

**EOG Resources Canada Inc.**

Waskada Unit No. 16

*Waterflood Progress Report 2013*

January 1<sup>st</sup> through to December 31<sup>st</sup> 2013

Prepared for:

Manitoba Industry, Economic Development and Mines

Petroleum Branch

Prepared by:

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February 28, 2014

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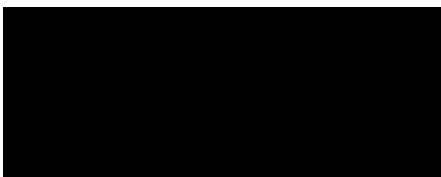
RE: Enhanced Oil Recovery Reports

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EOG Resources Canada Inc. (EOG) is submitting an Enhanced Oil Recovery Projects Reports to fulfill the requirements of subsection 73 of the Drilling and Production Regulations. We hope that this reports all requirements set forth.

If you have any questions or wish to discuss this report any further, please feel free to contact the undersigned.

Sincerely,



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## Unit No. 16

### Introduction

The Waskada Unit No.16 pressure maintenance project commenced water injection into the Lower Amaranth A pool in accordance with Manitoba Energy and Mines Order No. PM 57, dated May 1, 1987. This unit was then enlarged on October 1, 1988. Figure 1 shows a map of Unit No. 16.

Unit No.16 consists of 64 wells (producers/shut in/abandoned/injectors) which are summarized in Table 1. Water injection commenced with 4 injector wells on June 1987. The unit was then enlarged and 5 more injection wells were added in December 1988. Fourteen injector wells were added in November 2001, and 3 more were added October 2002. There were 21 injector wells operating in 2011, 2 with erratic operations, and 18 that are continuously active. There are currently 30 producing wells; 21 vertical wells and 9 Horizontal infill wells.

### Discussion

From January 1 to December 31 in 2013, Unit No. 16 produced 36,959 m<sup>3</sup> of total fluids (11,505 m<sup>3</sup> oil, 25,454 m<sup>3</sup> water), and injected 100,241 m<sup>3</sup> of source water, giving an annual oil and water voidage replacement ratio (VRR) of 2.6 for this reporting period. The cumulative VRR since injection commenced in May 1987 is presently at 0.9. Table 2 summarizes the yearly and cumulative VRR for Unit No.16.

In 2013 the majority of the injectors in Unit 16 were shut-in to divert and control injection water rates and pressures to the Horizontal Injection trial in Unit 18. The injection rate fluctuated between approximately 143 to 385 m<sup>3</sup>/d. The fluctuation had little effect on oil or water production, as can be seen in Appendix A. Appendices B and C shows the history of injection rates and produced oil and water volumes.

Average wellhead injection pressures for the 2 injection wells for 2013 are 2088 kPa. The pressures remained constant throughout the reporting period. Individual injection rates and wellhead pressure summaries can be found in Table 3.

There were two static gradient surveys performed in 2013. Both surveys indicated reservoir pressure maintenance was being maintained by the waterflood with bottom hole pressures of 8005kPa & 9146kPa.

Gas volumes from the field are measured at the 15-9-2-25W1M battery. There is no individual well gas volume measurement. It is not possible to separate out the gas production from only the wells in Unit 16, so the effectiveness of the pressure maintenance program cannot be evaluated on the GOR.

## Workovers

Five workovers were performed in 2013, on both producing wells. All of the repairs were pump, packer or rod repairs.

Two acid stimulations were performed on old vertical wells in the unit. This work entailed spotting acid on the perforations for a few hours then circulating it out.

A workover summary can be found in Table 6.

## Corrosion and Scale Prevention

The facilities in Unit 16 are currently using cathodic protection and chemicals to protect against corrosion and scale. All facilities are monitored every 3 months to assess the corrosion and ensure that proper electrical current is being supplied. There have been no issues with corrosion or scale to date.

All water flood injection water is treated with biocide and scale inhibitor. Corrosion mitigation in the wells is achieved by either batch inhibition in the wells or continuous chemical injection down the annulus. A biocide chemical is added to the injection water to prevent any sulphide producing bacteria from forming.

## Conclusion

The current pressure maintenance program is having a positive effect on oil production in Unit No. 16 as demonstrated by the static gradient surveys, and maintained reservoir pressure. EOG will maintain the current pressure maintenance program, and continue to monitor production and pressure performance to try to reach a VRR of 1.0.

There were six horizontal infill wells drilled in Unit 16 in 2013, with plans to drill up to 10 more over the next two years.

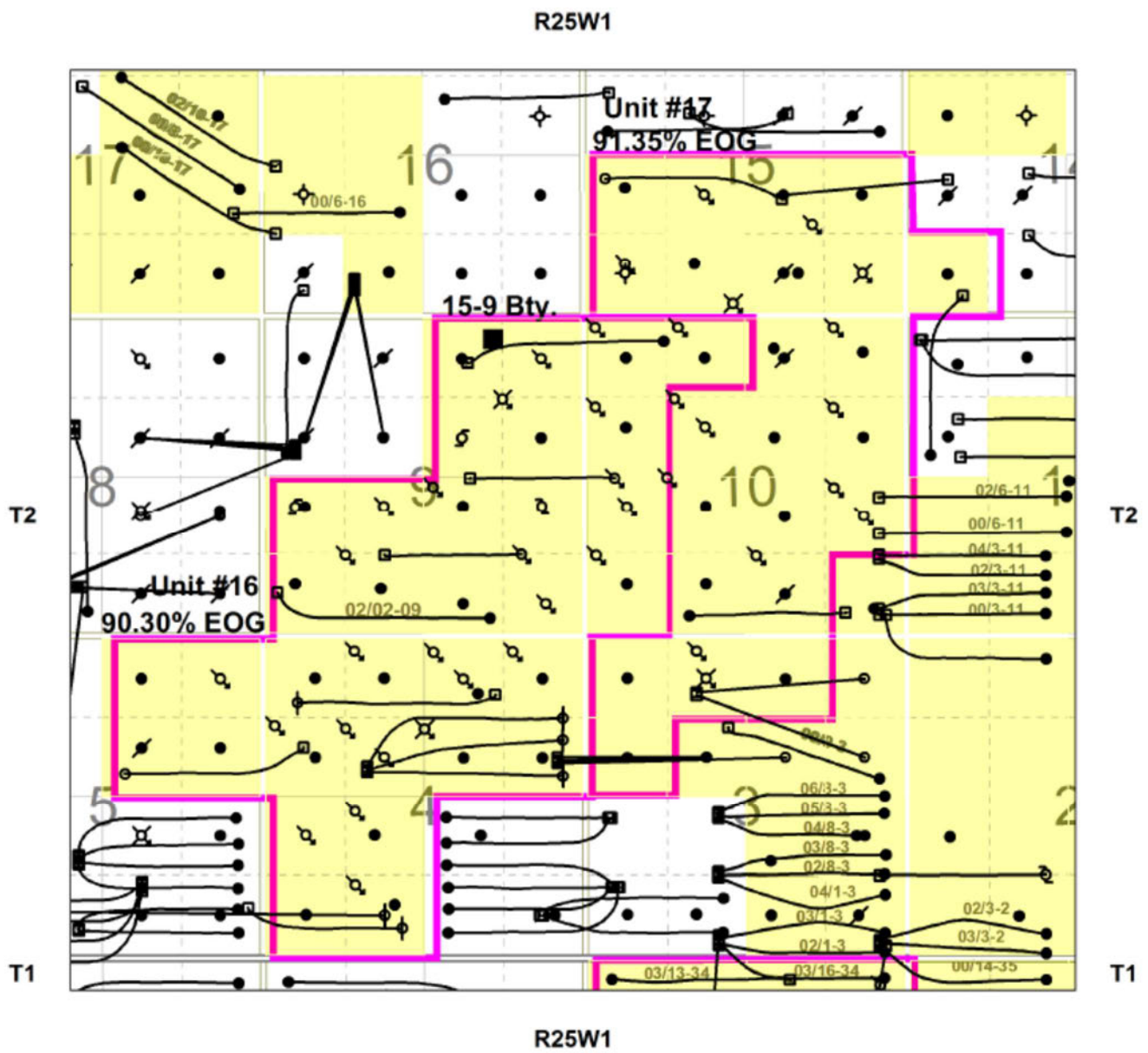


Figure 1 – Unit 16 Map

Table 1 –Summary of Unit 16 Wells

Well Location	Unit No.	Status	On Prod. Date	Cum Oil Prod. (m³)	Cum H2O Prod. (m³)	Last Prod. Date	On Inj. Date	Cum H2O Inj. (m³)	Last Inj. Date
100/01-09-002-25W1/00	16	abnd*	August-87	2,363	55,008	July-88	n/a	n/a	n/a
100/02-09-002-25W1/00	16	prod	July-86	18,169	1,434	Active	n/a	n/a	n/a
100/03-04-002-25W1/00	16	prod	July-86	7,191	178	Active	n/a	n/a	n/a
100/03-09-002-25W1/00	16	prod	August-87	37,590	23,734	Active	n/a	n/a	n/a
100/04-04-002-25W1/00	16	prod	February-86	18,483	5,330	August-11	n/a	n/a	n/a
100/04-09-002-25W1/02	16	prod	July-84	11,914	104,031	Active	n/a	n/a	n/a
100/04-10-002-25W1/00	16	prod	October-87	6,071	667	Active	n/a	n/a	n/a
100/05-04-002-25W1/00	16	abnd*	August-85	3,888	304	April-87	n/a	n/a	n/a
100/05-09-002-25W1/00	16	abnd	February-85	773	3,251	February-89	n/a	n/a	n/a
100/05-09-002-25W1/02	16	abnd**	Aug-90	1,898	158,591	Oct-08	n/a	n/a	n/a
100/05-10-002-25W1/00	16	abnd*	Mar-88	339	33	Aug-88	n/a	n/a	n/a
100/06-04-002-25W1/00	16	prod	Feb-86	25,788	15,473	Jun-11	n/a	n/a	n/a
100/06-09-002-25W1/00	16	abnd*	Nov-87	851	40	Aug-88	n/a	n/a	n/a
100/07-09-002-25W1/00	16	prod	Nov-87	27,015	16,677	Active	n/a	n/a	n/a
100/08-09-002-25W1/00	16	abnd***	Feb-88	13,546	5,675	Active	n/a	n/a	n/a
100/09-04-002-25W1/00	16	prod	Aug-87	7,883	358	Active	n/a	n/a	n/a
100/09-05-002-25W1/00	16	prod	Nov-85	43,764	5,386	Active	n/a	n/a	n/a
100/09-09-002-25W1/00	16	prod	Feb-88	25,231	12,160	Active	n/a	n/a	n/a
100/10-04-002-25W1/00	16	prod	Aug-87	17,133	353	Active	n/a	n/a	n/a
100/10-05-002-25W1/00	16	abnd	Dec-85	6,508	112,807	Aug-03	n/a	n/a	n/a
100/10-09-002-25W1/00	16	abnd*	Mar-86	1,145	68	Aug-88	n/a	n/a	n/a
100/11-04-002-25W1/00	16	abnd*	Feb-86	755	181	Apr-87	n/a	n/a	n/a
100/12-04-002-25W1/00	16	prod	Feb-86	17,148	6,041	Active	n/a	n/a	n/a
100/12-10-002-25W1/00	16	prod	Mar-88	34,467	50,174	Active	n/a	n/a	n/a
100/13-04-002-25W1/00	16	abnd	Aug-85	2,210	4,534	Sep-85	n/a	n/a	n/a
100/13-04-002-25W1/02	16	prod	Sep-85	9,854	11,698	Active	n/a	n/a	n/a
100/13-10-002-25W1/00	16	prod	Feb-88	27,784	2,761	Active	n/a	n/a	n/a
100/14-04-002-25W1/00	16	prod	Feb-86	13,789	6,016	Active	n/a	n/a	n/a
100/14-10-002-25W1/00	16	prod	Jan-86	8,103	1,502	Active	n/a	n/a	n/a
100/15-04-002-25W1/00	16	abnd*	Aug-85	392	364	Apr-87	n/a	n/a	n/a
100/15-05-002-25W1/00	16	prod	Dec-85	7,402	708	Active	n/a	n/a	n/a
100/15-09-002-25W1/00	16	prod	Jan-86	8,983	305	Active	n/a	n/a	n/a
100/16-04-002-25W1/00	16	prod	Sep-87	9,849	2,654	Active	n/a	n/a	n/a
100/16-05-002-25W1/00	16	abnd*	Jul-85	1,181	425	Apr-87	n/a	n/a	n/a
100/16-09-002-25W1/00	16	abnd*	Jul-85	3,365	203	Aug-88	n/a	n/a	n/a
102/02-09-002-25W1/00	16	prod	Mar-12	6,799	1,604	Active	n/a	n/a	n/a
102/05-09-002-25W1/00	16	prod	Nov-89	7,976	1,191	Active	n/a	n/a	n/a
102/09-04-002-25W1/00	16	prod	Dec-13	-	-	Active	n/a	n/a	n/a
102/10-05-002-25W1/00	16	prod	Jan-14	-	-	Active	n/a	n/a	n/a
102/13-04-002-25W1/00	16	prod	Nov-12	6,114	4,341	Active	n/a	n/a	n/a
102/15-04-002-25W1/00	16	prod	Mar-06	2,732	346	Active	n/a	n/a	n/a
103/03-04-002-25W1/00	16	prod	Dec-13	968	188	Active	n/a	n/a	n/a
103/09-04-002-25W1/00	16	prod	Dec-13	610	17	Active	n/a	n/a	n/a
103/13-10-002-25W1/00	16	prod	Nov-12	505	19,424	Active	n/a	n/a	n/a
104/03-04-002-25W1/00	16	prod	Dec-13	983	187	Active	n/a	n/a	n/a
104/09-04-002-25W1/00	16	prod	Dec-13	867	24	Active	n/a	n/a	n/a

\*converted to injection well

\*\*converted to source water well

\*\*\*converted to SWD

Table 1 –Summary of Unit 16 Wells (cont'd)

Well Location	Unit No.	Status	On Prod. Date	Cum Oil Prod. (m <sup>3</sup> )	Cum H2O Prod. (m <sup>3</sup> )	Last Prod. Date	On Inj. Date	Cum H2O Inj. (m <sup>3</sup> )	Last Inj. Date
100/01-09-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Dec-88	21,441	Aug-12
100/05-04-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Jun-87	106,765	Aug-12
100/05-09-002-25W1/02	16	source water	n/a	n/a	n/a	n/a	n/a	n/a	n/a
100/05-10-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Dec-88	654,645	Active
100/06-09-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Dec-88	47,427	Mar-12
100/08-09-002-25W1/02	16	SW Disposal	n/a	n/a	n/a	n/a	n/a	n/a	n/a
100/10-09-002-25W1/00	16	abnd**	n/a	n/a	n/a	n/a	Dec-88	48,806	Aug-01
100/10-09-002-25W1/00	16	source water	n/a	n/a	n/a	n/a	n/a	n/a	n/a
100/11-04-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Jun-87	26,181	Dec-11
100/15-04-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Jun-87	32,112	Feb-12
100/16-05-002-25W1/00	16	abnd	n/a	n/a	n/a	n/a	Jun-87	68,271	Aug-04
100/16-09-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Dec-88	411,415	Active
102/01-09-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Nov-01	12,561	Dec-11
102/05-10-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Nov-01	38,250	Aug-12
1C0/03-04-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Oct-02	23,724	Aug-12
1C0/03-09-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Nov-01	9,280	Dec-11
1C0/04-10-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Nov-01	2,618	Dec-11
1C0/06-04-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Oct-02	15,312	Aug-12
1C0/07-09-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Nov-01	11,203	Aug-12
1C0/09-09-002-25W1/00	16	abnd	n/a	n/a	n/a	n/a	Nov-01	20,383	Oct-04
1C0/10-04-002-25W1/00	16	abnd	n/a	n/a	n/a	n/a	Nov-01	1,829	Oct-03
1C0/11-04-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Nov-01	10,869	Aug-12
1C0/12-04-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Oct-02	12,178	Aug-12
1C0/12-10-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Nov-01	133,102	Aug-12
1C0/13-10-002-25W1/00	16	abnd	n/a	n/a	n/a	n/a	Nov-01	2,085	May-09
1C0/14-04-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Nov-01	23,588	Dec-11
1C0/14-10-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Nov-01	21,570	Aug-12
1C0/15-04-002-25W1/00	16	inj	n/a	n/a	n/a	n/a	Nov-01	6,663	Dec-11
1C0/16-04-002-25W1/00	16	abnd	n/a	n/a	n/a	n/a	Nov-01	1,483	May-10

\*converted to injection well

\*\*converted to source water well

\*\*\*converted to SWD



Table 2 – Voidage Replacement Ratio Calculations

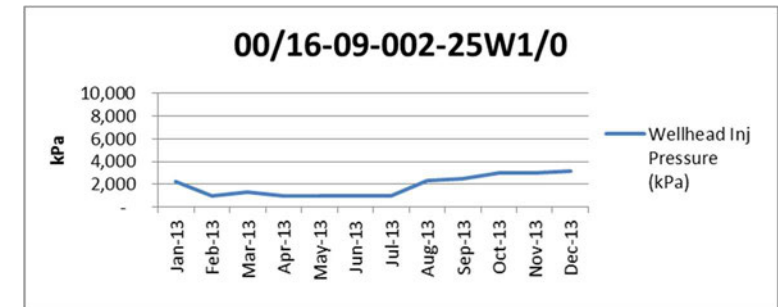
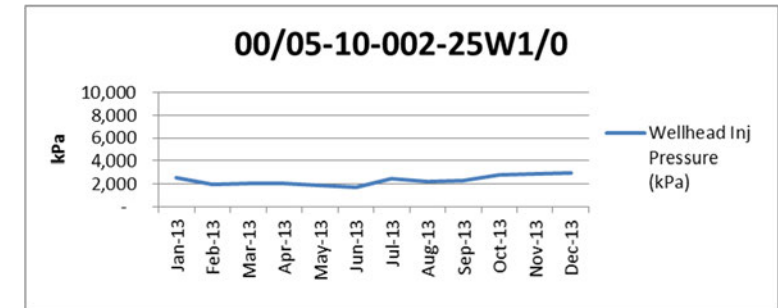
Year	Prod. Oil (m³)	Cum Prod. Oil (m³)	Prod. H <sub>2</sub> O (m³)	Cum Prod. H <sub>2</sub> O (m³)	Prod Fluid Rsvr (m³)	H <sub>2</sub> O Injected (m³)	Cum Prod. Fluid Rsvr (m³)	Cum H <sub>2</sub> O Injected (m³)	Annual VRR	Cum VRR (m³/m³)
1984	774	774	1,892	1,892	2,782	0	2,782	0	0.0	0.0
1985	5,938	6,712	3,359	5,251	10,189	0	12,970	0	0.0	0.0
1986	16,130	22,842	3,175	8,426	21,725	0	34,695	0	0.0	0.0
1987	19,644	42,487	5,006	13,432	27,596	19,770	62,291	19,770	0.7	0.3
1988	33,617	76,104	5,787	19,219	44,447	18,857	106,739	38,627	0.4	0.4
1989	29,005	105,109	4,528	23,748	37,884	36,119	144,623	74,746	1.0	0.5
1990	27,089	132,198	13,534	37,282	44,687	38,515	189,310	113,262	0.9	0.6
1991	24,743	156,942	24,878	62,160	53,333	39,653	242,643	152,914	0.7	0.6
1992	21,330	178,272	66,961	129,121	91,491	18,966	334,133	171,880	0.2	0.5
1993	19,754	198,026	72,774	201,894	95,491	16,521	429,624	188,401	0.2	0.4
1994	18,064	216,090	76,018	277,912	96,791	18,862	526,416	207,263	0.2	0.4
1995	16,721	232,811	106,240	384,152	125,469	38,999	651,885	246,262	0.3	0.4
1996	14,843	247,654	107,099	491,251	124,168	36,447	776,052	282,709	0.3	0.4
1997	13,016	260,670	100,417	591,667	115,385	35,740	891,438	318,449	0.3	0.4
1998	11,726	272,396	101,588	693,255	115,073	40,470	1,006,510	358,919	0.4	0.4
1999	11,715	284,110	103,785	797,040	117,257	37,339	1,123,767	396,258	0.3	0.4
2000	10,087	294,197	36,787	833,828	48,387	14,073	1,172,154	410,331	0.3	0.4
2001	10,124	304,321	44,885	878,713	56,527	28,196	1,228,682	438,528	0.5	0.4
2002	17,231	321,552	66,270	944,983	86,086	88,619	1,314,768	527,146	1.0	0.4
2003	15,739	337,291	104,552	1,049,536	122,652	66,491	1,437,420	593,638	0.5	0.4
2004	14,340	351,631	122,640	1,172,176	139,131	51,375	1,576,551	645,013	0.4	0.4
2005	11,626	363,256	63,637	1,235,813	77,006	64,324	1,653,558	709,337	0.8	0.4
2006	11,598	374,855	47,643	1,283,456	60,981	72,897	1,714,539	782,234	1.2	0.5
2007	10,417	385,272	51,461	1,334,917	63,441	109,531	1,777,979	891,765	1.7	0.5
2008	9,323	394,594	54,763	1,389,680	65,484	123,488	1,843,463	1,015,253	1.9	0.6
2009	8,347	402,941	10,000	1,399,680	19,599	105,691	1,863,062	1,120,944	5.4	0.6
2010	8,225	411,166	10,832	1,410,512	20,291	146,328	1,883,353	1,267,272	7.2	0.7
2011	6,298	417,464	9,764	1,420,276	17,006	148,906	1,900,359	1,416,178	8.8	0.7
2012	5,216	422,680	4,686	1,424,961	10,684	155,105	1,911,043	1,571,283	14.5	0.8
2013	11,505	434,185	25,454	1,450,415	38,685	100,241	1,949,728	1,671,525	2.6	0.9
<b>TOTAL</b>	<b>422,680</b>		<b>1,424,961</b>		<b>1,911,043</b>		<b>1,571,283</b>			<b>0.8</b>

**NOTE: A FORMATION VOLUME FACTOR OF 1.15 WAS USED**

Note: Correction to 2012 H<sub>2</sub>O Injected Volume has been made. Originally reported as 17,751m<sup>3</sup>.

Table 3 –Unit 16 Injection Wells

Well Location	Date	Hours On	H <sub>2</sub> O Inj Cal-d avg (m³/d)	H <sub>2</sub> O Inj Prd-d avg (m³/d)	Monthly Injected H <sub>2</sub> O (m³)	Wellhead Inj Pressure (kPa)
00/05-10-002-25W1/0	Jan-13	744	279.7	279.7	8,670	2,506
	Feb-13	672	217.5	217.5	6,089	1,953
	Mar-13	744	204.0	204.0	6,323	2,016
	Apr-13	684	164.2	170.4	4,926	2,068
	May-13	696	143.4	153.3	4,447	1,903
	Jun-13	720	152.8	152.8	4,583	1,700
	Jul-13	744	225.4	225.4	6,986	2,426
	Aug-13	744	224.8	224.8	6,969	2,240
	Sep-13	720	206.0	206.0	6,180	2,248
	Oct-13	744	265.7	265.7	8,236	2,787
	Nov-13	720	274.5	274.5	8,234	2,860
	Dec-13	744	270.4	270.4	8,382	2,966
	<b>2013 Totals:</b>	<b>8676</b>			<b>80,026</b>	
00/16-09-002-25W1/0	Jan-13	744	106.1	106.1	3,289	2,238
	Feb-13	624	76.3	82.2	2,136	984
	Mar-13	221	20.0	69.1	619	1,287
	Apr-13	0	0.0		-	1,000
	May-13	0	0.0		-	1,000
	Jun-13	0	0.0		-	1,000
	Jul-13	0	0.0		-	1,000
	Aug-13	714	76.8	80.0	2,380	2,269
	Sep-13	720	79.8	79.8	2,394	2,510
	Oct-13	744	99.9	99.9	3,096	3,015
	Nov-13	720	104.7	104.7	3,140	3,000
	Dec-13	744	102.0	102.0	3,161	3,138
	<b>2013 Totals:</b>	<b>5231</b>			<b>20,216</b>	



## Table 4 – Summary of Unit 16 Injection

Unit No. 16 Total Injection:

Date	Hours On	H <sub>2</sub> O Inj Cal-d avg (m <sup>3</sup> /d)	H <sub>2</sub> O Inj Prd-d avg (m <sup>3</sup> /d)	Monthly Injected H <sub>2</sub> O (m <sup>3</sup> )
Jan-13	1,488	386	386	11,959
Feb-13	1,296	294	300	8,225
Mar-13	965	224	273	6,942
Apr-13	684	164	170	4,926
May-13	696	143	153	4,447
Jun-13	720	153	153	4,583
Jul-13	744	225	225	6,986
Aug-13	1,458	302	305	9,349
Sep-13	1,440	286	286	8,574
Oct-13	1,488	366	366	11,331
Nov-13	1,440	379	379	11,374
Dec-13	1,488	372	372	11,544
2013 Group Totals:	13,907			100,241

2013 Group Totals:

Unit No. 16 Total:

Date	Monthly Injected H <sub>2</sub> O (m <sup>3</sup> )	H <sub>2</sub> O Inj Cal-d avg (m <sup>3</sup> /d)
1984	-	0
1985	-	0
1986	-	0
1987	19,770	54
1988	18,857	52
1989	36,119	99
1990	38,515	106
1991	39,653	109
1992	18,966	52
1993	16,521	45
1994	18,862	52
1995	38,999	107
1996	36,447	100
1997	35,740	98
1998	40,470	111
1999	37,339	102
2000	14,073	39
2001	28,196	77
2002	88,619	243
2003	66,491	182
2004	51,375	141
2005	64,324	176
2006	72,897	200
2007	109,531	300
2008	123,488	338
2009	105,691	290
2010	146,328	401
2011	148,906	408
2012	155,105	425
2013	100,241	275
Group Totals:	1,671,524.60	

Group Totals:

Table 5.1 – Summary of Producing Wells

Well Location	Date	Hours On	Monthly Produced Oil (m³)	Oil Cal-d (m³/d)	Oil Prd-d (m³/d)	Monthly Produced H <sub>2</sub> O (m³)	H <sub>2</sub> O Cal-d (m³/d)	H <sub>2</sub> O Prd-d (m³/d)	WOR (m³/m³)
00/02-09-002-25W1/0	2013-01	352	15.31	0.49	1.04	13.81	0.45	0.94	0.90
00/02-09-002-25W1/0	2013-02	672	48.12	1.72	1.72	31.11	1.11	1.11	0.65
00/02-09-002-25W1/0	2013-03	744	25.91	0.84	0.84	18.31	0.59	0.59	0.71
00/02-09-002-25W1/0	2013-04	696	62.33	2.08	2.15	32.11	1.07	1.11	0.52
00/02-09-002-25W1/0	2013-05	744	39.62	1.28	1.28	28.11	0.91	0.91	0.71
00/02-09-002-25W1/0	2013-06	720	24.21	0.81	0.81	6.30	0.21	0.21	0.26
00/02-09-002-25W1/0	2013-07	744	28.11	0.91	0.91	3.30	0.11	0.11	0.12
00/02-09-002-25W1/0	2013-08	744	28.41	0.92	0.92	3.20	0.10	0.10	0.11
00/02-09-002-25W1/0	2013-09	720	26.41	0.88	0.88	2.80	0.09	0.09	0.11
00/02-09-002-25W1/0	2013-10	744	29.41	0.95	0.95	3.10	0.10	0.10	0.11
00/02-09-002-25W1/0	2013-11	720	23.61	0.79	0.79	2.40	0.08	0.08	0.10
00/02-09-002-25W1/0	2013-12	732	23.21	0.75	0.76	2.80	0.09	0.09	0.12
00/02-09-002-25W1/0	Subtotal	8,332	374.66	1.03	1.08	147.35	0.40	0.42	0.39
00/03-04-002-25W1/0	2013-01	732	16.11	0.52	0.53	0.20	0.01	0.01	0.01
00/03-04-002-25W1/0	2013-02	672	12.61	0.45	0.45	0.00	0.00	0.00	0.00
00/03-04-002-25W1/0	2013-03	744	12.81	0.41	0.41	0.00	0.00	0.00	0.00
00/03-04-002-25W1/0	2013-04	720	13.01	0.43	0.43	0.00	0.00	0.00	0.00
00/03-04-002-25W1/0	2013-05	744	12.31	0.40	0.40	0.00	0.00	0.00	0.00
00/03-04-002-25W1/0	2013-06	720	11.81	0.39	0.39	0.00	0.00	0.00	0.00
00/03-04-002-25W1/0	2013-07	744	11.41	0.37	0.37	0.00	0.00	0.00	0.00
00/03-04-002-25W1/0	2013-08	744	12.51	0.40	0.40	0.00	0.00	0.00	0.00
00/03-04-002-25W1/0	2013-09	720	7.70	0.26	0.26	0.00	0.00	0.00	0.00
00/03-04-002-25W1/0	2013-10	744	11.01	0.36	0.36	0.00	0.00	0.00	0.00
00/03-04-002-25W1/0	2013-11	648	7.70	0.26	0.29	0.00	0.00	0.00	0.00
00/03-04-002-25W1/0	2013-12	696	8.40	0.27	0.29	0.00	0.00	0.00	0.00
00/03-04-002-25W1/0	Subtotal	8,628	137.39	0.38	0.38	0.20	0.00	0.00	0.00
00/03-09-002-25W1/0	2013-01	732	7.50	0.24	0.25	43.92	1.42	1.44	5.85
00/03-09-002-25W1/0	2013-02	672	5.50	0.20	0.20	30.91	1.10	1.10	5.62
00/03-09-002-25W1/0	2013-03	744	6.40	0.21	0.21	39.72	1.28	1.28	6.20
00/03-09-002-25W1/0	2013-04	654	4.90	0.16	0.18	28.51	0.95	1.05	5.82
00/03-09-002-25W1/0	2013-05	624	3.80	0.12	0.15	23.71	0.76	0.91	6.24
00/03-09-002-25W1/0	2013-06	720	4.40	0.15	0.15	26.11	0.87	0.87	5.93
00/03-09-002-25W1/0	2013-07	744	4.70	0.15	0.15	26.21	0.85	0.85	5.57
00/03-09-002-25W1/0	2013-08	744	4.00	0.13	0.13	23.31	0.75	0.75	5.83
00/03-09-002-25W1/0	2013-09	720	2.30	0.08	0.08	12.01	0.40	0.40	5.22
00/03-09-002-25W1/0	2013-10	744	4.20	0.14	0.14	22.51	0.73	0.73	5.36
00/03-09-002-25W1/0	2013-11	720	2.40	0.08	0.08	13.81	0.46	0.46	5.75
00/03-09-002-25W1/0	2013-12	714	2.70	0.09	0.09	16.31	0.53	0.55	6.04
00/03-09-002-25W1/0	Subtotal	8,532	52.80	0.14	0.15	307.04	0.84	0.86	5.82



Well Location	Date	Hours On	Monthly Produced Oil (m³)	Oil Cal-d (m³/d)	Oil Prd-d (m³/d)	Monthly Produced H <sub>2</sub> O (m³)	H <sub>2</sub> O Cal-d (m³/d)	H <sub>2</sub> O Prd-d (m³/d)	WOR (m³/m³)
00/04-04-002-25W1/0	2013-01	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-04-002-25W1/0	2013-02	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-04-002-25W1/0	2013-03	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-04-002-25W1/0	2013-04	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-04-002-25W1/0	2013-05	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-04-002-25W1/0	2013-06	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-04-002-25W1/0	2013-07	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-04-002-25W1/0	2013-08	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-04-002-25W1/0	2013-09	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-04-002-25W1/0	2013-10	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-04-002-25W1/0	2013-11	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-04-002-25W1/0	2013-12	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-04-002-25W1/0 Subtotal		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-09-002-25W1/2	2013-01	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-09-002-25W1/2	2013-02	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-09-002-25W1/2	2013-03	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-09-002-25W1/2	2013-04	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/04-09-002-25W1/2	2013-05	528	4.30	0.14	0.20	167.78	5.41	7.63	39.00
00/04-09-002-25W1/2	2013-06	696	9.10	0.30	0.31	231.41	7.71	7.98	25.42
00/04-09-002-25W1/2	2013-07	744	9.00	0.29	0.29	227.50	7.34	7.34	25.27
00/04-09-002-25W1/2	2013-08	744	8.80	0.28	0.28	226.70	7.31	7.31	25.75
00/04-09-002-25W1/2	2013-09	720	8.00	0.27	0.27	192.59	6.42	6.42	24.06
00/04-09-002-25W1/2	2013-10	744	8.80	0.28	0.28	212.40	6.85	6.85	24.13
00/04-09-002-25W1/2	2013-11	720	7.20	0.24	0.24	184.78	6.16	6.16	25.65
00/04-09-002-25W1/2	2013-12	732	7.20	0.23	0.24	183.38	5.92	6.01	25.46
00/04-09-002-25W1/2 Subtotal		5,628	62.40	0.17	0.27	1626.54	4.46	6.94	26.07
00/04-10-002-25W1/0	2013-01	744	23.61	0.76	0.76	4.20	0.14	0.14	0.18
00/04-10-002-25W1/0	2013-02	672	23.61	0.84	0.84	0.40	0.01	0.01	0.02
00/04-10-002-25W1/0	2013-03	744	22.81	0.74	0.74	2.40	0.08	0.08	0.11
00/04-10-002-25W1/0	2013-04	648	19.11	0.64	0.71	2.10	0.07	0.08	0.11
00/04-10-002-25W1/0	2013-05	624	23.91	0.77	0.92	2.70	0.09	0.10	0.11
00/04-10-002-25W1/0	2013-06	720	22.01	0.73	0.73	1.20	0.04	0.04	0.05
00/04-10-002-25W1/0	2013-07	744	21.21	0.68	0.68	2.40	0.08	0.08	0.11
00/04-10-002-25W1/0	2013-08	744	21.51	0.69	0.69	2.30	0.07	0.07	0.11
00/04-10-002-25W1/0	2013-09	288	15.61	0.52	1.30	0.70	0.02	0.06	0.04
00/04-10-002-25W1/0	2013-10	744	23.81	0.77	0.77	2.40	0.08	0.08	0.10
00/04-10-002-25W1/0	2013-11	720	22.41	0.75	0.75	2.20	0.07	0.07	0.10
00/04-10-002-25W1/0	2013-12	744	22.91	0.74	0.74	0.30	0.01	0.01	0.01
00/04-10-002-25W1/0 Subtotal		8,136	262.52	0.72	0.77	23.30	0.06	0.07	0.09

Well Location	Date	Hours On	Monthly Produced Oil (m³)	Oil Cal-d (m³/d)	Oil Prd-d (m³/d)	Monthly Produced H <sub>2</sub> O (m³)	H <sub>2</sub> O Cal-d (m³/d)	H <sub>2</sub> O Prd-d (m³/d)	WOR (m³/m³)
00/06-04-002-25W1/0	2013-01	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/06-04-002-25W1/0	2013-02	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/06-04-002-25W1/0	2013-03	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/06-04-002-25W1/0	2013-04	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/06-04-002-25W1/0	2013-05	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/06-04-002-25W1/0	2013-06	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/06-04-002-25W1/0	2013-07	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/06-04-002-25W1/0	2013-08	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/06-04-002-25W1/0	2013-09	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/06-04-002-25W1/0	2013-10	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/06-04-002-25W1/0	2013-11	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/06-04-002-25W1/0	2013-12	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/06-04-002-25W1/0 Subtotal		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/07-09-002-25W1/0	2013-01	732	10.70	0.35	0.35	16.71	0.54	0.55	1.56
00/07-09-002-25W1/0	2013-02	672	9.10	0.33	0.33	13.41	0.48	0.48	1.47
00/07-09-002-25W1/0	2013-03	744	9.80	0.32	0.32	15.91	0.51	0.51	1.62
00/07-09-002-25W1/0	2013-04	702	8.60	0.29	0.29	13.21	0.44	0.45	1.53
00/07-09-002-25W1/0	2013-05	624	5.40	0.17	0.21	8.70	0.28	0.33	1.61
00/07-09-002-25W1/0	2013-06	720	7.10	0.24	0.24	11.71	0.39	0.39	1.65
00/07-09-002-25W1/0	2013-07	648	6.50	0.21	0.24	10.10	0.33	0.37	1.55
00/07-09-002-25W1/0	2013-08	744	6.90	0.22	0.22	10.60	0.34	0.34	1.54
00/07-09-002-25W1/0	2013-09	720	5.00	0.17	0.17	7.00	0.23	0.23	1.40
00/07-09-002-25W1/0	2013-10	744	6.20	0.20	0.20	8.80	0.28	0.28	1.42
00/07-09-002-25W1/0	2013-11	720	6.20	0.21	0.21	9.50	0.32	0.32	1.53
00/07-09-002-25W1/0	2013-12	168	0.40	0.01	0.06	0.80	0.03	0.11	2.00
00/07-09-002-25W1/0 Subtotal		7,938	81.90	0.22	0.25	126.45	0.35	0.38	1.54
00/09-04-002-25W1/0	2013-01	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-04-002-25W1/0	2013-02	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-04-002-25W1/0	2013-03	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-04-002-25W1/0	2013-04	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-04-002-25W1/0	2013-05	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-04-002-25W1/0	2013-06	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-04-002-25W1/0	2013-07	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-04-002-25W1/0	2013-08	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-04-002-25W1/0	2013-09	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-04-002-25W1/0	2013-10	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-04-002-25W1/0	2013-11	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-04-002-25W1/0	2013-12	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-04-002-25W1/0 Subtotal		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Well Location	Date	Hours On	Monthly Produced Oil (m³)	Oil Cal-d (m³/d)	Oil Prd-d (m³/d)	Monthly Produced H <sub>2</sub> O (m³)	H <sub>2</sub> O Cal-d (m³/d)	H <sub>2</sub> O Prd-d (m³/d)	WOR (m³/m³)
00/09-05-002-25W1/0	2013-01	732	81.84	2.64	2.68	21.11	0.68	0.69	0.26
00/09-05-002-25W1/0	2013-02	672	62.83	2.24	2.24	15.01	0.54	0.54	0.24
00/09-05-002-25W1/0	2013-03	744	66.73	2.15	2.15	17.81	0.57	0.57	0.27
00/09-05-002-25W1/0	2013-04	720	68.23	2.27	2.27	17.11	0.57	0.57	0.25
00/09-05-002-25W1/0	2013-05	744	59.43	1.92	1.92	15.71	0.51	0.51	0.26
00/09-05-002-25W1/0	2013-06	720	54.12	1.80	1.80	14.51	0.48	0.48	0.27
00/09-05-002-25W1/0	2013-07	744	53.92	1.74	1.74	13.91	0.45	0.45	0.26
00/09-05-002-25W1/0	2013-08	744	58.73	1.89	1.89	15.11	0.49	0.49	0.26
00/09-05-002-25W1/0	2013-09	720	54.12	1.80	1.80	13.01	0.43	0.43	0.24
00/09-05-002-25W1/0	2013-10	744	56.33	1.82	1.82	13.51	0.44	0.44	0.24
00/09-05-002-25W1/0	2013-11	720	48.22	1.61	1.61	12.11	0.40	0.40	0.25
00/09-05-002-25W1/0	2013-12	240	14.21	0.46	1.42	3.60	0.12	0.36	0.25
00/09-05-002-25W1/0	Subtotal	8,244	678.71	1.86	1.98	172.51	0.47	0.50	0.25
00/09-09-002-25W1/0	2013-01	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-09-002-25W1/0	2013-02	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-09-002-25W1/0	2013-03	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-09-002-25W1/0	2013-04	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-09-002-25W1/0	2013-05	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-09-002-25W1/0	2013-06	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-09-002-25W1/0	2013-07	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-09-002-25W1/0	2013-08	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-09-002-25W1/0	2013-09	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-09-002-25W1/0	2013-10	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-09-002-25W1/0	2013-11	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-09-002-25W1/0	2013-12	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/09-09-002-25W1/0	Subtotal	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/10-04-002-25W1/0	2013-01	720	39.52	1.27	1.32	0.90	0.03	0.03	0.02
00/10-04-002-25W1/0	2013-02	660	33.82	1.21	1.23	0.80	0.03	0.03	0.02
00/10-04-002-25W1/0	2013-03	744	37.52	1.21	1.21	1.00	0.03	0.03	0.03
00/10-04-002-25W1/0	2013-04	720	38.42	1.28	1.28	0.90	0.03	0.03	0.02
00/10-04-002-25W1/0	2013-05	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/10-04-002-25W1/0	2013-06	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/10-04-002-25W1/0	2013-07	624	44.42	1.43	1.71	1.10	0.04	0.04	0.02
00/10-04-002-25W1/0	2013-08	744	47.22	1.52	1.52	1.10	0.04	0.04	0.02
00/10-04-002-25W1/0	2013-09	720	34.92	1.16	1.16	0.60	0.02	0.02	0.02
00/10-04-002-25W1/0	2013-10	744	40.02	1.29	1.29	0.60	0.02	0.02	0.02
00/10-04-002-25W1/0	2013-11	580	28.61	0.95	1.18	0.60	0.02	0.02	0.02
00/10-04-002-25W1/0	2013-12	599	30.81	0.99	1.23	0.70	0.02	0.03	0.02
00/10-04-002-25W1/0	Subtotal	6,855	375.28	1.03	1.31	8.30	0.02	0.03	0.02

Well Location	Date	Hours On	Monthly Produced Oil (m³)	Oil Cal-d (m³/d)	Oil Prd-d (m³/d)	Monthly Produced H <sub>2</sub> O (m³)	H <sub>2</sub> O Cal-d (m³/d)	H <sub>2</sub> O Prd-d (m³/d)	WOR (m³/m³)
00/12-04-002-25W1/0	2013-01	391	14.31	0.46	0.88	27.61	0.89	1.69	1.93
00/12-04-002-25W1/0	2013-02	672	42.72	1.53	1.53	41.22	1.47	1.47	0.96
00/12-04-002-25W1/0	2013-03	744	40.22	1.30	1.30	43.22	1.39	1.39	1.07
00/12-04-002-25W1/0	2013-04	720	36.02	1.20	1.20	36.62	1.22	1.22	1.02
00/12-04-002-25W1/0	2013-05	744	32.51	1.05	1.05	34.32	1.11	1.11	1.06
00/12-04-002-25W1/0	2013-06	720	30.21	1.01	1.01	32.31	1.08	1.08	1.07
00/12-04-002-25W1/0	2013-07	744	28.71	0.93	0.93	29.21	0.94	0.94	1.02
00/12-04-002-25W1/0	2013-08	744	28.01	0.90	0.90	28.91	0.93	0.93	1.03
00/12-04-002-25W1/0	2013-09	720	26.21	0.87	0.87	25.11	0.84	0.84	0.96
00/12-04-002-25W1/0	2013-10	744	26.31	0.85	0.85	25.31	0.82	0.82	0.96
00/12-04-002-25W1/0	2013-11	720	23.41	0.78	0.78	23.71	0.79	0.79	1.01
00/12-04-002-25W1/0	2013-12	744	22.81	0.74	0.74	23.61	0.76	0.76	1.04
00/12-04-002-25W1/0 Subtotal		8,407	351.45	0.96	1.00	371.16	1.02	1.06	1.06
00/12-10-002-25W1/0	2013-01	732	38.72	1.25	1.27	93.44	3.01	3.06	2.41
00/12-10-002-25W1/0	2013-02	672	32.81	1.17	1.17	73.93	2.64	2.64	2.25
00/12-10-002-25W1/0	2013-03	744	33.22	1.07	1.07	83.24	2.69	2.69	2.51
00/12-10-002-25W1/0	2013-04	672	34.82	1.16	1.24	82.54	2.75	2.95	2.37
00/12-10-002-25W1/0	2013-05	714	31.31	1.01	1.05	77.54	2.50	2.61	2.48
00/12-10-002-25W1/0	2013-06	720	33.22	1.11	1.11	83.04	2.77	2.77	2.50
00/12-10-002-25W1/0	2013-07	744	35.22	1.14	1.14	83.74	2.70	2.70	2.38
00/12-10-002-25W1/0	2013-08	744	32.61	1.05	1.05	78.24	2.52	2.52	2.40
00/12-10-002-25W1/0	2013-09	720	30.31	1.01	1.01	67.43	2.25	2.25	2.22
00/12-10-002-25W1/0	2013-10	744	28.51	0.92	0.92	63.83	2.06	2.06	2.24
00/12-10-002-25W1/0	2013-11	720	27.81	0.93	0.93	65.33	2.18	2.18	2.35
00/12-10-002-25W1/0	2013-12	744	31.41	1.01	1.01	75.73	2.44	2.44	2.41
00/12-10-002-25W1/0 Subtotal		8,670	389.97	1.07	1.08	928.03	2.54	2.57	2.38
00/13-04-002-25W1/2	2013-01	732	21.91	0.71	0.72	8.60	0.28	0.28	0.39
00/13-04-002-25W1/2	2013-02	672	11.41	0.41	0.41	4.20	0.15	0.15	0.37
00/13-04-002-25W1/2	2013-03	732	15.21	0.49	0.50	6.50	0.21	0.21	0.43
00/13-04-002-25W1/2	2013-04	720	12.31	0.41	0.41	4.70	0.16	0.16	0.38
00/13-04-002-25W1/2	2013-05	744	14.41	0.46	0.46	5.70	0.18	0.18	0.40
00/13-04-002-25W1/2	2013-06	720	11.31	0.38	0.38	4.60	0.15	0.15	0.41
00/13-04-002-25W1/2	2013-07	744	8.60	0.28	0.28	3.50	0.11	0.11	0.41
00/13-04-002-25W1/2	2013-08	744	6.30	0.20	0.20	2.60	0.08	0.08	0.41
00/13-04-002-25W1/2	2013-09	552	4.10	0.14	0.18	1.60	0.05	0.07	0.39
00/13-04-002-25W1/2	2013-10	744	8.90	0.29	0.29	3.50	0.11	0.11	0.39
00/13-04-002-25W1/2	2013-11	720	3.10	0.10	0.10	1.40	0.05	0.05	0.45
00/13-04-002-25W1/2	2013-12	728	6.40	0.21	0.21	2.50	0.08	0.08	0.39
00/13-04-002-25W1/2 Subtotal		8,552	123.96	0.34	0.35	49.40	0.14	0.14	0.40



Well Location	Date	Hours On	Monthly Produced Oil (m³)	Oil Cal-d (m³/d)	Oil Prd-d (m³/d)	Monthly Produced H <sub>2</sub> O (m³)	H <sub>2</sub> O Cal-d (m³/d)	H <sub>2</sub> O Prd-d (m³/d)	WOR (m³/m³)
00/13-10-002-25W1/0	2013-01	732	47.92	1.55	1.57	21.31	0.69	0.70	0.44
00/13-10-002-25W1/0	2013-02	672	46.52	1.66	1.66	19.21	0.69	0.69	0.41
00/13-10-002-25W1/0	2013-03	744	45.62	1.47	1.47	21.01	0.68	0.68	0.46
00/13-10-002-25W1/0	2013-04	720	46.42	1.55	1.55	20.11	0.67	0.67	0.43
00/13-10-002-25W1/0	2013-05	744	44.82	1.45	1.45	20.11	0.65	0.65	0.45
00/13-10-002-25W1/0	2013-06	720	40.62	1.35	1.35	18.41	0.61	0.61	0.45
00/13-10-002-25W1/0	2013-07	744	40.02	1.29	1.29	17.61	0.57	0.57	0.44
00/13-10-002-25W1/0	2013-08	744	39.62	1.28	1.28	17.41	0.56	0.56	0.44
00/13-10-002-25W1/0	2013-09	720	35.12	1.17	1.17	14.51	0.48	0.48	0.41
00/13-10-002-25W1/0	2013-10	744	35.52	1.15	1.15	14.71	0.47	0.47	0.41
00/13-10-002-25W1/0	2013-11	720	30.51	1.02	1.02	13.21	0.44	0.44	0.43
00/13-10-002-25W1/0	2013-12	744	30.61	0.99	0.99	13.61	0.44	0.44	0.44
00/13-10-002-25W1/0 Subtotal		8,748	483.32	1.32	1.33	211.22	0.58	0.58	0.44
00/14-04-002-25W1/0	2013-01	732	4.90	0.16	0.16	2.20	0.07	0.07	0.45
00/14-04-002-25W1/0	2013-02	672	1.40	0.05	0.05	0.50	0.02	0.02	0.36
00/14-04-002-25W1/0	2013-03	744	8.10	0.26	0.26	3.70	0.12	0.12	0.46
00/14-04-002-25W1/0	2013-04	504	6.80	0.23	0.32	3.10	0.10	0.15	0.46
00/14-04-002-25W1/0	2013-05	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/14-04-002-25W1/0	2013-06	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/14-04-002-25W1/0	2013-07	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/14-04-002-25W1/0	2013-08	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/14-04-002-25W1/0	2013-09	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/14-04-002-25W1/0	2013-10	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/14-04-002-25W1/0	2013-11	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/14-04-002-25W1/0	2013-12	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/14-04-002-25W1/0 Subtotal		2,652	21.20	0.06	0.19	9.50	0.03	0.09	0.45
00/14-10-002-25W1/0	2013-01	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/14-10-002-25W1/0	2013-02	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/14-10-002-25W1/0	2013-03	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/14-10-002-25W1/0	2013-04	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/14-10-002-25W1/0	2013-05	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/14-10-002-25W1/0	2013-06	572	13.21	0.44	0.55	1.70	0.06	0.07	0.13
00/14-10-002-25W1/0	2013-07	744	11.41	0.37	0.37	1.70	0.05	0.05	0.15
00/14-10-002-25W1/0	2013-08	744	9.80	0.32	0.32	1.40	0.05	0.05	0.14
00/14-10-002-25W1/0	2013-09	720	13.11	0.44	0.44	1.70	0.06	0.06	0.13
00/14-10-002-25W1/0	2013-10	744	11.91	0.38	0.38	1.60	0.05	0.05	0.13
00/14-10-002-25W1/0	2013-11	720	10.20	0.34	0.34	1.50	0.05	0.05	0.15
00/14-10-002-25W1/0	2013-12	744	8.00	0.26	0.26	1.20	0.04	0.04	0.15
00/14-10-002-25W1/0 Subtotal		4,988	77.64	0.21	0.37	10.80	0.03	0.05	0.14

Well Location	Date	Hours On	Monthly Produced Oil (m³)	Oil Cal-d (m³/d)	Oil Prd-d (m³/d)	Monthly Produced H <sub>2</sub> O (m³)	H <sub>2</sub> O Cal-d (m³/d)	H <sub>2</sub> O Prd-d (m³/d)	WOR (m³/m³)
00/15-05-002-25W1/0	2013-01	732	7.80	0.25	0.26	0.00	0.00	0.00	0.00
00/15-05-002-25W1/0	2013-02	672	7.10	0.25	0.25	0.00	0.00	0.00	0.00
00/15-05-002-25W1/0	2013-03	744	9.10	0.29	0.29	0.00	0.00	0.00	0.00
00/15-05-002-25W1/0	2013-04	720	10.80	0.36	0.36	0.00	0.00	0.00	0.00
00/15-05-002-25W1/0	2013-05	744	9.20	0.30	0.30	0.00	0.00	0.00	0.00
00/15-05-002-25W1/0	2013-06	720	8.60	0.29	0.29	0.00	0.00	0.00	0.00
00/15-05-002-25W1/0	2013-07	744	8.80	0.28	0.28	0.00	0.00	0.00	0.00
00/15-05-002-25W1/0	2013-08	744	7.80	0.25	0.25	0.00	0.00	0.00	0.00
00/15-05-002-25W1/0	2013-09	720	10.60	0.35	0.35	0.00	0.00	0.00	0.00
00/15-05-002-25W1/0	2013-10	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/15-05-002-25W1/0	2013-11	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/15-05-002-25W1/0	2013-12	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/15-05-002-25W1/0 Subtotal		6,540	79.80	0.22	0.29	0.00	0.00	0.00	0.00
00/15-09-002-25W1/0	2013-01	732	22.91	0.74	0.75	0.10	0.00	0.00	0.00
00/15-09-002-25W1/0	2013-02	672	17.41	0.62	0.62	0.20	0.01	0.01	0.01
00/15-09-002-25W1/0	2013-03	744	18.51	0.60	0.60	0.40	0.01	0.01	0.02
00/15-09-002-25W1/0	2013-04	720	17.41	0.58	0.58	0.30	0.01	0.01	0.02
00/15-09-002-25W1/0	2013-05	24	0.60	0.02	0.60	0.00	0.00	0.00	0.00
00/15-09-002-25W1/0	2013-06	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00/15-09-002-25W1/0	2013-07	252	9.10	0.29	0.87	0.00	0.00	0.00	0.00
00/15-09-002-25W1/0	2013-08	744	42.62	1.37	1.37	0.00	0.00	0.00	0.00
00/15-09-002-25W1/0	2013-09	453	21.71	0.72	1.15	0.00	0.00	0.00	0.00
00/15-09-002-25W1/0	2013-10	744	36.22	1.17	1.17	0.10	0.00	0.00	0.00
00/15-09-002-25W1/0	2013-11	672	27.21	0.91	0.97	0.00	0.00	0.00	0.00
00/15-09-002-25W1/0	2013-12	687	18.61	0.60	0.65	0.00	0.00	0.00	0.00
00/15-09-002-25W1/0 Subtotal		6,444	232.31	0.64	0.87	1.10	0.00	0.00	0.00
00/16-04-002-25W1/0	2013-01	720	14.51	0.47	0.48	1.60	0.05	0.05	0.11
00/16-04-002-25W1/0	2013-02	672	11.11	0.40	0.40	1.30	0.05	0.05	0.12
00/16-04-002-25W1/0	2013-03	744	17.81	0.57	0.57	2.10	0.07	0.07	0.12
00/16-04-002-25W1/0	2013-04	720	19.41	0.65	0.65	2.20	0.07	0.07	0.11
00/16-04-002-25W1/0	2013-05	744	18.71	0.60	0.60	2.20	0.07	0.07	0.12
00/16-04-002-25W1/0	2013-06	720	11.91	0.40	0.40	1.60	0.05	0.05	0.13
00/16-04-002-25W1/0	2013-07	744	7.60	0.25	0.25	0.80	0.03	0.03	0.11
00/16-04-002-25W1/0	2013-08	744	14.11	0.46	0.46	1.50	0.05	0.05	0.11
00/16-04-002-25W1/0	2013-09	720	14.91	0.50	0.50	1.50	0.05	0.05	0.10
00/16-04-002-25W1/0	2013-10	744	20.01	0.65	0.65	2.20	0.07	0.07	0.11
00/16-04-002-25W1/0	2013-11	580	13.41	0.45	0.55	1.60	0.05	0.07	0.12
00/16-04-002-25W1/0	2013-12	705	19.11	0.62	0.65	2.10	0.07	0.07	0.11
00/16-04-002-25W1/0 Subtotal		8,557	182.61	0.50	0.51	20.70	0.06	0.06	0.11



Well Location	Date	Hours On	Monthly Produced Oil (m³)	Oil Cal-d (m³/d)	Oil Prd-d (m³/d)	Monthly Produced H <sub>2</sub> O (m³)	H <sub>2</sub> O Cal-d (m³/d)	H <sub>2</sub> O Prd-d (m³/d)	WOR (m³/m³)
02/02-09-002-25W1/0	2013-01	732	205.59	6.63	6.74	88.54	2.86	2.90	0.43
02/02-09-002-25W1/0	2013-02	672	171.88	6.14	6.14	71.53	2.55	2.55	0.42
02/02-09-002-25W1/0	2013-03	744	185.08	5.97	5.97	77.34	2.49	2.49	0.42
02/02-09-002-25W1/0	2013-04	697	159.47	5.32	5.49	62.83	2.09	2.16	0.39
02/02-09-002-25W1/0	2013-05	744	163.07	5.26	5.26	67.03	2.16	2.16	0.41
02/02-09-002-25W1/0	2013-06	720	144.47	4.82	4.82	60.03	2.00	2.00	0.42
02/02-09-002-25W1/0	2013-07	744	134.96	4.35	4.35	53.52	1.73	1.73	0.40
02/02-09-002-25W1/0	2013-08	744	132.86	4.29	4.29	53.32	1.72	1.72	0.40
02/02-09-002-25W1/0	2013-09	720	121.56	4.05	4.05	45.22	1.51	1.51	0.37
02/02-09-002-25W1/0	2013-10	744	133.36	4.30	4.30	49.72	1.60	1.60	0.37
02/02-09-002-25W1/0	2013-11	720	110.35	3.68	3.68	43.42	1.45	1.45	0.39
02/02-09-002-25W1/0	2013-12	744	108.15	3.49	3.49	43.82	1.41	1.41	0.41
02/02-09-002-25W1/0 Subtotal		8,725	1770.80	4.85	4.87	716.32	1.96	1.97	0.40
02/05-09-002-25W1/0	2013-01	732	16.11	0.52	0.53	5.40	0.17	0.18	0.34
02/05-09-002-25W1/0	2013-02	672	16.11	0.58	0.58	5.30	0.19	0.19	0.33
02/05-09-002-25W1/0	2013-03	744	17.21	0.56	0.56	6.20	0.20	0.20	0.36
02/05-09-002-25W1/0	2013-04	654	14.71	0.49	0.54	5.00	0.17	0.18	0.34
02/05-09-002-25W1/0	2013-05	624	12.31	0.40	0.47	4.40	0.14	0.17	0.36
02/05-09-002-25W1/0	2013-06	720	13.91	0.46	0.46	5.00	0.17	0.17	0.36
02/05-09-002-25W1/0	2013-07	744	12.61	0.41	0.41	4.30	0.14	0.14	0.34
02/05-09-002-25W1/0	2013-08	744	12.61	0.41	0.41	4.20	0.14	0.14	0.33
02/05-09-002-25W1/0	2013-09	720	10.40	0.35	0.35	3.30	0.11	0.11	0.32
02/05-09-002-25W1/0	2013-10	744	13.61	0.44	0.44	4.40	0.14	0.14	0.32
02/05-09-002-25W1/0	2013-11	720	11.21	0.37	0.37	3.90	0.13	0.13	0.35
02/05-09-002-25W1/0	2013-12	744	11.71	0.38	0.38	4.00	0.13	0.13	0.34
02/05-09-002-25W1/0 Subtotal		8,562	162.51	0.45	0.46	55.40	0.15	0.16	0.34
02/13-04-002-25W1/0	2013-01	744	918.72	29.64	29.64	594.27	19.17	19.17	0.65
02/13-04-002-25W1/0	2013-02	625	662.70	23.67	25.45	531.74	18.99	20.42	0.80
02/13-04-002-25W1/0	2013-03	568	328.45	10.60	13.88	377.17	12.17	15.94	1.15
02/13-04-002-25W1/0	2013-04	700	580.86	19.36	19.92	421.99	14.07	14.47	0.73
02/13-04-002-25W1/0	2013-05	681	376.77	12.15	13.28	301.24	9.72	10.62	0.80
02/13-04-002-25W1/0	2013-06	720	294.73	9.82	9.82	268.12	8.94	8.94	0.91
02/13-04-002-25W1/0	2013-07	744	243.61	7.86	7.86	211.70	6.83	6.83	0.87
02/13-04-002-25W1/0	2013-08	744	220.20	7.10	7.10	193.39	6.24	6.24	0.88
02/13-04-002-25W1/0	2013-09	720	147.67	4.92	4.92	176.18	5.87	5.87	1.19
02/13-04-002-25W1/0	2013-10	720	138.46	4.47	4.62	176.88	5.71	5.90	1.28
02/13-04-002-25W1/0	2013-11	580	102.55	3.42	4.24	142.57	4.75	5.90	1.39
02/13-04-002-25W1/0	2013-12	717	147.17	4.75	4.93	211.20	6.81	7.07	1.44
02/13-04-002-25W1/0 Subtotal		8,263	4161.89	11.40	12.09	3606.45	9.88	10.47	0.87

Well Location	Date	Hours On	Monthly Produced Oil (m³)	Oil Cal-d (m³/d)	Oil Prd-d (m³/d)	Monthly Produced H <sub>2</sub> O (m³)	H <sub>2</sub> O Cal-d (m³/d)	H <sub>2</sub> O Prd-d (m³/d)	WOR (m³/m³)
02/15-04-002-25W1/0	2013-01	636	12.81	0.41	0.48	1.40	0.05	0.05	0.11
02/15-04-002-25W1/0	2013-02	672	11.81	0.42	0.42	1.30	0.05	0.05	0.11
02/15-04-002-25W1/0	2013-03	744	18.91	0.61	0.61	2.30	0.07	0.07	0.12
02/15-04-002-25W1/0	2013-04	616	16.61	0.55	0.65	1.80	0.06	0.07	0.11
02/15-04-002-25W1/0	2013-05	624	15.51	0.50	0.60	1.80	0.06	0.07	0.12
02/15-04-002-25W1/0	2013-06	720	11.71	0.39	0.39	1.30	0.04	0.04	0.11
02/15-04-002-25W1/0	2013-07	744	7.50	0.24	0.24	0.80	0.03	0.03	0.11
02/15-04-002-25W1/0	2013-08	744	14.21	0.46	0.46	1.60	0.05	0.05	0.11
02/15-04-002-25W1/0	2013-09	720	14.91	0.50	0.50	1.50	0.05	0.05	0.10
02/15-04-002-25W1/0	2013-10	744	20.01	0.65	0.65	2.10	0.07	0.07	0.11
02/15-04-002-25W1/0	2013-11	580	13.31	0.44	0.55	1.70	0.06	0.07	0.13
02/15-04-002-25W1/0	2013-12	705	19.11	0.62	0.65	2.20	0.07	0.07	0.12
02/15-04-002-25W1/0 Subtotal		8,249	176.41	0.48	0.51	19.80	0.05	0.06	0.11
03/03-04-002-25W1/0	2013-12	612	951.43	30.69	37.31	188.19	6.07	7.38	0.2
03/03-04-002-25W1/0 Subtotal		612	951.43	2.61	37.31	14111.73	38.66	553.40	14.83
03/09-04-002-25W1/0	2013-12	324	593.17	19.13	43.94	16.81	0.54	1.25	0.03
03/09-04-002-25W1/0 Subtotal		324	593.17	1.63	43.94	10729.19	29.40	794.75	18.09
03/13-10-002-25W1/0	2013-01	744	28.01	0.90	0.90	1662.56	53.63	53.63	59.35
03/13-10-002-25W1/0	2013-02	600	14.61	0.52	0.58	1244.17	44.43	49.77	85.18
03/13-10-002-25W1/0	2013-03	744	31.81	1.03	1.03	1683.27	54.30	54.30	52.91
03/13-10-002-25W1/0	2013-04	720	72.73	2.42	2.42	1699.27	56.64	56.64	23.36
03/13-10-002-25W1/0	2013-05	684	62.53	2.02	2.19	1589.02	51.26	55.76	25.41
03/13-10-002-25W1/0	2013-06	720	67.53	2.25	2.25	1731.09	57.70	57.70	25.63
03/13-10-002-25W1/0	2013-07	528	49.72	1.60	2.26	1218.56	39.31	55.39	24.51
03/13-10-002-25W1/0	2013-08	612	27.21	0.88	1.07	1491.98	48.13	58.51	54.83
03/13-10-002-25W1/0	2013-09	720	20.01	0.67	0.67	1589.42	52.98	52.98	79.44
03/13-10-002-25W1/0	2013-10	744	22.61	0.73	0.73	1665.36	53.72	53.72	73.65
03/13-10-002-25W1/0	2013-11	648	18.11	0.60	0.67	1443.76	48.13	53.47	79.73
03/13-10-002-25W1/0	2013-12	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
03/13-10-002-25W1/0 Subtotal		7,464	414.88	1.14	1.33	17018.46	46.63	54.72	41.02
04/03-04-002-25W1/0	2013-12	612	966.44	31.18	37.9	187.09	6.04	7.34	0.19
04/03-04-002-25W1/0 Subtotal		6,732	1338.70	3.67	4.77	14298.82	39.17	50.98	10.68
04/09-04-002-25W1/0	2013-11	18	4.10	0.14	5.47	0.00	0.00	0.00	0.00
04/09-04-002-25W1/0	2013-12	560	846.29	27.30	36.27	24.01	0.77	1.03	0.03
04/09-04-002-25W1/0 Subtotal		6,566	2157.28	5.91	7.89	12639.56	34.63	46.20	5.86

## Table 5.2 – Summary of Unit 16 Production

Unit No. 16 2013 Total:

Date	Hours On	Monthly Produced Oil (m³)	Oil Cal-d (m³/d)	Oil Prd-d (m³/d)	Monthly Produced H <sub>2</sub> O (m³)	H <sub>2</sub> O Cal-d (m³/d)	H <sub>2</sub> O Prd-d (m³/d)	WOR (m³/m³)	Well Count
2013-01	13,835	1,549	50.0	51.3	2,608	84.1	85.6	1.7	20
2013-02	13,309	1,243	44.4	46.3	2,086	74.5	81.3	1.7	20
2013-03	14,692	951	30.7	34.0	2,402	77.5	81.2	2.5	20
2013-04	13,743	1,243	41.4	42.7	2,434	81.2	82.0	2.0	20
2013-05	12,447	931	30.0	32.4	2,350	75.8	83.8	2.5	19
2013-06	13,508	814	27.1	27.3	2,498	83.3	83.6	3.1	19
2013-07	14,700	777	25.1	26.6	1,910	61.6	77.8	2.5	21
2013-08	15,492	776	25.0	25.2	2,157	69.6	80.0	2.8	21
2013-09	14,253	625	20.8	22.1	2,156	71.9	71.9	3.5	21
2013-10	14,856	675	21.8	21.9	2,273	73.3	73.5	3.4	20
2013-11	13,666	542	18.1	24.8	1,968	65.6	72.1	3.6	21
2013-12	13,191	1,379	44.5	55.1	612	19.7	20.7	0.4	20
2013 TOTAL	167,692	11,505			25,454.11				

Table 5.3 – Unit 16 Historical Production

Unit No. 16 Total:

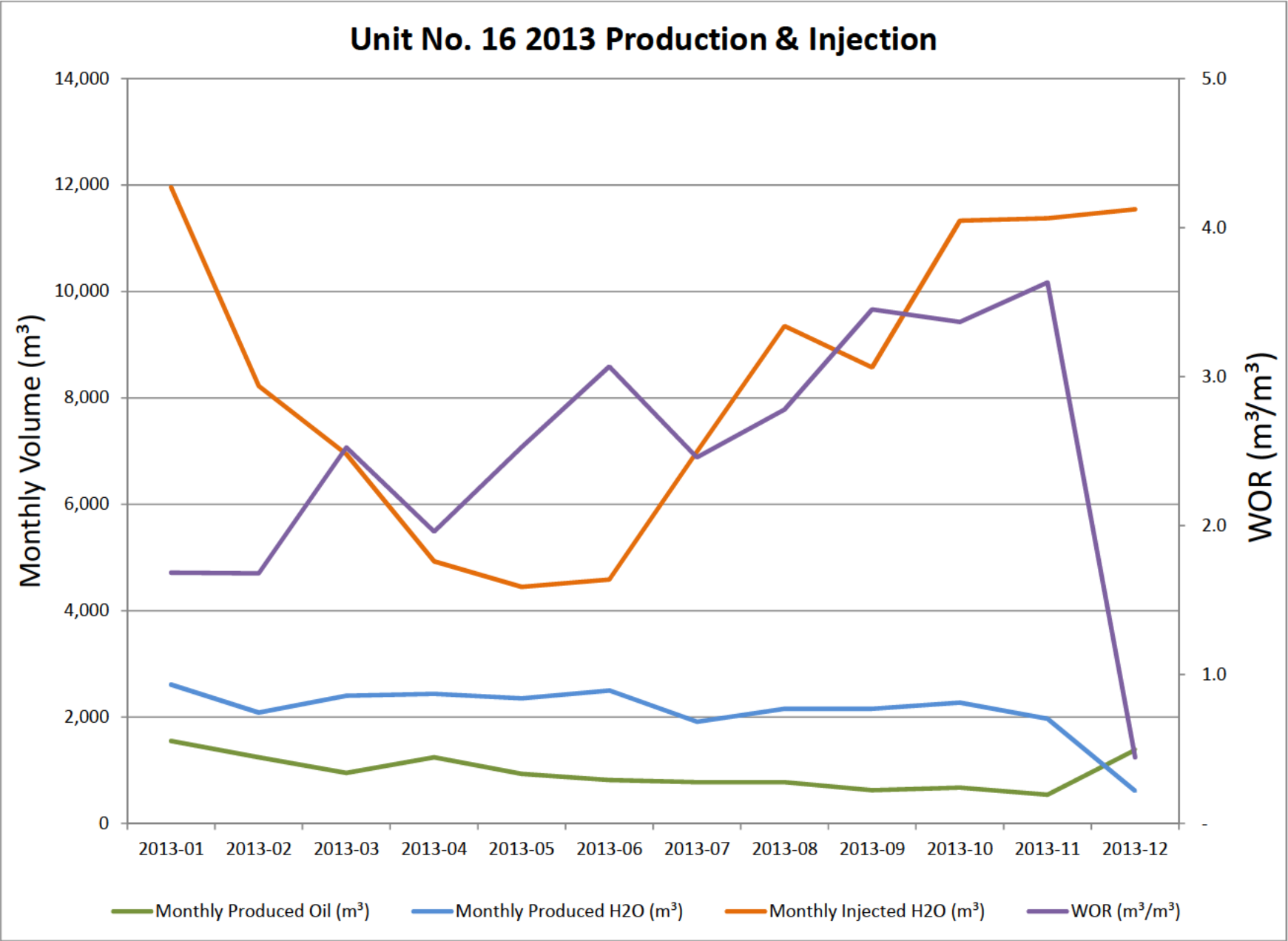
Date	Hours On	Monthly Produced Oil (m³)	Oil Cal-d (m³/d)	Oil Prd-d (m³/d)	Monthly Produced H <sub>2</sub> O (m³)	H <sub>2</sub> O Cal-d (m³/d)	H <sub>2</sub> O Prd-d (m³/d)	WOR (m³/m³)	Well Count
1984	3,600	774	2.1	0.0	1,892	5.2	0.1	2.4	1
1985	29,952	5,938	16.3	2.3	3,359	9.2	1.3	0.6	5
1986	94,440	16,130	44.2	19.9	3,175	8.7	3.9	0.2	18
1987	155,280	19,644	53.8	39.8	5,006	13.7	10.1	0.3	20
1988	222,336	33,617	92.1	97.4	5,787	15.9	16.8	0.2	27
1989	196,344	29,005	79.5	74.2	4,528	12.4	11.6	0.2	23
1990	207,408	27,089	74.2	73.2	13,534	37.1	36.6	0.5	24
1991	208,224	24,743	67.8	67.1	24,878	68.2	67.5	1.0	25
1992	208,632	21,330	58.4	58.0	66,961	183.5	182.1	3.1	25
1993	207,792	19,754	54.1	53.5	72,774	199.4	197.1	3.7	25
1994	205,104	18,064	49.5	48.3	76,018	208.3	203.2	4.2	25
1995	207,888	16,721	45.8	45.3	106,240	291.1	287.8	6.4	25
1996	205,032	14,843	40.7	39.7	107,099	293.4	286.2	7.2	25
1997	204,408	13,016	35.7	34.7	100,417	275.1	267.5	7.7	25
1998	206,256	11,726	32.1	31.5	101,588	278.3	273.0	8.7	25
1999	192,864	11,715	32.1	29.4	103,785	284.3	260.8	8.9	25
2000	198,696	10,087	27.6	26.1	36,787	100.8	95.3	3.6	25
2001	193,728	10,124	27.7	25.6	44,885	123.0	113.3	4.4	25
2002	198,600	17,231	47.2	44.6	66,270	181.6	171.5	3.8	25
2003	195,480	15,739	43.1	40.1	104,552	286.4	266.3	6.6	25
2004	193,368	14,340	39.3	36.1	122,640	336.0	309.0	8.6	24
2005	194,040	11,626	31.9	29.4	63,637	174.3	160.9	5.5	24
2006	204,283	11,598	31.8	30.9	47,643	130.5	126.8	4.1	25
2007	207,552	10,417	28.5	28.2	51,461	141.0	139.2	4.9	25
2008	209,304	9,323	25.5	25.4	54,763	150.0	149.4	5.9	25
2009	186,696	8,347	22.9	20.3	10,000	27.4	24.3	1.2	24
2010	207,000	8,225	22.5	22.2	10,832	29.7	29.2	1.3	24
2011	181,296	6,298	17.3	14.9	9,764	26.8	23.1	1.6	24
2012	156,296	5,216	14.3	10.6	4,686	12.8	9.5	0.9	27
2013	167,692	11,505	31.5	32.9	25,454	69.7	72.9	2.2	20
Grand Total	5,281,899	422,680			1,424,961.13				

Table 6 – 2013 Workovers

Well Type	UWI	Workover	Date
Oil	100/01-09-002-25W1/00	Packer	Oct-13
Oil	100/02-09-002-25W1/00	Pump Repair	Jan-13
Oil	100/12-04-002-25W1/00	Pump Repair	Jan-13
Oil	100/15-09-002-25W1/00	Pump Repair	Jul-13
Oil	103/13-10-002-25W1/00	Rod Repair	Aug-13
Oil	100/15-09-002-25W1/00	Acid Stimulation	Dec-13
Oil	100/02-09-002-25W1/00	Acid Stimulation	Mar-13

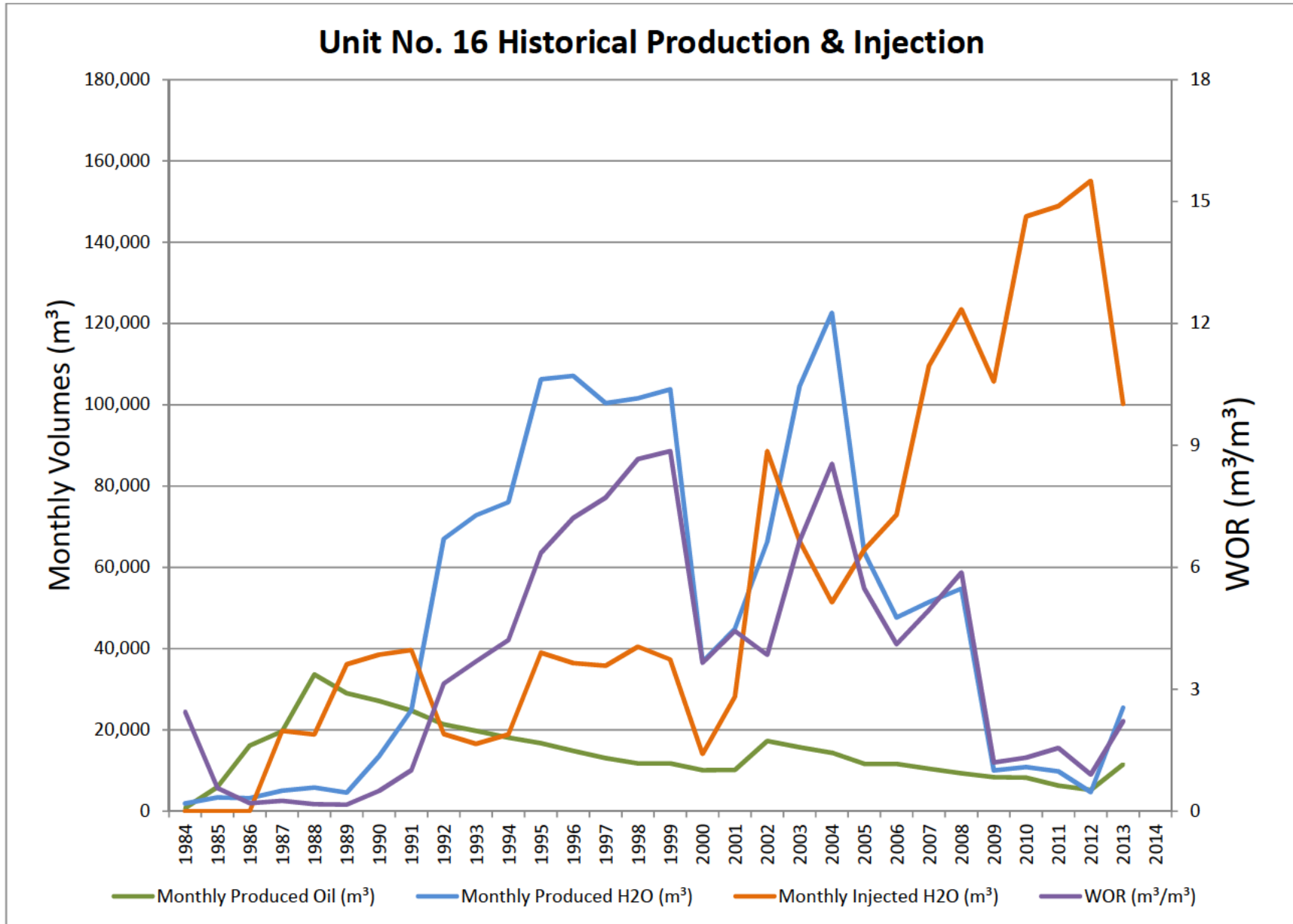


Appendix A – Unit 16 Production and Injection 2013 Plot





## Appendix B – Historical Unit 16 Production Plot



## Appendix C – Cumulative Historical Production & Injection Plot

