8/31/2006	5.73	4.37	0.76	28.24	19.14	8.36	28.62	4.688	2.061
9/30/2006	5.67	4.34	0.77	28.56	19.31	8.49	29.48	4.776	2.095
10/31/2006	5.58	4.42	0.79	20.74	19.49	8.62	30.12	3.435	2.113
11/30/2006	5.51	4.40	0.80	23.44	19.65	8.76	30.83	3.912	2.135
12/31/2006	5.38	4.59	0.85	25.34	19.82	8.90	31.61	4.126	2.161
1/31/2007	5.21	4.85	0.93	21.99	19.98	9.05	32.29	3.463	2.178
2/28/2007	5.08	4.84	0.95	22.65	20.12	9.18	32.93	3.587	2.195
3/31/2007	5.08	4.83	0.95	24.21	20.28	9.33	33.68	3.841	2.216
4/30/2007	4.84	4.97	1.03	24.92	20.42	9.48	34.43	3.909	2.237
5/31/2007	4.56	5.07	1.11	24.93	20.57	9.64	35.20	3.904	2.258
6/30/2007	4.67	5.11	1.10	25.25	20.71	9.79	35.96	3.907	2.279
7/31/2007	4.69	5.02	1.07	23.55	20.85	9.95	36.69	3.692	2.296
8/31/2007	4.68	5.00	1.07	21.03	21.00	10.10	37.34	3.310	2.308
9/30/2007	4.33	4.79	1.11	23.87	21.13	10.25	38.06	3.947	2.327
10/31/2007	3.95	4.74	1.20	24.20	21.25	10.39	38.81	4.111	2.346
11/30/2007	3.90	4.43	1.14	24.25	21.36	10.53	39.53	4.360	2.366
12/31/2007	4.55	5.44	1.19	24.75	21.51	10.70	40.30	3.663	2.382
1/31/2008	4.40	5.30	1.21	24.20	21.64	10.86	41.05	3.683	2.398
2/29/2008	3.20	4.37	1.37	22.64	21.74	10.99	41.71	4.272	2.415
3/31/2008	3.36	4.23	1.26	24.20	21.84	11.12	42.46	4.654	2.435
4/30/2008	3.28	4.16	1.27	15.77	21.94	11.24	42.93	3.090	2.441
5/31/2008	3.31	4.02	1.21	17.83	22.04	11.37	43.48	3.585	2.451
6/30/2008	3.94	4.48	1.14	17.03	22.16	11.50	43.99	3.029	2.456
7/31/2008	4.35	4.89	1.12	22.93	22.29	11.65	44.70	3.726	2.470
8/31/2008	4.38	4.95	1.13	22.16	22.43	11.81	45.39	3.563	2.481
9/30/2008	4.20	4.89	1.16	20.99	22.56	11.95	46.02	3.439	2.491
10/31/2008	4.06	5.02	1.23	19.94	22.68	12.11	46.64	3.220	2.498
11/30/2008	3.98	4.98	1.25	22.18	22.80	12.26	47.30	3.617	2.509
12/31/2008	4.11	5.21	1.27	22.74	22.93	12.42	48.01	3.551	2.520

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/2009	4.04	5.24	1.30	25.46	23.05	12.58	48.80	3.971	2.535
2/28/2009	4.08	5.35	1.31	26.19	23.17	12.73	49.53	4.013	2.549
3/31/2009	3.39	4.22	1.25	25.37	23.27	12.86	50.32	4.879	2.568
4/30/2009	4.19	5.35	1.28	21.60	23.40	13.02	50.97	3.293	2.575
5/31/2009	3.95	4.99	1.26	22.24	23.52	13.18	51.66	3.629	2.585
6/30/2009	3.98	4.98	1.25	19.64	23.64	13.33	52.25	3.204	2.591
7/31/2009	3.90	4.92	1.26	22.49	23.76	13.48	52.94	3.717	2.601
8/31/2009	3.84	4.90	1.28	21.96	23.88	13.63	53.62	3.652	2.611
9/30/2009	3.79	4.97	1.31	24.31	23.99	13.78	54.35	4.008	2.623
10/31/2009	3.67	4.97	1.35	24.47	24.11	13.94	55.11	4.061	2.636
11/30/2009	4.78	7.58	1.59	24.93	24.25	14.16	55.86	2.782	2.638
12/31/2009	5.86	9.58	1.63	29.01	24.43	14.46	56.76	2.572	2.637
1/31/2010	5.50	9.24	1.68	24.88	24.60	14.75	57.53	2.296	2.631
2/28/2010	5.27	8.82	1.67	23.96	24.75	14.99	58.20	2.315	2.627
3/31/2010	5.22	8.47	1.62	24.56	24.91	15.26	58.96	2.461	2.625
4/30/2010	5.28	8.53	1.61	25.54	25.07	15.51	59.73	2.539	2.624
5/31/2010	5.30	8.62	1.63	26.67	25.24	15.78	60.55	2.627	2.624
6/30/2010	5.06	8.60	1.70	26.63	25.39	16.04	61.35	2.647	2.624
7/31/2010	4.78	8.48	1.78	26.87	25.54	16.30	62.19	2.726	2.626
8/31/2010	4.80	8.62	1.80	27.12	25.68	16.57	63.03	2.711	2.627
9/30/2010	4.78	8.57	1.79	25.01	25.83	16.82	63.78	2.513	2.625
10/31/2010	4.72	8.66	1.83	24.25	25.97	17.09	64.53	2.419	2.623
11/30/2010	4.45	8.74	1.97	22.71	26.11	17.35	65.21	2.265	2.618
12/31/2010	4.15	8.62	2.08	22.31	26.24	17.62	65.90	2.271	2.614
1/31/2011	4.23	8.79	2.08	25.80	26.37	17.89	66.70	2.576	2.614
2/28/2011	4.30	8.76	2.04	23.14	26.49	18.14	67.35	2.314	2.610
3/31/2011	4.07	8.36	2.06	20.55	26.61	18.40	67.99	2.154	2.605
4/30/2011	4.64	8.49	1.83	22.75	26.75	18.65	68.67	2.314	2.602
5/31/2011	4.60	8.62	1.88		26.89	18.92	68.67	0.000	2.572
6/30/2011	4.43	8.66	1.96	20.17	27.03	19.18	69.27	2.028	2.566
7/31/2011	4.32	8.63	2.00	25.19	27.16	19.45	70.06	2.550	2.566
8/31/2011	4.41	8.54	1.94	25.70	27.30	19.71	70.85	2.618	2.566
9/30/2011	4.21	8.66	2.06	25.76	27.42	19.97	71.62	2.608	2.567
10/31/2011	3.70	11.23	3.03	17.59	27.54	20.32	72.17	1.430	2.551
11/30/2011	3.06	12.28	4.02		27.63	20.69	72.17	0.000	2.516
12/31/2011	3.06	13.83	4.52		27.73	21.12	72.17	0.000	2.477