

KOLA UNIT NO. 2
WATERFLOOD EOR PROJECT
ANNUAL REPORT FOR 2012

March 1, 2013

Tundra Oil and Gas Partnership

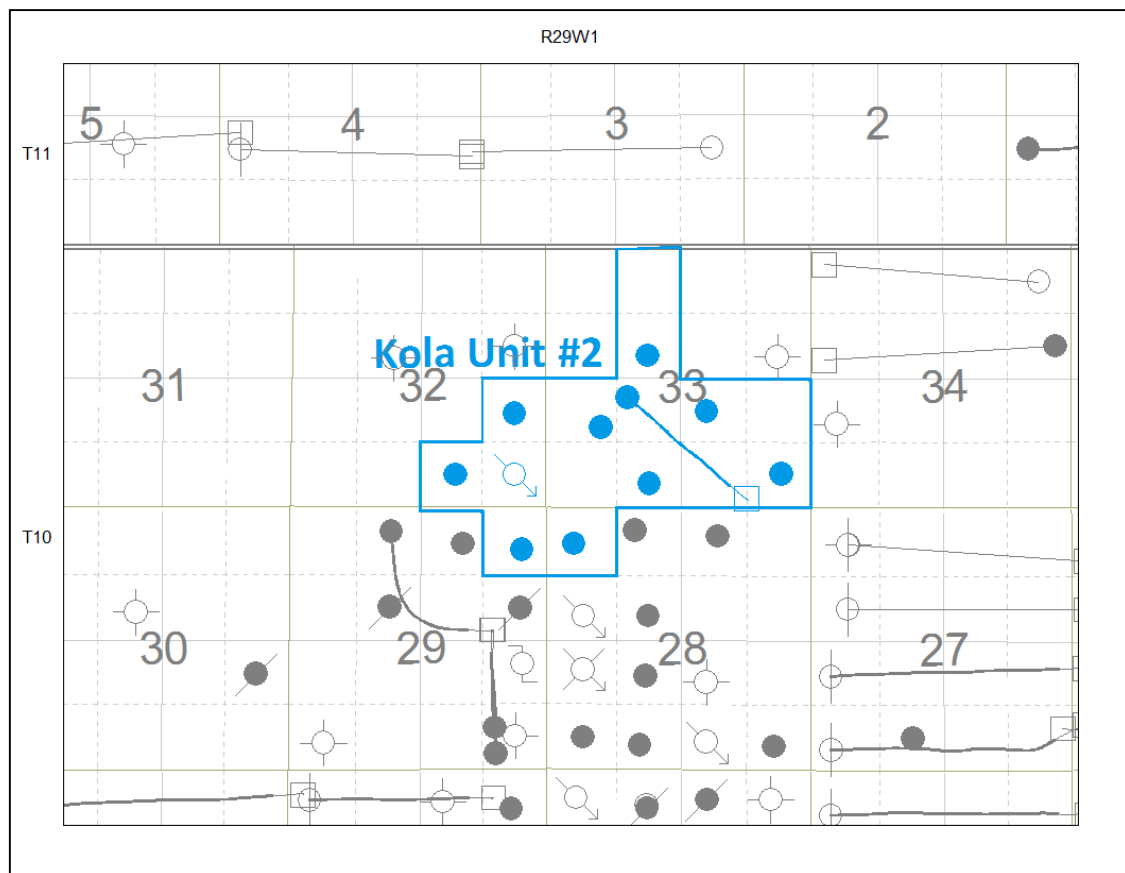
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INTRODUCTION

Kola Unit No. 2 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Waterflood Order No. 4 effective December 1, 1996 with Tundra Oil and Gas Ltd. as Operator. The EOR project area contains 11 wells in 15 LSDs in Township 10, Range 29 W1 as shown in the figure below. Well list and well status is available in Appendix A.

Figure 1: Kola Unit No. 2 Area Outline



In accordance with Section 73 of the Manitoba Drilling and Production Regulation, Tundra hereby submits the 2012 Annual Progress Report for Kola Unit No. 2 as required by Waterflood Order No 4.

DISCUSSION

Production History

For the wells included in Kola Unit No. 2, production started March 1993 with the 00/16-29-010-29W1/0 well. Oil production peaked at 42.7 m³/d in March of 1998. The Unit was producing 6.84 m³/d of oil and 12.74 m³/d of water, in December 2012. 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: Kola Unit No. 2 Production/Injection Rates and WOR vs. Time

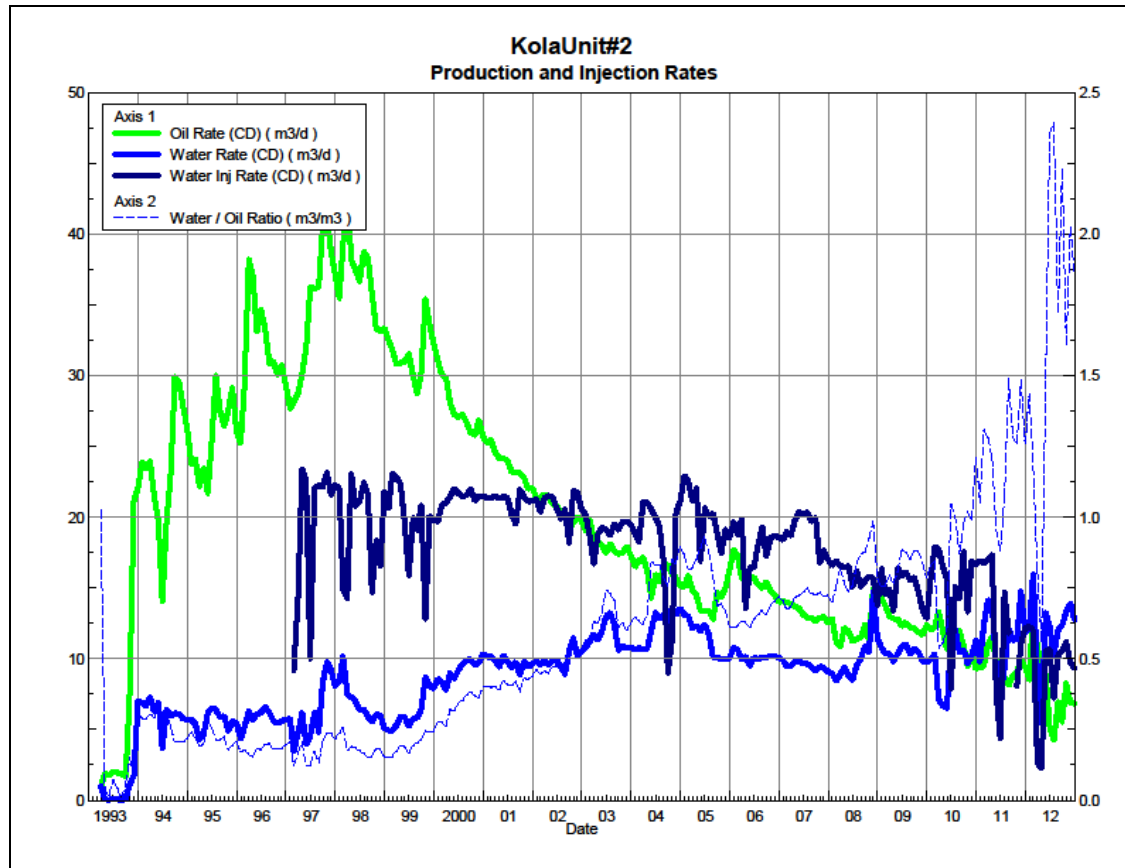
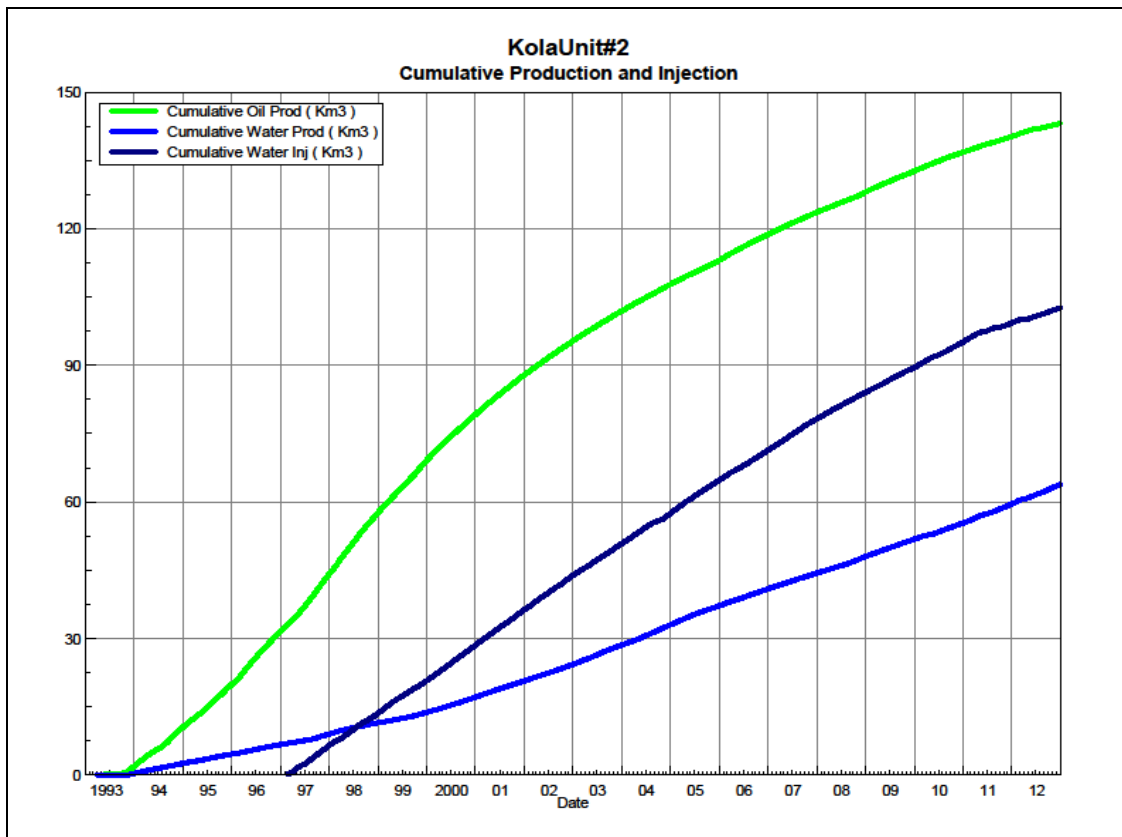


Figure 3 shows the cumulative production for Kola Unit No. 2 to the end of December 2012 as 143.2 E³m³ of oil, and 63.9 E³m³ of water. The cumulative water injected is 102.7 E³m³. The original oil-in-place of Kola Unit No. 2 is estimated at 1190 E³m³. At the end of 2012 the recovery factor of Kola Unit No. 2 was 12.0%. 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: Kola Unit No. 2 Cumulative Oil, Water and Water Injected vs Time



Waterflood History

As of December 2012 the Unit has 1 active vertical injector. Water injection started in February 1997. Water has only been injected through 00/01-32-010-29W1/0.

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

Injected fluid consists of water producing from the Lodgepole formation, from the unit and surrounding area. Water is filtered to 25 microns prior to re-injection.

Injection Wellhead Pressures

The Average monthly wellhead injection pressures are summarized in Appendix B, and shows all injection pressure since 2003. Average Injection pressure for 00/01-32-010-29W1/0 was 8200 kPag in 2011.

Reservoir Pressure

No reservoir pressure measurements were taken at Kola Unit No. 2 in 2012.

Well Servicing

Table 1 lists the maintenance that was required in Kola Unit No. 2 in 2012.

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

00/08-32-010-29W1/0	Repair Tubing Leak	27/01/2012
00/01-33-010-29W1/0	Scale Squeeze	27/09/2012
00/03-33-010-29W1/0	Pump Change	24/07/2012
00/03-33-010-29W1/0	Scale Squeeze	01/11/2012
00/05-33-010-29W1/0	Pump Change, Rod Repair	09/01/2012
00/06-33-010-29W1/0	Pump Change	26/06/2012

Voidage Replacement

Cumulative voidage for the Kola Unit No. 2 was 0.479 in December 2012. 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.

Waterflood Performance Discussion

The OOIP of Kola Unit No. 2 is estimated at 1190 E³m³. The recovery factor was 12.0% based on 143 E³m³ of cumulative oil recovered to the end of 2012. The ultimate expected recoverable reserve based on decline analysis is 184 E³m³ or an ultimate recovery factor of 15.5%.

The overall performance of this waterflood has been good as indicated by an expected recovery factor of 15.5%, beyond the primary recovery factor. Waterflood response is clearly evident in wells in the western part of the Unit. It should be easy to maintain a cumulative voidage of unity. There have been no water breakthrough issues.

Trends in production are very stable and mature. No changes are anticipated in the future trends. The waterflood performance will likely be improved significantly by the addition of another injector well in the east part of the Unit where recovery has been enhanced mainly by the addition of a horizontal well.

Optimization of the waterflood will be evaluated to add injection water in the under-supported area of the pool. Also, facility enhancements in the area may play a role in future optimization.

List of Appendices

Appendix A: Well Name and Well Status

Appendix B: Monthly Injection Wellhead Pressures Table and Plots

Appendix C: Kola Unit No. 2 Injection Pattern Summary

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

Plots and Table for the following Injector:

00/01-32-010-29W1/0

Appendix A

UWI	Surface Location	Well Status
100/13-28-010-29W1/00	100/02-33-010-29W1/00	Capable of OIL Prod
100/16-29-010-29W1/00		Capable of OIL Prod
100/01-32-010-29W1/00		WTR Injection
100/02-32-010-29W1/00		Capable of OIL Prod
100/08-32-010-29W1/00		Capable of OIL Prod
100/01-33-010-29W1/00		Capable of OIL Prod
100/03-33-010-29W1/00		Capable of OIL Prod
100/05-33-010-29W1/00		Capable of OIL Prod
100/06-33-010-29W1/00		Capable of OIL Prod
100/07-33-010-29W1/00		Capable of OIL Prod
100/11-33-010-29W1/00		Capable of OIL Prod

Appendix B

Average Monthly Injection Pressure (kPag)

Injection Pressure		Injection Pressure		Injection Pressure	
Month	100/01-32	Month	100/01-32	Month	100/01-32
		Jan-06	10419	Jan-10	11123
		Feb-06	10377	Feb-10	10461
		Mar-06	10549	Mar-10	10516
		Apr-06	9327	Apr-10	10530
		May-06	9342	May-10	10477
		Jun-06	10483	Jun-10	5193
		Jul-06	10529	Jul-10	9852
Aug-02	5529	Aug-06	10465	Aug-10	9461
Sep-02	10082	Sep-06	10440	Sep-10	10357
Oct-02	10082	Oct-06	10263	Oct-10	10187
Nov-02	10082	Nov-06	10599	Nov-10	10654
Dec-02	10082	Dec-06	10516	Dec-10	10723
Jan-03	9998	Jan-07	10574	Jan-11	10152
Feb-03	10097	Feb-07	10468	Feb-11	10108
Mar-03	10144	Mar-07	10300	Mar-11	10216
Apr-03	10061	Apr-07	10347	Apr-11	10100
May-03	9940	May-07	10301	May-11	9526
Jun-03	9940	Jun-07	10301	Jun-11	5603
Jul-03	9940	Jul-07	10333	Jul-11	6871
Aug-03	9940	Aug-07	10300	Aug-11	9632
Sep-03	9913	Sep-07	10301	Sep-11	0
Oct-03	9825	Oct-07	10301	Oct-11	8397
Nov-03	9825	Nov-07	10221	Nov-11	9000
Dec-03	9825	Dec-07	10200	Dec-11	9000
Jan-04	9825	Jan-08	10200	Jan-12	8935
Feb-04	9825	Feb-08	10180	Feb-12	8900
Mar-04	9825	Mar-08	10101	Mar-12	8900
Apr-04	9825	Apr-08	10124	Apr-12	8900
May-04	9825	May-08	10190	May-12	8900
Jun-04	9825	Jun-08	10200	Jun-12	8900
Jul-04	9825	Jul-08	10200	Jul-12	8900
Aug-04	9825	Aug-08	10135	Aug-12	8661
Sep-04	10182	Sep-08	9934	Sep-12	1500
Oct-04	9927	Oct-08	10001	Oct-12	1500
Nov-04	9190	Nov-08	10001	Nov-12	1500
Dec-04	9190	Dec-08	10001	Dec-12	1500
Jan-05	9190	Jan-09	10001		
Feb-05	9659	Feb-09	10001		
Mar-05	10200	Mar-09	10001		
Apr-05	10200	Apr-09	10001		
May-05	10200	May-09	10001		
Jun-05	10173	Jun-09	10007		
Jul-05	10369	Jul-09	10201		
Aug-05	10526	Aug-09	10200		
Sep-05	10727	Sep-09	10200		
Oct-05	10800	Oct-09	10284		
Nov-05	10760	Nov-09	10487		
Dec-05	10400	Dec-09	11032		

Appendix C

North Ebor Unit No. 1 Pattern Summary as of December 2012

Pattern Name	Injector Location (010-29W1)	Status	Supported Wells (010-29W1)	No. of Supported Wells	Allocation Factor	Pattern Prod Start Month	Inj Start Month	Oil Rate (m³/d)	Water Rate (m³/d)	WOR (m³/m³)	Water Injection (m³/d)	Cum Oil (E³m³)	Cum Water (E³m³)	Cum Inj Water (E³m³)	Monthly VRR	Cum VRR
00/16-14-010-29W1 Injector	00/16-14	WTR Injection	01-23, 02-23, 09-14, 12-13, 13-13, 15-14	6	1	Jun 1987	Jun 1990	1.2	2.9	2.37	6.5	49.5	34.0	102.6	1.6	1.18

Appendix D
Rates and VRR
Plots and Tables

Pattern: 00/01-32-10-29W1 Set: KolaUnit#2

Oil Formation Vol Factor : 1.05000 m3/m3

Water Formation Vol Factor : 1.00000 m3/m3

Water / Oil Ratio : 1.86 m3/m3

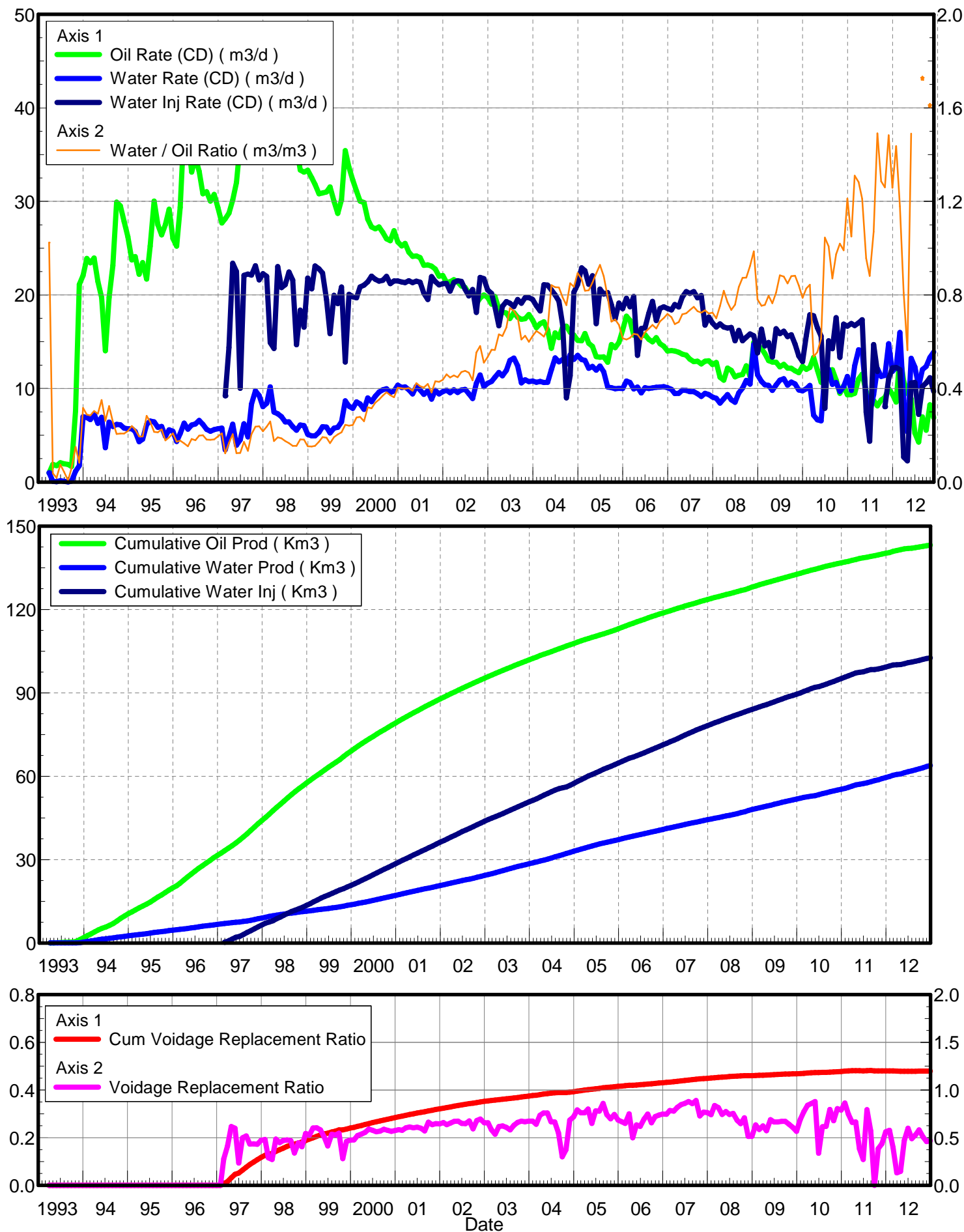
February 25, 2013

Operator: Tundra_O&G_Prtshp

Oil Rate (CD) : 6.84 m3/d

Water Rate (CD) : 12.74 m3/d

Water Inj Rate (CD) : 9.35 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 Replacemnt Ratio
3/31/1993	0.96	0.98	1.02		0.03	0.03	0.00	0.000	0.000
4/30/1993	1.89	0.07	0.04		0.09	0.03	0.00	0.000	0.000
5/31/1993	1.74	0.03	0.02		0.14	0.03	0.00	0.000	0.000
6/30/1993	2.06	0.15	0.07		0.20	0.04	0.00	0.000	0.000
7/31/1993	1.94	0.08	0.04		0.26	0.04	0.00	0.000	0.000
8/31/1993	1.87	0.01	0.01		0.32	0.04	0.00	0.000	0.000
9/30/1993	1.67	0.10	0.06		0.37	0.04	0.00	0.000	0.000
10/31/1993	7.61	1.15	0.15		0.61	0.08	0.00	0.000	0.000
11/30/1993	21.12	1.75	0.08		1.24	0.13	0.00	0.000	0.000
12/31/1993	22.08	7.00	0.32		1.92	0.35	0.00	0.000	0.000
1/31/1994	23.91	6.89	0.29		2.67	0.56	0.00	0.000	0.000
2/28/1994	23.43	6.67	0.28		3.32	0.75	0.00	0.000	0.000
3/31/1994	23.94	7.27	0.30		4.06	0.97	0.00	0.000	0.000
4/30/1994	21.46	6.27	0.29		4.71	1.16	0.00	0.000	0.000
5/31/1994	19.73	6.92	0.35		5.32	1.38	0.00	0.000	0.000
6/30/1994	14.03	3.67	0.26		5.74	1.49	0.00	0.000	0.000
7/31/1994	19.75	6.41	0.32		6.35	1.69	0.00	0.000	0.000
8/31/1994	23.15	5.95	0.26		7.07	1.87	0.00	0.000	0.000
9/30/1994	29.92	6.16	0.21		7.97	2.06	0.00	0.000	0.000
10/31/1994	29.52	6.11	0.21		8.88	2.24	0.00	0.000	0.000
11/30/1994	27.85	5.77	0.21		9.72	2.42	0.00	0.000	0.000
12/31/1994	26.21	5.70	0.22		10.53	2.59	0.00	0.000	0.000
1/31/1995	23.75	5.69	0.24		11.27	2.77	0.00	0.000	0.000
2/28/1995	24.11	5.40	0.22		11.94	2.92	0.00	0.000	0.000
3/31/1995	22.20	4.32	0.19		12.63	3.06	0.00	0.000	0.000
4/30/1995	23.45	4.58	0.20		13.33	3.19	0.00	0.000	0.000
5/31/1995	21.70	6.14	0.28		14.01	3.38	0.00	0.000	0.000
6/30/1995	25.22	6.51	0.26		14.76	3.58	0.00	0.000	0.000
7/31/1995	30.03	6.43	0.21		15.69	3.78	0.00	0.000	0.000
8/31/1995	27.49	5.85	0.21		16.55	3.96	0.00	0.000	0.000
9/30/1995	26.42	5.94	0.22		17.34	4.14	0.00	0.000	0.000
10/31/1995	27.50	4.89	0.18		18.19	4.29	0.00	0.000	0.000
11/30/1995	29.17	5.58	0.19		19.07	4.46	0.00	0.000	0.000
12/31/1995	26.05	5.44	0.21		19.87	4.63	0.00	0.000	0.000
1/31/1996	25.22	4.35	0.17		20.66	4.76	0.00	0.000	0.000
2/29/1996	29.36	5.19	0.18		21.51	4.91	0.00	0.000	0.000
3/31/1996	38.19	6.31	0.17		22.69	5.11	0.00	0.000	0.000
4/30/1996	37.00	5.66	0.15		23.80	5.28	0.00	0.000	0.000
5/31/1996	33.12	6.10	0.18		24.83	5.47	0.00	0.000	0.000
6/30/1996	34.67	6.20	0.18		25.87	5.65	0.00	0.000	0.000
7/31/1996	33.21	6.58	0.20		26.90	5.86	0.00	0.000	0.000
8/31/1996	30.81	6.17	0.20		27.85	6.05	0.00	0.000	0.000
9/30/1996	31.02	5.63	0.18		28.78	6.22	0.00	0.000	0.000
10/31/1996	30.04	5.43	0.18		29.72	6.38	0.00	0.000	0.000
11/30/1996	30.75	5.61	0.18		30.64	6.55	0.00	0.000	0.000
12/31/1996	29.35	5.71	0.19		31.55	6.73	0.00	0.000	0.000
1/31/1997	27.70	5.75	0.21		32.41	6.91	0.00	0.000	0.000
2/28/1997	28.13	3.45	0.12	9.21	33.19	7.00	0.26	0.279	0.006

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 Replacemnt Ratio
3/31/1997	28.75	4.82	0.17	14.39	34.08	7.15	0.70	0.411	0.016
4/30/1997	30.15	6.18	0.20	23.38	34.99	7.34	1.41	0.618	0.032
5/31/1997	32.02	3.95	0.12	22.50	35.98	7.46	2.10	0.599	0.046
6/30/1997	36.25	4.52	0.12	10.03	37.07	7.60	2.40	0.235	0.052
7/31/1997	36.17	6.22	0.17	22.09	38.19	7.79	3.09	0.500	0.064
8/31/1997	36.22	4.82	0.13	22.24	39.31	7.94	3.78	0.519	0.077
9/30/1997	40.60	8.32	0.20	22.12	40.53	8.19	4.44	0.434	0.088
10/31/1997	41.18	9.75	0.24	23.12	41.81	8.49	5.16	0.436	0.098
11/30/1997	38.79	9.24	0.24	21.60	42.97	8.77	5.81	0.432	0.108
12/31/1997	37.19	8.06	0.22	22.27	44.12	9.02	6.50	0.473	0.117
1/31/1998	35.47	8.41	0.24	22.00	45.22	9.28	7.18	0.482	0.126
2/28/1998	39.30	10.18	0.26	14.90	46.32	9.56	7.60	0.290	0.131
3/31/1998	42.74	7.49	0.18	14.27	47.65	9.80	8.04	0.273	0.134
4/30/1998	38.17	7.29	0.19	23.04	48.79	10.01	8.73	0.486	0.143
5/31/1998	37.48	7.00	0.19	20.79	49.96	10.23	9.37	0.448	0.150
6/30/1998	36.64	6.42	0.18	21.09	51.06	10.42	10.01	0.470	0.156
7/31/1998	38.77	6.44	0.17	22.45	52.26	10.62	10.70	0.476	0.163
8/31/1998	38.29	5.92	0.15	21.58	53.44	10.81	11.37	0.468	0.170
9/30/1998	35.81	5.53	0.15	14.67	54.52	10.97	11.81	0.340	0.173
10/31/1998	33.35	6.09	0.18	18.38	55.55	11.16	12.38	0.447	0.178
11/30/1998	33.13	6.02	0.18	16.55	56.55	11.34	12.88	0.406	0.182
12/31/1998	33.34	5.10	0.15	21.81	57.58	11.50	13.55	0.544	0.188
1/31/1999	32.52	4.94	0.15	20.64	58.59	11.65	14.19	0.528	0.194
2/28/1999	31.82	4.94	0.16	23.10	59.48	11.79	14.84	0.602	0.200
3/31/1999	30.81	5.33	0.17	22.79	60.43	11.96	15.55	0.605	0.206
4/30/1999	30.89	5.92	0.19	22.33	61.36	12.14	16.22	0.582	0.212
5/31/1999	31.00	5.87	0.19	19.52	62.32	12.32	16.82	0.508	0.216
6/30/1999	31.55	5.24	0.17	15.85	63.27	12.47	17.30	0.413	0.219
7/31/1999	30.01	5.76	0.19	19.95	64.20	12.65	17.92	0.535	0.224
8/31/1999	28.71	5.86	0.20	19.07	65.09	12.83	18.51	0.530	0.228
9/30/1999	30.20	6.43	0.21	20.85	65.99	13.03	19.13	0.547	0.232
10/31/1999	35.41	8.67	0.24	12.83	67.09	13.30	19.53	0.280	0.233
11/30/1999	33.62	8.11	0.24	20.06	68.10	13.54	20.13	0.462	0.237
12/31/1999	32.29	7.88	0.24	19.81	69.10	13.78	20.75	0.474	0.240
1/31/2000	31.09	8.58	0.28	19.69	70.07	14.05	21.36	0.478	0.244
2/29/2000	30.03	8.36	0.28	20.84	70.94	14.29	21.96	0.523	0.247
3/31/2000	29.87	7.77	0.26	21.05	71.86	14.53	22.61	0.538	0.251
4/30/2000	28.09	8.99	0.32	21.41	72.70	14.80	23.26	0.556	0.255
5/31/2000	27.26	8.59	0.32	22.02	73.55	15.07	23.94	0.592	0.259
6/30/2000	27.06	9.18	0.34	21.68	74.36	15.34	24.59	0.577	0.263
7/31/2000	27.26	9.61	0.35	21.47	75.21	15.64	25.26	0.561	0.267
8/31/2000	26.68	9.87	0.37	21.55	76.03	15.95	25.92	0.569	0.271
9/30/2000	26.00	9.98	0.38	21.98	76.81	16.25	26.58	0.590	0.274
10/31/2000	25.80	9.57	0.37	21.20	77.61	16.54	27.24	0.578	0.278
11/30/2000	26.86	9.74	0.36	21.49	78.42	16.84	27.89	0.567	0.281
12/31/2000	25.67	10.35	0.40	21.50	79.21	17.16	28.55	0.576	0.285
1/31/2001	25.25	10.11	0.40	21.38	80.00	17.47	29.22	0.584	0.288
2/28/2001	25.50	10.18	0.40	21.32	80.71	17.76	29.81	0.577	0.291

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
3/31/2001	24.57	9.86	0.40	21.53	81.47	18.06	30.48	0.604	0.294
4/30/2001	24.13	9.42	0.39	21.31	82.20	18.34	31.12	0.613	0.297
5/31/2001	24.16	10.22	0.42	21.47	82.95	18.66	31.78	0.603	0.301
6/30/2001	23.99	9.83	0.41	21.36	83.67	18.96	32.42	0.610	0.304
7/31/2001	23.17	9.37	0.40	20.19	84.38	19.25	33.05	0.599	0.306
8/31/2001	23.22	9.75	0.42	19.52	85.10	19.55	33.66	0.572	0.309
9/30/2001	23.09	8.85	0.38	21.95	85.80	19.81	34.31	0.663	0.312
10/31/2001	22.77	9.81	0.43	21.44	86.50	20.12	34.98	0.636	0.315
11/30/2001	22.00	9.42	0.43	21.07	87.16	20.40	35.61	0.648	0.318
12/31/2001	22.08	9.66	0.44	21.21	87.85	20.70	36.27	0.646	0.321
1/31/2002	21.34	9.82	0.46	21.22	88.51	21.00	36.93	0.659	0.324
2/28/2002	21.40	9.56	0.45	20.41	89.11	21.27	37.50	0.637	0.327
3/31/2002	21.63	9.85	0.46	21.33	89.78	21.58	38.16	0.655	0.329
4/30/2002	21.38	9.58	0.45	21.53	90.42	21.86	38.80	0.672	0.332
5/31/2002	20.96	9.85	0.47	21.45	91.07	22.17	39.47	0.673	0.335
6/30/2002	20.80	9.90	0.48	20.60	91.69	22.47	40.09	0.649	0.338
7/31/2002	20.19	9.45	0.47	19.88	92.32	22.76	40.70	0.649	0.340
8/31/2002	20.50	8.92	0.43	20.58	92.95	23.04	41.34	0.676	0.343
9/30/2002	19.07	10.56	0.55	18.14	93.53	23.35	41.89	0.593	0.345
10/31/2002	19.67	11.45	0.58	21.87	94.14	23.71	42.56	0.681	0.347
11/30/2002	20.00	10.20	0.51	21.74	94.74	24.01	43.22	0.697	0.350
12/31/2002	19.74	10.55	0.53	20.54	95.35	24.34	43.85	0.657	0.352
1/31/2003	19.03	10.76	0.57	20.16	95.94	24.67	44.48	0.656	0.355
2/28/2003	19.84	11.20	0.56	18.73	96.49	24.99	45.00	0.585	0.356
3/31/2003	18.52	11.70	0.63	16.71	97.07	25.35	45.52	0.536	0.358
4/30/2003	18.18	11.35	0.62	18.79	97.61	25.69	46.08	0.617	0.360
5/31/2003	18.07	11.95	0.66	19.29	98.17	26.06	46.68	0.624	0.361
6/30/2003	17.48	13.00	0.74	19.10	98.70	26.45	47.25	0.609	0.363
7/31/2003	18.11	13.25	0.73	18.75	99.26	26.86	47.84	0.581	0.365
8/31/2003	17.61	12.43	0.71	19.51	99.80	27.25	48.44	0.631	0.367
9/30/2003	17.40	10.61	0.61	19.10	100.33	27.57	49.01	0.662	0.369
10/31/2003	17.47	10.93	0.63	19.70	100.87	27.91	49.62	0.673	0.371
11/30/2003	17.91	10.74	0.60	19.71	101.41	28.23	50.22	0.667	0.373
12/31/2003	17.31	10.80	0.62	19.51	101.94	28.56	50.82	0.673	0.375
1/31/2004	16.51	10.67	0.65	18.85	102.45	28.89	51.40	0.673	0.377
2/29/2004	16.94	10.76	0.63	18.28	102.95	29.20	51.93	0.640	0.378
3/31/2004	17.14	10.65	0.62	21.08	103.48	29.53	52.59	0.736	0.381
4/30/2004	16.24	10.67	0.66	21.06	103.96	29.85	53.22	0.760	0.383
5/31/2004	14.29	12.04	0.84	20.55	104.41	30.23	53.86	0.760	0.385
6/30/2004	15.94	13.27	0.83	20.00	104.88	30.63	54.46	0.667	0.387
7/31/2004	15.43	12.84	0.83	19.33	105.36	31.02	55.06	0.666	0.389
8/31/2004	16.58	13.09	0.79	16.79	105.88	31.43	55.58	0.550	0.390
9/30/2004	16.66	12.61	0.76	9.00	106.38	31.81	55.85	0.299	0.389
10/31/2004	16.01	13.61	0.85	11.38	106.87	32.23	56.20	0.374	0.389
11/30/2004	15.71	13.11	0.83	20.29	107.34	32.62	56.81	0.685	0.391
12/31/2004	15.15	13.55	0.89	21.13	107.81	33.04	57.46	0.717	0.393
1/31/2005	15.09	13.09	0.87	22.91	108.28	33.45	58.17	0.792	0.395
2/28/2005	15.89	13.00	0.82	22.59	108.73	33.81	58.81	0.761	0.397

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
3/31/2005	14.84	12.15	0.82	21.14	109.19	34.19	59.46	0.762	0.400
4/30/2005	14.49	12.35	0.85	22.05	109.62	34.56	60.12	0.800	0.402
5/31/2005	13.40	11.95	0.89	16.92	110.04	34.93	60.65	0.650	0.403
6/30/2005	13.35	12.40	0.93	20.64	110.44	35.30	61.27	0.781	0.405
7/31/2005	13.38	11.77	0.88	20.08	110.85	35.67	61.89	0.778	0.407
8/31/2005	12.80	10.15	0.79	20.26	111.25	35.98	62.52	0.859	0.409
9/30/2005	14.69	10.08	0.69	18.92	111.69	36.29	63.09	0.742	0.411
10/31/2005	14.35	9.98	0.70	17.46	112.14	36.59	63.63	0.697	0.412
11/30/2005	14.92	10.02	0.67	19.12	112.58	36.90	64.20	0.745	0.414
12/31/2005	16.26	10.00	0.62	18.53	113.09	37.21	64.77	0.684	0.415
1/31/2006	17.72	10.80	0.61	19.65	113.64	37.54	65.38	0.668	0.417
2/28/2006	17.28	10.65	0.62	18.74	114.12	37.84	65.91	0.651	0.418
3/31/2006	15.69	9.94	0.63	19.84	114.61	38.15	66.52	0.751	0.420
4/30/2006	16.11	10.16	0.63	13.54	115.09	38.45	66.93	0.500	0.420
5/31/2006	15.62	9.52	0.61	16.42	115.57	38.75	67.44	0.634	0.421
6/30/2006	15.75	10.09	0.64	16.48	116.05	39.05	67.93	0.619	0.422
7/31/2006	15.25	9.99	0.66	18.02	116.52	39.36	68.49	0.693	0.424
8/31/2006	14.99	10.07	0.67	19.30	116.98	39.67	69.09	0.748	0.425
9/30/2006	15.43	10.13	0.66	17.26	117.45	39.98	69.61	0.656	0.426
10/31/2006	14.78	10.15	0.69	18.55	117.90	40.29	70.18	0.722	0.428
11/30/2006	14.52	10.19	0.70	18.74	118.34	40.60	70.74	0.737	0.429
12/31/2006	14.01	10.08	0.72	18.55	118.77	40.91	71.32	0.749	0.431
1/31/2007	14.05	9.90	0.70	18.39	119.21	41.21	71.89	0.746	0.432
2/28/2007	14.00	9.45	0.68	18.97	119.60	41.48	72.42	0.785	0.433
3/31/2007	13.86	9.48	0.68	18.71	120.03	41.77	73.00	0.778	0.435
4/30/2007	13.67	9.81	0.72	19.77	120.44	42.07	73.59	0.818	0.437
5/31/2007	13.57	9.80	0.72	20.37	120.86	42.37	74.23	0.847	0.438
6/30/2007	13.14	9.66	0.74	20.16	121.26	42.66	74.83	0.860	0.440
7/31/2007	12.88	9.65	0.75	20.36	121.66	42.96	75.46	0.879	0.442
8/31/2007	12.91	9.43	0.73	19.70	122.06	43.25	76.07	0.857	0.444
9/30/2007	12.62	9.14	0.72	19.94	122.43	43.53	76.67	0.890	0.446
10/31/2007	12.91	9.47	0.73	16.77	122.83	43.82	77.19	0.728	0.447
11/30/2007	12.96	9.35	0.72	17.64	123.22	44.10	77.72	0.768	0.448
12/31/2007	12.55	9.09	0.72	17.00	123.61	44.38	78.25	0.763	0.449
1/31/2008	12.78	8.95	0.70	16.58	124.01	44.66	78.76	0.741	0.450
2/29/2008	11.20	8.43	0.75	16.90	124.33	44.90	79.25	0.837	0.452
3/31/2008	10.88	8.90	0.82	16.58	124.67	45.18	79.76	0.816	0.453
4/30/2008	12.17	9.36	0.77	16.46	125.04	45.46	80.26	0.744	0.454
5/31/2008	11.94	8.79	0.74	16.54	125.41	45.73	80.77	0.775	0.455
6/30/2008	11.24	8.52	0.76	15.11	125.74	45.99	81.22	0.744	0.456
7/31/2008	11.42	9.52	0.83	16.22	126.10	46.28	81.73	0.754	0.457
8/31/2008	11.49	10.03	0.87	15.09	126.45	46.60	82.20	0.683	0.458
9/30/2008	12.43	10.87	0.87	15.49	126.83	46.92	82.66	0.647	0.459
10/31/2008	11.31	10.45	0.92	15.83	127.18	47.25	83.15	0.709	0.460
11/30/2008	14.93	14.73	0.99	15.64	127.63	47.69	83.62	0.514	0.460
12/31/2008	14.69	11.46	0.78	13.82	128.08	48.04	84.05	0.514	0.460
1/31/2009	14.28	10.76	0.75	16.35	128.52	48.38	84.55	0.635	0.461
2/28/2009	13.74	10.41	0.76	14.55	128.91	48.67	84.96	0.586	0.462

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
3/31/2009	12.98	10.34	0.80	14.93	129.31	48.99	85.42	0.623	0.462
4/30/2009	12.83	9.81	0.76	13.36	129.70	49.28	85.83	0.574	0.463
5/31/2009	12.81	10.37	0.81	16.39	130.09	49.60	86.33	0.688	0.464
6/30/2009	12.31	10.88	0.88	15.85	130.46	49.93	86.81	0.666	0.464
7/31/2009	12.57	11.05	0.88	16.14	130.85	50.27	87.31	0.666	0.465
8/31/2009	12.19	10.35	0.85	15.55	131.23	50.59	87.79	0.671	0.466
9/30/2009	12.15	10.70	0.88	15.75	131.59	50.92	88.26	0.672	0.467
10/31/2009	11.89	10.49	0.88	14.74	131.96	51.24	88.72	0.641	0.467
11/30/2009	11.70	9.83	0.84	13.46	132.31	51.54	89.12	0.609	0.468
12/31/2009	12.37	9.74	0.79	12.88	132.70	51.84	89.52	0.567	0.468
1/31/2010	12.05	9.97	0.83	15.67	133.07	52.15	90.01	0.692	0.469
2/28/2010	12.25	10.33	0.84	17.90	133.41	52.44	90.51	0.772	0.470
3/31/2010	13.32	7.14	0.54	17.76	133.83	52.66	91.06	0.841	0.471
4/30/2010	11.98	6.66	0.56	16.50	134.19	52.86	91.56	0.858	0.473
5/31/2010	10.66	6.54	0.61	15.59	134.52	53.06	92.04	0.879	0.474
6/30/2010	11.18	11.68	1.05	7.88	134.85	53.41	92.28	0.337	0.473
7/31/2010	11.96	12.05	1.01	15.11	135.22	53.78	92.74	0.614	0.474
8/31/2010	12.00	10.45	0.87	14.25	135.59	54.11	93.19	0.619	0.474
9/30/2010	10.92	10.63	0.97	17.58	135.92	54.43	93.71	0.795	0.475
10/31/2010	9.49	9.68	1.02	13.31	136.22	54.73	94.13	0.677	0.476
11/30/2010	10.28	10.19	0.99	16.88	136.52	55.03	94.63	0.804	0.477
12/31/2010	9.33	11.30	1.21	16.67	136.81	55.38	95.15	0.790	0.478
1/31/2011	9.35	9.81	1.05	16.94	137.10	55.69	95.67	0.863	0.479
2/28/2011	9.49	12.43	1.31	16.73	137.37	56.03	96.14	0.747	0.480
3/31/2011	11.02	14.14	1.28	17.01	137.71	56.47	96.67	0.662	0.481
4/30/2011	11.54	13.97	1.21	17.35	138.06	56.89	97.19	0.665	0.481
5/31/2011	9.68	9.27	0.96	7.47	138.36	57.18	97.42	0.384	0.481
6/30/2011	8.33	7.34	0.88	4.36	138.61	57.40	97.55	0.271	0.481
7/31/2011	8.73	9.34	1.07	14.70	138.88	57.69	98.01	0.794	0.482
8/31/2011	8.14	12.14	1.49	11.81	139.13	58.07	98.37	0.571	0.482
9/30/2011	8.78	11.29	1.29		139.39	58.40	98.37	0.000	0.480
10/31/2011	9.04	11.39	1.26	8.07	139.67	58.76	98.62	0.386	0.480
11/30/2011	9.98	14.80	1.48	11.04	139.97	59.20	98.96	0.437	0.480
12/31/2011	9.40	11.83	1.26	12.20	140.26	59.57	99.33	0.562	0.480
1/31/2012	8.54	12.27	1.44	12.26	140.53	59.95	99.71	0.577	0.481
2/29/2012	13.56	15.99	1.18	12.03	140.92	60.41	100.06	0.398	0.480
3/31/2012	10.79	8.73	0.81	2.65	141.26	60.68	100.15	0.132	0.479
4/30/2012	9.55	5.38	0.56	2.27	141.54	60.84	100.21	0.147	0.478
5/31/2012	8.88	13.23	1.49	10.60	141.82	61.25	100.54	0.470	0.478
6/30/2012	5.22	12.28	2.35	10.65	141.98	61.62	100.86	0.600	0.479
7/31/2012	4.27	10.22	2.39	7.22	142.11	61.94	101.09	0.491	0.479
8/31/2012	6.97	12.03	1.73	10.23	142.32	62.31	101.40	0.529	0.479
9/30/2012	5.55	12.36	2.23	10.59	142.49	62.68	101.72	0.582	0.479
10/31/2012	8.26	13.31	1.61	11.16	142.75	63.10	102.07	0.508	0.479
11/30/2012	6.88	13.91	2.02	9.69	142.95	63.51	102.36	0.459	0.479
12/31/2012	6.84	12.74	1.86	9.35	143.16	63.91	102.65	0.469	0.479