

**DALY UNIT NO. 6**  
**WATERFLOOD EOR PROJECT**  
**ANNUAL REPORT FOR 2015**

**March 11, 2016**

**Tundra Oil and Gas Partnership**

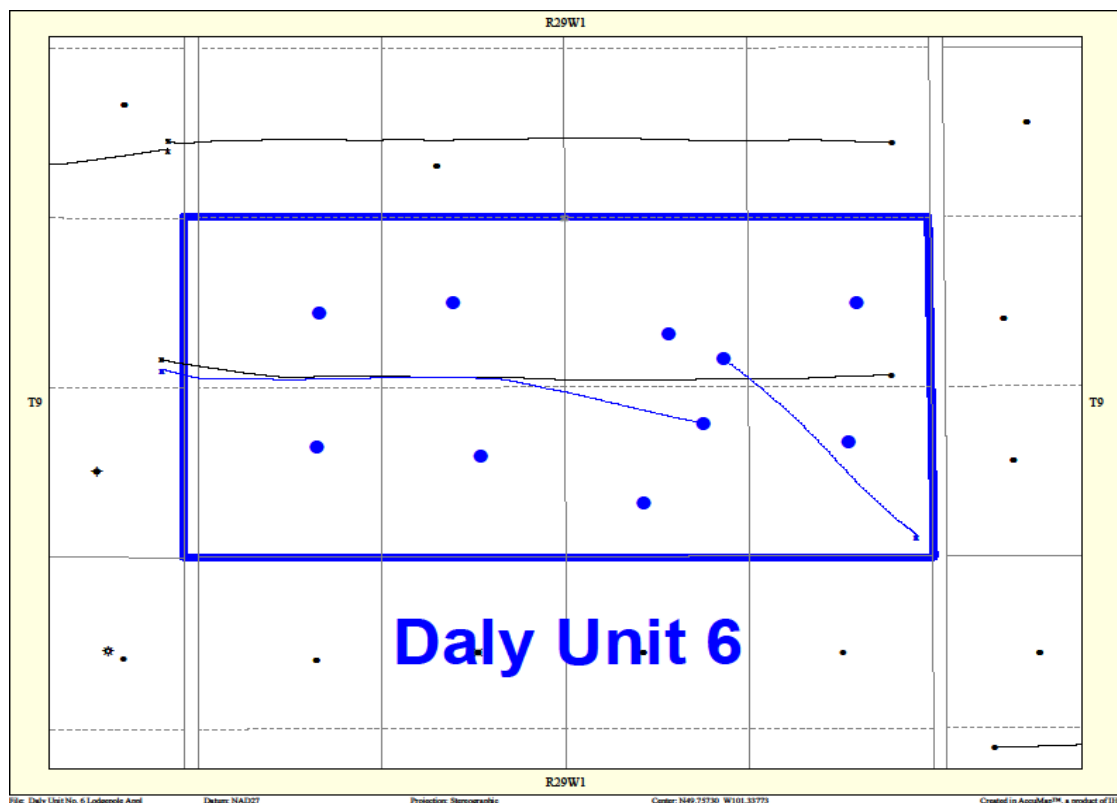
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## **INTRODUCTION**

Daly Unit No. 6 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Waterflood Order No. 39, effective January 1st, 2014 with Tundra Oil and Gas as Operator. The EOR project area, outlined in blue in Figure 1, contains 1 abandoned horizontal well, 8 vertical and 1 horizontal producing well in 8 LSDs in Section 22, Township 9, Range 29W1. Well list and well status is available in Appendix A.

**Figure 1: Daly Unit No. 6 Area Outline**



In accordance with Section 73 of the Manitoba Drilling and Production Regulation, Tundra submits the following 2015 Annual Progress Report for Daly Unit No. 6 as required by Waterflood Order No. 39.

## **DISCUSSION**

### **Production History**

For the wells included in Daly Unit No. 6, production started in October 1993 with the 00/07-22-009-29W1/00 well. Oil production peaked at 22.4 m<sup>3</sup>/d in October of 2014. In 2015, the average production for the unit was 4.96 m<sup>3</sup>/d of oil and 3.19 m<sup>3</sup>/d of water, and the average WOR was 0.67 m<sup>3</sup>/m<sup>3</sup>. There is currently no water injection in Daly Unit No. 6. The rates and WOR are presented in Figure 2.

**Figure 2: Daly Unit No. 6 Production/Injection Rates and WOR vs. Time**

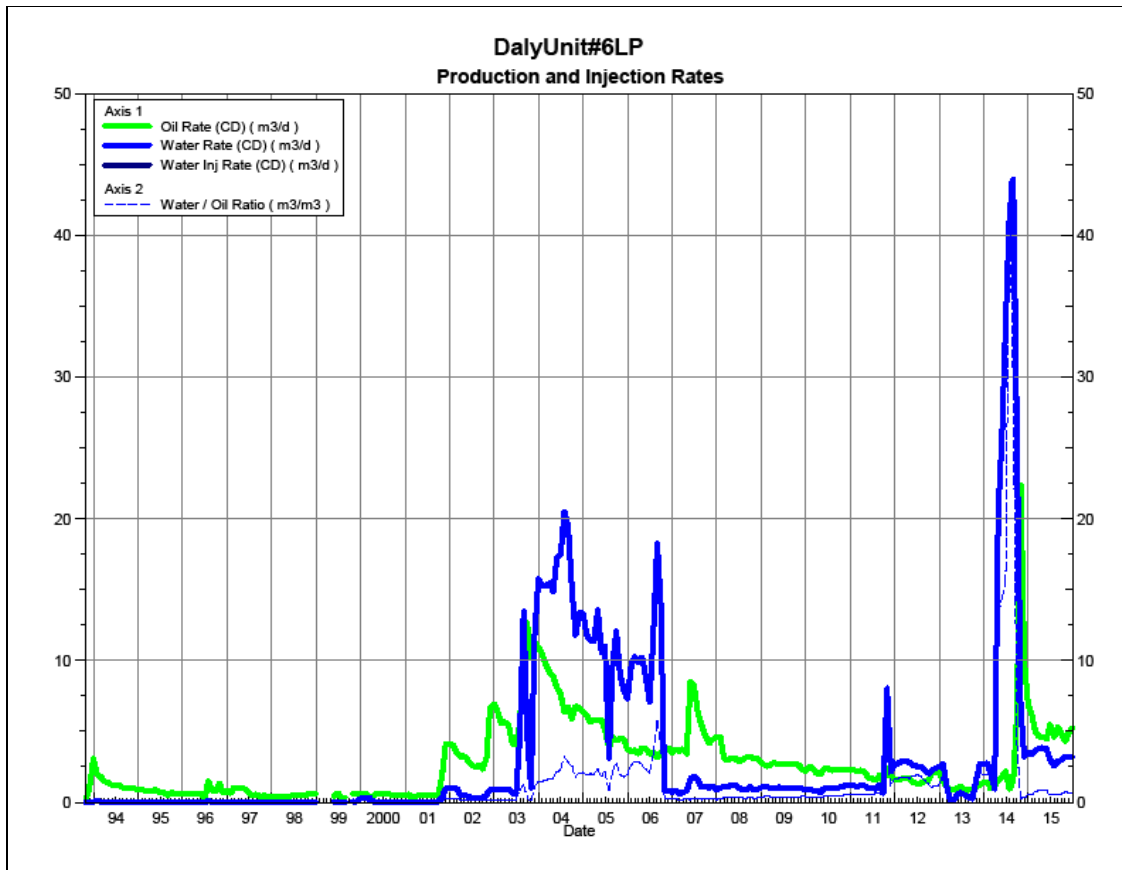
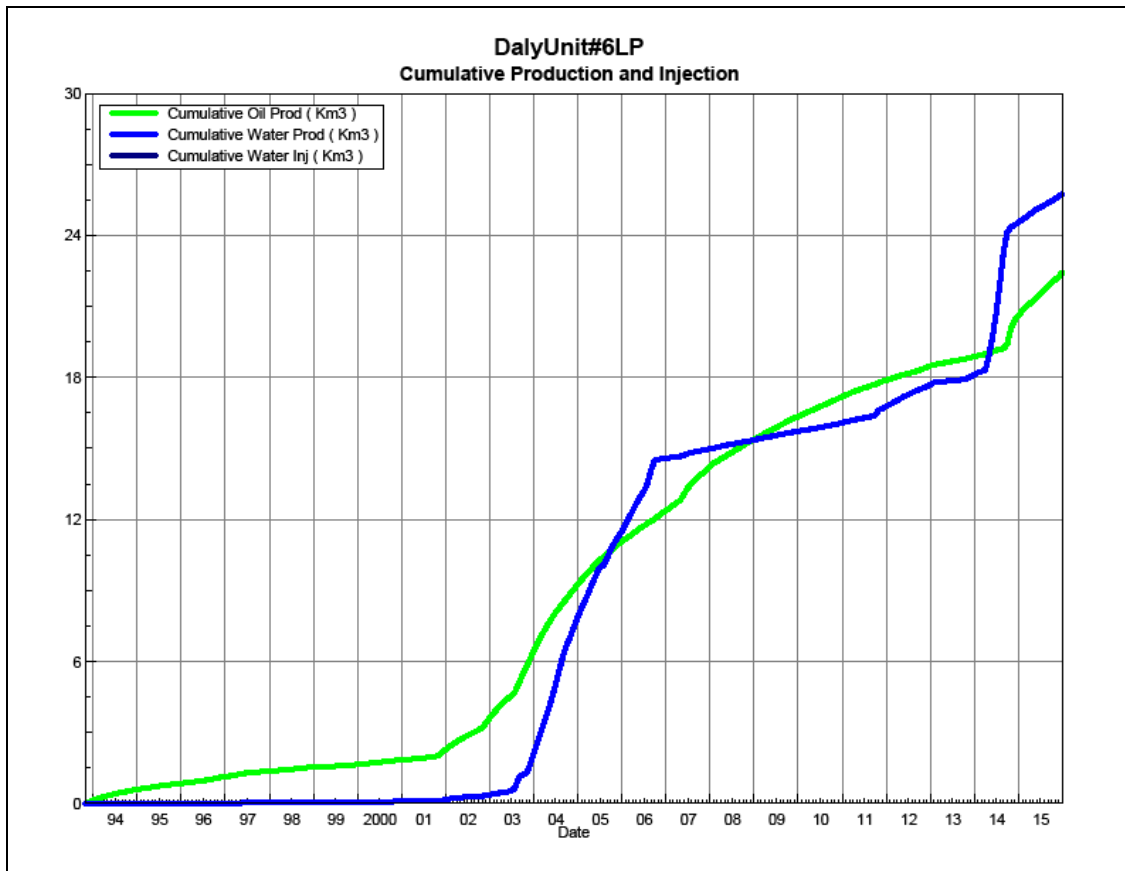


Figure 3 shows the cumulative production for Daly Unit No. 6 to the end of December 2015 as 22.44 e<sup>3</sup>m<sup>3</sup> of oil and 25.75 e<sup>3</sup>m<sup>3</sup> of water, representing a 1.5% recovery factor of the OOIP.

**Figure 3: Daly Unit No. 6 Cumulative Oil, Water and Water Injected vs. Time**



### **Waterflood History**

Daly Unit No. 6 is still in the development phase at the end of 2015. In February 2014, the single proposed horizontal injector (02/02-22-009-29W1) for the unit was drilled between the existing vertical producing wells, completing an effective 40 acre line drive waterflood pattern. In March 2014, the proposed injector was put on production. In order to maximize recovery from this Unit, Tundra expects to produce the future injector for a short period of time to clean-up the reservoir near the wellbore. All horizontal wells are fracture stimulated to improve the injection rates.

Production performance by injector pattern are summarized in Appendix B.

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

## **Waterflood EOR Operating Strategy and Performance**

### **Water Source and Quality**

The injection water for Daly Unit No. 6 will be sourced from the 16-32-007-29W1 well (Lodgepole formation). The water is treated at the 03-04-007-29W1 battery where it is filtered to 0.5 microns and has scale inhibitor added. The injection water is then distributed to the injectors through the dedicated infrastructure system.

### **Injection Wellhead Pressures**

No wellhead injection pressure is available for Daly Unit No. 6.

### **Reservoir Pressure**

Where practical, Tundra is committed to collecting pressure data from newly drilled injection wells. For Daly Unit No. 6, pressure data is currently available for the 02/02-22 Lodgepole location (Appendix C).

### **Well Servicing**

Table 1 lists the maintenance that was required in Daly Unit No. 6 in 2015.

**Table 1: Service and Maintenance in Daly Unit No. 6**

00/03-22-009-29W1/0	New Wellhead / Pump Change	2/17/2015
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### **Waterflood Performance Discussion**

At the end of 2015, there is currently no water injection in Daly Unit No. 6. The waterflood area had 1 injection well drilled in 2014 that is currently on production. Water injection is anticipated to begin in 2017, after the expected conversion of the 02/02-22 producer to an injector.

A summary table of the injector pattern(s) is presented in Appendix B. Plots of the production are presented in Appendix D for each of the injection pattern(s).

## **List of Appendices**

Appendix A: Well List and Well Status

Appendix B: Daly Unit No. 6 Injection Pattern Summary

Appendix C: Reservoir Pressure Survey Data For 02/02-22-009-29W1/0 (Lodgepole)

Appendix D: Injector Pattern Production/Injection Rates, Cumulative and VRR  
Plot and Table

## Appendix A

UWI	Well Status
100/01-22-009-29W1/00	Capable of OIL Prod
100/02-22-009-29W1/02	Capable of OIL Prod
100/03-22-009-29W1/00	Capable of OIL Prod
100/04-22-009-29W1/00	Capable of OIL Prod
100/05-22-009-29W1/02	Capable of OIL Prod
100/06-22-009-29W1/00	Capable of OIL Prod
100/07-22-009-29W1/00	Abandoned
100/08-22-009-29W1/00	Capable of OIL Prod
102/02-22-009-29W1/00	Capable of OIL Prod
102/07-22-009-29W1/00	Capable of OIL Prod



## Appendix B

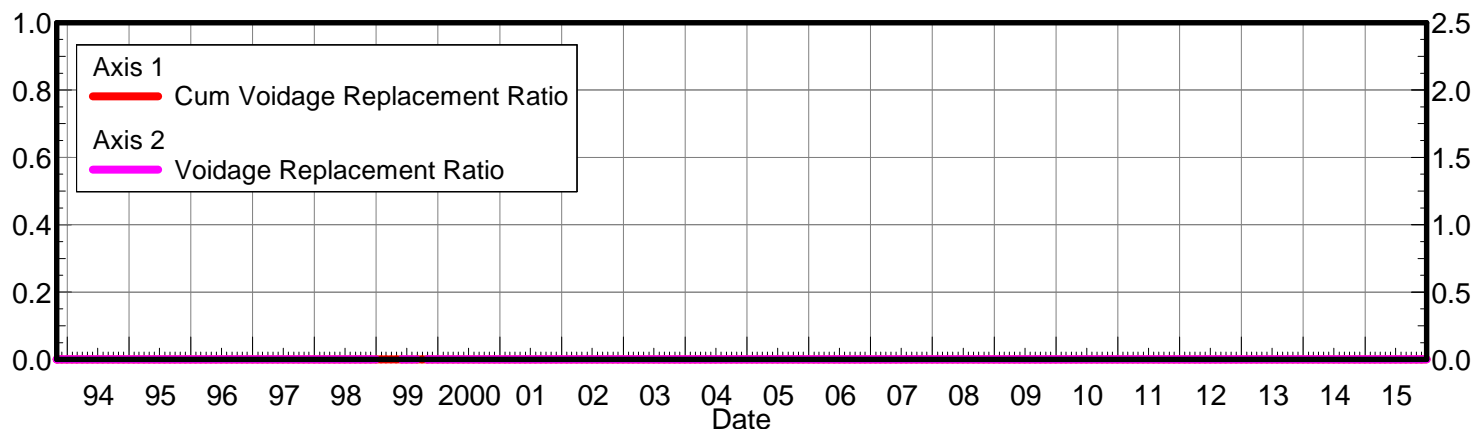
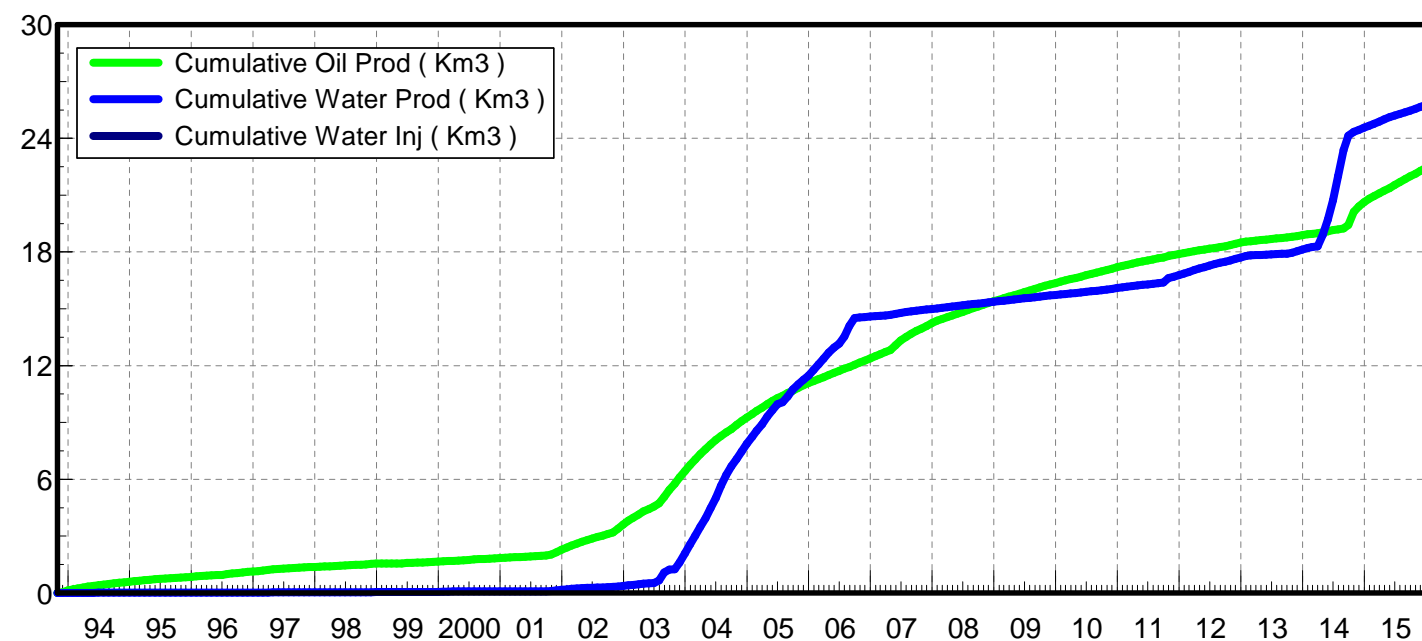
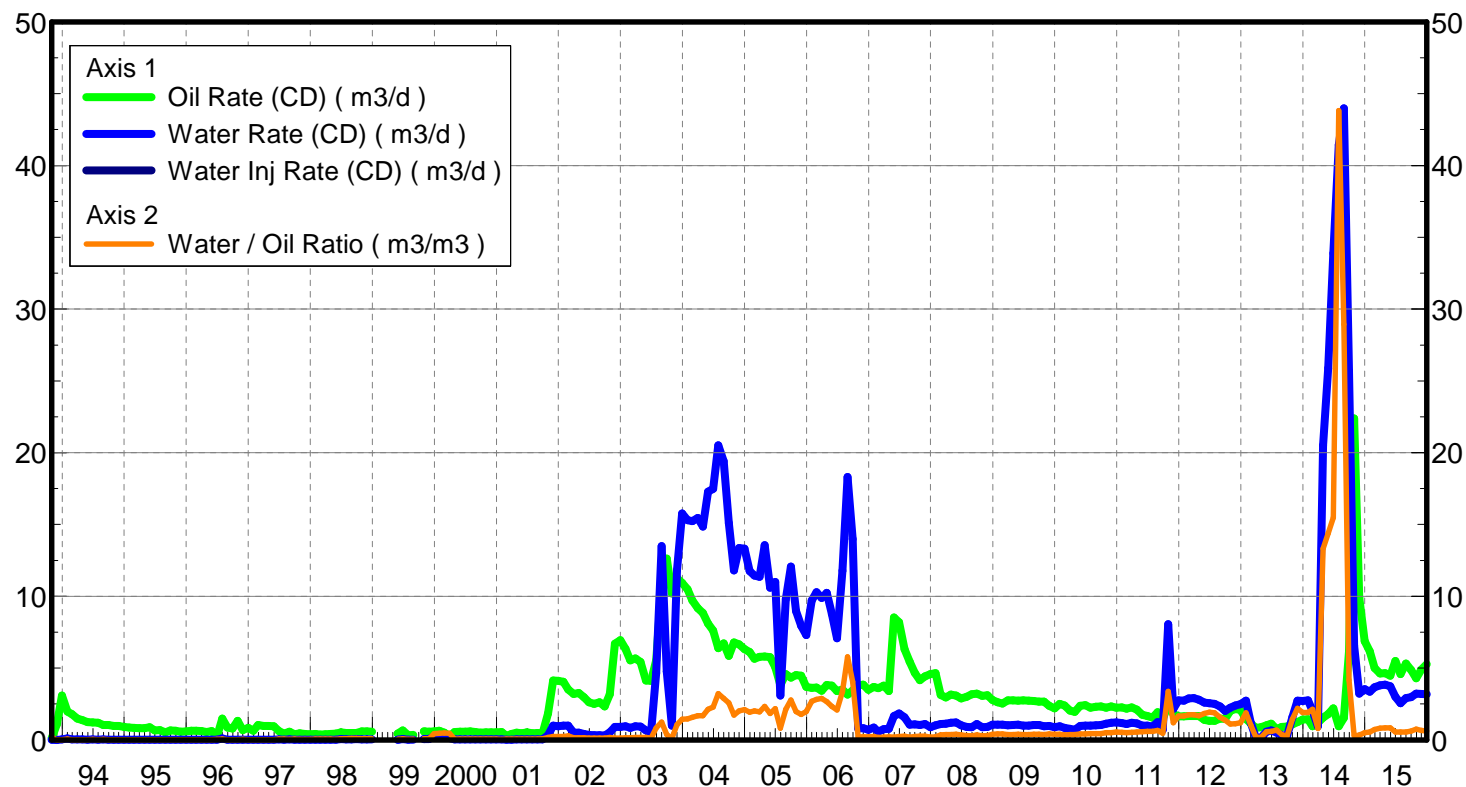
### Daly Unit No. 6 Pattern Summary as of December 2015

Pattern Name	Injector Location (009-29W1)	Status	Supported Wells (009-29W1)	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
02/02-22-09-29 Injector	02/08-21	Capable of Oil Production	01-22, 02-22, 03-22, 04-22, 05-22, 06-22, 07-22, 02/07-22, 08-22	9	1	Oct 1993	-	5.27	3.19	0.61	-	22.4	25.8	0.0	0.0	0.00

## **Appendix D**

### **Rates and VRR Plots**

Oil Formation Vol Factor : 0.82 m<sup>3</sup>/m<sup>3</sup>      Pattern : 02/02-22-009-29      Inj Set: Daily      Unit#6LP      Oil Rate (CD) : 5.27 m<sup>3</sup>/d  
 Water Formation Vol Factor : 1.00000 m<sup>3</sup>/m<sup>3</sup>      March 10, 2016      Water Rate (CD) : 3.19 m<sup>3</sup>/d  
 Water / Oil Ratio : 0.61 m<sup>3</sup>/m<sup>3</sup>      Operator: Tundra\_O&G\_Prtshp      Water Inj Rate (CD) : \* m<sup>3</sup>/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	VRR	Cum VRR
10/31/1993	0.14	0.02	0.17		0.00	0.00	0.00	0.000	0.000
11/30/1993	1.08	0.00	0.00		0.04	0.00	0.00	0.000	0.000
12/31/1993	3.08	0.03	0.01		0.13	0.00	0.00	0.000	0.000
1/31/1994	1.97	0.10	0.05		0.19	0.00	0.00	0.000	0.000
2/28/1994	1.80	0.03	0.01		0.24	0.01	0.00	0.000	0.000
3/31/1994	1.48	0.03	0.02		0.29	0.01	0.00	0.000	0.000
4/30/1994	1.37	0.03	0.02		0.33	0.01	0.00	0.000	0.000
5/31/1994	1.23	0.02	0.02		0.37	0.01	0.00	0.000	0.000
6/30/1994	1.22	0.03	0.03		0.41	0.01	0.00	0.000	0.000
7/31/1994	1.18	0.02	0.02		0.44	0.01	0.00	0.000	0.000
8/31/1994	1.04	0.04	0.04		0.47	0.01	0.00	0.000	0.000
9/30/1994	1.04	0.02	0.02		0.51	0.01	0.00	0.000	0.000
10/31/1994	0.96	0.01	0.01		0.54	0.01	0.00	0.000	0.000
11/30/1994	0.96	0.01	0.01		0.56	0.01	0.00	0.000	0.000
12/31/1994	0.90	0.01	0.01		0.59	0.01	0.00	0.000	0.000
1/31/1995	0.86	0.01	0.01		0.62	0.01	0.00	0.000	0.000
2/28/1995	0.85	0.01	0.01		0.64	0.01	0.00	0.000	0.000
3/31/1995	0.81	0.01	0.02		0.67	0.01	0.00	0.000	0.000
4/30/1995	0.82	0.01	0.02		0.69	0.01	0.00	0.000	0.000
5/31/1995	0.88	0.01	0.01		0.72	0.01	0.00	0.000	0.000
6/30/1995	0.65	0.01	0.02		0.74	0.01	0.00	0.000	0.000
7/31/1995	0.68	0.01	0.01		0.76	0.01	0.00	0.000	0.000
8/31/1995	0.52	0.01	0.02		0.78	0.01	0.00	0.000	0.000
9/30/1995	0.67	0.01	0.01		0.80	0.02	0.00	0.000	0.000
10/31/1995	0.65	0.01	0.01		0.82	0.02	0.00	0.000	0.000
11/30/1995	0.56	0.01	0.02		0.83	0.02	0.00	0.000	0.000
12/31/1995	0.60	0.01	0.02		0.85	0.02	0.00	0.000	0.000
1/31/1996	0.64	0.01	0.02		0.87	0.02	0.00	0.000	0.000
2/29/1996	0.64	0.01	0.02		0.89	0.02	0.00	0.000	0.000
3/31/1996	0.61	0.01	0.02		0.91	0.02	0.00	0.000	0.000
4/30/1996	0.56	0.01	0.02		0.93	0.02	0.00	0.000	0.000
5/31/1996	0.62	0.01	0.02		0.95	0.02	0.00	0.000	0.000
6/30/1996	0.19	0.01	0.03		0.95	0.02	0.00	0.000	0.000
7/31/1996	1.48	0.09	0.06		1.00	0.02	0.00	0.000	0.000
8/31/1996	0.86	0.01	0.02		1.02	0.02	0.00	0.000	0.000
9/30/1996	0.78	0.02	0.02		1.05	0.02	0.00	0.000	0.000
10/31/1996	1.34	0.02	0.01		1.09	0.02	0.00	0.000	0.000
11/30/1996	0.68	0.02	0.02		1.11	0.02	0.00	0.000	0.000
12/31/1996	0.85	0.02	0.02		1.14	0.02	0.00	0.000	0.000
1/31/1997	0.63	0.01	0.02		1.16	0.02	0.00	0.000	0.000
2/28/1997	1.03	0.02	0.02		1.18	0.02	0.00	0.000	0.000
3/31/1997	0.96	0.02	0.02		1.21	0.02	0.00	0.000	0.000
4/30/1997	0.98	0.02	0.02		1.24	0.03	0.00	0.000	0.000
5/31/1997	0.94	0.02	0.02		1.27	0.03	0.00	0.000	0.000
6/30/1997	0.62	0.03	0.05		1.29	0.03	0.00	0.000	0.000
7/31/1997	0.45	0.02	0.05		1.30	0.03	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	VRR	Cum VRR
8/31/1997	0.57	0.03	0.05		1.32	0.03	0.00	0.000	0.000
9/30/1997	0.39	0.02	0.05		1.33	0.03	0.00	0.000	0.000
10/31/1997	0.46	0.02	0.04		1.35	0.03	0.00	0.000	0.000
11/30/1997	0.41	0.02	0.04		1.36	0.03	0.00	0.000	0.000
12/31/1997	0.38	0.02	0.04		1.37	0.03	0.00	0.000	0.000
1/31/1998	0.40	0.02	0.05		1.39	0.03	0.00	0.000	0.000
2/28/1998	0.36	0.02	0.05		1.40	0.03	0.00	0.000	0.000
3/31/1998	0.39	0.02	0.05		1.41	0.03	0.00	0.000	0.000
4/30/1998	0.42	0.02	0.05		1.42	0.03	0.00	0.000	0.000
5/31/1998	0.43	0.02	0.05		1.43	0.03	0.00	0.000	0.000
6/30/1998	0.52	0.05	0.09		1.45	0.04	0.00	0.000	0.000
7/31/1998	0.48	0.04	0.09		1.46	0.04	0.00	0.000	0.000
8/31/1998	0.47	0.05	0.10		1.48	0.04	0.00	0.000	0.000
9/30/1998	0.48	0.05	0.10		1.49	0.04	0.00	0.000	0.000
10/31/1998	0.59	0.05	0.08		1.51	0.04	0.00	0.000	0.000
11/30/1998	0.60	0.04	0.07		1.53	0.04	0.00	0.000	0.000
12/31/1998	0.56	0.05	0.08		1.55	0.04	0.00	0.000	0.000
5/31/1999	0.43	0.02	0.05		1.56	0.04	0.00	0.000	0.000
6/30/1999	0.65	0.05	0.07		1.58	0.05	0.00	0.000	0.000
7/31/1999	0.32	0.01	0.04		1.59	0.05	0.00	0.000	0.000
8/31/1999	0.34	0.02	0.06		1.60	0.05	0.00	0.000	0.000
10/31/1999	0.59	0.05	0.09		1.62	0.05	0.00	0.000	0.000
11/30/1999	0.56	0.05	0.08		1.64	0.05	0.00	0.000	0.000
12/31/1999	0.59	0.26	0.44		1.65	0.06	0.00	0.000	0.000
1/31/2000	0.64	0.29	0.45		1.67	0.07	0.00	0.000	0.000
2/29/2000	0.51	0.24	0.47		1.69	0.07	0.00	0.000	0.000
3/31/2000	0.26	0.12	0.45		1.70	0.08	0.00	0.000	0.000
4/30/2000	0.56	0.03	0.05		1.71	0.08	0.00	0.000	0.000
5/31/2000	0.57	0.03	0.06		1.73	0.08	0.00	0.000	0.000
6/30/2000	0.56	0.03	0.05		1.75	0.08	0.00	0.000	0.000
7/31/2000	0.59	0.03	0.05		1.77	0.08	0.00	0.000	0.000
8/31/2000	0.55	0.04	0.06		1.78	0.08	0.00	0.000	0.000
9/30/2000	0.51	0.03	0.05		1.80	0.08	0.00	0.000	0.000
10/31/2000	0.52	0.03	0.05		1.81	0.08	0.00	0.000	0.000
11/30/2000	0.52	0.03	0.05		1.83	0.08	0.00	0.000	0.000
12/31/2000	0.53	0.03	0.06		1.85	0.09	0.00	0.000	0.000
1/31/2001	0.56	0.03	0.05		1.86	0.09	0.00	0.000	0.000
2/28/2001	0.28	0.01	0.05		1.87	0.09	0.00	0.000	0.000
3/31/2001	0.41	0.02	0.05		1.88	0.09	0.00	0.000	0.000
4/30/2001	0.51	0.03	0.05		1.90	0.09	0.00	0.000	0.000
5/31/2001	0.45	0.03	0.06		1.91	0.09	0.00	0.000	0.000
6/30/2001	0.52	0.03	0.05		1.93	0.09	0.00	0.000	0.000
7/31/2001	0.46	0.03	0.06		1.94	0.09	0.00	0.000	0.000
8/31/2001	0.49	0.03	0.06		1.96	0.09	0.00	0.000	0.000
9/30/2001	0.47	0.03	0.07		1.97	0.09	0.00	0.000	0.000
10/31/2001	1.84	0.32	0.18		2.03	0.10	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	VRR	Cum VRR
11/30/2001	4.13	1.00	0.24		2.15	0.13	0.00	0.000	0.000
12/31/2001	4.12	0.95	0.23		2.28	0.16	0.00	0.000	0.000
1/31/2002	4.04	0.99	0.25		2.41	0.19	0.00	0.000	0.000
2/28/2002	3.51	0.99	0.28		2.50	0.22	0.00	0.000	0.000
3/31/2002	3.20	0.50	0.16		2.60	0.24	0.00	0.000	0.000
4/30/2002	3.27	0.51	0.15		2.70	0.25	0.00	0.000	0.000
5/31/2002	2.97	0.41	0.14		2.79	0.26	0.00	0.000	0.000
6/30/2002	2.61	0.34	0.13		2.87	0.27	0.00	0.000	0.000
7/31/2002	2.50	0.32	0.13		2.95	0.28	0.00	0.000	0.000
8/31/2002	2.62	0.32	0.12		3.03	0.29	0.00	0.000	0.000
9/30/2002	2.33	0.31	0.13		3.10	0.30	0.00	0.000	0.000
10/31/2002	3.17	0.53	0.17		3.20	0.32	0.00	0.000	0.000
11/30/2002	6.70	0.89	0.13		3.40	0.35	0.00	0.000	0.000
12/31/2002	6.94	0.90	0.13		3.62	0.37	0.00	0.000	0.000
1/31/2003	6.35	0.96	0.15		3.81	0.40	0.00	0.000	0.000
2/28/2003	5.54	0.85	0.15		3.97	0.43	0.00	0.000	0.000
3/31/2003	5.67	0.95	0.17		4.14	0.46	0.00	0.000	0.000
4/30/2003	5.42	0.92	0.17		4.31	0.48	0.00	0.000	0.000
5/31/2003	4.14	0.67	0.16		4.43	0.50	0.00	0.000	0.000
6/30/2003	4.12	0.55	0.13		4.56	0.52	0.00	0.000	0.000
7/31/2003	5.55	4.67	0.84		4.73	0.67	0.00	0.000	0.000
8/31/2003	10.81	13.49	1.25		5.06	1.08	0.00	0.000	0.000
9/30/2003	12.63	4.77	0.38		5.44	1.23	0.00	0.000	0.000
10/31/2003	10.20	0.99	0.10		5.76	1.26	0.00	0.000	0.000
11/30/2003	11.26	11.82	1.05		6.10	1.61	0.00	0.000	0.000
12/31/2003	10.94	15.76	1.44		6.44	2.10	0.00	0.000	0.000
1/31/2004	10.49	15.30	1.46		6.76	2.58	0.00	0.000	0.000
2/29/2004	9.71	15.24	1.57		7.04	3.02	0.00	0.000	0.000
3/31/2004	9.16	15.45	1.69		7.33	3.50	0.00	0.000	0.000
4/30/2004	8.85	14.86	1.68		7.59	3.94	0.00	0.000	0.000
5/31/2004	8.09	17.27	2.13		7.84	4.48	0.00	0.000	0.000
6/30/2004	7.62	17.49	2.30		8.07	5.00	0.00	0.000	0.000
7/31/2004	6.38	20.51	3.22		8.27	5.64	0.00	0.000	0.000
8/31/2004	6.72	19.39	2.88		8.48	6.24	0.00	0.000	0.000
9/30/2004	5.85	15.09	2.58		8.65	6.69	0.00	0.000	0.000
10/31/2004	6.79	11.79	1.74		8.86	7.06	0.00	0.000	0.000
11/30/2004	6.66	13.37	2.01		9.06	7.46	0.00	0.000	0.000
12/31/2004	6.33	13.33	2.11		9.26	7.87	0.00	0.000	0.000
1/31/2005	6.12	11.76	1.92		9.45	8.24	0.00	0.000	0.000
2/28/2005	5.65	11.44	2.03		9.61	8.56	0.00	0.000	0.000
3/31/2005	5.79	11.36	1.96		9.79	8.91	0.00	0.000	0.000
4/30/2005	5.81	13.55	2.33		9.96	9.32	0.00	0.000	0.000
5/31/2005	5.76	10.60	1.84		10.14	9.64	0.00	0.000	0.000
6/30/2005	5.07	10.99	2.17		10.29	9.97	0.00	0.000	0.000
7/31/2005	3.83	3.09	0.81		10.41	10.07	0.00	0.000	0.000
8/31/2005	4.59	9.79	2.13		10.55	10.37	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	VRR	Cum VRR
9/30/2005	4.35	12.07	2.78		10.68	10.74	0.00	0.000	0.000
10/31/2005	4.52	8.96	1.98		10.82	11.01	0.00	0.000	0.000
11/30/2005	4.48	7.95	1.77		10.96	11.25	0.00	0.000	0.000
12/31/2005	3.70	7.29	1.97		11.07	11.48	0.00	0.000	0.000
1/31/2006	3.63	9.71	2.68		11.19	11.78	0.00	0.000	0.000
2/28/2006	3.65	10.29	2.82		11.29	12.07	0.00	0.000	0.000
3/31/2006	3.42	9.88	2.89		11.39	12.37	0.00	0.000	0.000
4/30/2006	3.83	10.23	2.67		11.51	12.68	0.00	0.000	0.000
5/31/2006	3.77	8.76	2.32		11.63	12.95	0.00	0.000	0.000
6/30/2006	3.40	7.07	2.08		11.73	13.16	0.00	0.000	0.000
7/31/2006	3.51	11.79	3.36		11.84	13.53	0.00	0.000	0.000
8/31/2006	3.16	18.31	5.79		11.93	14.10	0.00	0.000	0.000
9/30/2006	3.45	13.98	4.05		12.04	14.52	0.00	0.000	0.000
10/31/2006	3.81	0.79	0.21		12.16	14.54	0.00	0.000	0.000
11/30/2006	3.84	0.81	0.21		12.27	14.57	0.00	0.000	0.000
12/31/2006	3.49	0.71	0.20		12.38	14.59	0.00	0.000	0.000
1/31/2007	3.69	0.85	0.23		12.49	14.61	0.00	0.000	0.000
2/28/2007	3.61	0.58	0.16		12.60	14.63	0.00	0.000	0.000
3/31/2007	3.78	0.74	0.20		12.71	14.65	0.00	0.000	0.000
4/30/2007	3.40	0.76	0.22		12.81	14.68	0.00	0.000	0.000
5/31/2007	8.53	1.65	0.19		13.08	14.73	0.00	0.000	0.000
6/30/2007	8.20	1.84	0.22		13.32	14.78	0.00	0.000	0.000
7/31/2007	6.31	1.57	0.25		13.52	14.83	0.00	0.000	0.000
8/31/2007	5.45	1.06	0.19		13.69	14.86	0.00	0.000	0.000
9/30/2007	4.66	1.08	0.23		13.83	14.90	0.00	0.000	0.000
10/31/2007	4.17	1.03	0.25		13.96	14.93	0.00	0.000	0.000
11/30/2007	4.42	1.11	0.25		14.09	14.96	0.00	0.000	0.000
12/31/2007	4.58	0.89	0.19		14.23	14.99	0.00	0.000	0.000
1/31/2008	4.64	1.03	0.22		14.38	15.02	0.00	0.000	0.000
2/29/2008	3.13	1.10	0.35		14.47	15.05	0.00	0.000	0.000
3/31/2008	2.95	1.12	0.38		14.56	15.09	0.00	0.000	0.000
4/30/2008	3.15	1.18	0.38		14.65	15.12	0.00	0.000	0.000
5/31/2008	3.10	1.22	0.39		14.75	15.16	0.00	0.000	0.000
6/30/2008	2.89	1.01	0.35		14.84	15.19	0.00	0.000	0.000
7/31/2008	3.00	0.90	0.30		14.93	15.22	0.00	0.000	0.000
8/31/2008	3.17	0.87	0.27		15.03	15.25	0.00	0.000	0.000
9/30/2008	3.23	1.10	0.34		15.12	15.28	0.00	0.000	0.000
10/31/2008	3.07	0.87	0.28		15.22	15.31	0.00	0.000	0.000
11/30/2008	3.10	0.91	0.29		15.31	15.33	0.00	0.000	0.000
12/31/2008	2.77	1.06	0.38		15.40	15.37	0.00	0.000	0.000
1/31/2009	2.62	1.06	0.40		15.48	15.40	0.00	0.000	0.000
2/28/2009	2.54	1.06	0.42		15.55	15.43	0.00	0.000	0.000
3/31/2009	2.75	1.01	0.37		15.64	15.46	0.00	0.000	0.000
4/30/2009	2.75	1.03	0.38		15.72	15.49	0.00	0.000	0.000
5/31/2009	2.73	1.06	0.39		15.80	15.52	0.00	0.000	0.000
6/30/2009	2.74	0.99	0.36		15.89	15.55	0.00	0.000	0.000

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7/31/2009	2.72	0.99	0.36		15.97	15.58	0.00	0.000	0.000
8/31/2009	2.70	1.04	0.38		16.05	15.62	0.00	0.000	0.000
9/30/2009	2.67	1.04	0.39		16.13	15.65	0.00	0.000	0.000
10/31/2009	2.67	0.96	0.36		16.22	15.68	0.00	0.000	0.000
11/30/2009	2.37	0.96	0.41		16.29	15.71	0.00	0.000	0.000
12/31/2009	2.20	0.89	0.40		16.36	15.73	0.00	0.000	0.000
1/31/2010	2.52	0.96	0.38		16.43	15.76	0.00	0.000	0.000
2/28/2010	2.40	0.83	0.34		16.50	15.79	0.00	0.000	0.000
3/31/2010	2.04	0.77	0.38		16.56	15.81	0.00	0.000	0.000
4/30/2010	1.95	0.71	0.36		16.62	15.83	0.00	0.000	0.000
5/31/2010	2.38	0.96	0.40		16.70	15.86	0.00	0.000	0.000
6/30/2010	2.42	1.00	0.41		16.77	15.89	0.00	0.000	0.000
7/31/2010	2.23	0.99	0.44		16.84	15.92	0.00	0.000	0.000
8/31/2010	2.31	1.02	0.44		16.91	15.95	0.00	0.000	0.000
9/30/2010	2.33	1.03	0.44		16.98	15.98	0.00	0.000	0.000
10/31/2010	2.24	1.12	0.50		17.05	16.02	0.00	0.000	0.000
11/30/2010	2.32	1.19	0.51		17.12	16.05	0.00	0.000	0.000
12/31/2010	2.25	1.22	0.54		17.19	16.09	0.00	0.000	0.000
1/31/2011	2.27	1.17	0.52		17.26	16.13	0.00	0.000	0.000
2/28/2011	2.17	1.11	0.51		17.32	16.16	0.00	0.000	0.000
3/31/2011	2.26	1.19	0.53		17.39	16.20	0.00	0.000	0.000
4/30/2011	2.10	1.16	0.55		17.45	16.23	0.00	0.000	0.000
5/31/2011	1.75	0.99	0.57		17.51	16.26	0.00	0.000	0.000
6/30/2011	1.66	0.99	0.60		17.56	16.29	0.00	0.000	0.000
7/31/2011	1.54	0.93	0.60		17.60	16.32	0.00	0.000	0.000
8/31/2011	1.92	1.25	0.65		17.66	16.36	0.00	0.000	0.000
9/30/2011	1.49	0.70	0.47		17.71	16.38	0.00	0.000	0.000
10/31/2011	2.39	8.05	3.37		17.78	16.63	0.00	0.000	0.000
11/30/2011	1.82	2.16	1.19		17.84	16.69	0.00	0.000	0.000
12/31/2011	1.65	2.75	1.67		17.89	16.78	0.00	0.000	0.000
1/31/2012	1.64	2.74	1.67		17.94	16.86	0.00	0.000	0.000
2/29/2012	1.65	2.90	1.75		17.99	16.95	0.00	0.000	0.000
3/31/2012	1.67	2.90	1.74		18.04	17.04	0.00	0.000	0.000
4/30/2012	1.67	2.80	1.68		18.09	17.12	0.00	0.000	0.000
5/31/2012	1.40	2.60	1.85		18.13	17.20	0.00	0.000	0.000
6/30/2012	1.33	2.55	1.92		18.17	17.28	0.00	0.000	0.000
7/31/2012	1.34	2.52	1.88		18.21	17.36	0.00	0.000	0.000
8/31/2012	1.48	2.33	1.58		18.26	17.43	0.00	0.000	0.000
9/30/2012	1.45	2.01	1.38		18.30	17.49	0.00	0.000	0.000
10/31/2012	2.03	2.23	1.10		18.37	17.56	0.00	0.000	0.000
11/30/2012	2.15	2.40	1.12		18.43	17.63	0.00	0.000	0.000
12/31/2012	2.09	2.49	1.19		18.50	17.71	0.00	0.000	0.000
1/31/2013	1.45	2.74	1.89		18.54	17.79	0.00	0.000	0.000
2/28/2013	1.15	1.19	1.04		18.57	17.83	0.00	0.000	0.000
3/31/2013	0.85	0.15	0.18		18.60	17.83	0.00	0.000	0.000
4/30/2013	0.87	0.16	0.18		18.63	17.84	0.00	0.000	0.000



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5/31/2013	1.01	0.57	0.57		18.66	17.85	0.00	0.000	0.000
6/30/2013	1.13	0.66	0.59		18.69	17.87	0.00	0.000	0.000
7/31/2013	0.75	0.51	0.68		18.71	17.89	0.00	0.000	0.000
8/31/2013	0.91	0.33	0.36		18.74	17.90	0.00	0.000	0.000
9/30/2013	0.93	0.25	0.26		18.77	17.91	0.00	0.000	0.000
10/31/2013	1.09	1.56	1.44		18.80	17.96	0.00	0.000	0.000
11/30/2013	1.24	2.74	2.21		18.84	18.04	0.00	0.000	0.000
12/31/2013	1.41	2.71	1.92		18.88	18.12	0.00	0.000	0.000
1/31/2014	1.44	2.75	1.91		18.93	18.21	0.00	0.000	0.000
2/28/2014	0.94	2.01	2.14		18.96	18.26	0.00	0.000	0.000
3/31/2014	1.19	0.95	0.80		18.99	18.29	0.00	0.000	0.000
4/30/2014	1.54	20.52	13.32		19.04	18.91	0.00	0.000	0.000
5/31/2014	1.80	25.90	14.39		19.09	19.71	0.00	0.000	0.000
6/30/2014	2.19	33.89	15.47		19.16	20.73	0.00	0.000	0.000
7/31/2014	0.95	41.42	43.82		19.19	22.01	0.00	0.000	0.000
8/31/2014	1.52	43.98	28.94		19.24	23.38	0.00	0.000	0.000
9/30/2014	6.14	25.69	4.18		19.42	24.15	0.00	0.000	0.000
10/31/2014	22.38	6.57	0.29		20.11	24.35	0.00	0.000	0.000
11/30/2014	9.90	3.21	0.32		20.41	24.45	0.00	0.000	0.000
12/31/2014	6.88	3.53	0.51		20.62	24.56	0.00	0.000	0.000
1/31/2015	6.16	3.35	0.54		20.82	24.66	0.00	0.000	0.000
2/28/2015	5.00	3.67	0.73		20.96	24.76	0.00	0.000	0.000
3/31/2015	4.62	3.81	0.82		21.10	24.88	0.00	0.000	0.000
4/30/2015	4.64	3.85	0.83		21.24	25.00	0.00	0.000	0.000
5/31/2015	4.48	3.74	0.83		21.38	25.11	0.00	0.000	0.000
6/30/2015	5.49	3.01	0.55		21.54	25.20	0.00	0.000	0.000
7/31/2015	4.57	2.55	0.56		21.68	25.28	0.00	0.000	0.000
8/31/2015	5.31	2.90	0.55		21.85	25.37	0.00	0.000	0.000
9/30/2015	4.87	2.97	0.61		21.99	25.46	0.00	0.000	0.000
10/31/2015	4.29	3.23	0.75		22.13	25.56	0.00	0.000	0.000
11/30/2015	4.89	3.19	0.65		22.27	25.66	0.00	0.000	0.000
12/31/2015	5.27	3.19	0.61		22.44	25.75	0.00	0.000	0.000