

CROMER UNIT NO. 1
WATERFLOOD EOR PROJECT

ANNUAL REPORT FOR 2012

March 1, 2013

Tundra Oil and Gas Partnership

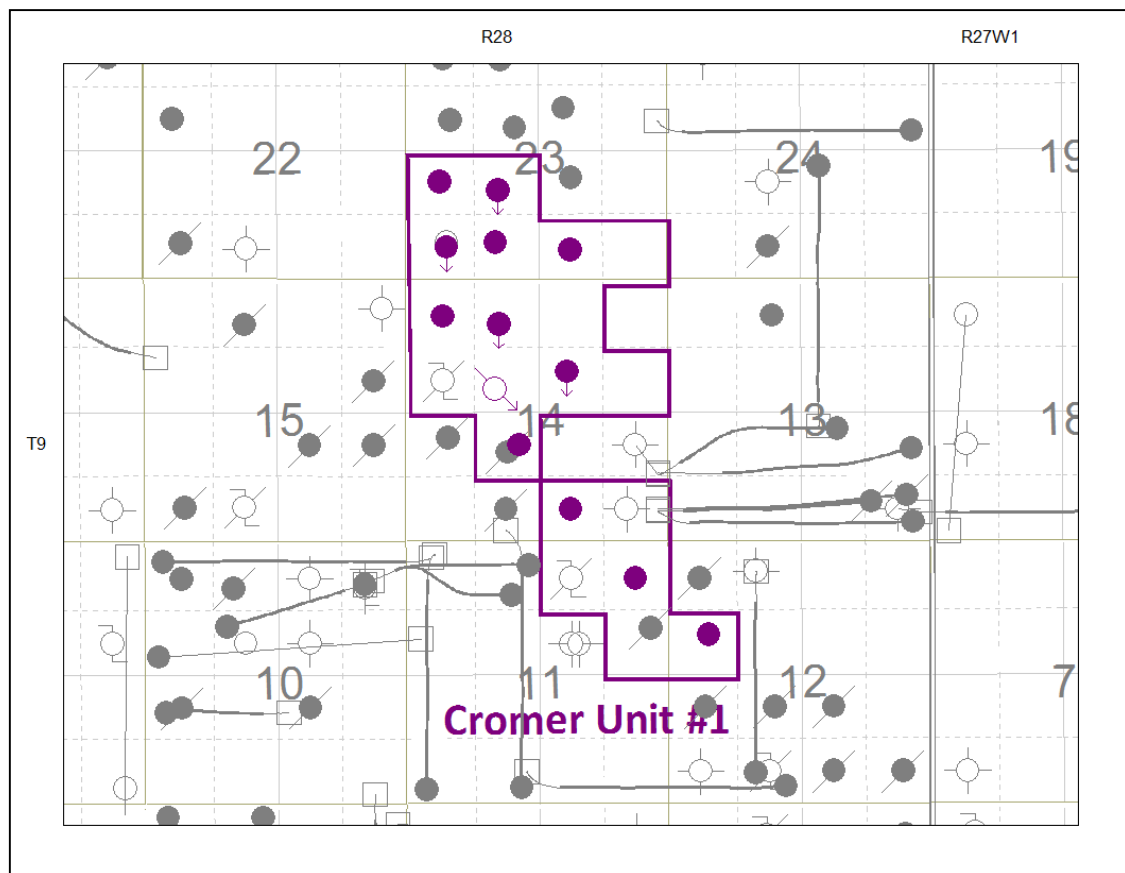
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INTRODUCTION

Cromer Unit No. 1 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Waterflood Order No. 6 effective November 1, 1998 with Tundra Oil and Gas as Operator. The EOR project area, outlined in purple in the attached Figure 1, contains 13 wells in 20 LSDs in Township 9, Range 28W1. Well list and well status is available in Appendix A.

Figure 1: Cromer Unit # 1 Area Outline



In accordance with Section 73 of the Manitoba Drilling and Production Regulation, Tundra submits the following 2012 Annual Progress Report for Cromer Unit No. 1 as required by Waterflood Order No. 6.

DISCUSSION

Production History

For the wells included in Cromer No 1, production started in July 1992 with 00/02-23-009-28W1/0. Oil production peaked at 18.87 m³/d in July of 1996. The water oil ratio (WOR) averaged 4.64 m³/m³ over 2012. In December 2012, the Unit was producing 2.5 m³/d of oil and 11.8 m³/d of water. 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 presented in Figure 2.

Figure 2: Cromer Unit No.1 Production/Injection Rates and WOR vs Time

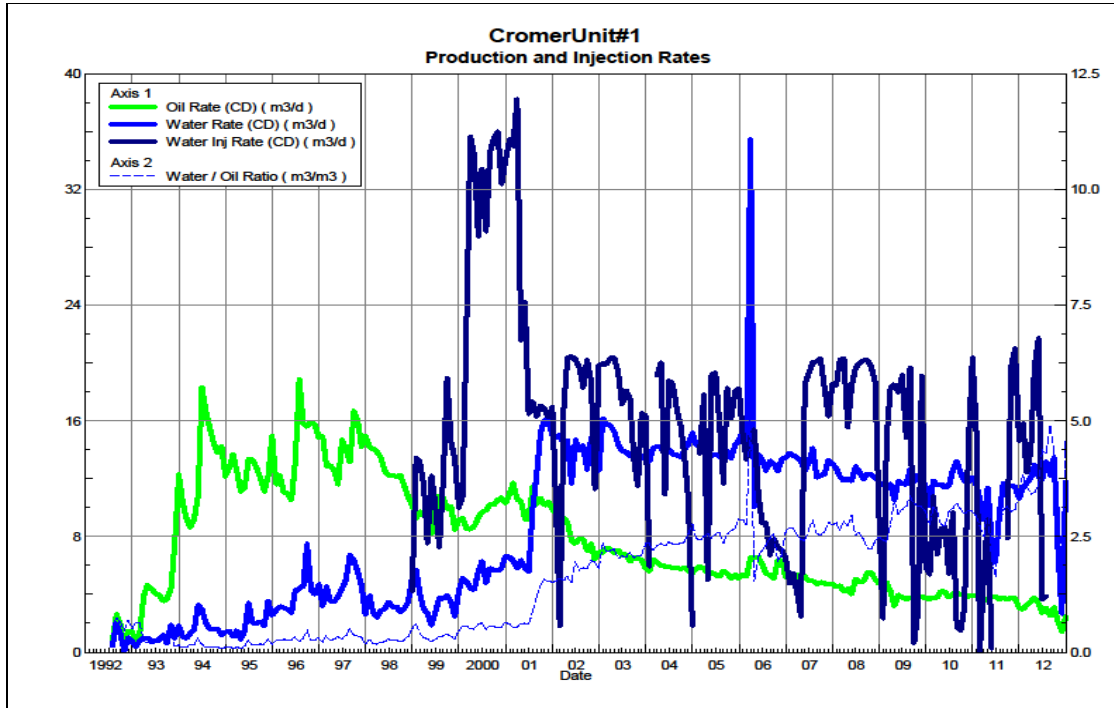
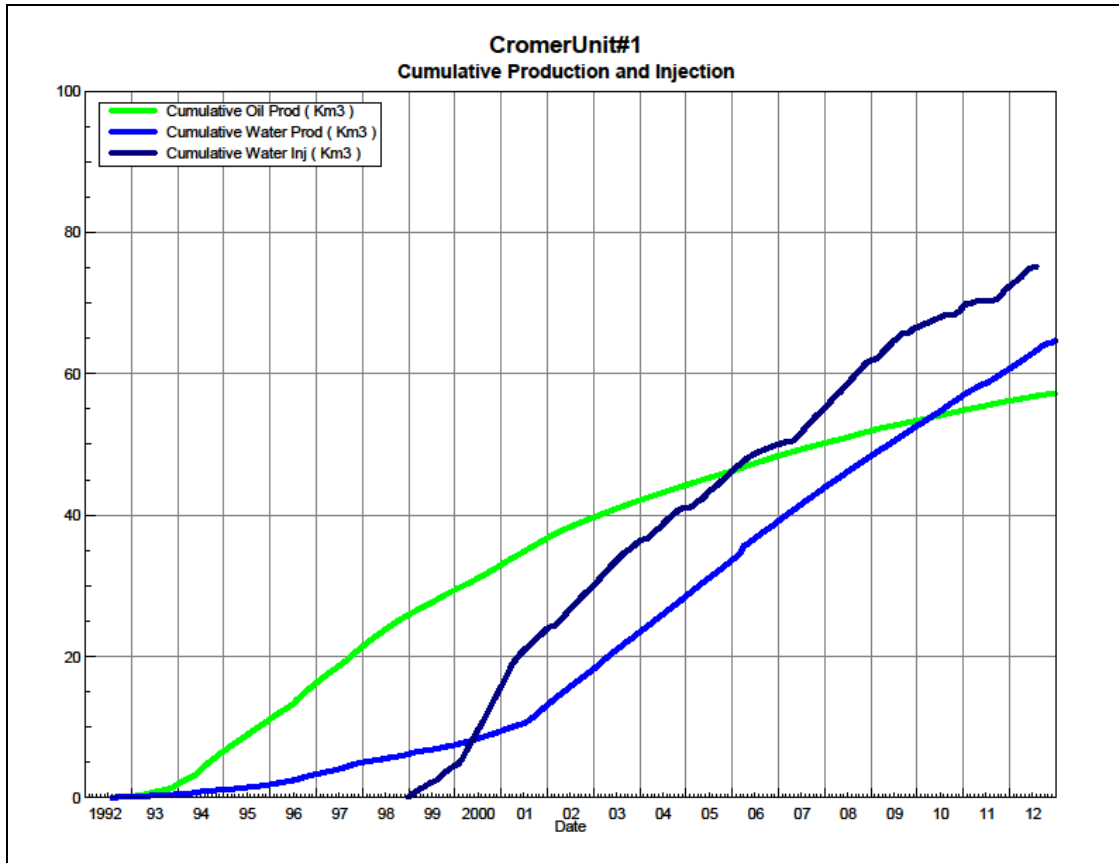


Figure 3 shows the cumulative production for Cromer Unit No. 1 to the end of December 2012 as 57.2 E³m³ of oil, and 64.8 E³m³ of water. The cumulative water injected is 75.2 E³m³. The original oil-in-place (OOIP) of Cromer Unit No. 1 is 779 E³m³ resulting in a recovery factor to date of 7.3%. The cumulative 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: Cromer Unit No. 1 Cumulative Oil, Water and Water Injected vs. Time



Waterflood Developed Plan

As of December 2012 the Unit has 1 active vertical injector. Water injection started in December 1998. Water has only been injected through 00/11-14-009-28W1/0. In July 2012, injection into the 00/11-14-009-28W1/0 well was suspended.

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 show all injection pressure since 2003. Average injection pressure for 00/11-14-009-28W1/0 was 11125 kPag in 2012.

Reservoir Pressure

No reservoir pressure measurements were taken at Cromer Unit No. 1 in 2012.

Well Servicing

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

Table 1: Service and Maintenance in Cromer Unit No. 1

00/02-14-009-28W1/0	Scale Squeeze	22/06/2012
00/11-14-009-28W1/0	Acid Job	09/03/2012

Voidage Replacement

Cumulative voidage for the Cromer Unit No. 1 was 0.597 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

Given an OOIP of 779,000 m³, the current recovery factor is 7.3%. The ultimate expected recoverable reserve based on decline analysis is 80,000 m³ or an ultimate recovery factor of 10.3%.

The overall performance of this waterflood has been poor as indicated by the low recovery factor, and obvious lack of waterflood response in producers. This is certainly due to having only one injector where multiple injectors are required in patterns to provide the necessary areal sweep and injected water volumes.

The long term decline trends for oil and water are very stable and not expected to change. The Unit will require additional water injector wells in addition to increased fluid handling throughput in order to make this an effective waterflood.

List of Appendices

Appendix A: Well Name and Well Status

Appendix B: Monthly Injection Wellhead Pressures Table and Plots

Appendix C: Cromer Unit No. 1 Injection Pattern Summary

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

Appendix A

UWI	Well Status
100/16-11-009-28W1/02	Capable of OIL Prod
100/12-12-009-28W1/02	Capable of OIL Prod
100/02-14-009-28W1/02	Capable of OIL Prod
102/06-14-009-28W1/02	Commingled
100/10-14-009-28W1/00	Commingled
100/11-14-009-28W1/00	WTR Injection
100/13-14-009-28W1/03	Capable of OIL Prod
100/14-14-009-28W1/00	Commingled
100/02-23-009-28W1/02	Commingled
100/03-23-009-28W1/00	Capable of OIL Prod
100/04-23-009-28W1/03	Commingled
100/05-23-009-28W1/00	Capable of OIL Prod
100/06-23-009-28W1/02	Commingled

Appendix B

Average Monthly Injection Pressure (kPag)

Injection Pressure		Injection Pressure		Injection Pressure		Injection Pressure	
Month	100/11-14	Month	100/11-14	Month	100/11-14	Month	100/11-14
		Jan-05	11600	Jan-08	12210	Jan-11	11890
		Feb-05	9914	Feb-08	12014	Feb-11	10800
		Mar-05	10981	Mar-08	12226	Mar-11	10577
		Apr-05	11107	Apr-08	12307	Apr-11	10078
		May-05	11097	May-08	12342	May-11	10800
		Jun-05	11493	Jun-08	12836	Jun-11	10800
		Jul-05	11600	Jul-08	12442	Jul-11	10800
Aug-02	1527	Aug-05	11606	Aug-08	12320	Aug-11	10800
Sep-02	3609	Sep-05	11800	Sep-08	12301	Sep-11	9174
Oct-02	10508	Oct-05	11800	Oct-08	12261	Oct-11	9010
Nov-02	10392	Nov-05	11800	Nov-08	12220	Nov-11	9010
Dec-02	10596	Dec-05	11839	Dec-08	6123	Dec-11	10615
Jan-03	10851	Jan-06	12100	Jan-09	2774	Jan-12	11000
Feb-03	10880	Feb-06	12021	Feb-09	9021	Feb-12	11155
Mar-03	10880	Mar-06	12000	Mar-09	11688	Mar-12	12314
Apr-03	11029	Apr-06	12600	Apr-09	11765	Apr-12	16000
May-03	11124	May-06	12839	May-09	11765	May-12	12368
Jun-03	11140	Jun-06	12801	Jun-09	11893	Jun-12	11500
Jul-03	11140	Jul-06	11839	Jul-09	8723	Jul-12	3539
Aug-03	11140	Aug-06	3387	Aug-09	11000	Aug-12	0
Sep-03	11140	Sep-06	8613	Sep-09	11000	Sep-12	0
Oct-03	11140	Oct-06	7889	Oct-09	4077	Oct-12	0
Nov-03	11146	Nov-06	7507	Nov-09	11182	Nov-12	0
Dec-03	11170	Dec-06	6752	Dec-09	3491	Dec-12	0
Jan-04	11170	Jan-07	6329	Jan-10	5497		
Feb-04	11170	Feb-07	6122	Feb-10	7254		
Mar-04	11170	Mar-07	4821	Mar-10	6348		
Apr-04	11170	Apr-07	0	Apr-10	8417		
May-04	11170	May-07	4271	May-10	9478		
Jun-04	11170	Jun-07	10953	Jun-10	5850		
Jul-04	11475	Jul-07	10491	Jul-10	9167		
Aug-04	11800	Aug-07	11394	Aug-10	4987		
Sep-04	11800	Sep-07	11693	Sep-10	6333		
Oct-04	11800	Oct-07	11868	Oct-10	7632		
Nov-04	11367	Nov-07	9743	Nov-10	9055		
Dec-04	11600	Dec-07	11535	Dec-10	11466		

Appendix C

Cromer Unit No. 1 Pattern Summary as of December 2012

Pattern Name	Injector Location (009-28W)	Injector Surf. Location (009-28W1)	Status	Supported Wells (009-28W1)	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 (E ³ m ³)	Cum Water (E ³ m ³)	Cum Inj Water (E ³ m ³)	Monthly VRR	Cum VRR
00/11-14-009-28W1 Injector	00/11-14	Vertical Well	WTR Injection	02-14, 02-23, 03-23, 04-23, 05-23, 06-23, 10-14, 12-12, 13-14, 14-14, 16-11, 02/06-14	12	1	Jul 1992	Dec 1998	2.5	11.8	4.74	-	57.2	64.8	75.2	0.0	0.60

Pattern: 00/11-14-009-28W1Inj Set: CromerUnit#1

Oil Formation Vol Factor : 1.07100 m3/m3

Water Formation Vol Factor : 1.00150 m3/m3

Water / Oil Ratio : 4.74 m3/m3

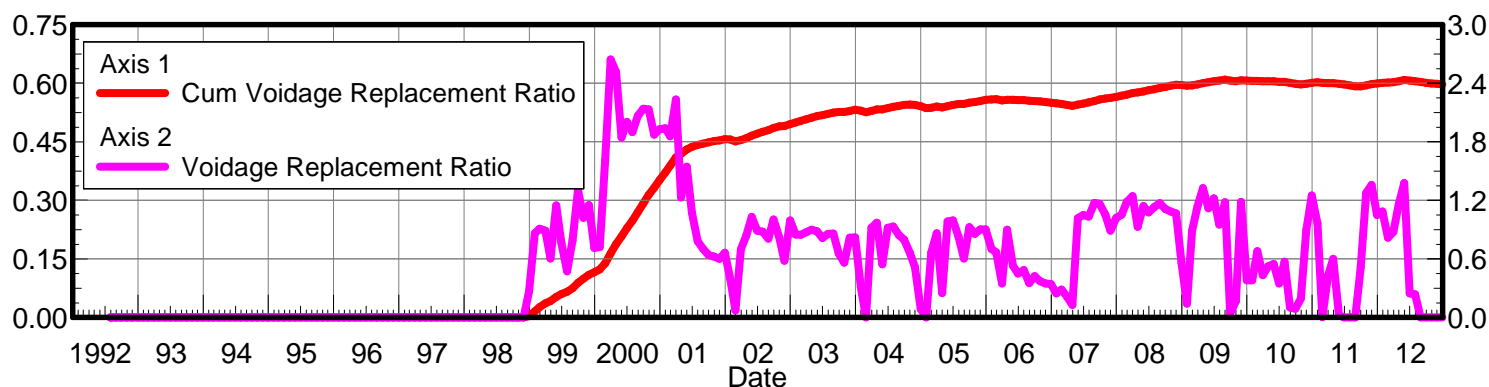
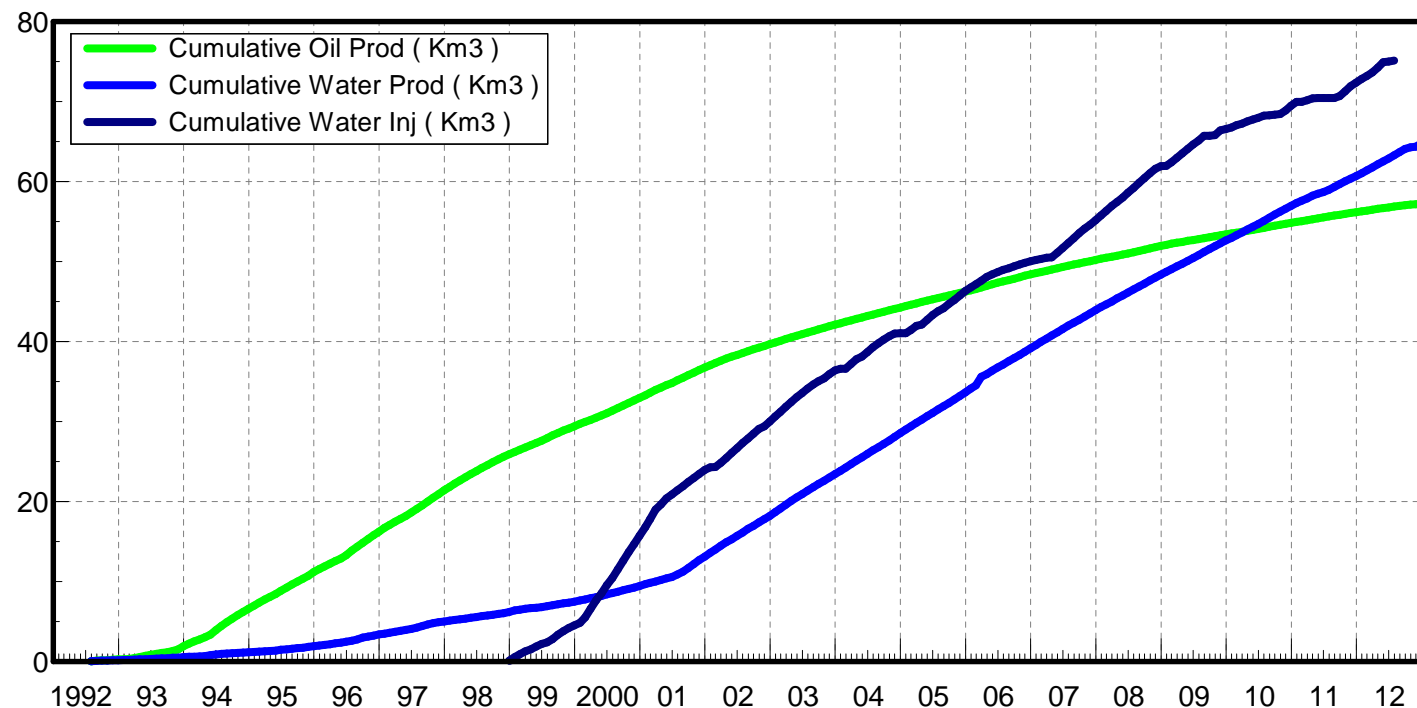
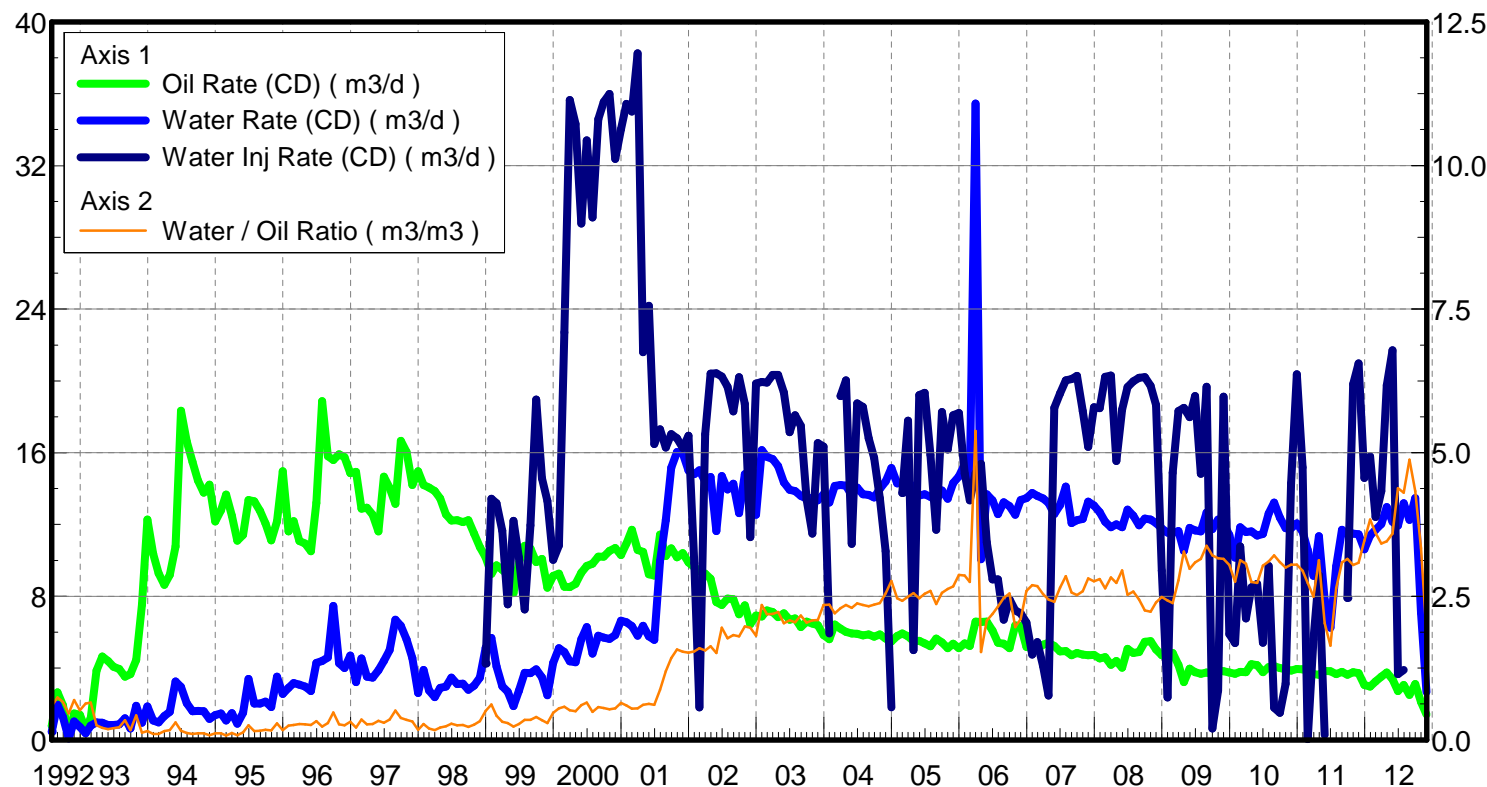
February 20, 2013

Operator: Tundra_O&G_Prtshp

Oil Rate (CD) : 2.49 m3/d

Water Rate (CD) : 11.79 m3/d

Water Inj Rate (CD) : 3.90 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
7/31/1992	0.78	0.46	0.59		0.02	0.01	0.00	0.000	0.000
8/31/1992	2.65	1.96	0.74		0.11	0.07	0.00	0.000	0.000
9/30/1992	1.93	1.27	0.66		0.16	0.11	0.00	0.000	0.000
10/31/1992	0.20	0.09	0.46		0.17	0.12	0.00	0.000	0.000
11/30/1992	1.47	1.02	0.70		0.21	0.15	0.00	0.000	0.000
12/31/1992	1.40	0.73	0.52		0.26	0.17	0.00	0.000	0.000
1/31/1993	0.59	0.37	0.63		0.28	0.18	0.00	0.000	0.000
2/28/1993	1.22	0.79	0.65		0.31	0.20	0.00	0.000	0.000
3/31/1993	3.86	0.98	0.25		0.43	0.23	0.00	0.000	0.000
4/30/1993	4.65	0.96	0.21		0.57	0.26	0.00	0.000	0.000
5/31/1993	4.40	0.83	0.19		0.71	0.29	0.00	0.000	0.000
6/30/1993	4.07	0.82	0.20		0.83	0.31	0.00	0.000	0.000
7/31/1993	3.94	0.87	0.22		0.95	0.34	0.00	0.000	0.000
8/31/1993	3.53	1.21	0.34		1.06	0.38	0.00	0.000	0.000
9/30/1993	3.67	0.63	0.17		1.17	0.40	0.00	0.000	0.000
10/31/1993	4.45	1.89	0.43		1.31	0.45	0.00	0.000	0.000
11/30/1993	7.53	0.96	0.13		1.53	0.48	0.00	0.000	0.000
12/31/1993	12.28	1.86	0.15		1.91	0.54	0.00	0.000	0.000
1/31/1994	10.36	1.07	0.10		2.23	0.57	0.00	0.000	0.000
2/28/1994	9.29	0.97	0.10		2.50	0.60	0.00	0.000	0.000
3/31/1994	8.64	1.32	0.15		2.76	0.64	0.00	0.000	0.000
4/30/1994	9.19	1.55	0.17		3.04	0.69	0.00	0.000	0.000
5/31/1994	10.77	3.25	0.30		3.37	0.79	0.00	0.000	0.000
6/30/1994	18.33	2.96	0.16		3.92	0.88	0.00	0.000	0.000
7/31/1994	16.63	2.04	0.12		4.44	0.94	0.00	0.000	0.000
8/31/1994	15.49	1.60	0.10		4.92	0.99	0.00	0.000	0.000
9/30/1994	14.46	1.62	0.11		5.35	1.04	0.00	0.000	0.000
10/31/1994	13.78	1.60	0.12		5.78	1.09	0.00	0.000	0.000
11/30/1994	14.21	1.17	0.08		6.21	1.13	0.00	0.000	0.000
12/31/1994	12.17	1.38	0.11		6.58	1.17	0.00	0.000	0.000
1/31/1995	12.79	1.47	0.11		6.98	1.21	0.00	0.000	0.000
2/28/1995	13.68	1.07	0.08		7.36	1.24	0.00	0.000	0.000
3/31/1995	12.48	1.49	0.12		7.75	1.29	0.00	0.000	0.000
4/30/1995	11.10	0.91	0.08		8.08	1.32	0.00	0.000	0.000
5/31/1995	11.41	1.51	0.13		8.44	1.36	0.00	0.000	0.000
6/30/1995	13.36	3.39	0.25		8.84	1.47	0.00	0.000	0.000
7/31/1995	13.28	2.03	0.15		9.25	1.53	0.00	0.000	0.000
8/31/1995	12.75	2.02	0.16		9.64	1.59	0.00	0.000	0.000
9/30/1995	12.06	2.12	0.18		10.01	1.65	0.00	0.000	0.000
10/31/1995	11.11	1.84	0.17		10.35	1.71	0.00	0.000	0.000
11/30/1995	12.16	3.52	0.29		10.72	1.82	0.00	0.000	0.000
12/31/1995	14.97	2.56	0.17		11.18	1.90	0.00	0.000	0.000
1/31/1996	11.62	2.89	0.25		11.54	1.99	0.00	0.000	0.000
2/29/1996	12.19	3.17	0.26		11.89	2.08	0.00	0.000	0.000
3/31/1996	11.08	3.07	0.28		12.24	2.17	0.00	0.000	0.000
4/30/1996	10.95	2.97	0.27		12.57	2.26	0.00	0.000	0.000
5/31/1996	10.52	2.73	0.26		12.89	2.35	0.00	0.000	0.000
6/30/1996	13.20	4.28	0.32		13.29	2.48	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
7/31/1996	18.87	4.40	0.23		13.87	2.61	0.00	0.000	0.000
8/31/1996	15.80	4.59	0.29		14.36	2.75	0.00	0.000	0.000
9/30/1996	15.59	7.47	0.48		14.83	2.98	0.00	0.000	0.000
10/31/1996	15.92	4.27	0.27		15.32	3.11	0.00	0.000	0.000
11/30/1996	15.75	4.01	0.25		15.80	3.23	0.00	0.000	0.000
12/31/1996	14.85	4.69	0.32		16.26	3.38	0.00	0.000	0.000
1/31/1997	14.93	3.22	0.22		16.72	3.48	0.00	0.000	0.000
2/28/1997	12.89	4.54	0.35		17.08	3.60	0.00	0.000	0.000
3/31/1997	12.93	3.52	0.27		17.48	3.71	0.00	0.000	0.000
4/30/1997	12.55	3.47	0.28		17.86	3.82	0.00	0.000	0.000
5/31/1997	11.62	3.88	0.33		18.22	3.94	0.00	0.000	0.000
6/30/1997	14.67	4.39	0.30		18.66	4.07	0.00	0.000	0.000
7/31/1997	14.04	4.99	0.36		19.09	4.22	0.00	0.000	0.000
8/31/1997	13.15	6.69	0.51		19.50	4.43	0.00	0.000	0.000
9/30/1997	16.66	6.35	0.38		20.00	4.62	0.00	0.000	0.000
10/31/1997	16.04	5.58	0.35		20.50	4.79	0.00	0.000	0.000
11/30/1997	14.19	4.56	0.32		20.92	4.93	0.00	0.000	0.000
12/31/1997	14.96	2.61	0.17		21.39	5.01	0.00	0.000	0.000
1/31/1998	14.20	3.90	0.27		21.83	5.13	0.00	0.000	0.000
2/28/1998	14.06	2.76	0.20		22.22	5.21	0.00	0.000	0.000
3/31/1998	13.87	2.39	0.17		22.65	5.28	0.00	0.000	0.000
4/30/1998	13.45	2.89	0.21		23.05	5.37	0.00	0.000	0.000
5/31/1998	12.56	2.96	0.24		23.44	5.46	0.00	0.000	0.000
6/30/1998	12.22	3.47	0.28		23.81	5.57	0.00	0.000	0.000
7/31/1998	12.24	3.12	0.25		24.19	5.66	0.00	0.000	0.000
8/31/1998	12.14	3.14	0.26		24.57	5.76	0.00	0.000	0.000
9/30/1998	12.23	2.79	0.23		24.93	5.84	0.00	0.000	0.000
10/31/1998	11.50	3.03	0.26		25.29	5.94	0.00	0.000	0.000
11/30/1998	10.74	3.48	0.32		25.61	6.04	0.00	0.000	0.000
12/31/1998	10.18	5.12	0.50	4.25	25.93	6.20	0.13	0.266	0.004
1/31/1999	9.24	5.68	0.61	13.43	26.21	6.38	0.55	0.863	0.016
2/28/1999	9.72	4.09	0.42	13.18	26.49	6.49	0.92	0.910	0.026
3/31/1999	9.47	2.99	0.32	11.65	26.78	6.58	1.28	0.888	0.036
4/30/1999	9.18	2.68	0.29	7.54	27.06	6.66	1.50	0.603	0.042
5/31/1999	8.18	1.88	0.23	12.20	27.31	6.72	1.88	1.149	0.052
6/30/1999	9.87	2.75	0.28	10.16	27.60	6.81	2.19	0.764	0.060
7/31/1999	10.81	3.75	0.35	7.27	27.94	6.92	2.41	0.475	0.066
8/31/1999	10.67	3.72	0.35	11.95	28.27	7.04	2.78	0.790	0.075
9/30/1999	9.91	3.93	0.40	18.96	28.57	7.15	3.35	1.305	0.089
10/31/1999	10.09	3.48	0.35	14.57	28.88	7.26	3.80	1.021	0.100
11/30/1999	8.47	2.48	0.29	13.30	29.14	7.34	4.20	1.153	0.109
12/31/1999	9.14	4.28	0.47	10.02	29.42	7.47	4.51	0.713	0.116
1/31/2000	9.27	5.11	0.55	10.83	29.71	7.63	4.85	0.721	0.123
2/29/2000	8.54	4.90	0.57	22.71	29.95	7.77	5.51	1.618	0.138
3/31/2000	8.51	4.38	0.52	35.65	30.22	7.91	6.61	2.645	0.164
4/30/2000	8.70	4.33	0.50	34.32	30.48	8.04	7.64	2.517	0.188
5/31/2000	9.32	5.62	0.60	28.76	30.77	8.21	8.54	1.845	0.208
6/30/2000	9.69	6.29	0.65	33.40	31.06	8.40	9.54	2.005	0.229

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
7/31/2000	9.82	4.80	0.49	29.10	31.36	8.55	10.44	1.901	0.248
8/31/2000	10.21	5.81	0.57	34.59	31.68	8.73	11.51	2.067	0.270
9/30/2000	10.22	5.69	0.56	35.53	31.99	8.90	12.58	2.138	0.292
10/31/2000	10.52	5.63	0.54	35.99	32.31	9.07	13.69	2.131	0.314
11/30/2000	10.69	5.84	0.55	32.37	32.63	9.25	14.66	1.875	0.332
12/31/2000	10.30	6.64	0.64	34.03	32.95	9.45	15.72	1.927	0.352
1/31/2001	10.94	6.56	0.60	35.44	33.29	9.66	16.82	1.940	0.372
2/28/2001	11.71	6.34	0.54	35.00	33.62	9.84	17.80	1.856	0.389
3/31/2001	10.58	5.80	0.55	38.25	33.95	10.02	18.98	2.235	0.410
4/30/2001	10.47	6.36	0.61	21.60	34.26	10.21	19.63	1.230	0.419
5/31/2001	9.23	5.77	0.63	24.18	34.55	10.39	20.38	1.546	0.431
6/30/2001	9.16	5.57	0.61	16.49	34.82	10.55	20.88	1.072	0.437
7/31/2001	11.44	9.96	0.87	17.31	35.18	10.86	21.41	0.780	0.442
8/31/2001	10.25	12.24	1.19	16.28	35.49	11.24	21.92	0.702	0.445
9/30/2001	10.67	15.17	1.42	17.04	35.81	11.70	22.43	0.641	0.449
10/31/2001	10.18	16.04	1.58	16.81	36.13	12.19	22.95	0.624	0.451
11/30/2001	10.40	15.97	1.54	16.28	36.44	12.67	23.44	0.601	0.454
12/31/2001	9.89	15.00	1.52	16.95	36.75	13.14	23.96	0.663	0.457
1/31/2002	9.62	14.81	1.54	9.85	37.05	13.60	24.27	0.392	0.456
2/28/2002	9.42	15.03	1.60	1.80	37.31	14.02	24.32	0.072	0.451
3/31/2002	9.25	14.41	1.56	17.01	37.60	14.46	24.85	0.700	0.454
4/30/2002	8.98	14.64	1.63	20.40	37.87	14.90	25.46	0.842	0.460
5/31/2002	7.68	11.63	1.51	20.42	38.10	15.26	26.09	1.029	0.466
6/30/2002	7.52	14.70	1.95	20.25	38.33	15.70	26.70	0.890	0.471
7/31/2002	7.87	13.95	1.77	19.68	38.57	16.14	27.31	0.880	0.476
8/31/2002	7.83	14.28	1.82	18.30	38.82	16.58	27.88	0.808	0.480
9/30/2002	7.00	12.63	1.80	20.21	39.03	16.96	28.48	1.005	0.485
10/31/2002	7.50	14.82	1.97	18.71	39.26	17.42	29.06	0.819	0.489
11/30/2002	6.44	12.59	1.95	11.29	39.45	17.79	29.40	0.580	0.490
12/31/2002	6.93	12.55	1.81	19.85	39.67	18.18	30.02	0.995	0.495
1/31/2003	6.87	16.15	2.35	19.94	39.88	18.68	30.63	0.849	0.499
2/28/2003	7.22	15.78	2.18	19.90	40.08	19.13	31.19	0.847	0.503
3/31/2003	7.13	15.65	2.20	20.33	40.30	19.61	31.82	0.873	0.507
4/30/2003	6.85	15.25	2.23	20.34	40.51	20.07	32.43	0.901	0.512
5/31/2003	7.06	14.34	2.03	19.35	40.73	20.51	33.03	0.884	0.516
6/30/2003	6.70	13.93	2.08	17.14	40.93	20.93	33.55	0.813	0.518
7/31/2003	6.77	13.85	2.05	18.09	41.14	21.36	34.11	0.858	0.522
8/31/2003	6.28	13.59	2.17	17.50	41.33	21.78	34.65	0.862	0.525
9/30/2003	6.59	13.44	2.04	13.39	41.53	22.19	35.05	0.654	0.526
10/31/2003	6.48	13.49	2.08	11.49	41.73	22.60	35.41	0.563	0.527
11/30/2003	6.40	13.35	2.09	16.53	41.92	23.00	35.90	0.819	0.529
12/31/2003	5.83	13.68	2.35	16.34	42.10	23.43	36.41	0.820	0.532
1/31/2004	5.61	13.21	2.35	5.94	42.28	23.84	36.59	0.309	0.530
2/29/2004	6.42	14.15	2.20		42.46	24.25	36.59	0.000	0.525
3/31/2004	6.19	14.21	2.29	19.15	42.66	24.69	37.19	0.920	0.529
4/30/2004	6.03	14.16	2.35	20.02	42.84	25.11	37.79	0.972	0.533
5/31/2004	5.94	13.64	2.30	10.91	43.02	25.54	38.13	0.546	0.533
6/30/2004	5.92	14.06	2.38	18.75	43.20	25.96	38.69	0.920	0.536

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
7/31/2004	5.83	13.68	2.35	18.55	43.38	26.38	39.26	0.931	0.540
8/31/2004	5.87	13.65	2.33	16.80	43.56	26.81	39.79	0.843	0.542
9/30/2004	5.74	13.51	2.35	15.71	43.73	27.21	40.26	0.799	0.544
10/31/2004	5.87	13.99	2.38	13.45	43.92	27.64	40.67	0.664	0.545
11/30/2004	5.65	14.39	2.55	10.52	44.09	28.08	40.99	0.515	0.545
12/31/2004	5.48	15.15	2.76	1.82	44.26	28.55	41.05	0.087	0.541
1/31/2005	5.79	14.29	2.47		44.43	28.99	41.05	0.000	0.536
2/28/2005	5.92	14.35	2.42	13.76	44.60	29.39	41.43	0.665	0.537
3/31/2005	5.77	14.40	2.50	17.78	44.78	29.84	41.98	0.864	0.540
4/30/2005	5.49	14.04	2.56	5.00	44.94	30.26	42.13	0.251	0.538
5/31/2005	5.52	13.61	2.47	19.21	45.12	30.68	42.73	0.985	0.541
6/30/2005	5.38	13.68	2.54	19.33	45.28	31.09	43.31	0.994	0.545
7/31/2005	5.22	13.55	2.60	15.87	45.44	31.51	43.80	0.830	0.547
8/31/2005	5.64	13.35	2.37	11.70	45.61	31.92	44.16	0.604	0.547
9/30/2005	5.43	13.89	2.56	18.26	45.78	32.34	44.71	0.927	0.550
10/31/2005	5.11	13.43	2.63	16.18	45.93	32.76	45.21	0.856	0.552
11/30/2005	5.36	14.31	2.67	18.08	46.10	33.19	45.75	0.902	0.555
12/31/2005	5.11	14.68	2.87	18.21	46.25	33.64	46.32	0.904	0.557
1/31/2006	5.37	15.36	2.86	14.84	46.42	34.12	46.78	0.703	0.558
2/28/2006	5.24	14.42	2.75	13.35	46.57	34.52	47.15	0.667	0.559
3/31/2006	6.59	35.45	5.38	14.85	46.77	35.62	47.61	0.350	0.556
4/30/2006	6.57	10.06	1.53	15.38	46.97	35.92	48.07	0.900	0.558
5/31/2006	6.59	13.68	2.07	11.01	47.17	36.35	48.42	0.531	0.558
6/30/2006	6.08	13.35	2.19	8.94	47.36	36.75	48.68	0.450	0.557
7/31/2006	5.42	12.57	2.32	8.95	47.52	37.14	48.96	0.487	0.557
8/31/2006	5.36	13.24	2.47	6.69	47.69	37.55	49.17	0.353	0.555
9/30/2006	5.11	13.02	2.55	7.83	47.84	37.94	49.40	0.424	0.554
10/31/2006	6.38	12.54	1.97	7.21	48.04	38.33	49.63	0.372	0.553
11/30/2006	6.34	13.36	2.11	7.05	48.23	38.73	49.84	0.350	0.552
12/31/2006	5.19	13.47	2.60	6.53	48.39	39.15	50.04	0.343	0.551
1/31/2007	5.10	13.75	2.69	4.76	48.55	39.57	50.19	0.248	0.549
2/28/2007	5.08	13.60	2.68	5.44	48.69	39.95	50.34	0.286	0.547
3/31/2007	5.30	13.45	2.54	4.12	48.86	40.37	50.47	0.216	0.545
4/30/2007	5.40	13.20	2.44	2.47	49.02	40.76	50.54	0.130	0.542
5/31/2007	5.23	12.57	2.41	18.50	49.18	41.15	51.12	1.019	0.545
6/30/2007	4.93	13.08	2.65	19.30	49.33	41.55	51.70	1.051	0.548
7/31/2007	4.95	14.11	2.85	20.04	49.48	41.98	52.32	1.032	0.551
8/31/2007	4.71	12.08	2.56	20.10	49.63	42.36	52.94	1.174	0.555
9/30/2007	4.85	12.23	2.52	20.28	49.77	42.73	53.55	1.164	0.558
10/31/2007	4.75	12.32	2.59	18.31	49.92	43.11	54.12	1.052	0.561
11/30/2007	4.72	13.27	2.81	16.32	50.06	43.51	54.61	0.891	0.563
12/31/2007	4.74	13.07	2.76	18.53	50.21	43.91	55.18	1.022	0.565
1/31/2008	4.54	12.69	2.80	18.49	50.35	44.30	55.75	1.054	0.568
2/29/2008	4.60	12.15	2.64	20.22	50.48	44.66	56.34	1.185	0.571
3/31/2008	4.19	11.85	2.83	20.29	50.61	45.02	56.97	1.242	0.575
4/30/2008	4.39	12.01	2.73	15.55	50.75	45.38	57.43	0.930	0.576
5/31/2008	4.02	11.85	2.95	18.42	50.87	45.75	58.01	1.141	0.579
6/30/2008	5.07	12.83	2.53	19.65	51.02	46.14	58.60	1.076	0.582

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
7/31/2008	4.84	12.49	2.58	19.98	51.17	46.52	59.21	1.131	0.585
8/31/2008	4.89	11.96	2.44	20.17	51.32	46.89	59.84	1.173	0.588
9/30/2008	5.47	12.32	2.25	20.22	51.49	47.26	60.45	1.112	0.591
10/31/2008	5.50	12.28	2.23	19.72	51.66	47.65	61.06	1.086	0.593
11/30/2008	5.04	12.07	2.40	18.65	51.81	48.01	61.62	1.068	0.596
12/31/2008	4.73	11.77	2.49	9.42	51.96	48.37	61.91	0.560	0.596
1/31/2009	4.76	11.54	2.43	2.35	52.10	48.73	61.98	0.142	0.593
2/28/2009	4.84	11.53	2.38	14.88	52.24	49.05	62.40	0.891	0.595
3/31/2009	4.19	11.63	2.78	18.33	52.37	49.41	62.97	1.138	0.597
4/30/2009	3.21	10.53	3.28	18.50	52.47	49.73	63.52	1.325	0.600
5/31/2009	3.96	11.81	2.98	17.98	52.59	50.10	64.08	1.121	0.603
6/30/2009	3.77	11.66	3.09	19.15	52.70	50.45	64.65	1.220	0.605
7/31/2009	3.69	11.61	3.15	14.83	52.82	50.81	65.11	0.953	0.607
8/31/2009	3.75	12.66	3.38	19.67	52.93	51.20	65.72	1.180	0.610
9/30/2009	3.66	11.74	3.21	0.63	53.04	51.55	65.74	0.040	0.607
10/31/2009	3.88	12.27	3.16	2.76	53.16	51.93	65.83	0.168	0.605
11/30/2009	3.82	12.04	3.15	19.12	53.28	52.29	66.40	1.185	0.608
12/31/2009	3.75	11.42	3.05	5.90	53.39	52.65	66.58	0.382	0.607
1/31/2010	3.68	10.15	2.76	5.39	53.51	52.96	66.75	0.383	0.606
2/28/2010	3.79	11.84	3.13	10.79	53.61	53.29	67.05	0.679	0.606
3/31/2010	3.77	11.58	3.07	6.76	53.73	53.65	67.26	0.433	0.605
4/30/2010	4.22	11.62	2.75	8.50	53.86	54.00	67.52	0.527	0.605
5/31/2010	4.16	11.38	2.73	8.69	53.99	54.35	67.79	0.549	0.605
6/30/2010	3.78	11.47	3.04	5.42	54.10	54.70	67.95	0.349	0.604
7/31/2010	4.06	12.61	3.10	9.68	54.23	55.09	68.25	0.571	0.604
8/31/2010	4.11	13.21	3.21	1.79	54.35	55.50	68.31	0.102	0.601
9/30/2010	4.00	12.39	3.10	1.51	54.47	55.87	68.35	0.091	0.599
10/31/2010	3.94	11.80	3.00	3.13	54.59	56.23	68.45	0.195	0.597
11/30/2010	3.87	11.80	3.05	14.29	54.71	56.59	68.88	0.897	0.598
12/31/2010	3.96	12.07	3.05	20.37	54.83	56.96	69.51	1.249	0.601
1/31/2011	3.94	11.60	2.95	15.18	54.96	57.32	69.98	0.960	0.603
2/28/2011	3.87	10.58	2.73	0.04	55.06	57.62	69.98	0.003	0.601
3/31/2011	3.66	9.15	2.50	5.61	55.18	57.90	70.15	0.429	0.600
4/30/2011	3.63	11.36	3.13	9.17	55.29	58.24	70.43	0.602	0.600
5/31/2011	3.85	7.81	2.03	0.27	55.41	58.48	70.44	0.023	0.598
6/30/2011	3.82	6.26	1.64		55.52	58.67	70.44	0.000	0.597
7/31/2011	3.66	9.66	2.64		55.63	58.97	70.44	0.000	0.595
8/31/2011	3.79	11.70	3.09		55.75	59.33	70.44	0.000	0.592
9/30/2011	3.64	11.46	3.15	7.90	55.86	59.68	70.67	0.515	0.592
10/31/2011	3.78	11.50	3.04	19.81	55.98	60.03	71.29	1.275	0.595
11/30/2011	3.71	11.46	3.09	20.98	56.09	60.38	71.92	1.359	0.598
12/31/2011	3.06	10.61	3.47	14.60	56.18	60.71	72.37	1.051	0.599
1/31/2012	2.97	11.38	3.83	15.80	56.27	61.06	72.86	1.085	0.601
2/29/2012	3.25	11.71	3.60	12.42	56.37	61.40	73.22	0.818	0.602
3/31/2012	3.52	12.03	3.42	13.86	56.48	61.77	73.65	0.878	0.603
4/30/2012	3.75	12.97	3.46	19.74	56.59	62.16	74.24	1.163	0.605
5/31/2012	3.38	12.15	3.59	21.70	56.70	62.54	74.92	1.376	0.608
6/30/2012	2.72	11.94	4.38	3.66	56.78	62.90	75.03	0.247	0.607

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7/31/2012	3.06	13.18	4.30	3.90	56.87	63.30	75.15	0.237	0.605
8/31/2012	2.51	12.25	4.88		56.95	63.68	75.15	0.000	0.603
9/30/2012	3.11	13.47	4.33		57.04	64.09	75.15	0.000	0.601
10/31/2012	2.12	7.08	3.34		57.11	64.31	75.15	0.000	0.599
11/30/2012	1.43	2.67	1.87		57.15	64.39	75.15	0.000	0.599
12/31/2012	2.49	11.79	4.74		57.23	64.75	75.15	0.000	0.597