

**EAST ROUTLEDGE UNIT NO. 1
WATERFLOOD EOR PROJECT**

ANNUAL REPORT FOR 2012

March 1, 2013

Tundra Oil and Gas Partnership

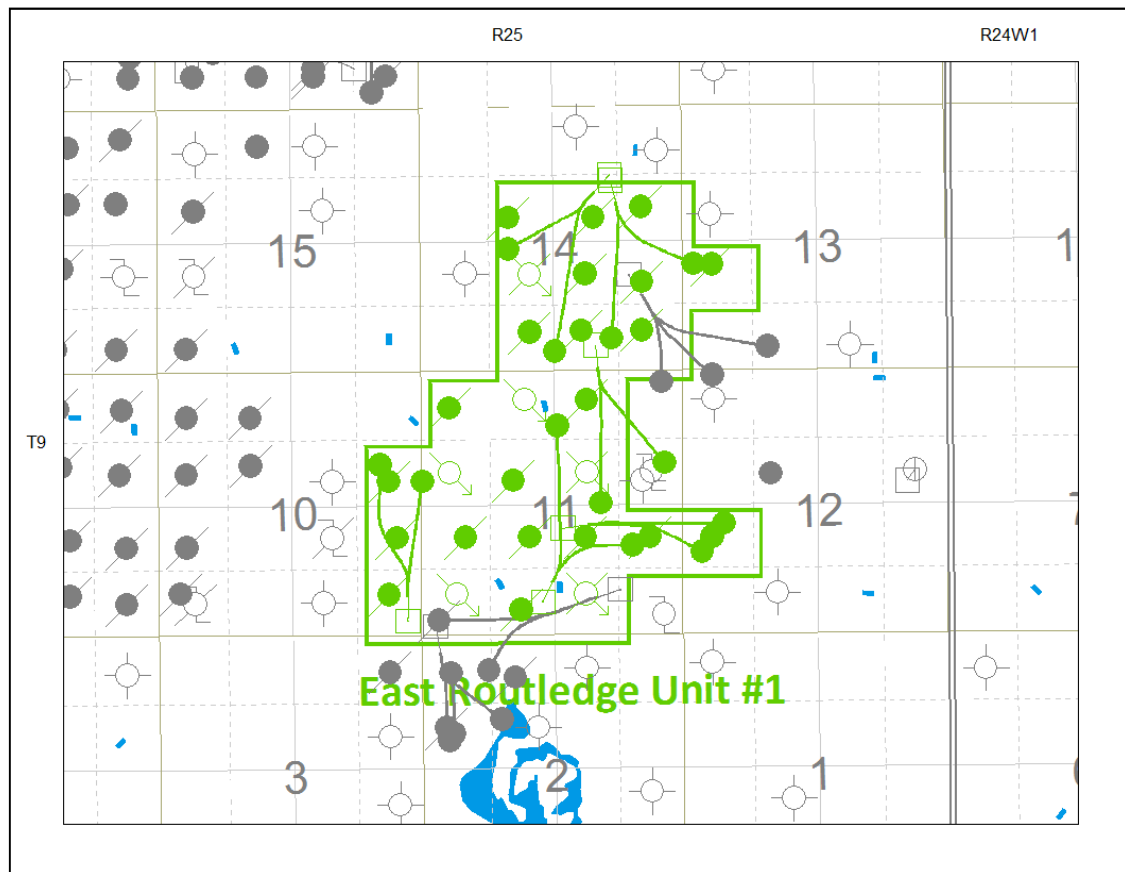
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INTRODUCTION

East Routledge Unit No. 1 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Board Order No. PM 20 effective May 1972 with Samedan Oil of Canada Ltd. as Operator. Tundra acquired the unit from Topa Resources Ltd. and became operator in April 2002. The EOR project area contains 39 wells in 27 LSDs in Township 9, Range 25 W1 as shown in the figure below. Well list and well status is available in Appendix A.

Figure 1: East Routledge Unit No. 1 Area Outline



In accordance with Section 73 of the Manitoba Drilling and Production Regulation, Tundra hereby submits the 2012 Annual Progress Report for East Routledge Unit No. 1 as required by Broad Order No. PM 20.

DISCUSSION

Production History

For the wells included in East Routledge Unit No. 1, production started January 1964 with 00/07-11-009-25W1/0 well. Oil production peaked at 140 m³/d in March 1968. The Unit was producing 11.4 m³/d of oil and 780 m³/d of water, in December 2012. The water oil ratio (WOR) averaged 68 m³/m³ in 2012. The rates and WOR are plotted in Figure 2.

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

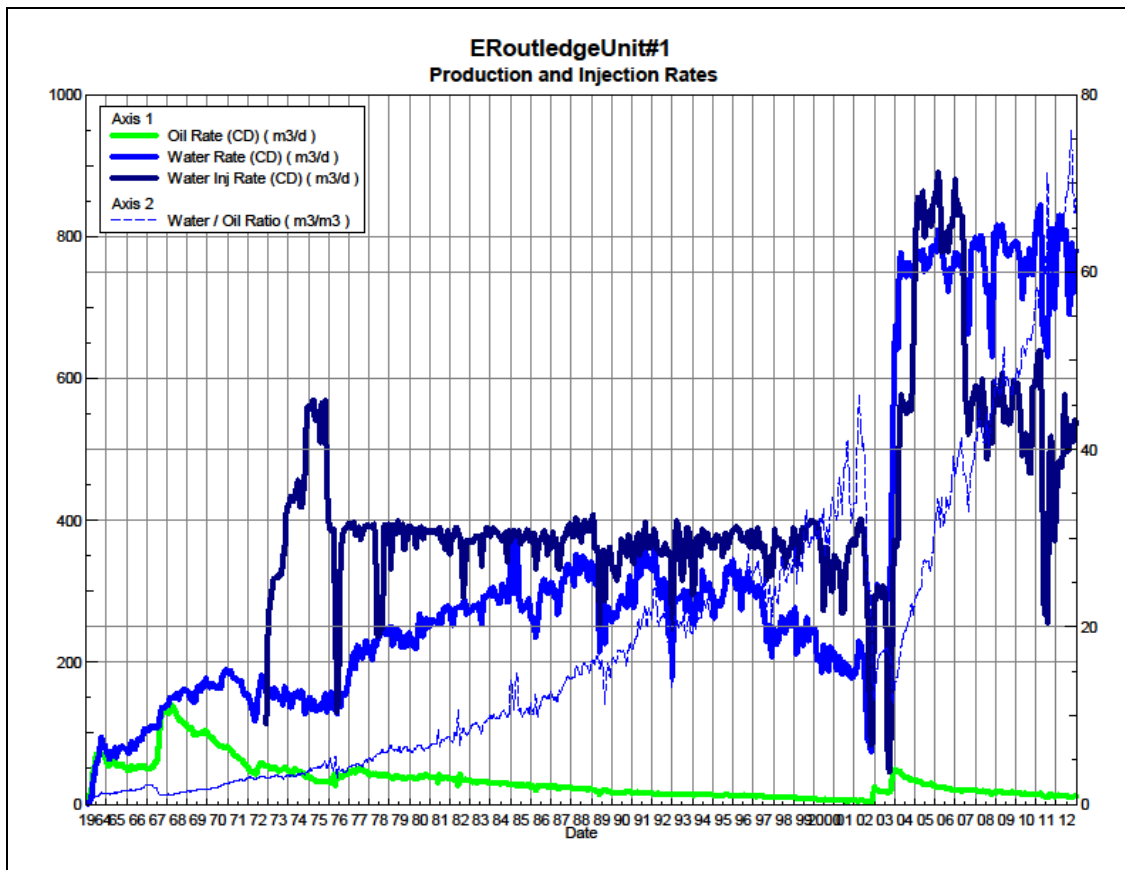
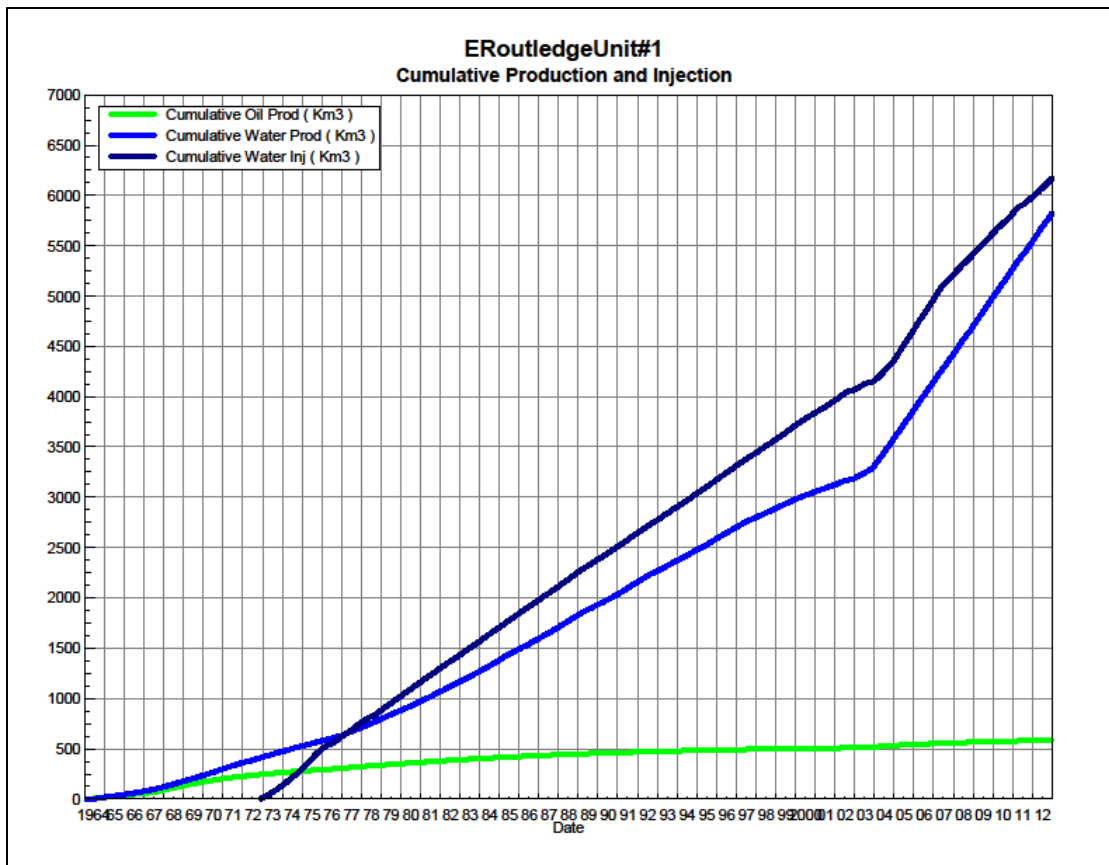


Figure 3 shows the cumulative production for East Routledge Unit No. 1 to the end of December 2012 as 586 E³m³ of oil, and 5824 E³m³ of water. The cumulative water injected is 6169 E³m³.

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



Waterflood History

As of December 2012 the Unit has 3 active vertical injectors and injector patterns in place. Water injection started in August 1964. The injector in the northernmost pattern 00/06-14-009-25W1 was abandoned in 2003.

An overall summary for each injector pattern is presented in Appendix C.

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

Waterflood EOR Operating Strategy and Performance

Water Source and Quality

Currently there is no source water being used at East Routledge Unit No. 1. Produced water is re-injected back into the formation after filtration.

Injection Wellhead Pressures

The average monthly wellhead injection pressures, for each injection well, are summarized in Appendix B, and show all injection pressure since 2003. Average pressure for the injectors is as follows: 3783 kPag for 00/14-11-009-25W1/00, 1900 kPag for 00/12-11-009-25W1/00 and 4402 kPag for 00/04-11-009-25W1/00.

Reservoir Pressure

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

Well Servicing

No maintenance was required on 5 wells in East Routledge Unit No. 1 in 2012.

Voidage Replacement

Cumulative voidage for the East Routledge Unit No. 1 was 0.958 in December 2012. Tundra hopes to maintain this cumulative VRR, by keeping water injection at its current rate for the foreseeable future. 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

OOIP for East Routledge Unit No. 1 is 1684 E³m³. Current recovery factor within the Unit is approximately 35%. Ultimate recovery factor for the East Routledge Unit No. 1 is estimated to approach 40% by decline analysis. The flood has significantly outperformed the predicted estimated ultimate recovery factor of 31.5% last predicted in June 1988.

Overall this waterflood has been extremely effective as evident by the significantly high estimated ultimate recovery factor. Two major factors have contributed to the Unit's high recovery. The first is time; this is a mature waterflood that has been in operation and managed relatively well for nearly 40 years. The unit has been producing at watercuts close to 95% for the last 20 years indicating that the flood is in the late stages of its production life, post water breakthrough, etc. The second major factor that has lead to such a high recovery factor has to do with development that occurred in 2002-2003 when horizontal drilling technology was applied to the unit. When horizontal wells were drilled into the unit, unit production increased nearly 10 fold. A portion of the reserves recovered by each horizontal well can be attributed to production acceleration, however, with such a dramatic effect on the units overall production, it is clear that incremental reserves were also encountered when the horizontal wells were drilled. These incremental reserves have also contributed to the Units overall high recovery factor.

Tundra has no definite plans to significantly alter the way in which the waterflood at East Routledge No. 1 is currently operating; i.e. no drilling plans. The focus at this phase in the pools development is really acceleration of long-life post water breakthrough (high WCT) reserves; in the foreseeable future Tundra will focus on smaller capex items such as pump up-sizes and potentially 1-2 electrical submersible pump installations.

List of Appendices

Appendix A: Well Name and Well Status

Appendix B: Monthly Injection Wellhead Pressures Table and Plots

Appendix C: East Routledge Unit No.1 Injection Pattern Summary

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

Plots and Tables for the following injectors:

00/04-11-009-25W1/00

00/12-11-009-25W1/00

00/06-14-009-25W1/00

Appendix A

UWI	Surface Location	Well Status
100/01-10-009-25W1/00		ABD Producer
100/08-10-009-25W1/00		ABD Producer
100/09-10-009-25W1/00		ABD Producer
102/09-10-009-25W1/00	01-10-009-25W1	Capable of OIL Prod
102/09-10-009-25W1/02	01-10-009-25W1	Capable of OIL Prod
100/02-11-009-25W1/00		ABD WTR Injection
100/03-11-009-25W1/00		ABD Producer
100/04-11-009-25W1/00		WTR Injection
100/05-11-009-25W1/00		ABD Producer
100/06-11-009-25W1/00		ABD Producer
100/07-11-009-25W1/00		ABD Producer
100/08-11-009-25W1/00		ABD Producer
102/08-11-009-25W1/00	03-11-009-25W1	Capable of OIL Prod
103/09-11-009-25W1/02	02-14-009-25W1	Capable of OIL Prod
100/10-11-009-25W1/00		ABD WTR Injection
102/10-11-009-25W1/00	02-14-009-25W1	Capable of OIL Prod
100/11-11-009-25W1/00		ABD Producer
100/12-11-009-25W1/00		WTR Injection
100/13-11-009-25W1/00		ABD Producer
100/14-11-009-25W1/00		WTR Injection
100/15-11-009-25W1/00		ABD Producer
102/15-11-009-25W1/02	03-11-009-25W1	Capable of OIL Prod
100/05-12-009-25W1/00		ABD Producer
102/05-12-009-25W1/00	07-11-009-25W1	Capable of OIL Prod
103/05-12-009-25W1/02	07-11-009-25W1	Capable of OIL Prod
100/05-13-009-25W1/00		ABD Producer
102/05-13-009-25W1/00	10-14-009-25W1	Capable of OIL Prod
100/01-14-009-25W1/00		ABD Producer
100/02-14-009-25W1/00		ABD Producer
102/02-14-009-25W1/00	10-14-009-25W1	Capable of OIL Prod
102/02-14-009-25W1/02	10-14-009-25W1	Capable of OIL Prod
100/03-14-009-25W1/00		ABD Producer
100/06-14-009-25W1/00		ABD WTR Injection
102/06-14-009-25W1/02	10-14-009-25W1	Capable of OIL Prod
100/07-14-009-25W1/00		ABD Producer
100/08-14-009-25W1/00		ABD Producer
100/09-14-009-25W1/00		ABD Producer
100/10-14-009-25W1/00		ABD Producer
100/11-14-009-25W1/00		ABD Producer

Appendix B

Average Monthly Injection Pressure (kPag)

Month	Injection Pressure			
	100/04-11	100/12-11	100/14-11	100/06-14
Jan-02				
Feb-02				
Mar-02				
Apr-02				
May-02				
Jun-02				
Jul-02				
Aug-02	0	-	-	-
Sep-02	0	-	-	-
Oct-02	0	-	-	-
Nov-02	0	-	-	-
Dec-02	0	0	0	0
Jan-03	900	929	929	0
Feb-03	4839	4816	4881	0
Mar-03	4834	4865	4900	353
Apr-03	4800	4800	4800	36
May-03	4958	5394	5394	-
Jun-03	5100	6000	6000	-
Jul-03	5100	6000	6000	-
Aug-03	1338	5138	4050	-
Sep-03	400	-	-	-
Oct-03	1587	5000	5000	-
Nov-03	4870	4870	4870	-
Dec-03	5550	5647	5741	-
Jan-04	4729	5858	6000	-
Feb-04	6200	6100	6000	-
Mar-04	5184	5319	5000	-
Apr-04	5837	4513	4100	-
May-04	5819	4594	4206	-
Jun-04	5817	4637	4220	-
Jul-04	5813	4571	4131	-
Aug-04	6016	4619	4158	-
Sep-04	5823	4625	4162	-
Oct-04	5905	4604	4165	-
Nov-04	6160	4955	4423	-
Dec-04	4889	4321	4295	-
Jan-05	5661	5139	5139	-
Feb-05	6036	5616	5616	-
Mar-05	6003	5650	5631	-
Apr-05	6243	5470	5687	-
May-05	5748	2900	5319	-
Jun-05	6689	1350	6145	-
Jul-05	6832	1350	6110	-
Aug-05	6976	1350	6073	-
Sep-05	6812	962	5923	-
Oct-05	6021	1535	5676	-
Nov-05	6325	1740	5468	-
Dec-05	6300	1832	5626	-

Month	Injection Pressure			
	100/04-11	100/12-11	100/14-11	100/06-14
Jan-06	6297	2061	5619	-
Feb-06	6714	2636	5404	-
Mar-06	6674	3171	5687	-
Apr-06	6053	2933	5193	-
May-06	6606	2039	5598	-
Jun-06	6788	2000	6033	-
Jul-06	7063	2000	6045	-
Aug-06	6665	2000	5929	-
Sep-06	6897	2000	6107	-
Oct-06	7248	2000	6194	-
Nov-06	7200	2000	6000	-
Dec-06	7200	1971	6058	-
Jan-07	7200	1900	6200	-
Feb-07	7200	1900	6200	-
Mar-07	7168	1900	6200	-
Apr-07	6950	1900	6200	-
May-07	6863	1958	6084	-
Jun-07	6121	2125	5793	-
Jul-07	4685	2310	5368	-
Aug-07	4027	2121	5076	-
Sep-07	3955	2100	5200	-
Oct-07	4202	2100	5626	-
Nov-07	4193	2100	5567	-
Dec-07	4215	2194	5597	-
Jan-08	4203	2200	5600	-
Feb-08	4179	2200	5510	-
Mar-08	4203	2200	5413	-
Apr-08	4207	2200	5513	-
May-08	4052	2200	5426	-
Jun-08	3940	2190	5257	-
Jul-08	3400	2155	4423	-
Aug-08	3865	2200	5116	-
Sep-08	3857	2137	4850	-
Oct-08	3965	2161	4416	-
Nov-08	4523	2200	5223	-
Dec-08	4658	2200	5200	-
Jan-09	4210	2200	5035	-
Feb-09	4014	2200	4882	-
Mar-09	4274	2200	5303	-
Apr-09	4253	2200	5400	-
May-09	3723	2168	4790	-
Jun-09	3753	2287	4393	-
Jul-09	3845	2284	4445	-
Aug-09	3974	2200	4348	-
Sep-09	4000	2200	4593	-
Oct-09	4010	2200	4400	-
Nov-09	4110	2200	4353	-
Dec-09	4097	2200	4394	-

Month	Injection Pressure			
	100/04-11	100/12-11	100/14-11	100/06-14
Jan-10	4119	2200	4400	-
Feb-10	4007	2200	4400	-
Mar-10	4016	2266	4406	-
Apr-10	4057	2430	4437	-
May-10	4074	2465	4432	-
Jun-10	4123	2430	4433	-
Jul-10	4042	2223	4342	-
Aug-10	3758	1803	3839	-
Sep-10	3753	1920	4300	-
Oct-10	4184	1923	4865	-
Nov-10	4230	1900	5033	-
Dec-10	4158	1900	5000	-
Jan-11	4435	1900	5097	-
Feb-11	4518	1900	5071	-
Mar-11	4590	1900	5200	-
Apr-11	4213	1900	4360	-
May-11	3616	1900	3800	-
Jun-11	3200	1900	3800	-
Jul-11	3200	1900	3800	-
Aug-11	4139	1900	3800	-
Sep-11	4800	1900	3800	-
Oct-11	4742	1900	3800	-
Nov-11	4260	1900	3800	-
Dec-11	4455	1900	3800	-
Jan-12	4768	1900	3800	-
Feb-12	4972	1900	3800	-
Mar-12	5013	1900	3800	-
Apr-12	4760	1900	3800	-
May-12	4135	1900	3761	-
Jun-12	3833	1900	3800	-
Jul-12	3752	1900	3658	-
Aug-12	4006	1900	3781	-
Sep-12	4387	1900	3800	-
Oct-12	4400	1900	3800	-
Nov-12	4400	1900	3800	-
Dec-12	4400	1900	3800	-

Appendix C

East Routledge Unit No. 1 Injector Pattern Summary as of December 2012

Pattern Name	Injector Location (009-25W)	Injector Surf. Location (009-25W1)	Status	No. of Supported Wells	Supported Wells (009-25W1)	Allocation Factor	Pattern Prod Start Month	Inj Start Month	Oil Rate (m³/d)	Water Rate (m³/d)	WOR (m³/m³)	Water Injection (m³/d)	Cum Oil (E³m³)	Cum Water (E³m³)	Cum Inj Water (E³m³)	Monthly VRR	Cum VRR
00/04-11-009-25W1 Injector	00/04-11	Vertical Well	WTR Injection	14	01-10, 02/09-10/2 (Surf. 01-10), 02-11, 03-11	1	Jan 1964	Nov 1972	1.75	127.99	73.10	131.94	158.76	1276.04	1813.86	1.02	1.26
					08-10, 05-11, 06-11, 07-11, 08-11, 05-12	0.5											
					02/09-10 (Surf. 01-10), 02/08-11 (Surf. 03-11)	0.4											
					02/05-12 (Surf. 07-11), 03/05-12 (Surf. 07-11)	0.1											
00/12-11-009-25W1 Injector	00/12-11 00/14-11	Vertical Well	WTR Injection	24	09-10, 10-11, 02/10-11 (Surf. 02-14), 11-11, 13-11, 15-11, 02/15-11 (Surf. 03-11), 03/09-11/2 (Surf. 02-14)	1	Jan 1964	Nov 1972	5.7	441.8	77.57	403.0	224.3	2770.7	3093.9	0.9	1.03
					02/05-12 (Surf. 07-11), 03/05-12 (Surf. 07-11)	0.9											
					02/09-10 (Surf. 01-10), 02/08-11 (Surf. 03-11)	0.6											
					08-10, 05-11, 06-11, 07-11, 08-11, 05-12, 01-14, 02-14, 03-14	0.5											
					02/02-14 (Surf. 10-14)	0.2											
					02/05-13 (Surf. 10-14), 02/02-13/2 (Surf. 10-14)	0.1											
					05-13, 02/06-14 (Surf. 10-14), 07-14, 08-14, 09-14, 10-14, 11-14	1											
02/05-13 (Surf. 10-14), 02/02-13/2 (Surf. 10-14)	0.9																
02/02-14 (Surf. 10-14)	0.8																
00/06-14-009-25W1 Injector	00/06-14	Vertical Well	ABD WTR Injection	13	01-14, 02-14, 03-14	0.5	Apr 1967	Nov 1972	3.9	209.8	53.38	-	202.6	1777.4	1261.1	0.0	0.63
					05-13, 02/06-14 (Surf. 10-14), 07-14, 08-14, 09-14, 10-14, 11-14	1											
					02/05-13 (Surf. 10-14), 02/02-13/2 (Surf. 10-14)	0.9											
					02/02-14 (Surf. 10-14)	0.8											

Appendix D
Rates and VRR
Plots and Tables

Pattern: 00/04-11-009-25Inj Set: ERoutledgeUnit#1

Oil Formation Vol Factor : 1.05000 m3/m3

Water Formation Vol Factor : 1.00000 m3/m3

Water / Oil Ratio : 73.10 m3/m3

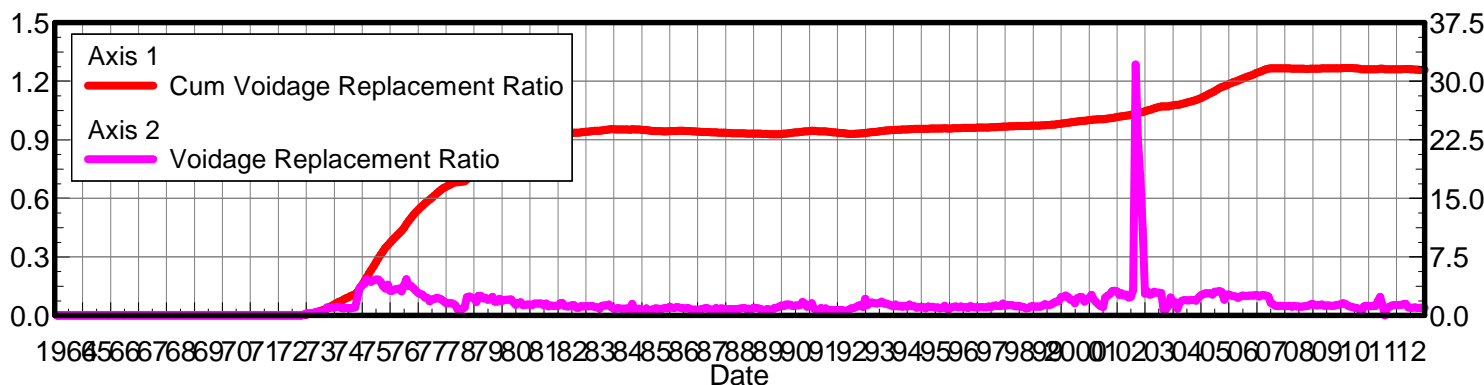
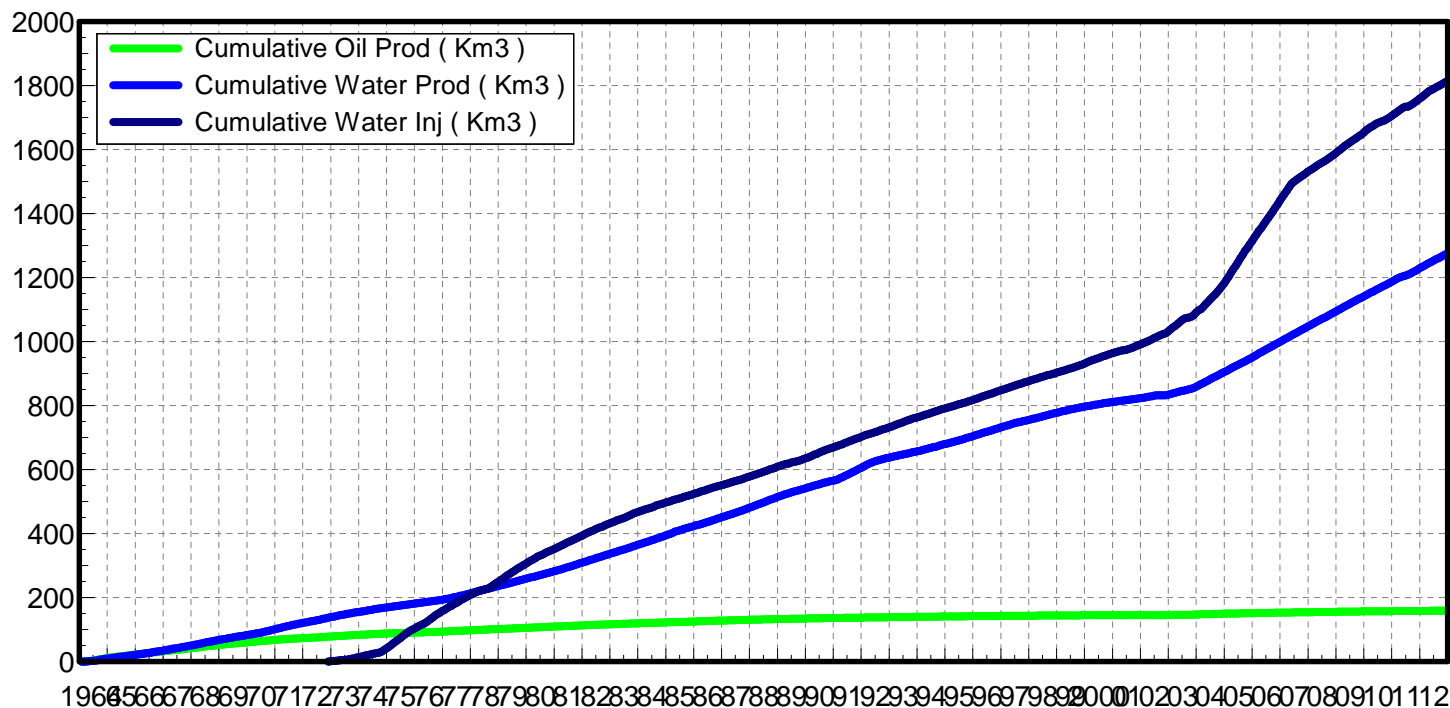
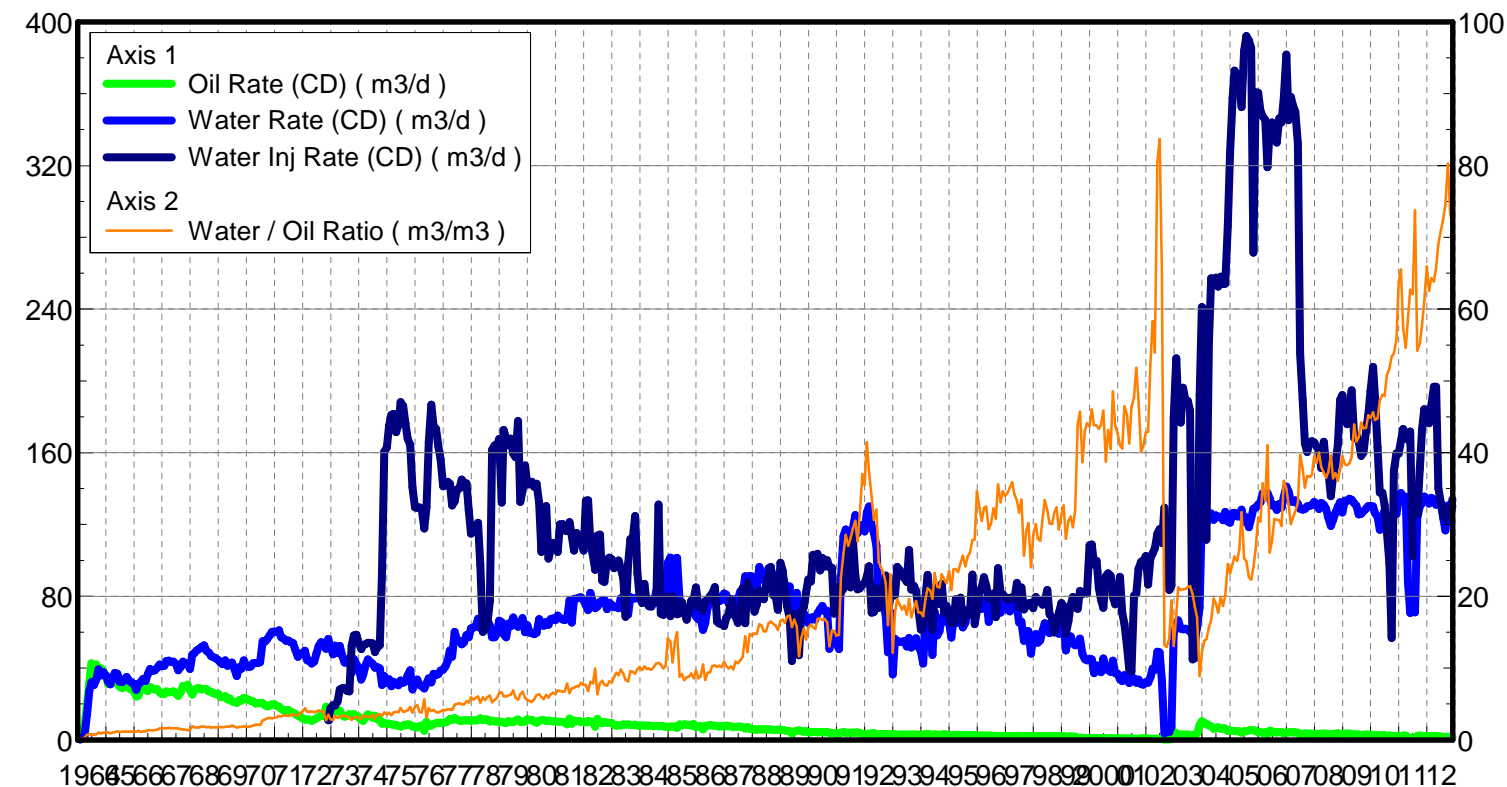
February 28, 2013

Operator: Tundra_O&G_Prtshp

Oil Rate (CD) : 1.75 m3/d

Water Rate (CD) : 127.99 m3/d

Water Inj Rate (CD) : 131.94 m3/d



Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1964	2.49	0.37	0.15		0.08	0.01	0.00	0.000	0.000
2/29/1964	5.26	1.14	0.22		0.23	0.04	0.00	0.000	0.000
3/31/1964	7.36	2.30	0.31		0.46	0.12	0.00	0.000	0.000
4/30/1964	19.93	13.93	0.70		1.06	0.53	0.00	0.000	0.000
5/31/1964	31.83	26.97	0.85		2.04	1.37	0.00	0.000	0.000
6/30/1964	42.72	32.28	0.76		3.32	2.34	0.00	0.000	0.000
7/31/1964	40.69	30.59	0.75		4.59	3.29	0.00	0.000	0.000
8/31/1964	42.02	33.55	0.80		5.89	4.33	0.00	0.000	0.000
9/30/1964	38.72	39.32	1.02		7.05	5.51	0.00	0.000	0.000
10/31/1964	39.90	35.94	0.90		8.29	6.62	0.00	0.000	0.000
11/30/1964	38.16	37.67	0.99		9.43	7.75	0.00	0.000	0.000
12/31/1964	35.99	36.00	1.00		10.55	8.87	0.00	0.000	0.000
1/31/1965	31.07	32.55	1.05		11.51	9.87	0.00	0.000	0.000
2/28/1965	34.44	30.91	0.90		12.47	10.74	0.00	0.000	0.000
3/31/1965	34.72	34.63	1.00		13.55	11.81	0.00	0.000	0.000
4/30/1965	34.31	37.29	1.09		14.58	12.93	0.00	0.000	0.000
5/31/1965	31.34	36.89	1.18		15.55	14.08	0.00	0.000	0.000
6/30/1965	29.72	32.44	1.09		16.44	15.05	0.00	0.000	0.000
7/31/1965	28.75	32.20	1.12		17.33	16.05	0.00	0.000	0.000
8/31/1965	29.94	33.85	1.13		18.26	17.10	0.00	0.000	0.000
9/30/1965	30.56	35.09	1.15		19.18	18.15	0.00	0.000	0.000
10/31/1965	28.70	32.87	1.15		20.07	19.17	0.00	0.000	0.000
11/30/1965	28.04	32.03	1.14		20.91	20.13	0.00	0.000	0.000
12/31/1965	27.45	31.38	1.14		21.76	21.10	0.00	0.000	0.000
1/31/1966	24.13	27.96	1.16		22.51	21.97	0.00	0.000	0.000
2/28/1966	24.64	31.32	1.27		23.20	22.85	0.00	0.000	0.000
3/31/1966	29.50	32.21	1.09		24.11	23.84	0.00	0.000	0.000
4/30/1966	28.45	33.96	1.19		24.97	24.86	0.00	0.000	0.000
5/31/1966	27.83	32.79	1.18		25.83	25.88	0.00	0.000	0.000
6/30/1966	27.16	36.58	1.35		26.64	26.98	0.00	0.000	0.000
7/31/1966	29.29	39.56	1.35		27.55	28.20	0.00	0.000	0.000
8/31/1966	28.84	38.48	1.33		28.45	29.40	0.00	0.000	0.000
9/30/1966	28.17	38.83	1.38		29.29	30.56	0.00	0.000	0.000
10/31/1966	28.24	39.97	1.42		30.17	31.80	0.00	0.000	0.000
11/30/1966	26.55	41.95	1.58		30.96	33.06	0.00	0.000	0.000
12/31/1966	25.56	41.08	1.61		31.76	34.33	0.00	0.000	0.000
1/31/1967	25.62	41.21	1.61		32.55	35.61	0.00	0.000	0.000
2/28/1967	27.04	43.98	1.63		33.31	36.84	0.00	0.000	0.000
3/31/1967	26.48	44.10	1.67		34.13	38.21	0.00	0.000	0.000
4/30/1967	26.58	43.38	1.63		34.93	39.51	0.00	0.000	0.000
5/31/1967	26.95	43.65	1.62		35.76	40.86	0.00	0.000	0.000
6/30/1967	26.00	42.35	1.63		36.54	42.13	0.00	0.000	0.000
7/31/1967	24.50	38.85	1.59		37.30	43.34	0.00	0.000	0.000
8/31/1967	26.73	40.59	1.52		38.13	44.60	0.00	0.000	0.000
9/30/1967	30.01	43.55	1.45		39.03	45.90	0.00	0.000	0.000
10/31/1967	29.69	42.27	1.42		39.95	47.21	0.00	0.000	0.000
11/30/1967	30.80	42.51	1.38		40.87	48.49	0.00	0.000	0.000
12/31/1967	27.67	39.44	1.43		41.73	49.71	0.00	0.000	0.000

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1968	25.27	47.54	1.88		42.51	51.18	0.00	0.000	0.000
2/29/1968	27.68	48.36	1.75		43.32	52.59	0.00	0.000	0.000
3/31/1968	28.80	50.06	1.74		44.21	54.14	0.00	0.000	0.000
4/30/1968	28.84	50.73	1.76		45.08	55.66	0.00	0.000	0.000
5/31/1968	28.13	51.81	1.84		45.95	57.27	0.00	0.000	0.000
6/30/1968	28.52	52.67	1.85		46.80	58.85	0.00	0.000	0.000
7/31/1968	28.29	49.65	1.75		47.68	60.39	0.00	0.000	0.000
8/31/1968	26.94	48.57	1.80		48.51	61.89	0.00	0.000	0.000
9/30/1968	26.89	46.56	1.73		49.32	63.29	0.00	0.000	0.000
10/31/1968	25.90	46.10	1.78		50.12	64.72	0.00	0.000	0.000
11/30/1968	25.66	45.64	1.78		50.89	66.09	0.00	0.000	0.000
12/31/1968	25.79	44.48	1.72		51.69	67.47	0.00	0.000	0.000
1/31/1969	23.89	43.13	1.80		52.43	68.80	0.00	0.000	0.000
2/28/1969	23.79	42.15	1.77		53.10	69.98	0.00	0.000	0.000
3/31/1969	24.41	44.32	1.82		53.86	71.36	0.00	0.000	0.000
4/30/1969	22.49	41.37	1.84		54.53	72.60	0.00	0.000	0.000
5/31/1969	23.03	42.37	1.84		55.25	73.91	0.00	0.000	0.000
6/30/1969	21.51	42.99	2.00		55.89	75.20	0.00	0.000	0.000
7/31/1969	21.18	39.37	1.86		56.55	76.42	0.00	0.000	0.000
8/31/1969	20.55	35.51	1.73		57.19	77.52	0.00	0.000	0.000
9/30/1969	22.20	40.52	1.83		57.85	78.74	0.00	0.000	0.000
10/31/1969	21.92	39.63	1.81		58.53	79.97	0.00	0.000	0.000
11/30/1969	23.38	44.36	1.90		59.23	81.30	0.00	0.000	0.000
12/31/1969	22.86	41.38	1.81		59.94	82.58	0.00	0.000	0.000
1/31/1970	22.44	40.52	1.81		60.64	83.84	0.00	0.000	0.000
2/28/1970	21.75	40.90	1.88		61.25	84.98	0.00	0.000	0.000
3/31/1970	21.56	42.68	1.98		61.91	86.30	0.00	0.000	0.000
4/30/1970	20.22	42.91	2.12		62.52	87.59	0.00	0.000	0.000
5/31/1970	20.35	42.93	2.11		63.15	88.92	0.00	0.000	0.000
6/30/1970	20.63	43.28	2.10		63.77	90.22	0.00	0.000	0.000
7/31/1970	20.45	55.02	2.69		64.40	91.93	0.00	0.000	0.000
8/31/1970	19.34	54.63	2.83		65.00	93.62	0.00	0.000	0.000
9/30/1970	18.71	56.02	2.99		65.56	95.30	0.00	0.000	0.000
10/31/1970	19.15	58.14	3.04		66.16	97.10	0.00	0.000	0.000
11/30/1970	19.89	60.19	3.03		66.76	98.91	0.00	0.000	0.000
12/31/1970	19.84	60.44	3.05		67.37	100.78	0.00	0.000	0.000
1/31/1971	18.94	60.01	3.17		67.96	102.64	0.00	0.000	0.000
2/28/1971	18.46	61.06	3.31		68.47	104.35	0.00	0.000	0.000
3/31/1971	17.40	57.23	3.29		69.01	106.13	0.00	0.000	0.000
4/30/1971	16.56	56.70	3.42		69.51	107.83	0.00	0.000	0.000
5/31/1971	16.24	55.18	3.40		70.01	109.54	0.00	0.000	0.000
6/30/1971	16.69	55.37	3.32		70.51	111.20	0.00	0.000	0.000
7/31/1971	15.75	54.41	3.45		71.00	112.89	0.00	0.000	0.000
8/31/1971	15.15	53.87	3.56		71.47	114.56	0.00	0.000	0.000
9/30/1971	14.48	50.16	3.46		71.91	116.06	0.00	0.000	0.000
10/31/1971	13.55	46.21	3.41		72.33	117.49	0.00	0.000	0.000
11/30/1971	12.93	48.08	3.72		72.71	118.94	0.00	0.000	0.000
12/31/1971	12.12	47.88	3.95		73.09	120.42	0.00	0.000	0.000

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1/31/1972	11.30	49.58	4.39		73.44	121.96	0.00	0.000	0.000
2/29/1972	11.25	44.39	3.94		73.77	123.24	0.00	0.000	0.000
3/31/1972	11.30	44.22	3.91		74.12	124.61	0.00	0.000	0.000
4/30/1972	10.62	42.46	4.00		74.44	125.89	0.00	0.000	0.000
5/31/1972	11.29	43.69	3.87		74.79	127.24	0.00	0.000	0.000
6/30/1972	12.14	48.05	3.96		75.15	128.68	0.00	0.000	0.000
7/31/1972	12.80	52.34	4.09		75.55	130.31	0.00	0.000	0.000
8/31/1972	13.67	54.47	3.99		75.97	132.00	0.00	0.000	0.000
9/30/1972	13.36	52.66	3.94		76.37	133.57	0.00	0.000	0.000
10/31/1972	18.52	50.72	2.74		76.95	135.15	0.00	0.000	0.000
11/30/1972	16.03	56.18	3.50	11.04	77.43	136.83	0.33	0.151	0.002
12/31/1972	17.81	51.56	2.89	17.68	77.98	138.43	0.88	0.252	0.004
1/31/1973	17.18	47.67	2.78	19.28	78.51	139.91	1.48	0.293	0.007
2/28/1973	15.81	52.55	3.32	19.15	78.95	141.38	2.01	0.277	0.009
3/31/1973	15.89	48.45	3.05	21.29	79.45	142.88	2.67	0.327	0.012
4/30/1973	16.25	52.39	3.22	28.11	79.93	144.45	3.52	0.405	0.015
5/31/1973	13.63	46.64	3.42	28.87	80.36	145.90	4.41	0.474	0.019
6/30/1973	12.99	43.14	3.32	28.78	80.75	147.19	5.28	0.507	0.023
7/31/1973	13.33	43.05	3.23	27.42	81.16	148.53	6.13	0.481	0.026
8/31/1973	14.45	45.34	3.14	26.94	81.61	149.93	6.96	0.445	0.030
9/30/1973	13.47	37.42	2.78	52.49	82.01	151.06	8.54	1.018	0.036
10/31/1973	14.38	45.00	3.13	58.15	82.46	152.45	10.34	0.968	0.043
11/30/1973	13.20	42.23	3.20	58.55	82.85	153.72	12.09	1.044	0.050
12/31/1973	12.94	40.17	3.10	54.09	83.25	154.96	13.77	1.006	0.057
1/31/1974	11.33	33.66	2.97	50.47	83.61	156.01	15.34	1.108	0.063
2/28/1974	10.68	36.35	3.40	52.75	83.90	157.03	16.81	1.109	0.069
3/31/1974	12.73	41.76	3.28	53.44	84.30	158.32	18.47	0.969	0.075
4/30/1974	14.14	44.85	3.17	54.03	84.72	159.67	20.09	0.905	0.081
5/31/1974	13.42	43.50	3.24	53.91	85.14	161.01	21.76	0.936	0.087
6/30/1974	12.15	42.27	3.48	53.69	85.50	162.28	23.37	0.976	0.093
7/31/1974	13.55	40.20	2.97	49.03	85.92	163.53	24.89	0.901	0.098
8/31/1974	11.51	40.52	3.52	51.42	86.28	164.78	26.49	0.977	0.104
9/30/1974	11.14	39.94	3.59	52.69	86.61	165.98	28.07	1.020	0.109
10/31/1974	9.08	30.62	3.37	93.87	86.90	166.93	30.98	2.338	0.120
11/30/1974	9.36	35.54	3.80	160.56	87.18	168.00	35.79	3.539	0.138
12/31/1974	8.99	31.71	3.53	162.96	87.46	168.98	40.85	3.960	0.157
1/31/1975	8.97	33.72	3.76	174.95	87.73	170.03	46.27	4.056	0.177
2/28/1975	8.64	29.94	3.47	181.09	87.98	170.86	51.34	4.642	0.195
3/31/1975	8.48	32.35	3.82	181.68	88.24	171.87	56.97	4.404	0.215
4/30/1975	8.05	31.27	3.89	171.38	88.48	172.81	62.11	4.315	0.234
5/31/1975	7.88	30.35	3.85	175.40	88.72	173.75	67.55	4.541	0.253
6/30/1975	7.46	33.01	4.43	188.16	88.95	174.74	73.20	4.607	0.273
7/31/1975	8.15	31.86	3.91	185.98	89.20	175.73	78.96	4.600	0.293
8/31/1975	8.16	32.58	3.99	176.48	89.45	176.74	84.43	4.289	0.312
9/30/1975	8.66	35.86	4.14	167.95	89.71	177.81	89.47	3.736	0.329
10/31/1975	8.48	38.77	4.57	164.22	89.98	179.01	94.56	3.445	0.346
11/30/1975	7.34	28.06	3.82	140.68	90.20	179.85	98.78	3.933	0.360
12/31/1975	7.21	33.28	4.61	129.57	90.42	180.89	102.80	3.172	0.373

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1/31/1976	6.90	33.53	4.86	129.41	90.63	181.93	106.81	3.174	0.385
2/29/1976	7.81	30.63	3.92	129.46	90.86	182.81	110.56	3.334	0.397
3/31/1976	7.87	30.10	3.83	128.77	91.10	183.75	114.56	3.356	0.410
4/30/1976	5.07	28.57	5.64	117.79	91.26	184.60	118.09	3.475	0.421
5/31/1976	10.09	31.51	3.12	129.73	91.57	185.58	122.11	3.081	0.433
6/30/1976	7.81	34.42	4.41	165.66	91.80	186.61	127.08	3.887	0.449
7/31/1976	7.91	31.97	4.04	186.81	92.05	187.61	132.87	4.638	0.467
8/31/1976	8.81	36.80	4.17	174.73	92.32	188.75	138.29	3.794	0.484
9/30/1976	9.33	36.19	3.88	173.14	92.60	189.83	143.48	3.765	0.500
10/31/1976	9.59	36.60	3.82	163.44	92.90	190.97	148.55	3.502	0.515
11/30/1976	9.62	38.63	4.01	156.29	93.19	192.13	153.24	3.207	0.528
12/31/1976	9.41	39.18	4.16	141.34	93.48	193.34	157.62	2.881	0.541
1/31/1977	9.95	40.86	4.11	141.82	93.79	194.61	162.02	2.764	0.553
2/28/1977	10.26	43.79	4.27	143.88	94.08	195.83	166.05	2.637	0.564
3/31/1977	11.76	49.92	4.24	142.77	94.44	197.38	170.47	2.293	0.575
4/30/1977	11.10	46.21	4.17	130.53	94.77	198.77	174.39	2.256	0.585
5/31/1977	12.29	60.12	4.89	132.91	95.15	200.63	178.51	1.820	0.594
6/30/1977	11.20	55.99	5.00	139.59	95.49	202.31	182.70	2.060	0.604
7/31/1977	10.80	55.22	5.11	140.07	95.82	204.02	187.04	2.104	0.614
8/31/1977	10.68	53.32	4.99	145.00	96.16	205.67	191.53	2.247	0.625
9/30/1977	11.00	54.30	4.94	142.77	96.49	207.30	195.82	2.168	0.634
10/31/1977	10.83	58.45	5.40	142.93	96.82	209.12	200.25	2.047	0.644
11/30/1977	11.01	57.09	5.19	127.99	97.15	210.83	204.09	1.865	0.652
12/31/1977	10.55	62.14	5.89	114.95	97.48	212.75	207.65	1.570	0.659
1/31/1978	11.05	62.42	5.65	116.23	97.82	214.69	211.25	1.570	0.666
2/28/1978	10.82	63.44	5.86	117.65	98.12	216.47	214.55	1.573	0.672
3/31/1978	11.13	67.50	6.06	120.99	98.47	218.56	218.30	1.528	0.678
4/30/1978	11.97	62.24	5.20	97.78	98.83	220.43	221.23	1.307	0.682
5/31/1978	10.90	64.65	5.93	60.26	99.17	222.43	223.10	0.792	0.683
6/30/1978	11.51	64.14	5.57	61.69	99.51	224.35	224.95	0.809	0.684
7/31/1978	11.28	67.07	5.95	64.71	99.86	226.43	226.96	0.820	0.685
8/31/1978	10.26	63.50	6.19	77.43	100.18	228.40	229.36	1.042	0.688
9/30/1978	10.88	57.15	5.25	161.69	100.51	230.12	234.21	2.358	0.698
10/31/1978	10.21	57.10	5.59	164.08	100.82	231.89	239.29	2.419	0.708
11/30/1978	10.24	59.65	5.82	163.69	101.13	233.68	244.20	2.325	0.719
12/31/1978	10.19	66.42	6.52	167.66	101.45	235.74	249.40	2.174	0.729
1/31/1979	9.91	65.49	6.61	132.19	101.75	237.77	253.50	1.742	0.736
2/28/1979	9.70	58.95	6.08	172.64	102.02	239.42	258.33	2.497	0.745
3/31/1979	9.45	57.16	6.05	167.72	102.32	241.19	263.53	2.500	0.756
4/30/1979	10.39	64.83	6.24	164.07	102.63	243.13	268.45	2.166	0.765
5/31/1979	10.10	63.26	6.26	167.89	102.94	245.09	273.66	2.273	0.775
6/30/1979	9.93	68.23	6.87	159.46	103.24	247.14	278.44	2.027	0.783
7/31/1979	10.89	64.41	5.92	157.56	103.58	249.14	283.33	2.077	0.792
8/31/1979	11.28	63.10	5.60	177.65	103.93	251.09	288.83	2.371	0.802
9/30/1979	10.07	64.19	6.37	132.59	104.23	253.02	292.81	1.773	0.808
10/31/1979	10.10	67.91	6.72	138.80	104.54	255.12	297.11	1.768	0.814
11/30/1979	10.23	60.06	5.87	152.95	104.85	256.93	301.70	2.160	0.822
12/31/1979	11.49	63.90	5.56	142.45	105.21	258.91	306.12	1.875	0.829

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1/31/1980	11.05	59.76	5.41	142.45	105.55	260.76	310.54	1.996	0.836
2/29/1980	11.21	59.39	5.30	143.72	105.87	262.48	314.70	2.019	0.842
3/31/1980	10.34	58.93	5.70	141.02	106.19	264.31	319.07	2.021	0.849
4/30/1980	9.60	59.56	6.21	142.75	106.48	266.10	323.36	2.050	0.856
5/31/1980	10.61	67.34	6.35	132.12	106.81	268.18	327.45	1.683	0.861
6/30/1980	10.98	65.37	5.95	104.77	107.14	270.14	330.60	1.362	0.864
7/31/1980	11.17	63.55	5.69	122.26	107.49	272.11	334.39	1.624	0.869
8/31/1980	10.46	65.78	6.29	130.21	107.81	274.15	338.42	1.696	0.874
9/30/1980	10.84	64.10	5.91	100.96	108.14	276.08	341.45	1.337	0.876
10/31/1980	10.61	67.28	6.34	106.05	108.46	278.16	344.74	1.352	0.879
11/30/1980	10.30	67.70	6.57	109.70	108.77	280.19	348.03	1.397	0.882
12/31/1980	10.51	66.86	6.36	108.59	109.10	282.27	351.40	1.394	0.886
1/31/1981	10.06	69.26	6.89	104.77	109.41	284.41	354.64	1.312	0.888
2/28/1981	10.00	67.99	6.80	120.04	109.69	286.32	358.00	1.529	0.892
3/31/1981	9.99	67.15	6.72	120.19	110.00	288.40	361.73	1.548	0.896
4/30/1981	9.90	66.72	6.74	116.70	110.30	290.40	365.23	1.513	0.899
5/31/1981	8.62	67.31	7.81	116.38	110.56	292.49	368.84	1.524	0.903
6/30/1981	11.87	77.78	6.55	121.31	110.92	294.82	372.48	1.344	0.906
7/31/1981	9.08	65.32	7.19	113.68	111.20	296.85	376.00	1.519	0.909
8/31/1981	10.82	78.52	7.25	105.41	111.54	299.28	379.27	1.173	0.911
9/30/1981	10.49	78.69	7.50	115.26	111.85	301.64	382.73	1.285	0.913
10/31/1981	10.58	79.21	7.49	113.20	112.18	304.10	386.24	1.253	0.916
11/30/1981	9.98	79.46	7.96	110.02	112.48	306.48	389.54	1.223	0.917
12/31/1981	10.13	77.62	7.66	105.41	112.79	308.89	392.81	1.194	0.919
1/31/1982	9.82	75.07	7.65	133.23	113.10	311.21	396.94	1.561	0.923
2/28/1982	10.64	72.36	6.80	133.39	113.40	313.24	400.67	1.597	0.927
3/31/1982	10.12	81.98	8.10	109.86	113.71	315.78	404.08	1.186	0.929
4/30/1982	9.75	76.75	7.87	102.55	114.00	318.08	407.15	1.179	0.930
5/31/1982	7.39	73.31	9.93	94.75	114.23	320.36	410.09	1.169	0.931
6/30/1982	11.64	74.20	6.37	113.84	114.58	322.58	413.51	1.317	0.934
7/31/1982	9.75	76.99	7.89	114.31	114.88	324.97	417.05	1.311	0.936
8/31/1982	9.45	77.70	8.22	88.71	115.18	327.38	419.80	1.012	0.936
9/30/1982	10.13	77.99	7.70	87.92	115.48	329.72	422.44	0.992	0.937
10/31/1982	9.64	72.80	7.55	100.48	115.78	331.97	425.55	1.212	0.938
11/30/1982	9.39	76.47	8.15	101.59	116.06	334.27	428.60	1.177	0.940
12/31/1982	9.41	75.19	7.99	100.64	116.35	336.60	431.72	1.183	0.941
1/31/1983	8.44	73.87	8.76	95.71	116.61	338.89	434.69	1.157	0.942
2/28/1983	7.96	74.26	9.33	98.25	116.84	340.97	437.44	1.189	0.943
3/31/1983	8.12	73.38	9.04	100.00	117.09	343.24	440.54	1.221	0.945
4/30/1983	8.06	78.86	9.78	95.71	117.33	345.61	443.41	1.096	0.946
5/31/1983	8.58	79.12	9.22	89.99	117.60	348.06	446.20	1.021	0.946
6/30/1983	8.51	71.17	8.36	68.52	117.85	350.20	448.25	0.855	0.946
7/31/1983	8.58	69.86	8.14	97.94	118.12	352.36	451.29	1.242	0.947
8/31/1983	8.33	79.66	9.56	111.93	118.38	354.83	454.76	1.266	0.949
9/30/1983	8.30	78.58	9.47	111.29	118.62	357.19	458.10	1.275	0.951
10/31/1983	8.50	78.84	9.27	124.81	118.89	359.63	461.97	1.422	0.954
11/30/1983	8.01	78.87	9.85	93.01	119.13	362.00	464.76	1.066	0.954
12/31/1983	8.00	81.23	10.15	79.81	119.38	364.52	467.23	0.890	0.954

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1984	8.04	78.33	9.74	76.31	119.63	366.94	469.60	0.880	0.953
2/29/1984	7.94	81.33	10.24	86.97	119.86	369.30	472.12	0.970	0.953
3/31/1984	7.89	77.82	9.86	76.47	120.10	371.72	474.49	0.888	0.953
4/30/1984	7.90	78.41	9.93	74.41	120.34	374.07	476.72	0.858	0.953
5/31/1984	7.72	75.55	9.78	74.25	120.58	376.41	479.02	0.887	0.952
6/30/1984	7.53	76.39	10.14	78.06	120.80	378.70	481.37	0.926	0.952
7/31/1984	7.81	82.88	10.61	76.63	121.05	381.27	483.74	0.841	0.952
8/31/1984	7.57	81.19	10.73	131.12	121.28	383.79	487.81	1.471	0.954
9/30/1984	7.75	81.38	10.50	70.43	121.51	386.23	489.92	0.787	0.953
10/31/1984	7.63	76.03	9.97	69.64	121.75	388.59	492.08	0.829	0.953
11/30/1984	7.43	76.47	10.29	74.41	121.97	390.88	494.31	0.883	0.953
12/31/1984	6.99	98.74	14.13	79.81	122.19	393.94	496.79	0.752	0.951
1/31/1985	7.40	101.55	13.73	69.00	122.42	397.09	498.92	0.631	0.949
2/28/1985	7.34	79.25	10.80	79.97	122.62	399.31	501.16	0.920	0.949
3/31/1985	7.40	100.99	13.64	78.38	122.85	402.44	503.59	0.721	0.948
4/30/1985	6.76	101.37	15.00	69.95	123.06	405.48	505.69	0.645	0.946
5/31/1985	8.73	77.00	8.82	70.59	123.33	407.87	507.88	0.819	0.945
6/30/1985	8.07	73.90	9.16	76.79	123.57	410.08	510.18	0.932	0.945
7/31/1985	8.64	71.97	8.33	72.02	123.84	412.31	512.42	0.889	0.945
8/31/1985	8.40	73.02	8.70	66.93	124.10	414.58	514.49	0.818	0.944
9/30/1985	8.23	72.46	8.81	71.54	124.34	416.75	516.64	0.882	0.944
10/31/1985	8.01	74.03	9.24	77.43	124.59	419.05	519.04	0.939	0.944
11/30/1985	8.78	75.53	8.60	78.54	124.85	421.31	521.39	0.927	0.944
12/31/1985	7.11	68.67	9.66	84.90	125.07	423.44	524.03	1.115	0.945
1/31/1986	7.82	67.19	8.60	74.25	125.32	425.52	526.33	0.985	0.945
2/28/1986	7.79	68.48	8.79	74.74	125.54	427.44	528.42	0.975	0.945
3/31/1986	5.84	61.21	10.49	71.87	125.72	429.34	530.65	1.067	0.945
4/30/1986	7.80	65.23	8.36	77.28	125.95	431.30	532.97	1.053	0.946
5/31/1986	7.87	73.36	9.32	77.75	126.19	433.57	535.38	0.953	0.946
6/30/1986	8.23	77.55	9.42	80.14	126.44	435.90	537.78	0.930	0.946
7/31/1986	7.95	81.54	10.26	81.41	126.69	438.42	540.30	0.906	0.946
8/31/1986	7.96	82.56	10.37	85.23	126.93	440.98	542.95	0.937	0.945
9/30/1986	7.75	79.00	10.19	65.83	127.17	443.35	544.92	0.755	0.945
10/31/1986	7.50	77.38	10.32	64.87	127.40	445.75	546.93	0.761	0.944
11/30/1986	7.71	78.08	10.12	64.56	127.63	448.10	548.87	0.749	0.943
12/31/1986	7.50	81.50	10.86	63.44	127.86	450.62	550.84	0.710	0.942
1/31/1987	7.89	80.90	10.26	68.21	128.11	453.13	552.95	0.765	0.941
2/28/1987	7.62	76.02	9.97	69.60	128.32	455.26	554.90	0.828	0.941
3/31/1987	7.65	78.40	10.24	78.34	128.56	457.69	557.33	0.906	0.940
4/30/1987	7.10	69.73	9.82	72.46	128.77	459.78	559.50	0.939	0.940
5/31/1987	7.21	78.58	10.89	68.81	129.00	462.22	561.64	0.799	0.940
6/30/1987	7.36	78.55	10.67	65.15	129.22	464.57	563.59	0.755	0.939
7/31/1987	7.45	82.90	11.13	69.60	129.45	467.14	565.75	0.767	0.938
8/31/1987	7.05	81.42	11.55	84.70	129.67	469.67	568.37	0.954	0.938
9/30/1987	6.32	91.26	14.43	64.99	129.86	472.40	570.32	0.664	0.937
10/31/1987	7.17	87.91	12.26	87.72	130.08	475.13	573.04	0.919	0.937
11/30/1987	6.21	91.42	14.71	83.59	130.26	477.87	575.55	0.853	0.936
12/31/1987	6.25	90.97	14.55	82.04	130.46	480.69	578.09	0.841	0.936

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1988	5.85	86.76	14.84	71.35	130.64	483.38	580.30	0.768	0.935
2/29/1988	5.71	84.42	14.78	75.32	130.80	485.83	582.49	0.833	0.935
3/31/1988	5.99	96.40	16.11	82.95	130.99	488.82	585.06	0.808	0.934
4/30/1988	5.86	92.99	15.87	82.95	131.17	491.61	587.55	0.837	0.934
5/31/1988	5.89	89.13	15.14	78.34	131.35	494.37	589.98	0.822	0.933
6/30/1988	5.99	90.58	15.13	86.29	131.53	497.09	592.57	0.891	0.933
7/31/1988	5.88	95.61	16.26	91.69	131.71	500.05	595.41	0.901	0.933
8/31/1988	5.75	94.68	16.47	96.30	131.89	502.99	598.39	0.956	0.933
9/30/1988	5.66	91.37	16.14	80.57	132.06	505.73	600.81	0.828	0.932
10/31/1988	5.44	86.61	15.94	80.09	132.23	508.41	603.29	0.868	0.932
11/30/1988	5.79	88.64	15.30	72.46	132.40	511.07	605.47	0.765	0.931
12/31/1988	5.66	93.71	16.55	98.68	132.58	513.98	608.53	0.990	0.932
1/31/1989	5.45	91.28	16.76	94.23	132.75	516.81	611.45	0.971	0.932
2/28/1989	5.29	86.39	16.32	82.63	132.89	519.23	613.76	0.899	0.932
3/31/1989	4.91	84.53	17.20	74.53	133.05	521.85	616.07	0.831	0.931
4/30/1989	4.93	85.51	17.33	67.69	133.19	524.41	618.10	0.746	0.931
5/31/1989	3.74	58.76	15.73	44.02	133.31	526.23	619.47	0.702	0.930
6/30/1989	4.66	78.03	16.74	70.24	133.45	528.57	621.57	0.847	0.930
7/31/1989	5.17	81.91	15.84	64.52	133.61	531.11	623.57	0.739	0.929
8/31/1989	5.32	61.95	11.65	47.20	133.77	533.03	625.04	0.699	0.928
9/30/1989	4.98	70.39	14.14	71.22	133.92	535.15	627.17	0.942	0.928
10/31/1989	4.55	70.50	15.50	73.93	134.06	537.33	629.47	0.982	0.928
11/30/1989	4.89	68.30	13.97	82.03	134.21	539.38	631.93	1.117	0.929
12/31/1989	4.17	65.17	15.64	89.51	134.34	541.40	634.70	1.287	0.930
1/31/1990	4.23	67.97	16.08	88.24	134.47	543.51	637.44	1.219	0.931
2/28/1990	4.35	68.38	15.72	103.18	134.59	545.42	640.33	1.415	0.932
3/31/1990	4.33	66.87	15.44	101.11	134.73	547.50	643.46	1.416	0.934
4/30/1990	4.19	70.49	16.83	103.65	134.85	549.61	646.57	1.384	0.935
5/31/1990	4.30	72.79	16.91	94.43	134.99	551.87	649.50	1.221	0.936
6/30/1990	4.46	74.62	16.71	101.43	135.12	554.11	652.54	1.279	0.938
7/31/1990	4.25	71.68	16.85	96.50	135.25	556.33	655.53	1.267	0.939
8/31/1990	4.39	71.91	16.39	100.16	135.39	558.56	658.64	1.309	0.940
9/30/1990	3.89	50.73	13.03	96.18	135.51	560.08	661.52	1.755	0.942
10/31/1990	3.85	58.74	15.24	95.86	135.62	561.90	664.49	1.527	0.943
11/30/1990	3.88	58.72	15.11	70.27	135.74	563.66	666.60	1.119	0.944
12/31/1990	3.72	54.00	14.50	77.58	135.86	565.34	669.01	1.340	0.945
1/31/1991	3.46	50.59	14.64	85.37	135.96	566.90	671.65	1.575	0.946
2/28/1991	4.01	90.57	22.58	82.04	136.08	569.44	673.95	0.866	0.946
3/31/1991	4.38	113.51	25.93	84.26	136.21	572.96	676.56	0.713	0.945
4/30/1991	4.11	117.31	28.54	87.60	136.34	576.48	679.19	0.720	0.944
5/31/1991	4.05	109.64	27.05	110.49	136.46	579.88	682.62	0.970	0.944
6/30/1991	4.03	113.26	28.09	85.05	136.58	583.27	685.17	0.724	0.943
7/31/1991	4.00	117.52	29.36	112.88	136.71	586.92	688.67	0.927	0.943
8/31/1991	4.10	125.17	30.53	91.41	136.83	590.80	691.50	0.706	0.941
9/30/1991	4.16	115.06	27.68	83.94	136.96	594.25	694.02	0.703	0.940
10/31/1991	3.80	119.43	31.46	84.42	137.08	597.95	696.64	0.684	0.939
11/30/1991	3.24	119.75	37.00	86.49	137.17	601.54	699.23	0.702	0.938
12/31/1991	3.27	116.18	35.52	87.12	137.27	605.15	701.93	0.728	0.937

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1/31/1992	3.06	126.75	41.43	90.94	137.37	609.07	704.75	0.700	0.936
2/29/1992	3.49	130.11	37.28	96.66	137.47	612.85	707.55	0.723	0.934
3/31/1992	3.52	119.10	33.86	70.91	137.58	616.54	709.75	0.577	0.933
4/30/1992	3.77	115.43	30.63	71.22	137.69	620.00	711.89	0.597	0.931
5/31/1992	3.37	108.15	32.08	84.42	137.80	623.36	714.51	0.756	0.930
6/30/1992	3.06	75.88	24.81	73.61	137.89	625.63	716.71	0.931	0.930
7/31/1992	3.27	78.39	24.00	79.65	137.99	628.06	719.18	0.974	0.930
8/31/1992	3.25	75.55	23.26	84.10	138.09	630.40	721.79	1.065	0.931
9/30/1992	3.17	69.21	21.84	91.57	138.19	632.48	724.54	1.262	0.932
10/31/1992	3.05	48.82	15.99	70.91	138.28	633.99	726.74	1.363	0.933
11/30/1992	3.08	70.99	23.04	80.13	138.37	636.12	729.14	1.079	0.933
12/31/1992	2.99	36.43	12.17	84.10	138.47	637.25	731.75	2.125	0.935
1/31/1993	3.17	56.22	17.73	80.45	138.56	639.00	734.24	1.351	0.936
2/28/1993	2.81	54.94	19.58	96.34	138.64	640.53	736.94	1.664	0.937
3/31/1993	2.90	54.60	18.82	94.59	138.73	642.23	739.87	1.641	0.939
4/30/1993	3.01	54.65	18.16	91.41	138.82	643.87	742.61	1.581	0.940
5/31/1993	2.94	55.09	18.72	90.14	138.91	645.57	745.41	1.549	0.942
6/30/1993	2.98	52.02	17.44	88.08	139.00	647.13	748.05	1.597	0.943
7/31/1993	2.90	56.88	19.63	105.88	139.09	648.90	751.33	1.767	0.945
8/31/1993	3.01	51.41	17.09	83.78	139.19	650.49	753.93	1.535	0.946
9/30/1993	2.89	52.69	18.25	85.85	139.27	652.07	756.50	1.541	0.948
10/31/1993	2.94	56.66	19.30	82.99	139.36	653.83	759.08	1.389	0.949
11/30/1993	2.92	51.94	17.77	72.97	139.45	655.39	761.27	1.327	0.949
12/31/1993	2.79	49.33	17.70	61.37	139.54	656.92	763.17	1.174	0.950
1/31/1994	2.46	42.48	17.24	63.27	139.61	658.23	765.13	1.404	0.951
2/28/1994	3.32	64.77	19.53	79.65	139.71	660.05	767.36	1.167	0.951
3/31/1994	3.30	69.60	21.10	91.89	139.81	662.20	770.21	1.258	0.952
4/30/1994	3.08	64.06	20.80	74.56	139.90	664.13	772.45	1.108	0.952
5/31/1994	2.40	47.29	19.66	61.21	139.98	665.59	774.34	1.229	0.953
6/30/1994	3.06	71.18	23.24	84.58	140.07	667.73	776.88	1.137	0.953
7/31/1994	2.73	58.23	21.33	84.90	140.15	669.53	779.51	1.389	0.954
8/31/1994	2.85	60.59	21.25	75.67	140.24	671.41	781.86	1.190	0.955
9/30/1994	2.96	68.25	23.07	86.96	140.33	673.46	784.47	1.219	0.956
10/31/1994	3.07	68.61	22.32	70.59	140.43	675.59	786.66	0.983	0.956
11/30/1994	3.02	65.78	21.81	74.56	140.52	677.56	788.89	1.081	0.956
12/31/1994	2.79	65.53	23.51	69.63	140.60	679.59	791.05	1.017	0.956
1/31/1995	2.73	57.01	20.90	65.02	140.69	681.36	793.07	1.086	0.957
2/28/1995	2.81	66.98	23.80	65.34	140.77	683.23	794.90	0.934	0.957
3/31/1995	2.74	65.11	23.77	78.38	140.85	685.25	797.33	1.153	0.957
4/30/1995	2.79	65.36	23.39	73.45	140.93	687.21	799.53	1.075	0.957
5/31/1995	2.75	67.61	24.63	79.33	141.02	689.31	801.99	1.125	0.958
6/30/1995	2.44	62.71	25.67	65.34	141.09	691.19	803.95	1.001	0.958
7/31/1995	2.70	65.38	24.20	72.18	141.18	693.22	806.19	1.058	0.958
8/31/1995	2.82	71.92	25.54	69.79	141.26	695.45	808.35	0.932	0.958
9/30/1995	2.68	69.86	26.05	70.91	141.34	697.54	810.48	0.976	0.958
10/31/1995	2.56	71.31	27.84	92.05	141.42	699.75	813.33	1.244	0.959
11/30/1995	2.61	72.79	27.91	64.55	141.50	701.94	815.27	0.855	0.959
12/31/1995	2.37	82.16	34.63	72.18	141.58	704.48	817.50	0.853	0.958

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1/31/1996	2.34	75.68	32.36	81.87	141.65	706.83	820.04	1.048	0.958
2/29/1996	2.39	72.94	30.52	84.90	141.72	708.94	822.50	1.125	0.959
3/31/1996	2.37	76.65	32.30	90.62	141.79	711.32	825.31	1.145	0.959
4/30/1996	2.42	78.74	32.47	85.85	141.86	713.68	827.89	1.056	0.960
5/31/1996	2.24	65.78	29.36	78.69	141.93	715.72	830.33	1.155	0.960
6/30/1996	2.50	75.21	30.10	80.60	142.01	717.98	832.75	1.036	0.960
7/31/1996	2.30	74.23	32.25	81.56	142.08	720.28	835.27	1.064	0.961
8/31/1996	2.24	69.15	30.84	68.36	142.15	722.42	837.39	0.956	0.961
9/30/1996	2.18	77.50	35.61	95.71	142.21	724.75	840.27	1.199	0.961
10/31/1996	2.14	70.90	33.10	81.40	142.28	726.95	842.79	1.113	0.962
11/30/1996	2.22	76.71	34.61	81.08	142.35	729.25	845.22	1.026	0.962
12/31/1996	2.19	74.25	33.97	79.65	142.41	731.55	847.69	1.041	0.962
1/31/1997	2.11	72.50	34.42	78.06	142.48	733.80	850.11	1.045	0.962
2/28/1997	2.04	71.52	35.13	79.01	142.54	735.80	852.32	1.073	0.963
3/31/1997	2.10	75.50	35.87	79.49	142.60	738.14	854.79	1.023	0.963
4/30/1997	2.15	73.53	34.25	78.22	142.67	740.35	857.13	1.032	0.963
5/31/1997	2.21	73.53	33.33	87.44	142.74	742.62	859.84	1.153	0.963
6/30/1997	2.06	65.32	31.66	73.93	142.80	744.58	862.06	1.095	0.964
7/31/1997	1.97	65.90	33.46	84.90	142.86	746.63	864.69	1.249	0.964
8/31/1997	2.15	55.11	25.65	72.62	142.92	748.34	866.94	1.266	0.965
9/30/1997	2.09	60.56	29.02	75.04	142.99	750.15	869.20	1.196	0.965
10/31/1997	2.00	60.49	30.20	75.99	143.05	752.03	871.55	1.214	0.966
11/30/1997	2.00	48.12	24.04	76.47	143.11	753.47	873.85	1.523	0.967
12/31/1997	2.02	57.47	28.48	73.29	143.17	755.25	876.12	1.230	0.967
1/31/1998	1.96	58.86	30.01	79.65	143.23	757.08	878.59	1.307	0.968
2/28/1998	1.93	54.05	28.05	77.10	143.29	758.59	880.75	1.375	0.969
3/31/1998	2.00	55.54	27.77	77.42	143.35	760.31	883.15	1.343	0.970
4/30/1998	1.98	60.65	30.68	75.36	143.41	762.13	885.41	1.201	0.970
5/31/1998	1.95	65.05	33.41	77.42	143.47	764.15	887.81	1.154	0.971
6/30/1998	2.02	64.51	31.99	83.62	143.53	766.08	890.31	1.255	0.971
7/31/1998	1.97	59.46	30.14	69.95	143.59	767.93	892.48	1.137	0.971
8/31/1998	2.04	61.43	30.08	68.04	143.65	769.83	894.59	1.070	0.972
9/30/1998	2.01	63.65	31.67	59.78	143.71	771.74	896.39	0.909	0.972
10/31/1998	2.05	66.36	32.40	64.71	143.78	773.80	898.39	0.944	0.971
11/30/1998	2.02	59.18	29.32	70.75	143.84	775.57	900.51	1.154	0.972
12/31/1998	1.96	61.52	31.31	76.31	143.90	777.48	902.88	1.200	0.972
1/31/1999	1.99	65.05	32.63	74.40	143.96	779.50	905.19	1.108	0.973
2/28/1999	1.77	49.76	28.04	59.14	144.01	780.89	906.84	1.145	0.973
3/31/1999	1.86	56.74	30.51	66.29	144.07	782.65	908.90	1.130	0.973
4/30/1999	1.86	57.72	31.09	75.20	144.12	784.38	911.15	1.260	0.974
5/31/1999	1.81	53.71	29.60	79.65	144.18	786.05	913.62	1.432	0.975
6/30/1999	1.65	52.70	32.04	73.93	144.23	787.63	915.84	1.358	0.975
7/31/1999	1.21	53.24	43.95	72.97	144.27	789.28	918.10	1.339	0.976
8/31/1999	1.23	56.41	45.72	82.99	144.30	791.03	920.67	1.438	0.977
9/30/1999	1.24	47.76	38.67	81.24	144.34	792.46	923.11	1.656	0.978
10/31/1999	1.05	45.06	42.98	82.35	144.37	793.86	925.67	1.784	0.979
11/30/1999	1.00	44.24	44.09	81.56	144.40	795.18	928.11	1.801	0.980
12/31/1999	1.04	45.27	43.65	108.58	144.44	796.59	931.48	2.342	0.982

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/2000	0.97	44.82	46.00	108.90	144.47	797.98	934.85	2.376	0.984
2/29/2000	0.85	37.26	43.84	97.61	144.49	799.06	937.68	2.558	0.986
3/31/2000	0.95	41.47	43.80	99.68	144.52	800.34	940.77	2.347	0.988
4/30/2000	0.94	40.91	43.36	84.58	144.55	801.57	943.31	2.019	0.989
5/31/2000	0.86	37.64	43.87	78.06	144.58	802.74	945.73	2.025	0.991
6/30/2000	0.99	45.38	45.84	73.61	144.61	804.10	947.94	1.586	0.992
7/31/2000	1.03	39.95	38.77	91.25	144.64	805.34	950.77	2.224	0.993
8/31/2000	0.90	38.87	43.19	92.85	144.67	806.54	953.65	2.332	0.995
9/30/2000	0.94	37.98	40.55	91.41	144.69	807.68	956.39	2.346	0.997
10/31/2000	0.91	44.07	48.53	79.65	144.72	809.05	958.86	1.769	0.998
11/30/2000	0.85	37.13	43.77	75.52	144.75	810.16	961.12	1.986	0.999
12/31/2000	0.86	36.87	42.64	83.62	144.77	811.30	963.72	2.214	1.000
1/31/2001	0.82	33.74	41.09	90.94	144.80	812.35	966.54	2.628	1.002
2/28/2001	0.81	32.74	40.57	70.90	144.82	813.27	968.52	2.111	1.003
3/31/2001	0.78	36.06	46.48	64.71	144.85	814.38	970.53	1.755	1.004
4/30/2001	0.77	35.01	45.27	52.15	144.87	815.43	972.09	1.456	1.005
5/31/2001	0.77	31.71	41.31	39.43	144.89	816.42	973.31	1.212	1.005
6/30/2001	0.75	34.60	46.33	38.00	144.92	817.46	974.45	1.074	1.005
7/31/2001	0.72	34.27	47.75	80.28	144.94	818.52	976.94	2.292	1.006
8/31/2001	0.61	31.84	51.82	81.40	144.96	819.50	979.47	2.505	1.008
9/30/2001	0.71	33.61	47.33	95.23	144.98	820.51	982.32	2.772	1.010
10/31/2001	0.77	31.06	40.11	99.20	145.00	821.48	985.40	3.113	1.012
11/30/2001	0.75	30.78	40.95	99.84	145.02	822.40	988.39	3.163	1.014
12/31/2001	0.75	32.21	42.86	102.38	145.05	823.40	991.57	3.102	1.016
1/31/2002	0.74	31.83	42.90	86.48	145.07	824.38	994.25	2.652	1.018
2/28/2002	0.67	34.74	52.16	101.27	145.09	825.36	997.08	2.857	1.020
3/31/2002	0.68	39.68	58.30	103.81	145.11	826.59	1000.30	2.570	1.022
4/30/2002	0.72	39.02	53.95	106.68	145.13	827.76	1003.50	2.681	1.024
5/31/2002	0.61	49.12	80.57	114.95	145.15	829.28	1007.07	2.310	1.026
6/30/2002	0.58	48.81	83.68	117.37	145.17	830.75	1010.59	2.375	1.028
7/31/2002	0.51	33.06	65.28	109.81	145.18	831.77	1013.99	3.269	1.030
8/31/2002	0.28	3.73	13.21	129.42	145.19	831.89	1018.00	32.164	1.034
9/30/2002	0.34	4.43	12.97	108.25	145.20	832.02	1021.25	22.604	1.037
10/31/2002	0.31	4.33	14.13	83.48	145.21	832.15	1023.84	17.950	1.040
11/30/2002	0.38	7.41	19.42	86.10	145.22	832.38	1026.42	11.019	1.042
12/31/2002	4.53	59.30	13.10	179.61	145.36	834.21	1031.99	2.804	1.046
1/31/2003	3.68	63.89	17.36	212.61	145.48	836.19	1038.58	3.138	1.050
2/28/2003	3.14	66.65	21.22	187.21	145.57	838.06	1043.82	2.677	1.053
3/31/2003	2.96	61.89	20.90	176.74	145.66	839.98	1049.30	2.719	1.057
4/30/2003	2.94	61.62	20.96	196.27	145.75	841.83	1055.19	3.033	1.061
5/31/2003	2.95	61.90	21.01	188.87	145.84	843.75	1061.04	2.906	1.064
6/30/2003	2.87	61.32	21.33	188.83	145.92	845.59	1066.71	2.935	1.068
7/31/2003	2.83	60.60	21.40	183.39	146.01	847.46	1072.39	2.885	1.072
8/31/2003	2.86	58.14	20.32	44.81	146.10	849.27	1073.78	0.733	1.071
9/30/2003	3.04	56.35	18.52	45.57	146.19	850.96	1075.15	0.765	1.070
10/31/2003	3.66	62.51	17.07	79.94	146.31	852.90	1077.63	1.205	1.071
11/30/2003	8.30	73.99	8.91	191.90	146.55	855.11	1083.38	2.320	1.074
12/31/2003	10.42	126.73	12.16	241.10	146.88	859.04	1090.86	1.751	1.077

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/2004	9.48	131.25	13.85	239.87	147.17	863.11	1098.29	1.699	1.079
2/29/2004	8.61	120.68	14.01	111.48	147.42	866.61	1101.53	0.859	1.078
3/31/2004	8.07	126.02	15.62	221.70	147.67	870.52	1108.40	1.648	1.081
4/30/2004	7.55	126.15	16.72	257.18	147.90	874.30	1116.12	1.918	1.084
5/31/2004	6.22	122.51	19.69	254.29	148.09	878.10	1124.00	1.971	1.087
6/30/2004	6.59	125.00	18.97	257.58	148.29	881.85	1131.73	1.953	1.091
7/31/2004	7.02	124.21	17.71	252.53	148.51	885.70	1139.55	1.919	1.094
8/31/2004	6.25	124.40	19.90	257.99	148.70	889.56	1147.55	1.970	1.097
9/30/2004	6.56	122.34	18.64	254.05	148.90	893.23	1155.17	1.966	1.101
10/31/2004	6.31	127.05	20.12	254.09	149.09	897.17	1163.05	1.901	1.104
11/30/2004	4.97	121.67	24.49	286.17	149.24	900.82	1171.64	2.255	1.108
12/31/2004	5.22	121.03	23.20	326.73	149.40	904.57	1181.76	2.583	1.113
1/31/2005	5.15	126.28	24.53	357.60	149.56	908.48	1192.85	2.716	1.119
2/28/2005	4.96	126.58	25.50	372.85	149.70	912.03	1203.29	2.829	1.125
3/31/2005	4.99	124.49	24.96	370.83	149.86	915.89	1214.79	2.859	1.132
4/30/2005	4.70	124.55	26.53	366.07	150.00	919.62	1225.77	2.827	1.138
5/31/2005	4.05	128.37	31.71	352.50	150.12	923.60	1236.69	2.658	1.144
6/30/2005	4.80	121.38	25.31	383.89	150.27	927.24	1248.21	3.037	1.150
7/31/2005	4.99	123.94	24.84	392.21	150.42	931.09	1260.37	3.036	1.157
8/31/2005	5.23	118.41	22.65	389.70	150.58	934.76	1272.45	3.145	1.164
9/30/2005	5.52	123.28	22.32	385.55	150.75	938.46	1284.02	2.987	1.171
10/31/2005	5.36	128.77	24.01	271.51	150.91	942.45	1292.43	2.020	1.174
11/30/2005	4.87	129.36	26.58	360.75	151.06	946.33	1303.26	2.683	1.179
12/31/2005	4.23	131.13	30.99	360.61	151.19	950.39	1314.44	2.660	1.185
1/31/2006	4.35	132.41	30.42	350.44	151.33	954.50	1325.30	2.558	1.190
2/28/2006	3.85	137.38	35.71	347.47	151.43	958.34	1335.03	2.457	1.195
3/31/2006	4.12	137.25	33.35	345.40	151.56	962.60	1345.74	2.440	1.200
4/30/2006	3.35	137.51	41.02	319.12	151.66	966.72	1355.31	2.263	1.204
5/31/2006	5.15	134.56	26.11	340.13	151.82	970.90	1365.85	2.430	1.208
6/30/2006	4.70	130.61	27.81	343.95	151.96	974.81	1376.17	2.538	1.213
7/31/2006	4.25	131.00	30.80	342.80	152.10	978.88	1386.80	2.530	1.218
8/31/2006	4.18	128.04	30.66	332.73	152.22	982.84	1397.11	2.513	1.223
9/30/2006	4.30	131.43	30.58	346.29	152.35	986.79	1407.50	2.547	1.227
10/31/2006	4.34	129.40	29.81	343.95	152.49	990.80	1418.16	2.568	1.232
11/30/2006	3.75	135.24	36.07	357.75	152.60	994.86	1428.90	2.571	1.237
12/31/2006	4.03	141.13	35.02	381.76	152.73	999.23	1440.73	2.626	1.242
1/31/2007	4.22	138.26	32.77	345.25	152.86	1003.52	1451.43	2.420	1.247
2/28/2007	4.42	132.96	30.05	358.30	152.98	1007.24	1461.47	2.604	1.251
3/31/2007	4.28	132.63	31.02	353.21	153.11	1011.35	1472.42	2.576	1.256
4/30/2007	4.19	133.42	31.86	349.86	153.24	1015.35	1482.91	2.538	1.261
5/31/2007	3.99	131.51	33.00	332.30	153.36	1019.43	1493.21	2.449	1.265
6/30/2007	3.24	128.74	39.68	215.33	153.46	1023.29	1499.67	1.629	1.266
7/31/2007	3.40	128.23	37.75	189.42	153.56	1027.27	1505.55	1.437	1.267
8/31/2007	3.66	128.55	35.16	165.28	153.68	1031.25	1510.67	1.248	1.267
9/30/2007	3.54	130.13	36.73	160.41	153.78	1035.16	1515.48	1.198	1.266
10/31/2007	3.56	130.34	36.64	165.88	153.89	1039.20	1520.62	1.237	1.266
11/30/2007	3.54	130.78	36.93	166.46	154.00	1043.12	1525.62	1.238	1.266
12/31/2007	3.35	132.60	39.55	165.81	154.10	1047.23	1530.76	1.218	1.266

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/2008	3.40	131.31	38.63	163.23	154.21	1051.30	1535.82	1.210	1.266
2/29/2008	3.21	128.57	40.02	161.87	154.30	1055.03	1540.51	1.227	1.266
3/31/2008	3.47	132.06	38.01	151.43	154.41	1059.12	1545.21	1.116	1.265
4/30/2008	3.52	130.88	37.22	166.14	154.52	1063.05	1550.19	1.235	1.265
5/31/2008	3.53	128.82	36.54	153.95	154.63	1067.04	1554.96	1.162	1.265
6/30/2008	3.32	123.82	37.27	150.20	154.73	1070.76	1559.47	1.180	1.265
7/31/2008	3.01	119.25	39.66	135.72	154.82	1074.46	1563.68	1.109	1.264
8/31/2008	3.36	122.52	36.45	146.86	154.92	1078.25	1568.23	1.165	1.264
9/30/2008	3.40	126.30	37.13	153.44	155.03	1082.04	1572.83	1.181	1.264
10/31/2008	3.60	129.94	36.10	164.46	155.14	1086.07	1577.93	1.230	1.263
11/30/2008	3.52	132.46	37.68	189.49	155.24	1090.04	1583.61	1.392	1.264
12/31/2008	3.21	126.77	39.53	192.03	155.34	1093.97	1589.57	1.476	1.264
1/31/2009	3.47	133.26	38.39	180.80	155.45	1098.11	1595.17	1.321	1.265
2/28/2009	3.48	133.07	38.28	175.87	155.55	1101.83	1600.10	1.286	1.265
3/31/2009	3.48	134.30	38.54	186.23	155.65	1105.99	1605.87	1.350	1.265
4/30/2009	3.40	133.88	39.39	194.78	155.76	1110.01	1611.71	1.417	1.266
5/31/2009	3.00	131.83	43.95	168.29	155.85	1114.10	1616.93	1.247	1.265
6/30/2009	3.14	130.48	41.56	169.59	155.94	1118.01	1622.02	1.268	1.265
7/31/2009	2.98	125.68	42.14	166.30	156.04	1121.91	1627.17	1.291	1.266
8/31/2009	2.85	125.89	44.21	158.17	156.12	1125.81	1632.08	1.227	1.265
9/30/2009	2.93	127.31	43.39	160.18	156.21	1129.63	1636.88	1.228	1.265
10/31/2009	2.96	128.89	43.48	172.18	156.30	1133.63	1642.22	1.304	1.265
11/30/2009	2.88	130.22	45.22	181.09	156.39	1137.53	1647.65	1.359	1.266
12/31/2009	2.90	130.19	44.87	194.24	156.48	1141.57	1653.67	1.458	1.266
1/31/2010	2.85	130.04	45.63	207.72	156.57	1145.60	1660.11	1.561	1.267
2/28/2010	2.84	126.39	44.55	190.69	156.65	1149.14	1665.45	1.474	1.268
3/31/2010	2.78	124.44	44.79	163.14	156.73	1153.00	1670.51	1.281	1.268
4/30/2010	2.48	117.10	47.28	137.72	156.81	1156.51	1674.64	1.151	1.268
5/31/2010	2.58	124.15	48.06	137.81	156.89	1160.36	1678.91	1.086	1.267
6/30/2010	2.67	127.71	47.89	130.97	156.97	1164.19	1682.84	1.004	1.266
7/31/2010	2.33	118.07	50.78	116.19	157.04	1167.85	1686.44	0.964	1.265
8/31/2010	2.42	124.97	51.73	98.59	157.12	1171.72	1689.50	0.773	1.264
9/30/2010	2.31	123.19	53.38	56.86	157.19	1175.42	1691.21	0.453	1.262
10/31/2010	2.32	125.05	53.81	150.01	157.26	1179.30	1695.86	1.177	1.261
11/30/2010	2.25	125.79	55.78	159.61	157.32	1183.07	1700.65	1.245	1.261
12/31/2010	2.10	133.64	63.76	159.42	157.39	1187.21	1705.59	1.174	1.261
1/31/2011	2.10	137.59	65.49	166.36	157.45	1191.48	1710.74	1.190	1.261
2/28/2011	2.36	135.53	57.40	173.13	157.52	1195.27	1715.59	1.254	1.261
3/31/2011	2.48	135.35	54.63	168.58	157.60	1199.47	1720.82	1.222	1.261
4/30/2011	1.50	87.96	58.69	167.30	157.64	1202.11	1725.84	1.869	1.262
5/31/2011	1.13	70.71	62.69	171.75	157.68	1204.30	1731.16	2.389	1.264
6/30/2011	1.20	74.27	62.10	102.18	157.71	1206.53	1734.23	1.353	1.264
7/31/2011	0.96	71.04	73.72		157.74	1208.73	1734.23	0.000	1.262
8/31/2011	2.28	123.82	54.24	125.88	157.81	1212.57	1738.13	0.997	1.261
9/30/2011	2.36	130.04	55.19	150.72	157.88	1216.47	1742.65	1.137	1.261
10/31/2011	2.28	131.77	57.73	173.03	157.96	1220.55	1748.01	1.290	1.261
11/30/2011	2.22	135.67	61.13	184.34	158.02	1224.62	1753.54	1.336	1.261
12/31/2011	2.04	134.61	65.95	179.16	158.09	1228.80	1759.10	1.310	1.261

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/2012	2.10	131.64	62.57	176.43	158.15	1232.88	1764.57	1.318	1.261
2/29/2012	2.10	134.89	64.28	186.24	158.21	1236.79	1769.97	1.358	1.262
3/31/2012	2.10	134.07	63.87	196.78	158.28	1240.95	1776.07	1.444	1.262
4/30/2012	1.99	130.91	65.77	196.69	158.34	1244.87	1781.97	1.479	1.263
5/31/2012	1.93	133.02	69.09	140.25	158.40	1249.00	1786.32	1.039	1.262
6/30/2012	1.85	131.41	70.98	131.93	158.45	1252.94	1790.28	0.989	1.261
7/31/2012	1.71	123.75	72.49	125.49	158.50	1256.77	1794.17	1.000	1.261
8/31/2012	1.56	116.63	74.61	123.28	158.55	1260.39	1797.99	1.042	1.260
9/30/2012	1.63	130.56	80.26	128.77	158.60	1264.31	1801.85	0.974	1.259
10/31/2012	1.70	124.47	73.30	125.97	158.65	1268.17	1805.76	0.998	1.259
11/30/2012	1.81	130.21	71.74	133.92	158.71	1272.07	1809.77	1.014	1.258
12/31/2012	1.75	127.99	73.10	131.94	158.76	1276.04	1813.86	1.016	1.257

Pattern: 00/12-11-009-25Inj Set: ERoutledgeUnit#1

Oil Formation Vol Factor : 1.05000 m3/m3

Water Formation Vol Factor : 1.00000 m3/m3

Water / Oil Ratio : 77.57 m3/m3

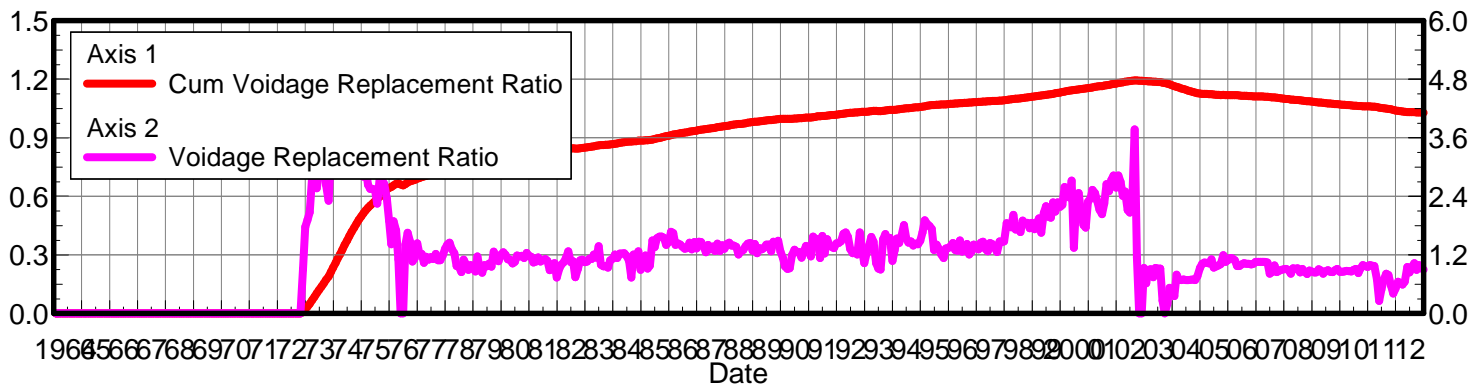
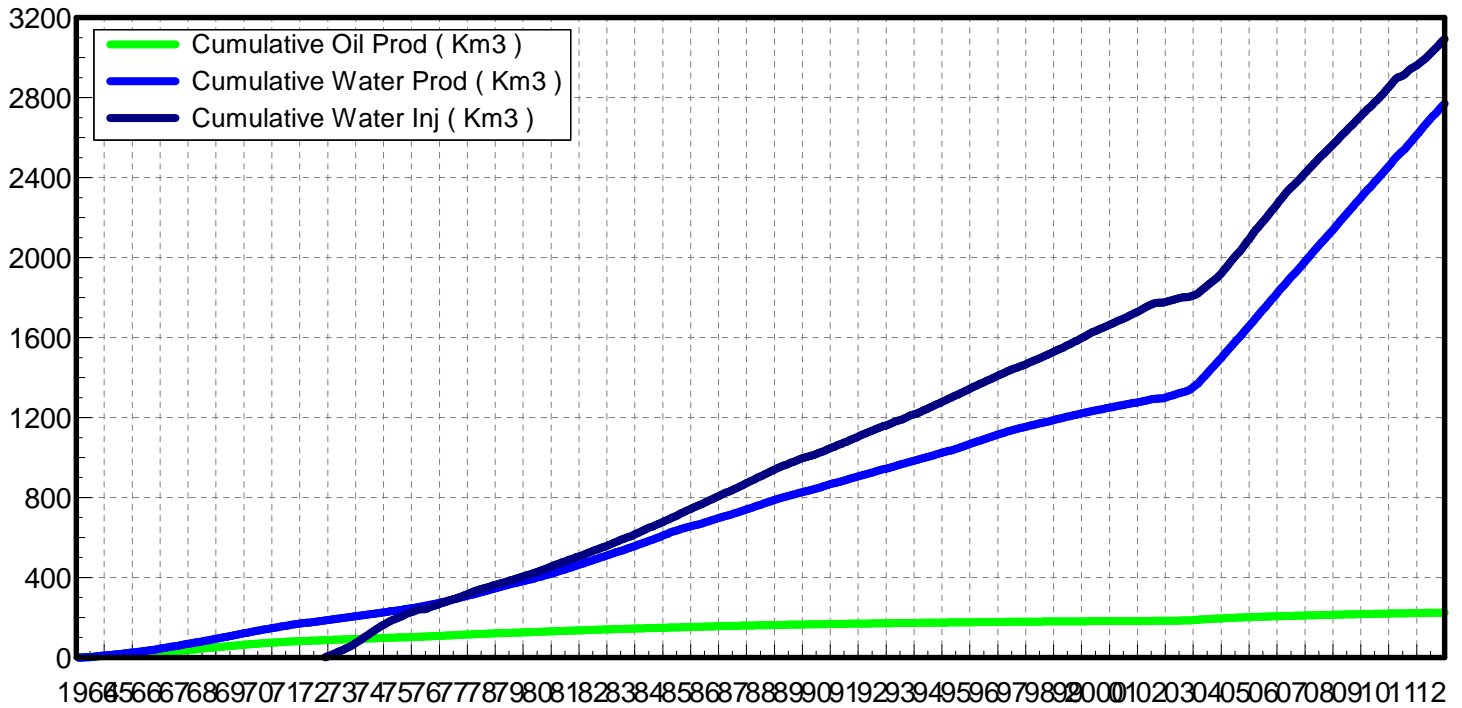
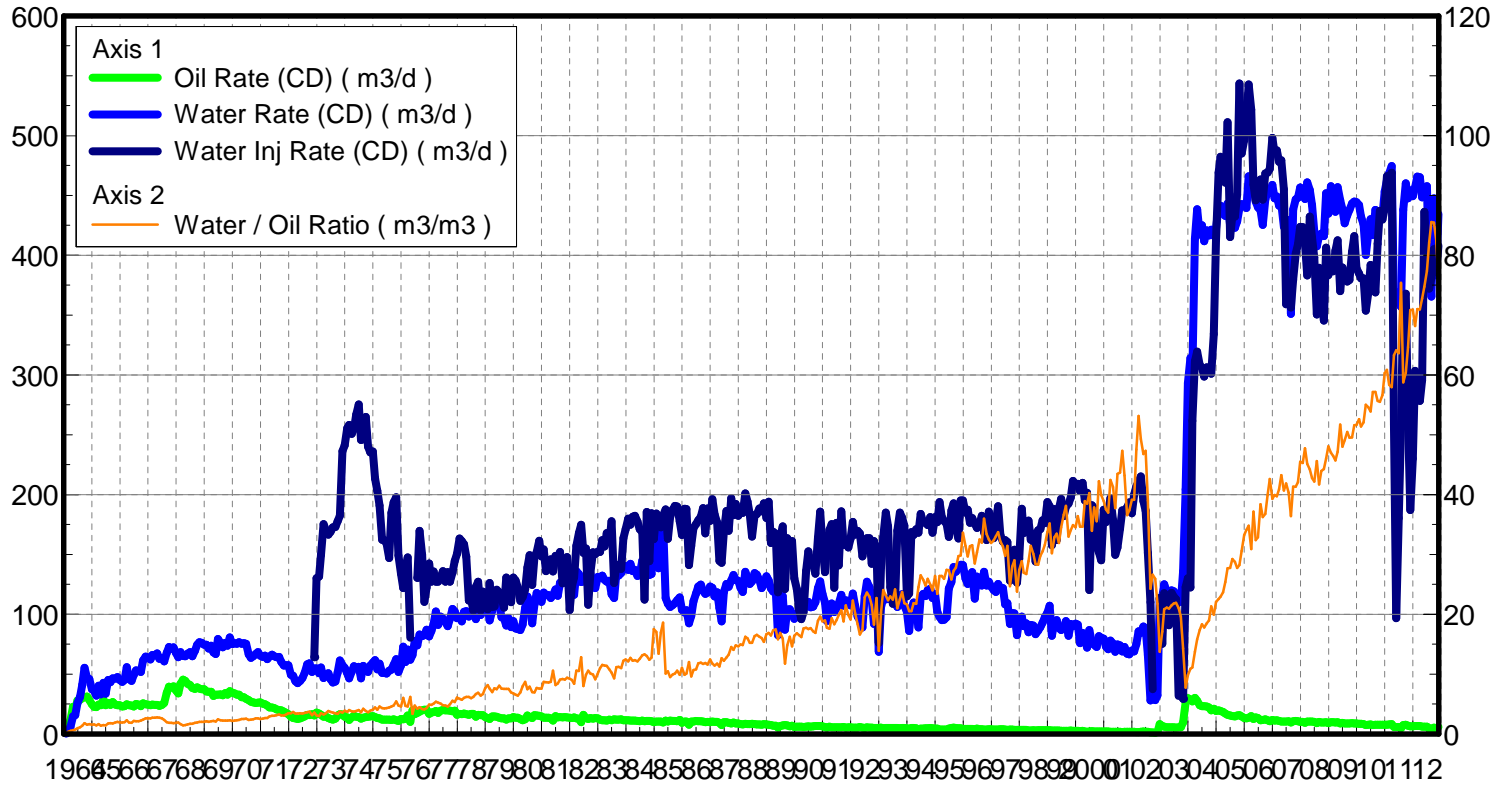
February 28, 2013

Operator: Tundra_O&G_Prtshp

Oil Rate (CD) : 5.70 m3/d

Water Rate (CD) : 441.78 m3/d

Water Inj Rate (CD) : 402.96 m3/d



Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1964	2.49	0.37	0.15		0.08	0.01	0.00	0.000	0.000
2/29/1964	6.68	2.33	0.35		0.27	0.08	0.00	0.000	0.000
3/31/1964	11.29	5.79	0.51		0.62	0.26	0.00	0.000	0.000
4/30/1964	22.72	14.62	0.64		1.30	0.70	0.00	0.000	0.000
5/31/1964	20.84	15.68	0.75		1.95	1.18	0.00	0.000	0.000
6/30/1964	27.93	25.79	0.92		2.79	1.96	0.00	0.000	0.000
7/31/1964	28.38	30.80	1.09		3.67	2.91	0.00	0.000	0.000
8/31/1964	29.87	41.14	1.38		4.59	4.19	0.00	0.000	0.000
9/30/1964	30.97	55.24	1.78		5.52	5.84	0.00	0.000	0.000
10/31/1964	31.05	46.69	1.50		6.48	7.29	0.00	0.000	0.000
11/30/1964	28.16	45.88	1.63		7.33	8.67	0.00	0.000	0.000
12/31/1964	24.75	37.34	1.51		8.10	9.83	0.00	0.000	0.000
1/31/1965	22.71	36.09	1.59		8.80	10.94	0.00	0.000	0.000
2/28/1965	22.37	31.96	1.43		9.43	11.84	0.00	0.000	0.000
3/31/1965	24.47	40.28	1.65		10.18	13.09	0.00	0.000	0.000
4/30/1965	23.91	33.11	1.38		10.90	14.08	0.00	0.000	0.000
5/31/1965	28.77	42.76	1.49		11.79	15.41	0.00	0.000	0.000
6/30/1965	24.09	33.69	1.40		12.52	16.42	0.00	0.000	0.000
7/31/1965	25.70	45.13	1.76		13.31	17.82	0.00	0.000	0.000
8/31/1965	24.18	43.09	1.78		14.06	19.15	0.00	0.000	0.000
9/30/1965	26.52	46.40	1.75		14.86	20.54	0.00	0.000	0.000
10/31/1965	24.38	46.11	1.89		15.61	21.97	0.00	0.000	0.000
11/30/1965	23.87	47.47	1.99		16.33	23.40	0.00	0.000	0.000
12/31/1965	23.83	45.20	1.90		17.07	24.80	0.00	0.000	0.000
1/31/1966	22.82	43.58	1.91		17.78	26.15	0.00	0.000	0.000
2/28/1966	23.20	45.18	1.95		18.43	27.42	0.00	0.000	0.000
3/31/1966	24.71	55.71	2.25		19.19	29.14	0.00	0.000	0.000
4/30/1966	23.97	45.98	1.92		19.91	30.52	0.00	0.000	0.000
5/31/1966	23.61	44.21	1.87		20.64	31.89	0.00	0.000	0.000
6/30/1966	22.81	49.33	2.16		21.33	33.37	0.00	0.000	0.000
7/31/1966	25.01	53.19	2.13		22.10	35.02	0.00	0.000	0.000
8/31/1966	24.61	52.44	2.13		22.87	36.65	0.00	0.000	0.000
9/30/1966	23.15	51.81	2.24		23.56	38.20	0.00	0.000	0.000
10/31/1966	25.69	61.40	2.39		24.36	40.10	0.00	0.000	0.000
11/30/1966	24.72	64.48	2.61		25.10	42.04	0.00	0.000	0.000
12/31/1966	24.52	63.84	2.60		25.86	44.02	0.00	0.000	0.000
1/31/1967	23.84	62.20	2.61		26.60	45.95	0.00	0.000	0.000
2/28/1967	24.58	65.89	2.68		27.29	47.79	0.00	0.000	0.000
3/31/1967	24.32	65.72	2.70		28.04	49.83	0.00	0.000	0.000
4/30/1967	24.21	67.19	2.78		28.77	51.84	0.00	0.000	0.000
5/31/1967	23.41	62.77	2.68		29.49	53.79	0.00	0.000	0.000
6/30/1967	24.23	63.59	2.62		30.22	55.70	0.00	0.000	0.000
7/31/1967	25.91	60.69	2.34		31.02	57.58	0.00	0.000	0.000
8/31/1967	34.34	67.70	1.97		32.09	59.68	0.00	0.000	0.000
9/30/1967	39.48	72.50	1.84		33.27	61.85	0.00	0.000	0.000
10/31/1967	38.79	70.96	1.83		34.47	64.05	0.00	0.000	0.000
11/30/1967	39.84	72.23	1.81		35.67	66.22	0.00	0.000	0.000
12/31/1967	36.17	67.56	1.87		36.79	68.31	0.00	0.000	0.000

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1968	33.76	63.95	1.89		37.84	70.30	0.00	0.000	0.000
2/29/1968	41.81	68.27	1.63		39.05	72.28	0.00	0.000	0.000
3/31/1968	45.27	65.12	1.44		40.45	74.29	0.00	0.000	0.000
4/30/1968	44.27	64.75	1.46		41.78	76.24	0.00	0.000	0.000
5/31/1968	41.77	67.13	1.61		43.07	78.32	0.00	0.000	0.000
6/30/1968	40.93	68.27	1.67		44.30	80.37	0.00	0.000	0.000
7/31/1968	38.42	64.94	1.69		45.49	82.38	0.00	0.000	0.000
8/31/1968	37.73	69.51	1.84		46.66	84.53	0.00	0.000	0.000
9/30/1968	38.99	74.52	1.91		47.83	86.77	0.00	0.000	0.000
10/31/1968	37.79	76.76	2.03		49.00	89.15	0.00	0.000	0.000
11/30/1968	37.42	76.05	2.03		50.13	91.43	0.00	0.000	0.000
12/31/1968	37.43	74.46	1.99		51.29	93.74	0.00	0.000	0.000
1/31/1969	35.41	74.54	2.10		52.38	96.05	0.00	0.000	0.000
2/28/1969	35.29	71.25	2.02		53.37	98.04	0.00	0.000	0.000
3/31/1969	35.11	73.59	2.10		54.46	100.33	0.00	0.000	0.000
4/30/1969	31.58	67.99	2.15		55.41	102.37	0.00	0.000	0.000
5/31/1969	32.73	66.72	2.04		56.42	104.43	0.00	0.000	0.000
6/30/1969	32.84	79.37	2.42		57.41	106.81	0.00	0.000	0.000
7/31/1969	33.09	76.01	2.30		58.43	109.17	0.00	0.000	0.000
8/31/1969	32.33	72.49	2.24		59.44	111.42	0.00	0.000	0.000
9/30/1969	34.24	76.13	2.22		60.46	113.70	0.00	0.000	0.000
10/31/1969	32.80	73.77	2.25		61.48	115.99	0.00	0.000	0.000
11/30/1969	35.70	80.58	2.26		62.55	118.41	0.00	0.000	0.000
12/31/1969	34.42	75.12	2.18		63.62	120.74	0.00	0.000	0.000
1/31/1970	33.72	75.75	2.25		64.66	123.08	0.00	0.000	0.000
2/28/1970	32.76	75.21	2.30		65.58	125.19	0.00	0.000	0.000
3/31/1970	32.78	76.67	2.34		66.60	127.57	0.00	0.000	0.000
4/30/1970	30.56	75.36	2.47		67.51	129.83	0.00	0.000	0.000
5/31/1970	30.54	75.82	2.48		68.46	132.18	0.00	0.000	0.000
6/30/1970	29.37	75.27	2.56		69.34	134.44	0.00	0.000	0.000
7/31/1970	28.27	66.59	2.36		70.22	136.50	0.00	0.000	0.000
8/31/1970	26.76	63.55	2.37		71.05	138.47	0.00	0.000	0.000
9/30/1970	26.48	64.92	2.45		71.84	140.42	0.00	0.000	0.000
10/31/1970	25.90	66.64	2.57		72.65	142.48	0.00	0.000	0.000
11/30/1970	26.23	68.31	2.60		73.43	144.53	0.00	0.000	0.000
12/31/1970	26.46	65.36	2.47		74.25	146.56	0.00	0.000	0.000
1/31/1971	25.26	64.29	2.54		75.04	148.55	0.00	0.000	0.000
2/28/1971	24.71	65.44	2.65		75.73	150.38	0.00	0.000	0.000
3/31/1971	23.63	62.47	2.64		76.46	152.32	0.00	0.000	0.000
4/30/1971	22.15	64.67	2.92		77.12	154.26	0.00	0.000	0.000
5/31/1971	21.98	66.27	3.02		77.81	156.32	0.00	0.000	0.000
6/30/1971	21.47	64.74	3.02		78.45	158.26	0.00	0.000	0.000
7/31/1971	20.37	64.02	3.14		79.08	160.24	0.00	0.000	0.000
8/31/1971	19.86	64.26	3.24		79.70	162.23	0.00	0.000	0.000
9/30/1971	19.66	60.19	3.06		80.29	164.04	0.00	0.000	0.000
10/31/1971	18.48	57.15	3.09		80.86	165.81	0.00	0.000	0.000
11/30/1971	17.60	57.44	3.26		81.39	167.53	0.00	0.000	0.000
12/31/1971	16.56	57.46	3.47		81.90	169.32	0.00	0.000	0.000

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1972	14.34	49.23	3.43		82.34	170.84	0.00	0.000	0.000
2/29/1972	13.17	48.43	3.68		82.73	172.25	0.00	0.000	0.000
3/31/1972	12.90	44.12	3.42		83.13	173.61	0.00	0.000	0.000
4/30/1972	12.53	42.44	3.39		83.50	174.89	0.00	0.000	0.000
5/31/1972	12.93	44.37	3.43		83.90	176.26	0.00	0.000	0.000
6/30/1972	13.84	46.72	3.38		84.32	177.66	0.00	0.000	0.000
7/31/1972	14.60	50.90	3.49		84.77	179.24	0.00	0.000	0.000
8/31/1972	16.04	58.07	3.62		85.27	181.04	0.00	0.000	0.000
9/30/1972	15.79	58.95	3.73		85.74	182.81	0.00	0.000	0.000
10/31/1972	16.38	51.75	3.16		86.25	184.41	0.00	0.000	0.000
11/30/1972	15.37	54.75	3.56	64.16	86.71	186.06	1.92	0.905	0.007
12/31/1972	17.77	54.71	3.08	130.01	87.26	187.75	5.96	1.772	0.021
1/31/1973	17.13	50.58	2.95	131.35	87.79	189.32	10.03	1.915	0.036
2/28/1973	16.02	55.46	3.46	149.76	88.24	190.87	14.22	2.072	0.050
3/31/1973	14.41	46.61	3.23	175.43	88.69	192.32	19.66	2.841	0.069
4/30/1973	14.48	49.68	3.43	170.55	89.12	193.81	24.78	2.628	0.086
5/31/1973	13.35	50.80	3.80	166.46	89.54	195.38	29.94	2.568	0.103
6/30/1973	12.40	45.51	3.67	168.77	89.91	196.75	35.00	2.884	0.120
7/31/1973	11.99	42.81	3.57	172.57	90.28	198.08	40.35	3.115	0.138
8/31/1973	12.65	43.78	3.46	172.85	90.67	199.43	45.71	3.029	0.155
9/30/1973	15.40	51.30	3.33	177.76	91.13	200.97	51.04	2.635	0.172
10/31/1973	16.51	61.44	3.72	182.26	91.65	202.88	56.69	2.314	0.190
11/30/1973	16.11	57.36	3.56	236.22	92.13	204.60	63.78	3.181	0.212
12/31/1973	14.27	55.29	3.87	241.22	92.57	206.31	71.25	3.433	0.235
1/31/1974	13.80	50.61	3.67	255.58	93.00	207.88	79.18	3.926	0.259
2/28/1974	11.60	46.38	4.00	258.15	93.32	209.18	86.41	4.408	0.281
3/31/1974	13.71	52.03	3.80	250.79	93.75	210.79	94.18	3.775	0.305
4/30/1974	15.21	56.48	3.71	254.83	94.21	212.49	101.82	3.517	0.327
5/31/1974	14.43	55.46	3.84	266.65	94.65	214.21	110.09	3.776	0.351
6/30/1974	13.98	55.98	4.01	275.40	95.07	215.89	118.35	3.898	0.375
7/31/1974	12.72	46.32	3.64	245.52	95.47	217.32	125.96	4.114	0.397
8/31/1974	13.44	56.76	4.22	246.24	95.88	219.08	133.60	3.475	0.418
9/30/1974	14.01	53.62	3.83	264.87	96.30	220.69	141.54	3.876	0.440
10/31/1974	14.28	51.72	3.62	240.01	96.75	222.29	148.98	3.598	0.460
11/30/1974	14.64	57.21	3.91	235.09	97.19	224.01	156.04	3.239	0.479
12/31/1974	14.74	59.51	4.04	236.06	97.64	225.85	163.35	3.148	0.497
1/31/1975	13.96	61.55	4.41	213.42	98.08	227.76	169.97	2.800	0.514
2/28/1975	13.31	53.78	4.04	203.11	98.45	229.27	175.66	2.998	0.528
3/31/1975	12.89	58.75	4.56	190.79	98.85	231.09	181.57	2.639	0.542
4/30/1975	11.85	51.00	4.30	162.11	99.20	232.62	186.44	2.555	0.554
5/31/1975	11.93	50.97	4.27	161.96	99.57	234.20	191.46	2.551	0.565
6/30/1975	11.80	50.56	4.29	159.02	99.93	235.72	196.23	2.526	0.576
7/31/1975	11.93	52.80	4.43	146.85	100.30	237.35	200.78	2.248	0.586
8/31/1975	11.68	53.74	4.60	184.72	100.66	239.02	206.51	2.799	0.599
9/30/1975	12.21	57.75	4.73	193.63	101.02	240.75	212.31	2.744	0.612
10/31/1975	11.51	62.55	5.43	197.81	101.38	242.69	218.45	2.650	0.626
11/30/1975	10.98	51.81	4.72	149.07	101.71	244.25	222.92	2.353	0.635
12/31/1975	12.46	57.21	4.59	133.79	102.10	246.02	227.07	1.903	0.643

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1976	12.15	72.98	6.00	121.77	102.47	248.28	230.84	1.420	0.649
2/29/1976	12.77	60.14	4.71	139.21	102.84	250.03	234.88	1.893	0.656
3/31/1976	15.43	70.58	4.57	147.54	103.32	252.21	239.45	1.700	0.664
4/30/1976	10.05	61.91	6.16	80.40	103.62	254.07	241.86	1.109	0.667
5/31/1976	19.78	65.93	3.33		104.24	256.11	241.86	0.000	0.662
6/30/1976	16.41	77.67	4.73		104.73	258.44	241.86	0.000	0.657
7/31/1976	17.47	73.85	4.23	130.37	105.27	260.73	245.90	1.414	0.662
8/31/1976	18.63	83.06	4.46	169.64	105.85	263.31	251.16	1.653	0.671
9/30/1976	19.71	81.67	4.14	149.77	106.44	265.76	255.66	1.463	0.677
10/31/1976	20.26	82.60	4.08	110.34	107.07	268.32	259.08	1.062	0.680
11/30/1976	20.33	87.16	4.29	122.26	107.68	270.93	262.75	1.127	0.684
12/31/1976	16.63	81.47	4.90	142.29	108.19	273.46	267.16	1.438	0.690
1/31/1977	17.71	85.90	4.85	127.19	108.74	276.12	271.10	1.217	0.695
2/28/1977	18.27	92.06	5.04	135.61	109.25	278.70	274.90	1.219	0.699
3/31/1977	19.08	102.27	5.36	127.19	109.85	281.87	278.84	1.040	0.702
4/30/1977	17.44	91.17	5.23	127.19	110.37	284.61	282.65	1.162	0.706
5/31/1977	19.47	98.09	5.04	131.16	110.97	287.65	286.72	1.107	0.709
6/30/1977	20.01	96.40	4.82	136.04	111.57	290.54	290.80	1.159	0.713
7/31/1977	19.78	93.30	4.72	127.19	112.19	293.43	294.75	1.115	0.717
8/31/1977	19.57	90.09	4.60	135.14	112.79	296.22	298.93	1.221	0.721
9/30/1977	19.38	96.10	4.96	127.19	113.37	299.11	302.75	1.092	0.724
10/31/1977	18.76	104.32	5.56	134.98	113.95	302.34	306.93	1.088	0.727
11/30/1977	19.29	102.39	5.31	144.52	114.53	305.41	311.27	1.178	0.731
12/31/1977	15.96	96.64	6.06	150.56	115.03	308.41	315.94	1.328	0.736
1/31/1978	16.74	98.09	5.86	163.28	115.55	311.45	321.00	1.412	0.742
2/28/1978	16.48	93.96	5.70	161.21	116.01	314.08	325.51	1.449	0.747
3/31/1978	17.00	101.98	6.00	158.35	116.54	317.24	330.42	1.321	0.752
4/30/1978	16.55	102.49	6.19	148.02	117.03	320.32	334.86	1.235	0.756
5/31/1978	15.81	98.09	6.20	111.29	117.52	323.36	338.31	0.970	0.757
6/30/1978	16.66	99.76	5.99	112.72	118.02	326.35	341.69	0.961	0.759
7/31/1978	16.73	103.68	6.20	103.03	118.54	329.56	344.89	0.850	0.760
8/31/1978	14.41	95.99	6.66	122.90	118.99	332.54	348.70	1.106	0.762
9/30/1978	15.91	109.13	6.86	127.19	119.46	335.81	352.51	1.011	0.764
10/31/1978	15.55	99.33	6.39	103.18	119.95	338.89	355.71	0.892	0.765
11/30/1978	15.53	103.60	6.67	118.86	120.41	342.00	359.28	0.991	0.767
12/31/1978	13.95	106.14	7.61	111.65	120.85	345.29	362.74	0.924	0.768
1/31/1979	13.14	107.54	8.19	104.08	121.25	348.62	365.97	0.858	0.769
2/28/1979	12.50	94.75	7.58	126.01	121.60	351.28	369.49	1.168	0.771
3/31/1979	14.73	102.93	6.99	106.16	122.06	354.47	372.79	0.897	0.772
4/30/1979	14.71	112.46	7.64	106.68	122.50	357.84	375.99	0.834	0.773
5/31/1979	14.32	106.52	7.44	120.51	122.94	361.14	379.72	0.991	0.775
6/30/1979	13.43	108.33	8.07	118.29	123.35	364.39	383.27	0.966	0.776
7/31/1979	12.91	97.48	7.55	113.67	123.75	367.42	386.79	1.024	0.778
8/31/1979	12.87	96.53	7.50	105.57	124.15	370.41	390.07	0.959	0.779
9/30/1979	12.04	90.52	7.52	130.53	124.51	373.12	393.98	1.265	0.782
10/31/1979	12.89	96.82	7.51	123.53	124.91	376.12	397.81	1.119	0.784
11/30/1979	12.86	89.25	6.94	110.02	125.29	378.80	401.11	1.071	0.786
12/31/1979	13.96	94.22	6.75	130.53	125.73	381.72	405.16	1.199	0.789

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1980	13.41	88.11	6.57	128.30	126.14	384.45	409.14	1.256	0.792
2/29/1980	13.66	87.56	6.41	122.27	126.54	386.99	412.68	1.200	0.794
3/31/1980	12.57	86.89	6.91	111.13	126.93	389.69	416.13	1.110	0.796
4/30/1980	11.46	91.37	7.97	114.41	127.27	392.43	419.56	1.106	0.798
5/31/1980	12.10	105.26	8.70	120.67	127.65	395.69	423.30	1.023	0.799
6/30/1980	15.45	114.92	7.44	138.95	128.11	399.14	427.47	1.060	0.801
7/31/1980	13.99	110.54	7.90	149.29	128.54	402.57	432.10	1.192	0.804
8/31/1980	13.20	92.44	7.00	124.49	128.95	405.43	435.96	1.171	0.806
9/30/1980	15.66	108.14	6.91	147.38	129.42	408.68	440.38	1.183	0.809
10/31/1980	15.35	117.70	7.67	151.68	129.90	412.32	445.08	1.133	0.811
11/30/1980	15.07	114.33	7.58	161.53	130.35	415.75	449.93	1.241	0.814
12/31/1980	14.57	110.44	7.58	148.34	130.80	419.18	454.52	1.180	0.817
1/31/1981	13.58	118.13	8.70	154.21	131.22	422.84	459.30	1.165	0.819
2/28/1981	13.49	116.34	8.63	135.94	131.60	426.10	463.11	1.042	0.821
3/31/1981	13.50	115.86	8.59	138.00	132.02	429.69	467.39	1.061	0.822
4/30/1981	13.08	113.42	8.67	145.95	132.41	433.09	471.77	1.148	0.825
5/31/1981	10.99	115.98	10.56	135.62	132.75	436.69	475.97	1.064	0.826
6/30/1981	14.82	120.79	8.15	148.81	133.20	440.31	480.44	1.091	0.828
7/31/1981	13.68	115.44	8.44	145.15	133.62	443.89	484.94	1.118	0.830
8/31/1981	13.95	126.45	9.06	152.15	134.05	447.81	489.65	1.078	0.832
9/30/1981	13.84	127.17	9.19	125.76	134.47	451.62	493.43	0.887	0.832
10/31/1981	14.03	127.45	9.08	143.09	134.90	455.57	497.86	1.006	0.834
11/30/1981	13.72	128.73	9.38	147.70	135.32	459.44	502.29	1.032	0.835
12/31/1981	13.64	125.83	9.23	103.35	135.74	463.34	505.50	0.737	0.834
1/31/1982	13.34	120.03	9.00	123.37	136.15	467.06	509.32	0.920	0.835
2/28/1982	13.85	116.15	8.39	130.85	136.54	470.31	512.98	1.001	0.836
3/31/1982	12.89	136.00	10.55	157.24	136.94	474.53	517.86	1.052	0.838
4/30/1982	12.68	133.54	10.53	167.89	137.32	478.53	522.89	1.143	0.840
5/31/1982	9.90	126.82	12.81	174.89	137.63	482.46	528.32	1.275	0.843
6/30/1982	15.94	127.47	8.00	151.20	138.10	486.29	532.85	1.048	0.844
7/31/1982	13.25	130.73	9.87	155.01	138.52	490.34	537.66	1.072	0.846
8/31/1982	12.51	132.44	10.59	107.95	138.90	494.45	541.00	0.742	0.845
9/30/1982	13.22	133.52	10.10	134.98	139.30	498.45	545.05	0.916	0.845
10/31/1982	12.65	125.64	9.93	151.83	139.69	502.35	549.76	1.093	0.847
11/30/1982	13.34	121.77	9.13	150.24	140.09	506.00	554.27	1.107	0.849
12/31/1982	13.03	131.07	10.06	152.31	140.50	510.06	558.99	1.052	0.850
1/31/1983	11.89	130.75	11.00	151.99	140.86	514.12	563.70	1.061	0.851
2/28/1983	11.46	132.19	11.54	161.85	141.19	517.82	568.23	1.122	0.853
3/31/1983	11.26	128.75	11.43	156.60	141.53	521.81	573.09	1.114	0.855
4/30/1983	11.17	127.31	11.40	167.89	141.87	525.63	578.12	1.208	0.857
5/31/1983	11.88	127.95	10.77	160.10	142.24	529.60	583.09	1.140	0.859
6/30/1983	11.38	116.70	10.25	177.59	142.58	533.10	588.42	1.380	0.862
7/31/1983	12.23	113.58	9.29	126.23	142.96	536.62	592.33	0.999	0.863
8/31/1983	12.01	134.05	11.16	141.34	143.33	540.77	596.71	0.964	0.863
9/30/1983	11.82	132.25	11.19	140.70	143.69	544.74	600.93	0.973	0.864
10/31/1983	12.20	134.46	11.02	138.00	144.06	548.91	605.21	0.937	0.864
11/30/1983	11.28	137.89	12.23	163.60	144.40	553.05	610.12	1.093	0.866
12/31/1983	11.28	140.23	12.43	171.07	144.75	557.39	615.42	1.125	0.868

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1984	11.32	136.95	12.10	179.81	145.10	561.64	620.99	1.208	0.870
2/29/1984	11.18	142.21	12.71	174.89	145.43	565.76	626.07	1.136	0.871
3/31/1984	11.12	136.06	12.23	181.41	145.77	569.98	631.69	1.228	0.874
4/30/1984	11.12	137.10	12.32	182.36	146.11	574.09	637.16	1.226	0.876
5/31/1984	10.88	131.94	12.12	177.43	146.44	578.18	642.66	1.238	0.878
6/30/1984	10.61	133.40	12.57	170.91	146.76	582.18	647.79	1.182	0.880
7/31/1984	11.00	144.72	13.16	168.53	147.10	586.67	653.01	1.078	0.881
8/31/1984	10.66	141.79	13.30	112.25	147.43	591.07	656.49	0.734	0.880
9/30/1984	10.92	142.12	13.02	185.53	147.76	595.33	662.06	1.208	0.882
10/31/1984	10.74	132.78	12.37	144.36	148.09	599.45	666.53	1.002	0.883
11/30/1984	10.47	133.53	12.76	184.42	148.41	603.45	672.07	1.276	0.885
12/31/1984	9.85	172.44	17.51	162.80	148.71	608.80	677.11	0.891	0.885
1/31/1985	10.42	177.33	17.02	184.11	149.03	614.30	682.82	0.978	0.886
2/28/1985	10.34	138.39	13.39	177.91	149.32	618.17	687.80	1.192	0.888
3/31/1985	10.43	176.37	16.92	172.66	149.65	623.64	693.15	0.922	0.888
4/30/1985	9.52	177.03	18.60	182.51	149.93	628.95	698.63	0.976	0.888
5/31/1985	11.25	113.41	10.08	187.61	150.28	632.46	704.45	1.498	0.891
6/30/1985	10.40	108.83	10.46	162.96	150.59	635.73	709.33	1.361	0.894
7/31/1985	11.15	106.00	9.51	181.24	150.94	639.02	714.95	1.540	0.896
8/31/1985	10.82	107.55	9.94	187.29	151.27	642.35	720.76	1.575	0.900
9/30/1985	10.84	109.33	10.09	190.46	151.60	645.63	726.47	1.578	0.903
10/31/1985	10.56	111.70	10.58	189.98	151.93	649.09	732.36	1.547	0.906
11/30/1985	11.57	114.11	9.87	177.75	152.27	652.52	737.69	1.408	0.908
12/31/1985	9.37	103.76	11.07	166.14	152.56	655.73	742.84	1.463	0.910
1/31/1986	10.30	101.52	9.86	188.11	152.88	658.88	748.68	1.675	0.914
2/28/1986	10.27	103.47	10.08	187.95	153.17	661.78	753.94	1.645	0.917
3/31/1986	7.69	92.48	12.02	141.20	153.41	664.64	758.32	1.404	0.918
4/30/1986	10.29	98.55	9.58	157.42	153.72	667.60	763.04	1.440	0.920
5/31/1986	10.37	110.83	10.69	172.21	154.04	671.04	768.38	1.415	0.923
6/30/1986	10.84	117.17	10.81	175.23	154.37	674.55	773.63	1.363	0.925
7/31/1986	10.47	123.20	11.77	178.41	154.69	678.37	779.16	1.330	0.927
8/31/1986	10.48	124.74	11.90	181.43	155.01	682.24	784.79	1.337	0.929
9/30/1986	10.22	119.35	11.68	188.58	155.32	685.82	790.45	1.450	0.931
10/31/1986	9.88	116.90	11.83	167.44	155.63	689.44	795.64	1.316	0.933
11/30/1986	10.16	117.96	11.61	188.43	155.93	692.98	801.29	1.465	0.935
12/31/1986	9.88	123.13	12.46	177.93	156.24	696.80	806.81	1.333	0.937
1/31/1987	10.39	122.23	11.77	196.06	156.56	700.59	812.88	1.473	0.940
2/28/1987	10.04	114.85	11.44	183.38	156.84	703.80	818.02	1.462	0.942
3/31/1987	10.09	118.44	11.74	176.55	157.15	707.47	823.49	1.368	0.944
4/30/1987	9.36	105.36	11.25	144.61	157.44	710.63	827.83	1.255	0.945
5/31/1987	7.45	94.06	12.63	142.86	157.67	713.55	832.26	1.402	0.947
6/30/1987	9.70	118.67	12.24	169.24	157.96	717.11	837.33	1.313	0.948
7/31/1987	9.82	125.24	12.76	186.40	158.26	720.99	843.11	1.375	0.950
8/31/1987	9.29	123.01	13.24	169.72	158.55	724.81	848.37	1.278	0.952
9/30/1987	8.83	128.34	14.53	197.05	158.81	728.66	854.29	1.432	0.954
10/31/1987	9.45	132.81	14.05	182.75	159.11	732.77	859.95	1.280	0.956
11/30/1987	8.68	128.56	14.82	192.28	159.37	736.63	865.72	1.397	0.958
12/31/1987	8.73	127.92	14.65	182.20	159.64	740.60	871.37	1.329	0.959

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1988	8.17	122.00	14.93	185.77	159.89	744.38	877.13	1.423	0.961
2/29/1988	7.98	118.72	14.87	184.66	160.12	747.82	882.48	1.453	0.963
3/31/1988	8.36	135.57	16.22	201.02	160.38	752.02	888.71	1.393	0.966
4/30/1988	8.19	130.77	15.98	194.03	160.63	755.95	894.53	1.392	0.967
5/31/1988	8.23	125.34	15.24	183.23	160.88	759.83	900.21	1.368	0.969
6/30/1988	8.37	127.38	15.23	164.95	161.13	763.65	905.16	1.211	0.970
7/31/1988	8.22	134.45	16.36	182.75	161.39	767.82	910.83	1.277	0.972
8/31/1988	8.03	133.14	16.58	183.70	161.64	771.95	916.52	1.298	0.973
9/30/1988	7.91	128.49	16.24	188.47	161.87	775.80	922.18	1.378	0.975
10/31/1988	7.60	121.80	16.03	186.08	162.11	779.58	927.95	1.434	0.977
11/30/1988	8.09	124.66	15.40	192.76	162.35	783.32	933.73	1.448	0.979
12/31/1988	7.91	131.78	16.66	180.36	162.60	787.40	939.32	1.288	0.980
1/31/1989	7.61	128.36	16.87	194.03	162.83	791.38	945.33	1.423	0.982
2/28/1989	7.39	121.48	16.43	159.55	163.04	794.78	949.80	1.234	0.983
3/31/1989	6.87	118.87	17.30	168.92	163.25	798.47	955.04	1.340	0.985
4/30/1989	6.89	120.25	17.45	167.33	163.46	802.08	960.06	1.313	0.986
5/31/1989	5.22	82.63	15.82	118.47	163.62	804.64	963.73	1.344	0.987
6/30/1989	6.51	109.74	16.85	164.31	163.82	807.93	968.66	1.409	0.988
7/31/1989	7.23	115.20	15.94	173.53	164.04	811.50	974.04	1.413	0.990
8/31/1989	7.43	87.12	11.72	121.09	164.27	814.20	977.79	1.276	0.991
9/30/1989	7.02	103.99	14.82	163.59	164.48	817.32	982.70	1.469	0.993
10/31/1989	6.41	104.15	16.24	159.78	164.68	820.55	987.65	1.441	0.994
11/30/1989	6.89	100.90	14.64	161.21	164.89	823.58	992.49	1.491	0.996
12/31/1989	5.87	96.27	16.40	130.05	165.07	826.56	996.52	1.270	0.997
1/31/1990	5.96	100.41	16.84	121.14	165.26	829.68	1000.28	1.136	0.997
2/28/1990	6.13	101.01	16.49	103.81	165.43	832.50	1003.18	0.966	0.997
3/31/1990	6.11	98.79	16.18	95.87	165.62	835.57	1006.16	0.911	0.997
4/30/1990	5.90	104.13	17.64	101.91	165.79	838.69	1009.21	0.924	0.996
5/31/1990	6.07	107.54	17.73	136.40	165.98	842.02	1013.44	1.198	0.997
6/30/1990	6.29	110.24	17.51	152.46	166.17	845.33	1018.02	1.305	0.998
7/31/1990	6.00	105.90	17.66	141.49	166.36	848.61	1022.40	1.261	0.999
8/31/1990	6.19	106.24	17.17	141.97	166.55	851.91	1026.80	1.259	1.000
9/30/1990	6.51	110.04	16.90	133.86	166.74	855.21	1030.82	1.145	1.001
10/31/1990	6.45	121.77	18.89	163.75	166.94	858.98	1035.89	1.274	1.002
11/30/1990	6.49	127.37	19.62	185.85	167.14	862.80	1041.47	1.385	1.003
12/31/1990	6.22	117.13	18.82	157.71	167.33	866.44	1046.36	1.275	1.004
1/31/1991	5.78	109.73	18.99	135.13	167.51	869.84	1050.55	1.167	1.005
2/28/1991	5.33	94.39	17.71	157.39	167.66	872.48	1054.95	1.574	1.006
3/31/1991	6.00	105.40	17.57	170.58	167.85	875.75	1060.24	1.527	1.008
4/30/1991	5.63	108.93	19.33	175.19	168.01	879.02	1065.50	1.526	1.010
5/31/1991	5.56	101.80	18.32	122.10	168.19	882.17	1069.28	1.134	1.010
6/30/1991	5.53	105.16	19.02	176.47	168.35	885.33	1074.58	1.590	1.012
7/31/1991	5.49	109.11	19.86	140.85	168.52	888.71	1078.94	1.226	1.012
8/31/1991	5.62	116.22	20.68	186.01	168.70	892.31	1084.71	1.523	1.014
9/30/1991	5.69	107.02	18.80	157.86	168.87	895.52	1089.45	1.397	1.015
10/31/1991	5.21	111.75	21.46	160.41	169.03	898.99	1094.42	1.369	1.017
11/30/1991	5.57	110.70	19.88	155.80	169.20	902.31	1099.09	1.337	1.018
12/31/1991	5.62	107.39	19.10	163.27	169.37	905.64	1104.15	1.441	1.019

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1992	5.26	117.16	22.28	177.26	169.53	909.27	1109.65	1.445	1.021
2/29/1992	5.31	107.14	20.19	166.45	169.69	912.38	1114.48	1.477	1.022
3/31/1992	5.35	98.07	18.33	169.63	169.85	915.42	1119.73	1.636	1.024
4/30/1992	5.73	95.05	16.59	167.56	170.03	918.27	1124.76	1.658	1.025
5/31/1992	5.13	89.06	17.37	148.33	170.18	921.03	1129.36	1.571	1.027
6/30/1992	5.04	114.86	22.81	158.34	170.34	924.47	1134.11	1.318	1.028
7/31/1992	5.38	127.17	23.64	163.59	170.50	928.42	1139.18	1.232	1.029
8/31/1992	5.35	122.55	22.92	163.59	170.67	932.22	1144.25	1.276	1.030
9/30/1992	5.22	112.28	21.52	142.28	170.82	935.58	1148.52	1.208	1.030
10/31/1992	5.03	91.82	18.25	161.05	170.98	938.43	1153.51	1.659	1.032
11/30/1992	5.08	115.17	22.69	155.32	171.13	941.88	1158.17	1.289	1.033
12/31/1992	4.94	68.53	13.88	75.99	171.29	944.01	1160.53	1.031	1.033
1/31/1993	5.23	105.74	20.22	139.58	171.45	947.29	1164.86	1.255	1.033
2/28/1993	4.71	113.28	24.07	164.38	171.58	950.46	1169.46	1.390	1.034
3/31/1993	4.86	112.57	23.15	185.05	171.73	953.95	1175.20	1.573	1.036
4/30/1993	5.04	112.68	22.33	173.45	171.88	957.33	1180.40	1.470	1.037
5/31/1993	4.94	113.60	22.99	122.73	172.03	960.85	1184.20	1.033	1.037
6/30/1993	5.01	112.58	22.46	108.74	172.19	964.23	1187.47	0.923	1.037
7/31/1993	4.86	117.29	24.15	110.49	172.34	967.86	1190.89	0.903	1.037
8/31/1993	5.05	106.01	21.01	169.63	172.49	971.15	1196.15	1.524	1.038
9/30/1993	4.83	108.65	22.50	185.05	172.64	974.41	1201.70	1.627	1.040
10/31/1993	4.92	116.83	23.73	180.76	172.79	978.03	1207.30	1.482	1.041
11/30/1993	4.90	107.10	21.84	173.92	172.94	981.24	1212.52	1.549	1.043
12/31/1993	4.71	101.96	21.64	114.94	173.08	984.41	1216.09	1.075	1.043
1/31/1994	4.19	85.98	20.53	117.33	173.21	987.07	1219.72	1.298	1.043
2/28/1994	5.09	104.46	20.51	168.52	173.36	990.00	1224.44	1.535	1.045
3/31/1994	5.02	109.79	21.87	166.29	173.51	993.40	1229.60	1.445	1.046
4/30/1994	4.74	103.10	21.74	170.90	173.65	996.49	1234.72	1.581	1.047
5/31/1994	3.63	88.99	24.52	168.20	173.77	999.25	1239.94	1.812	1.049
6/30/1994	4.32	114.43	26.52	183.78	173.90	1002.68	1245.45	1.545	1.051
7/31/1994	4.54	116.92	25.75	176.78	174.04	1006.31	1250.93	1.453	1.052
8/31/1994	4.64	115.08	24.78	177.10	174.18	1009.88	1256.42	1.476	1.053
9/30/1994	4.64	120.33	25.93	174.40	174.32	1013.49	1261.65	1.393	1.054
10/31/1994	4.86	121.33	24.97	181.24	174.47	1017.25	1267.27	1.433	1.056
11/30/1994	4.74	113.63	23.97	168.04	174.61	1020.66	1272.31	1.417	1.057
12/31/1994	4.44	117.08	26.38	181.08	174.75	1024.29	1277.93	1.487	1.058
1/31/1995	4.35	101.85	23.41	176.95	174.88	1027.44	1283.41	1.663	1.060
2/28/1995	3.70	97.73	26.40	193.80	174.99	1030.18	1288.84	1.907	1.062
3/31/1995	3.60	94.99	26.37	181.08	175.10	1033.12	1294.45	1.833	1.064
4/30/1995	3.68	95.36	25.93	178.05	175.21	1035.98	1299.79	1.794	1.065
5/31/1995	3.55	97.41	27.42	175.51	175.32	1039.00	1305.23	1.735	1.067
6/30/1995	4.44	121.68	27.38	164.54	175.45	1042.65	1310.17	1.302	1.068
7/31/1995	4.91	126.86	25.83	186.64	175.61	1046.59	1315.96	1.414	1.069
8/31/1995	5.12	139.55	27.25	192.68	175.76	1050.91	1321.93	1.329	1.070
9/30/1995	4.88	135.57	27.81	171.22	175.91	1054.98	1327.07	1.217	1.070
10/31/1995	4.65	138.37	29.73	163.27	176.05	1059.27	1332.13	1.140	1.071
11/30/1995	4.74	141.24	29.81	195.23	176.20	1063.51	1337.98	1.335	1.072
12/31/1995	4.20	141.06	33.63	195.07	176.33	1067.88	1344.03	1.341	1.073

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/1996	4.14	129.95	31.42	185.05	176.46	1071.91	1349.77	1.378	1.074
2/29/1996	4.22	125.24	29.67	187.28	176.58	1075.54	1355.20	1.444	1.075
3/31/1996	4.20	131.60	31.37	176.46	176.71	1079.62	1360.67	1.297	1.075
4/30/1996	4.29	135.19	31.54	180.28	176.84	1083.68	1366.08	1.291	1.076
5/31/1996	3.96	112.95	28.50	175.51	176.96	1087.18	1371.52	1.499	1.077
6/30/1996	4.33	131.37	30.35	172.02	177.09	1091.12	1376.68	1.266	1.078
7/31/1996	3.99	129.66	32.51	175.67	177.21	1095.14	1382.12	1.312	1.079
8/31/1996	3.88	124.07	31.98	182.35	177.33	1098.98	1387.78	1.423	1.080
9/30/1996	3.76	135.37	35.97	168.68	177.45	1103.05	1392.84	1.211	1.080
10/31/1996	3.71	123.85	33.40	161.84	177.56	1106.89	1397.85	1.267	1.081
11/30/1996	3.92	127.20	32.49	185.69	177.68	1110.70	1403.43	1.414	1.082
12/31/1996	3.86	123.12	31.89	176.47	177.80	1114.52	1408.90	1.388	1.083
1/31/1997	3.72	120.21	32.32	163.43	177.91	1118.24	1413.96	1.317	1.083
2/28/1997	3.59	118.58	33.00	177.90	178.01	1121.56	1418.94	1.454	1.084
3/31/1997	3.71	125.20	33.73	190.30	178.13	1125.45	1424.84	1.474	1.086
4/30/1997	3.79	121.92	32.17	166.14	178.24	1129.10	1429.83	1.320	1.086
5/31/1997	3.90	121.93	31.30	160.57	178.36	1132.88	1434.80	1.274	1.087
6/30/1997	3.64	108.31	29.74	161.84	178.47	1136.13	1439.66	1.443	1.088
7/31/1997	3.48	109.27	31.44	160.25	178.58	1139.52	1444.63	1.419	1.089
8/31/1997	3.72	91.77	24.66	128.00	178.70	1142.37	1448.60	1.338	1.089
9/30/1997	3.61	100.86	27.93	132.27	178.80	1145.39	1452.56	1.264	1.090
10/31/1997	3.47	100.73	29.01	153.89	178.91	1148.51	1457.33	1.474	1.091
11/30/1997	3.47	82.49	23.77	126.39	179.02	1150.99	1461.13	1.467	1.091
12/31/1997	3.49	95.71	27.40	146.74	179.12	1153.96	1465.67	1.477	1.092
1/31/1998	3.40	98.01	28.85	188.07	179.23	1156.99	1471.50	1.851	1.094
2/28/1998	3.34	90.00	26.92	167.89	179.32	1159.51	1476.21	1.795	1.095
3/31/1998	3.46	92.48	26.69	169.95	179.43	1162.38	1481.47	1.768	1.097
4/30/1998	2.94	85.03	28.87	178.22	179.52	1164.93	1486.82	2.022	1.099
5/31/1998	2.90	91.20	31.43	162.16	179.61	1167.76	1491.85	1.721	1.100
6/30/1998	3.01	90.45	30.08	167.41	179.70	1170.47	1496.87	1.788	1.101
7/31/1998	2.94	83.36	28.40	144.03	179.79	1173.06	1501.33	1.666	1.102
8/31/1998	3.05	86.13	28.29	170.11	179.88	1175.73	1506.61	1.904	1.104
9/30/1998	3.00	89.24	29.78	170.90	179.97	1178.40	1511.73	1.850	1.106
10/31/1998	3.05	93.05	30.49	178.53	180.07	1181.29	1517.27	1.855	1.107
11/30/1998	3.08	97.39	31.59	175.99	180.16	1184.21	1522.55	1.749	1.109
12/31/1998	3.00	101.24	33.75	193.64	180.25	1187.35	1528.55	1.855	1.110
1/31/1999	3.04	107.06	35.17	190.30	180.35	1190.67	1534.45	1.726	1.112
2/28/1999	2.71	81.90	30.17	157.55	180.42	1192.96	1538.86	1.859	1.113
3/31/1999	2.84	93.37	32.87	187.75	180.51	1195.85	1544.68	1.949	1.115
4/30/1999	2.84	94.98	33.44	161.84	180.60	1198.70	1549.54	1.652	1.116
5/31/1999	2.77	88.40	31.92	188.23	180.68	1201.44	1555.37	2.062	1.118
6/30/1999	2.51	86.73	34.51	196.50	180.76	1204.05	1561.27	2.199	1.120
7/31/1999	2.43	89.10	36.61	181.87	180.83	1206.81	1566.91	1.984	1.122
8/31/1999	2.48	94.41	38.11	190.14	180.91	1209.74	1572.80	1.960	1.124
9/30/1999	2.48	81.96	33.00	192.52	180.99	1212.19	1578.58	2.277	1.126
10/31/1999	2.70	91.78	34.03	197.45	181.07	1215.04	1584.70	2.087	1.128
11/30/1999	2.58	90.10	34.88	211.44	181.15	1217.74	1591.04	2.278	1.130
12/31/1999	2.67	92.21	34.54	207.63	181.23	1220.60	1597.48	2.185	1.132

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/2000	2.51	91.28	36.39	208.90	181.31	1223.43	1603.95	2.224	1.134
2/29/2000	2.19	75.89	34.66	202.86	181.37	1225.63	1609.84	2.594	1.137
3/31/2000	2.44	84.47	34.66	209.69	181.45	1228.25	1616.34	2.410	1.139
4/30/2000	2.06	79.93	38.89	195.23	181.51	1230.65	1622.19	2.378	1.141
5/31/2000	1.87	72.09	38.50	201.59	181.57	1232.88	1628.44	2.722	1.144
6/30/2000	2.16	86.91	40.26	120.19	181.63	1235.49	1632.05	1.348	1.144
7/31/2000	2.25	76.51	33.96	191.09	181.70	1237.86	1637.97	2.423	1.147
8/31/2000	1.97	74.44	37.86	188.71	181.76	1240.17	1643.82	2.466	1.149
9/30/2000	2.05	72.73	35.54	156.12	181.82	1242.35	1648.51	2.085	1.150
10/31/2000	1.94	81.78	42.26	151.83	181.88	1244.89	1653.21	1.811	1.151
11/30/2000	2.01	80.28	39.91	145.15	181.94	1247.29	1657.57	1.762	1.152
12/31/2000	2.05	79.70	38.91	187.44	182.01	1249.77	1663.38	2.290	1.154
1/31/2001	1.94	72.94	37.53	176.79	182.07	1252.03	1668.86	2.358	1.156
2/28/2001	1.91	70.79	36.98	184.42	182.12	1254.01	1674.02	2.533	1.158
3/31/2001	1.84	77.95	42.43	196.97	182.18	1256.43	1680.13	2.466	1.161
4/30/2001	1.83	75.69	41.28	178.85	182.23	1258.70	1685.49	2.304	1.162
5/31/2001	1.82	68.56	37.75	149.76	182.29	1260.82	1690.14	2.125	1.164
6/30/2001	1.72	74.80	43.44	155.80	182.34	1263.07	1694.81	2.034	1.165
7/31/2001	1.70	74.10	43.67	171.54	182.39	1265.36	1700.13	2.261	1.167
8/31/2001	1.45	68.85	47.32	186.80	182.44	1267.50	1705.92	2.654	1.169
9/30/2001	1.68	72.66	43.21	186.64	182.49	1269.68	1711.52	2.508	1.171
10/31/2001	1.84	67.14	36.58	189.18	182.55	1271.76	1717.38	2.739	1.174
11/30/2001	1.78	66.54	37.35	193.48	182.60	1273.75	1723.19	2.828	1.176
12/31/2001	1.78	69.64	39.15	184.33	182.65	1275.91	1728.90	2.578	1.178
1/31/2002	1.76	68.82	39.11	199.84	182.71	1278.05	1735.10	2.828	1.180
2/28/2002	1.58	75.12	47.53	206.99	182.75	1280.15	1740.89	2.696	1.183
3/31/2002	1.61	85.80	53.14	210.96	182.80	1282.81	1747.43	2.411	1.185
4/30/2002	1.71	84.37	49.29	215.26	182.85	1285.34	1753.89	2.498	1.187
5/31/2002	1.92	89.71	46.78	194.61	182.91	1288.12	1759.92	2.122	1.189
6/30/2002	1.87	88.27	47.29	186.54	182.97	1290.77	1765.52	2.067	1.191
7/31/2002	1.69	65.97	38.95	151.32	183.02	1292.81	1770.21	2.233	1.192
8/31/2002	1.15	27.95	24.27	110.00	183.06	1293.68	1773.62	3.772	1.194
9/30/2002	1.18	31.48	26.60	37.42	183.09	1294.63	1774.74	1.144	1.194
10/31/2002	1.09	28.26	25.92		183.13	1295.50	1774.74	0.000	1.193
11/30/2002	1.49	32.32	21.76		183.17	1296.47	1774.74	0.000	1.192
12/31/2002	8.21	112.80	13.74	113.65	183.43	1299.97	1778.27	0.936	1.191
1/31/2003	6.70	114.53	17.10	75.43	183.63	1303.52	1780.60	0.621	1.190
2/28/2003	6.00	125.01	20.84	117.46	183.80	1307.02	1783.89	0.895	1.189
3/31/2003	5.64	118.88	21.09	112.94	183.98	1310.70	1787.39	0.905	1.189
4/30/2003	5.56	116.24	20.92	90.69	184.14	1314.19	1790.11	0.743	1.187
5/31/2003	5.59	120.02	21.47	117.84	184.32	1317.91	1793.77	0.936	1.187
6/30/2003	5.47	119.09	21.79	114.70	184.48	1321.48	1797.21	0.919	1.186
7/31/2003	5.33	117.00	21.93	112.52	184.65	1325.11	1800.70	0.918	1.185
8/31/2003	5.38	113.24	21.05	31.68	184.81	1328.62	1801.68	0.266	1.183
9/30/2003	5.64	110.38	19.59		184.98	1331.93	1801.68	0.000	1.181
10/31/2003	9.47	135.71	14.33	29.35	185.28	1336.14	1802.59	0.202	1.178
11/30/2003	26.48	204.11	7.71	122.60	186.07	1342.26	1806.27	0.529	1.175
12/31/2003	29.91	293.06	9.80	130.23	187.00	1351.35	1810.30	0.401	1.170

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/2004	28.80	314.24	10.91	122.29	187.89	1361.09	1814.09	0.355	1.164
2/29/2004	27.13	301.57	11.12	261.69	188.68	1369.83	1821.68	0.793	1.162
3/31/2004	30.15	413.90	13.73	311.53	189.61	1382.67	1831.34	0.699	1.158
4/30/2004	27.70	438.46	15.83	319.42	190.44	1395.82	1840.92	0.683	1.154
5/31/2004	24.08	417.38	17.33	308.13	191.19	1408.76	1850.47	0.696	1.150
6/30/2004	23.19	425.07	18.33	306.19	191.88	1421.51	1859.66	0.681	1.146
7/31/2004	23.14	411.66	17.79	298.64	192.60	1434.27	1868.92	0.685	1.142
8/31/2004	22.77	420.80	18.48	306.34	193.31	1447.32	1878.41	0.689	1.138
9/30/2004	21.97	416.40	18.95	305.02	193.97	1459.81	1887.57	0.694	1.135
10/31/2004	19.75	421.38	21.34	301.04	194.58	1472.87	1896.90	0.681	1.131
11/30/2004	20.88	416.15	19.93	334.10	195.21	1485.36	1906.92	0.763	1.128
12/31/2004	19.12	422.31	22.09	413.63	195.80	1498.45	1919.74	0.935	1.127
1/31/2005	19.54	440.50	22.54	468.97	196.40	1512.10	1934.28	1.017	1.126
2/28/2005	19.27	441.37	22.91	482.32	196.94	1524.46	1947.79	1.045	1.125
3/31/2005	18.38	434.60	23.65	471.52	197.51	1537.93	1962.40	1.039	1.124
4/30/2005	17.04	432.82	25.39	460.71	198.03	1550.92	1976.22	1.022	1.124
5/31/2005	16.03	443.30	27.66	511.29	198.52	1564.66	1992.07	1.111	1.123
6/30/2005	15.33	425.17	27.74	415.27	198.98	1577.42	2004.53	0.941	1.122
7/31/2005	14.82	432.77	29.21	433.14	199.44	1590.83	2017.96	0.966	1.121
8/31/2005	14.69	422.88	28.78	432.25	199.90	1603.94	2031.36	0.986	1.120
9/30/2005	15.45	428.21	27.72	450.78	200.36	1616.79	2044.88	1.014	1.119
10/31/2005	15.56	439.22	28.23	543.50	200.84	1630.40	2061.73	1.193	1.120
11/30/2005	14.49	442.65	30.56	484.98	201.28	1643.68	2076.28	1.059	1.119
12/31/2005	13.28	441.75	33.25	496.14	201.69	1657.38	2091.66	1.089	1.119
1/31/2006	12.88	439.42	34.11	515.24	202.09	1671.00	2107.63	1.138	1.119
2/28/2006	13.40	466.04	34.79	542.75	202.46	1684.05	2122.83	1.130	1.119
3/31/2006	14.99	463.49	30.91	521.69	202.93	1698.42	2139.00	1.089	1.119
4/30/2006	12.34	457.98	37.12	459.08	203.30	1712.16	2152.77	0.975	1.118
5/31/2006	13.74	444.92	32.39	445.84	203.72	1725.95	2166.60	0.971	1.117
6/30/2006	13.39	439.97	32.87	455.17	204.13	1739.15	2180.25	1.003	1.116
7/31/2006	11.41	437.77	38.37	463.21	204.48	1752.72	2194.61	1.030	1.115
8/31/2006	11.73	425.36	36.25	446.52	204.84	1765.90	2208.45	1.020	1.115
9/30/2006	12.14	446.74	36.79	468.45	205.21	1779.31	2222.51	1.020	1.114
10/31/2006	11.36	453.04	39.87	468.85	205.56	1793.35	2237.04	1.008	1.113
11/30/2006	10.61	451.77	42.59	472.22	205.88	1806.90	2251.21	1.020	1.113
12/31/2006	11.68	458.85	39.29	498.10	206.24	1821.13	2266.65	1.057	1.112
1/31/2007	11.21	447.62	39.94	485.18	206.59	1835.00	2281.69	1.056	1.112
2/28/2007	11.31	449.22	39.73	487.59	206.90	1847.58	2295.34	1.057	1.112
3/31/2007	10.79	441.50	40.91	478.02	207.24	1861.27	2310.16	1.056	1.111
4/30/2007	10.25	443.08	43.23	479.26	207.55	1874.56	2324.54	1.056	1.111
5/31/2007	10.42	423.76	40.67	454.96	207.87	1887.70	2338.64	1.047	1.110
6/30/2007	10.26	429.25	41.85	358.96	208.18	1900.58	2349.41	0.816	1.109
7/31/2007	10.66	429.33	40.29	373.18	208.51	1913.88	2360.98	0.847	1.107
8/31/2007	9.64	350.92	36.39	356.34	208.81	1924.76	2372.03	0.987	1.106
9/30/2007	10.60	438.08	41.33	379.74	209.12	1937.91	2383.42	0.845	1.105
10/31/2007	10.81	446.63	41.31	401.29	209.46	1951.75	2395.86	0.876	1.103
11/30/2007	10.65	448.08	42.08	409.07	209.78	1965.19	2408.13	0.891	1.102
12/31/2007	10.04	456.58	45.49	423.76	210.09	1979.35	2421.27	0.907	1.101

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/2008	10.03	454.11	45.29	423.54	210.40	1993.42	2434.40	0.912	1.099
2/29/2008	9.37	447.04	47.72	409.45	210.67	2006.39	2446.27	0.896	1.098
3/31/2008	10.21	460.92	45.14	383.03	210.99	2020.68	2458.14	0.812	1.096
4/30/2008	10.28	454.58	44.24	432.29	211.30	2034.31	2471.11	0.929	1.095
5/31/2008	10.34	442.02	42.77	414.72	211.62	2048.02	2483.97	0.916	1.094
6/30/2008	9.95	419.70	42.17	398.10	211.92	2060.61	2495.91	0.925	1.093
7/31/2008	8.93	407.46	45.61	350.48	212.19	2073.24	2506.78	0.841	1.092
8/31/2008	9.98	415.88	41.69	389.53	212.50	2086.13	2518.85	0.914	1.091
9/30/2008	9.52	418.02	43.92	365.35	212.79	2098.67	2529.81	0.854	1.089
10/31/2008	9.40	415.94	44.27	345.48	213.08	2111.57	2540.52	0.811	1.088
11/30/2008	9.82	451.88	46.03	406.39	213.37	2125.12	2552.71	0.879	1.087
12/31/2008	9.04	434.82	48.09	383.46	213.65	2138.60	2564.60	0.863	1.085
1/31/2009	9.74	457.58	46.97	393.46	213.96	2152.79	2576.80	0.841	1.084
2/28/2009	9.67	449.31	46.46	386.60	214.23	2165.37	2587.62	0.841	1.083
3/31/2009	9.54	436.27	45.73	403.65	214.52	2178.89	2600.14	0.904	1.082
4/30/2009	9.69	456.93	47.15	412.47	214.81	2192.60	2612.51	0.883	1.080
5/31/2009	8.62	445.96	51.71	369.92	215.08	2206.43	2623.98	0.813	1.079
6/30/2009	9.13	438.45	48.00	389.71	215.35	2219.58	2635.67	0.870	1.078
7/31/2009	8.69	426.73	49.10	385.46	215.62	2232.81	2647.62	0.884	1.077
8/31/2009	8.59	433.48	50.47	377.89	215.89	2246.25	2659.33	0.854	1.075
9/30/2009	8.85	437.83	49.50	379.25	216.16	2259.38	2670.71	0.848	1.074
10/31/2009	8.95	443.37	49.55	402.84	216.43	2273.12	2683.20	0.890	1.073
11/30/2009	8.62	444.80	51.59	416.06	216.69	2286.47	2695.68	0.917	1.072
12/31/2009	8.60	444.44	51.66	388.95	216.96	2300.25	2707.74	0.858	1.071
1/31/2010	8.40	441.89	52.59	384.64	217.22	2313.94	2719.66	0.853	1.070
2/28/2010	8.42	432.38	51.37	380.69	217.45	2326.05	2730.32	0.863	1.069
3/31/2010	8.18	425.87	52.09	380.80	217.71	2339.25	2742.13	0.876	1.068
4/30/2010	7.27	400.16	55.01	353.82	217.93	2351.26	2752.74	0.868	1.067
5/31/2010	7.67	418.78	54.57	368.86	218.16	2364.24	2764.18	0.864	1.066
6/30/2010	7.98	430.21	53.91	391.81	218.40	2377.15	2775.93	0.893	1.065
7/31/2010	7.29	416.70	57.15	386.85	218.63	2390.06	2787.92	0.912	1.064
8/31/2010	7.66	437.83	57.16	368.83	218.87	2403.64	2799.36	0.827	1.063
9/30/2010	7.77	432.25	55.66	409.48	219.10	2416.60	2811.64	0.930	1.062
10/31/2010	7.77	430.92	55.48	437.02	219.34	2429.96	2825.19	0.995	1.062
11/30/2010	7.65	432.97	56.62	429.79	219.57	2442.95	2838.08	0.975	1.062
12/31/2010	7.52	453.29	60.31	438.97	219.80	2457.00	2851.69	0.952	1.061
1/31/2011	7.61	462.65	60.82	465.91	220.04	2471.35	2866.13	0.990	1.061
2/28/2011	8.03	468.50	58.33	465.93	220.26	2484.46	2879.18	0.977	1.060
3/31/2011	8.18	474.47	57.97	468.89	220.52	2499.17	2893.71	0.971	1.060
4/30/2011	5.68	359.83	63.31	258.30	220.69	2509.97	2901.46	0.706	1.058
5/31/2011	5.76	369.23	64.12	96.64	220.87	2521.41	2904.46	0.258	1.055
6/30/2011	5.66	360.49	63.65	180.41	221.04	2532.23	2909.87	0.492	1.053
7/31/2011	4.73	356.99	75.42	255.56	221.18	2543.30	2917.79	0.706	1.051
8/31/2011	7.45	438.01	58.78	363.07	221.41	2556.87	2929.05	0.814	1.050
9/30/2011	7.62	460.18	60.39	367.89	221.64	2570.68	2940.09	0.786	1.049
10/31/2011	6.92	447.49	64.63	261.63	221.86	2584.55	2948.20	0.575	1.046
11/30/2011	6.41	454.13	70.83	187.13	222.05	2598.18	2953.81	0.406	1.043
12/31/2011	6.34	449.38	70.91	230.03	222.25	2612.11	2960.94	0.504	1.041

Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio
1/31/2012	6.70	456.66	68.19	303.49	222.45	2626.26	2970.35	0.655	1.039
2/29/2012	6.56	465.84	71.02	296.98	222.64	2639.77	2978.96	0.628	1.037
3/31/2012	6.56	465.31	70.95	278.32	222.85	2654.20	2987.59	0.589	1.034
4/30/2012	6.16	448.39	72.75	295.58	223.03	2667.65	2996.46	0.650	1.033
5/31/2012	6.02	450.04	74.74	436.21	223.22	2681.60	3009.98	0.956	1.032
6/30/2012	5.92	457.66	77.37	390.57	223.40	2695.33	3021.70	0.842	1.031
7/31/2012	4.69	385.42	82.12	372.16	223.54	2707.28	3033.23	0.953	1.031
8/31/2012	4.27	365.45	85.55	381.08	223.67	2718.61	3045.05	1.030	1.031
9/30/2012	5.24	447.49	85.44	404.95	223.83	2732.03	3057.20	0.894	1.030
10/31/2012	4.64	383.74	82.63	385.70	223.98	2743.93	3069.15	0.993	1.030
11/30/2012	5.73	434.52	75.88	407.87	224.15	2756.96	3081.39	0.926	1.030
12/31/2012	5.70	441.78	77.57	402.96	224.32	2770.66	3093.88	0.900	1.029

Pattern: 00/06-14-009-25Inj Set: ERoutledgeUnit#1

Oil Formation Vol Factor : 1.05000 m3/m3

Water Formation Vol Factor : 1.00000 m3/m3

Water / Oil Ratio : 53.38 m3/m3

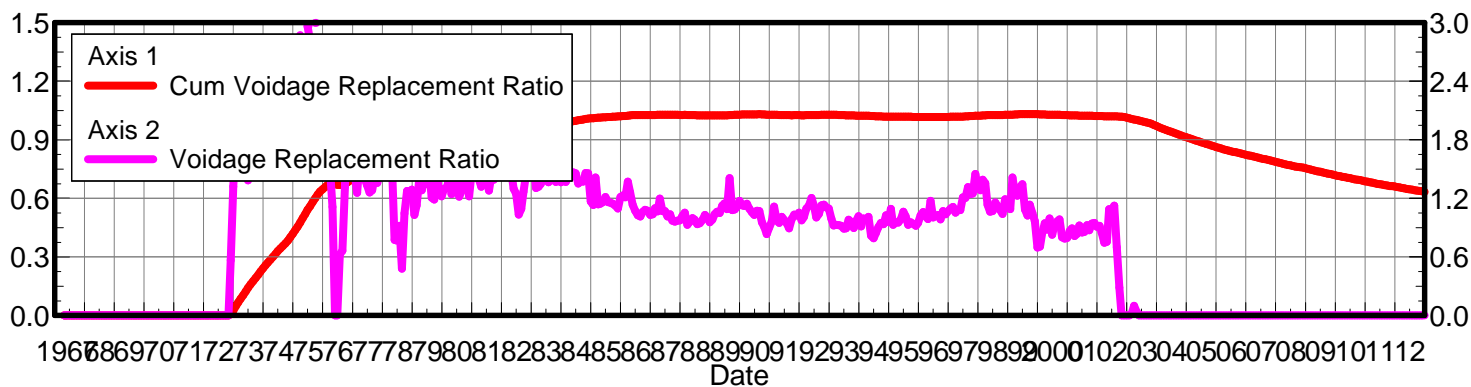
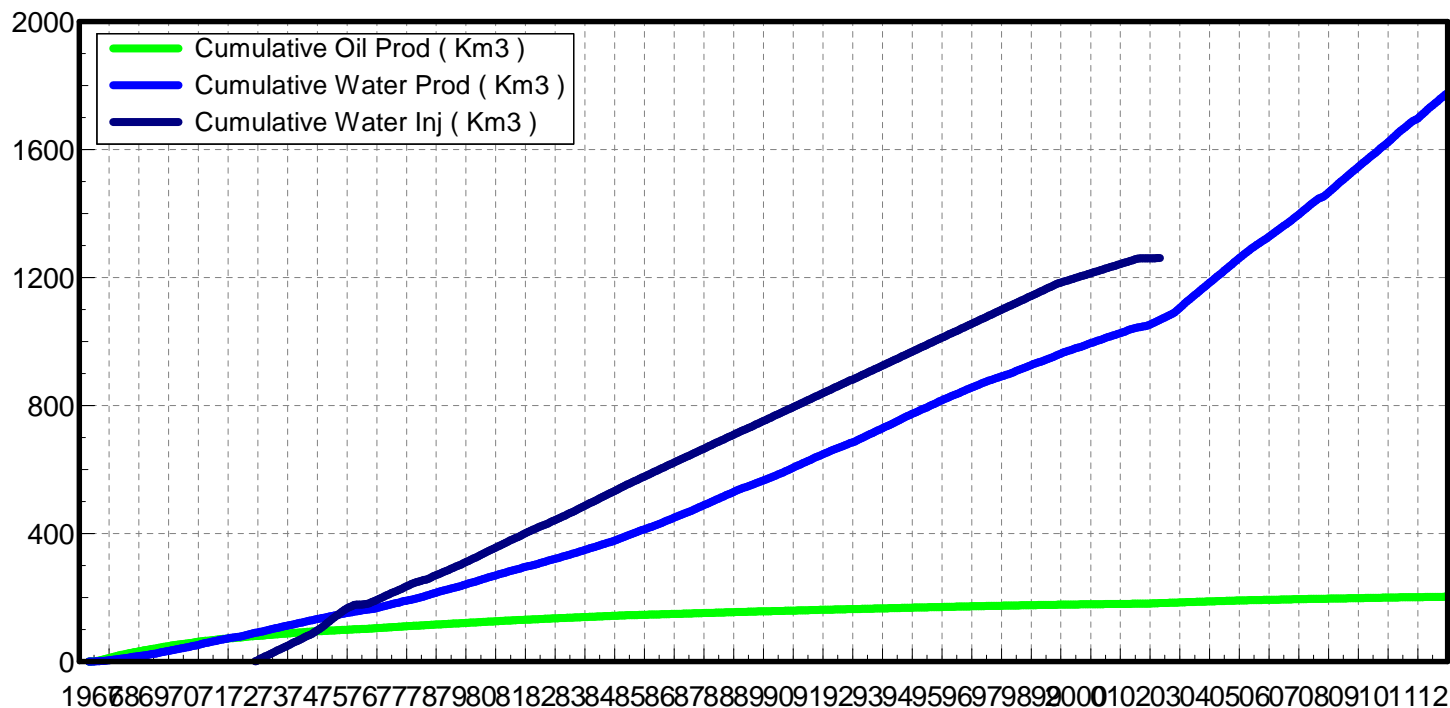
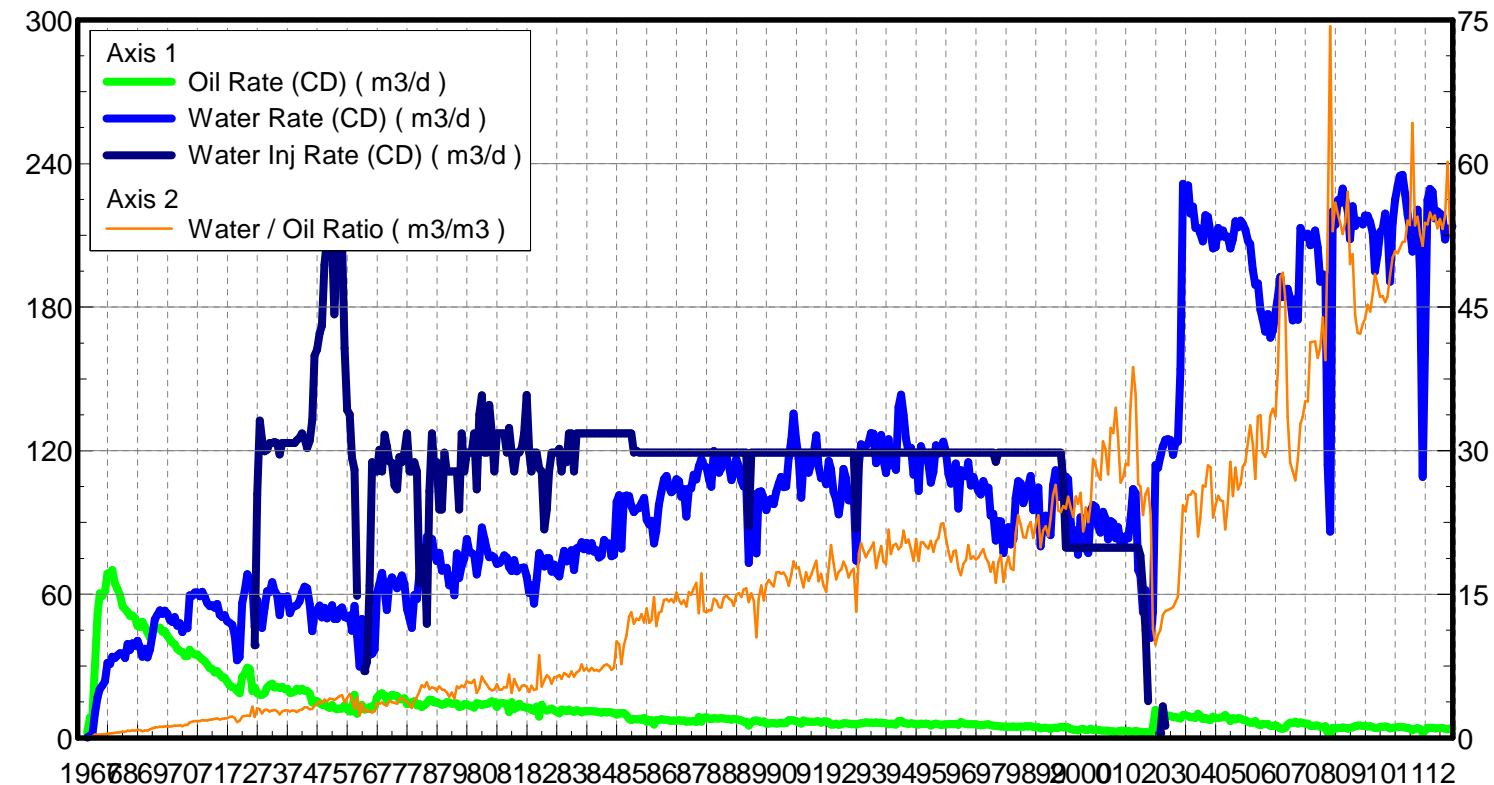
February 28, 2013

Operator: Tundra_O&G_Prtshp

Oil Rate (CD) : 3.93 m3/d

Water Rate (CD) : 209.84 m3/d

Water Inj Rate (CD) : 5.05 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
4/30/1967	2.34	0.23	0.10		0.07	0.01	0.00	0.000	0.000
5/31/1967	8.53	0.89	0.10		0.33	0.03	0.00	0.000	0.000
6/30/1967	9.28	1.48	0.16		0.61	0.08	0.00	0.000	0.000
7/31/1967	30.54	10.38	0.34		1.56	0.40	0.00	0.000	0.000
8/31/1967	51.71	17.08	0.33		3.16	0.93	0.00	0.000	0.000
9/30/1967	60.38	20.43	0.34		4.97	1.54	0.00	0.000	0.000
10/31/1967	59.37	21.83	0.37		6.81	2.22	0.00	0.000	0.000
11/30/1967	61.04	23.60	0.39		8.65	2.93	0.00	0.000	0.000
12/31/1967	68.62	31.38	0.46		10.77	3.90	0.00	0.000	0.000
1/31/1968	68.78	30.84	0.45		12.90	4.86	0.00	0.000	0.000
2/29/1968	70.20	33.88	0.48		14.94	5.84	0.00	0.000	0.000
3/31/1968	64.66	33.39	0.52		16.95	6.87	0.00	0.000	0.000
4/30/1968	62.27	34.47	0.55		18.81	7.91	0.00	0.000	0.000
5/31/1968	59.69	35.34	0.59		20.66	9.00	0.00	0.000	0.000
6/30/1968	55.06	35.19	0.64		22.32	10.06	0.00	0.000	0.000
7/31/1968	53.88	33.37	0.62		23.99	11.09	0.00	0.000	0.000
8/31/1968	52.66	39.26	0.75		25.62	12.31	0.00	0.000	0.000
9/30/1968	50.96	36.66	0.72		27.15	13.41	0.00	0.000	0.000
10/31/1968	51.21	39.52	0.77		28.73	14.64	0.00	0.000	0.000
11/30/1968	50.02	38.50	0.77		30.24	15.79	0.00	0.000	0.000
12/31/1968	46.69	40.58	0.87		31.68	17.05	0.00	0.000	0.000
1/31/1969	46.32	37.63	0.81		33.12	18.22	0.00	0.000	0.000
2/28/1969	48.52	33.87	0.70		34.48	19.16	0.00	0.000	0.000
3/31/1969	46.48	37.22	0.80		35.92	20.32	0.00	0.000	0.000
4/30/1969	44.03	33.58	0.76		37.24	21.32	0.00	0.000	0.000
5/31/1969	41.88	36.92	0.88		38.54	22.47	0.00	0.000	0.000
6/30/1969	43.88	42.77	0.97		39.85	23.75	0.00	0.000	0.000
7/31/1969	45.69	49.52	1.08		41.27	25.29	0.00	0.000	0.000
8/31/1969	45.85	51.37	1.12		42.69	26.88	0.00	0.000	0.000
9/30/1969	46.13	53.27	1.15		44.07	28.48	0.00	0.000	0.000
10/31/1969	44.30	51.77	1.17		45.45	30.08	0.00	0.000	0.000
11/30/1969	44.55	53.17	1.19		46.78	31.68	0.00	0.000	0.000
12/31/1969	42.62	52.01	1.22		48.11	33.29	0.00	0.000	0.000
1/31/1970	41.07	49.33	1.20		49.38	34.82	0.00	0.000	0.000
2/28/1970	39.90	48.49	1.22		50.50	36.18	0.00	0.000	0.000
3/31/1970	39.19	50.46	1.29		51.71	37.74	0.00	0.000	0.000
4/30/1970	37.28	46.88	1.26		52.83	39.15	0.00	0.000	0.000
5/31/1970	36.37	47.92	1.32		53.96	40.63	0.00	0.000	0.000
6/30/1970	35.98	44.19	1.23		55.04	41.96	0.00	0.000	0.000
7/31/1970	34.16	46.55	1.36		56.10	43.40	0.00	0.000	0.000
8/31/1970	34.16	45.87	1.34		57.15	44.82	0.00	0.000	0.000
9/30/1970	36.87	59.63	1.62		58.26	46.61	0.00	0.000	0.000
10/31/1970	35.45	59.36	1.67		59.36	48.45	0.00	0.000	0.000
11/30/1970	34.84	60.82	1.75		60.40	50.28	0.00	0.000	0.000
12/31/1970	34.90	60.79	1.74		61.49	52.16	0.00	0.000	0.000
1/31/1971	33.70	59.21	1.76		62.53	54.00	0.00	0.000	0.000
2/28/1971	32.79	61.02	1.86		63.45	55.71	0.00	0.000	0.000
3/31/1971	32.03	58.88	1.84		64.44	57.53	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 Replacemnt Ratio
4/30/1971	30.69	56.26	1.83		65.36	59.22	0.00	0.000	0.000
5/31/1971	29.15	54.98	1.89		66.27	60.92	0.00	0.000	0.000
6/30/1971	28.82	55.48	1.92		67.13	62.59	0.00	0.000	0.000
7/31/1971	27.42	54.36	1.98		67.98	64.27	0.00	0.000	0.000
8/31/1971	27.84	56.00	2.01		68.84	66.01	0.00	0.000	0.000
9/30/1971	26.62	51.42	1.93		69.64	67.55	0.00	0.000	0.000
10/31/1971	25.19	50.54	2.01		70.42	69.12	0.00	0.000	0.000
11/30/1971	25.20	51.33	2.04		71.18	70.66	0.00	0.000	0.000
12/31/1971	23.54	48.71	2.07		71.91	72.17	0.00	0.000	0.000
1/31/1972	21.93	48.04	2.19		72.59	73.66	0.00	0.000	0.000
2/29/1972	21.19	47.34	2.23		73.20	75.03	0.00	0.000	0.000
3/31/1972	20.80	42.47	2.04		73.85	76.35	0.00	0.000	0.000
4/30/1972	19.70	32.43	1.65		74.44	77.32	0.00	0.000	0.000
5/31/1972	18.70	33.78	1.81		75.02	78.37	0.00	0.000	0.000
6/30/1972	25.46	56.39	2.21		75.78	80.06	0.00	0.000	0.000
7/31/1972	26.86	61.45	2.29		76.62	81.96	0.00	0.000	0.000
8/31/1972	29.40	68.45	2.33		77.53	84.09	0.00	0.000	0.000
9/30/1972	28.74	66.17	2.30		78.39	86.07	0.00	0.000	0.000
10/31/1972	19.61	63.86	3.26		79.00	88.05	0.00	0.000	0.000
11/30/1972	21.11	46.23	2.19	38.66	79.63	89.44	1.16	0.565	0.007
12/31/1972	18.60	57.54	3.09	101.82	80.21	91.22	4.32	1.321	0.025
1/31/1973	17.94	53.19	2.96	132.58	80.76	92.87	8.43	1.841	0.047
2/28/1973	18.02	45.89	2.55	124.61	81.27	94.16	11.92	1.923	0.066
3/31/1973	18.67	54.37	2.91	119.69	81.85	95.84	15.63	1.618	0.086
4/30/1973	21.03	61.30	2.91	120.40	82.48	97.68	19.24	1.444	0.104
5/31/1973	22.18	60.97	2.75	123.22	83.16	99.57	23.06	1.462	0.123
6/30/1973	22.68	65.13	2.87	123.22	83.85	101.52	26.75	1.385	0.141
7/31/1973	21.07	61.50	2.92	123.60	84.50	103.43	30.59	1.478	0.159
8/31/1973	21.38	59.72	2.79	123.22	85.16	105.28	34.41	1.499	0.177
9/30/1973	20.75	51.26	2.47	118.39	85.78	106.82	37.96	1.621	0.193
10/31/1973	21.37	58.86	2.75	123.22	86.45	108.64	41.78	1.516	0.209
11/30/1973	20.34	58.42	2.87	123.22	87.06	110.40	45.47	1.544	0.225
12/31/1973	20.50	59.23	2.89	123.22	87.69	112.23	49.29	1.526	0.241
1/31/1974	18.86	52.13	2.76	123.22	88.28	113.85	53.11	1.713	0.257
2/28/1974	18.97	54.39	2.87	123.22	88.81	115.37	56.56	1.658	0.271
3/31/1974	19.52	55.08	2.82	123.22	89.41	117.08	60.38	1.630	0.286
4/30/1974	20.57	55.42	2.69	124.41	90.03	118.74	64.11	1.615	0.301
5/31/1974	19.70	57.03	2.90	125.40	90.64	120.51	68.00	1.614	0.315
6/30/1974	20.59	60.67	2.95	127.19	91.26	122.33	71.82	1.546	0.329
7/31/1974	19.71	63.21	3.21	125.01	91.87	124.29	75.69	1.490	0.343
8/31/1974	19.55	62.48	3.20	121.04	92.48	126.23	79.45	1.458	0.356
9/30/1974	18.56	55.79	3.01	124.14	93.03	127.90	83.17	1.649	0.369
10/31/1974	14.82	44.66	3.01	132.86	93.49	129.28	87.29	2.206	0.384
11/30/1974	15.53	52.17	3.36	159.70	93.96	130.85	92.08	2.332	0.401
12/31/1974	15.30	53.55	3.50	162.21	94.43	132.51	97.11	2.330	0.419
1/31/1975	14.49	55.26	3.81	169.12	94.88	134.22	102.35	2.400	0.438
2/28/1975	13.90	50.29	3.62	172.11	95.27	135.63	107.17	2.653	0.455
3/31/1975	13.66	54.41	3.98	197.54	95.69	137.32	113.29	2.873	0.476

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
4/30/1975	13.14	49.91	3.80	208.28	96.09	138.81	119.54	3.269	0.499
5/31/1975	12.46	51.04	4.10	204.51	96.47	140.40	125.88	3.189	0.521
6/30/1975	13.67	55.47	4.06	206.95	96.88	142.06	132.09	2.964	0.542
7/31/1975	12.53	49.64	3.96	176.94	97.27	143.60	137.57	2.817	0.560
8/31/1975	12.04	49.72	4.13	203.61	97.65	145.14	143.89	3.265	0.581
9/30/1975	12.22	53.53	4.38	199.01	98.01	146.75	149.86	2.999	0.600
10/31/1975	12.22	54.44	4.46	207.20	98.39	148.43	156.28	3.080	0.621
11/30/1975	13.55	50.52	3.73	162.74	98.80	149.95	161.16	2.514	0.635
12/31/1975	11.98	50.04	4.18	136.94	99.17	151.50	165.41	2.187	0.647
1/31/1976	11.11	51.11	4.60	135.14	99.51	153.09	169.60	2.153	0.658
2/29/1976	11.11	44.75	4.03	117.05	99.84	154.38	172.99	2.075	0.667
3/31/1976	17.95	55.10	3.07	112.05	100.39	156.09	176.46	1.515	0.675
4/30/1976	10.13	42.67	4.21	59.36	100.70	157.37	178.25	1.114	0.677
5/31/1976	12.58	29.78	2.37		101.09	158.30	178.25	0.000	0.674
6/30/1976	13.78	49.62	3.60		101.50	159.78	178.25	0.000	0.669
7/31/1976	11.78	31.95	2.71	27.82	101.86	160.77	179.11	0.628	0.669
8/31/1976	12.09	35.28	2.92	31.80	102.24	161.87	180.09	0.663	0.669
9/30/1976	12.79	34.69	2.71	63.59	102.62	162.91	182.00	1.322	0.672
10/31/1976	13.15	35.08	2.67	115.27	103.03	164.00	185.57	2.358	0.682
11/30/1976	13.19	37.02	2.81	111.29	103.43	165.11	188.91	2.188	0.690
12/31/1976	16.85	60.41	3.58	111.29	103.95	166.98	192.36	1.425	0.697
1/31/1977	18.13	64.34	3.55	120.35	104.51	168.97	196.09	1.444	0.704
2/28/1977	18.70	68.94	3.69	111.29	105.03	170.90	199.21	1.256	0.708
3/31/1977	17.79	61.76	3.47	126.71	105.59	172.82	203.14	1.575	0.716
4/30/1977	15.86	53.41	3.37	121.94	106.06	174.42	206.80	1.740	0.724
5/31/1977	16.88	64.95	3.85	115.43	106.59	176.43	210.38	1.396	0.730
6/30/1977	18.02	67.10	3.72	115.00	107.13	178.45	213.83	1.337	0.735
7/31/1977	17.69	65.01	3.68	105.41	107.67	180.46	217.09	1.261	0.740
8/31/1977	17.53	62.57	3.57	103.82	108.22	182.40	220.31	1.282	0.744
9/30/1977	16.13	65.52	4.06	117.33	108.70	184.37	223.83	1.423	0.750
10/31/1977	16.26	67.88	4.18	115.27	109.21	186.47	227.41	1.357	0.755
11/30/1977	16.54	64.34	3.89	119.24	109.70	188.40	230.98	1.459	0.761
12/31/1977	14.18	53.80	3.79	127.19	110.14	190.07	234.93	1.852	0.768
1/31/1978	14.39	49.83	3.46	111.29	110.59	191.62	238.38	1.714	0.775
2/28/1978	14.73	45.94	3.12	111.29	111.00	192.90	241.49	1.812	0.780
3/31/1978	15.35	59.77	3.89	115.27	111.48	194.75	245.06	1.519	0.786
4/30/1978	13.59	58.00	4.27	111.29	111.88	196.49	248.40	1.540	0.791
5/31/1978	14.11	68.67	4.87	64.71	112.32	198.62	250.41	0.775	0.791
6/30/1978	12.95	71.23	5.50	65.19	112.71	200.76	252.37	0.769	0.791
7/31/1978	13.63	72.05	5.29	79.49	113.13	202.99	254.83	0.920	0.792
8/31/1978	14.46	84.10	5.82	47.70	113.58	205.60	256.31	0.480	0.789
9/30/1978	15.98	81.64	5.11	103.02	114.06	208.05	259.40	1.047	0.791
10/31/1978	15.82	83.09	5.25	127.19	114.55	210.63	263.34	1.276	0.796
11/30/1978	14.75	76.63	5.20	111.29	114.99	212.92	266.68	1.208	0.799
12/31/1978	14.89	73.82	4.96	115.25	115.45	215.21	270.25	1.288	0.803
1/31/1979	14.37	77.38	5.38	95.35	115.90	217.61	273.21	1.031	0.805
2/28/1979	13.81	69.89	5.06	95.35	116.29	219.57	275.88	1.130	0.807
3/31/1979	14.16	70.75	5.00	119.24	116.72	221.76	279.58	1.393	0.812

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
4/30/1979	14.88	71.05	4.77	111.29	117.17	223.89	282.91	1.284	0.815
5/31/1979	14.81	63.72	4.30	111.29	117.63	225.87	286.36	1.404	0.820
6/30/1979	14.32	67.72	4.73	111.29	118.06	227.90	289.70	1.345	0.823
7/31/1979	14.40	59.57	4.14	111.29	118.51	229.75	293.15	1.490	0.828
8/31/1979	14.34	77.04	5.37	111.29	118.95	232.14	296.60	1.208	0.831
9/30/1979	12.87	66.81	5.19	95.39	119.34	234.14	299.46	1.188	0.833
10/31/1979	13.20	72.01	5.46	127.19	119.75	236.37	303.41	1.481	0.838
11/30/1979	14.15	74.98	5.30	111.29	120.17	238.62	306.75	1.239	0.841
12/31/1979	13.97	83.06	5.95	119.24	120.60	241.20	310.44	1.220	0.844
1/31/1980	13.50	77.67	5.75	119.24	121.02	243.60	314.14	1.298	0.847
2/29/1980	13.49	77.22	5.72	119.24	121.41	245.84	317.60	1.305	0.851
3/31/1980	12.65	76.61	6.06	127.19	121.81	248.22	321.54	1.415	0.855
4/30/1980	14.54	68.20	4.69	103.87	122.24	250.26	324.66	1.244	0.857
5/31/1980	14.30	74.55	5.21	135.14	122.69	252.58	328.85	1.509	0.862
6/30/1980	13.74	87.87	6.39	143.09	123.10	255.21	333.14	1.399	0.866
7/31/1980	14.07	83.05	5.90	119.24	123.53	257.79	336.83	1.219	0.869
8/31/1980	14.15	78.23	5.53	119.24	123.97	260.21	340.53	1.281	0.872
9/30/1980	14.63	75.43	5.16	139.12	124.41	262.47	344.70	1.532	0.877
10/31/1980	15.37	76.13	4.95	127.19	124.89	264.83	348.65	1.378	0.880
11/30/1980	14.94	75.41	5.05	111.29	125.34	267.10	351.99	1.222	0.883
12/31/1980	12.98	72.63	5.60	127.19	125.74	269.35	355.93	1.475	0.887
1/31/1981	14.55	73.03	5.02	127.21	126.19	271.61	359.87	1.441	0.891
2/28/1981	14.66	74.02	5.05	127.19	126.60	273.68	363.43	1.422	0.894
3/31/1981	14.39	76.23	5.30	127.19	127.05	276.05	367.38	1.393	0.897
4/30/1981	14.27	75.34	5.28	119.24	127.47	278.31	370.95	1.320	0.900
5/31/1981	10.79	71.33	6.61	129.57	127.81	280.52	374.97	1.567	0.904
6/30/1981	14.87	69.76	4.69	119.24	128.25	282.61	378.55	1.397	0.907
7/31/1981	12.11	74.28	6.13	111.29	128.63	284.91	382.00	1.279	0.910
8/31/1981	12.67	69.57	5.49	119.24	129.02	287.07	385.69	1.439	0.913
9/30/1981	14.25	70.82	4.97	119.24	129.45	289.20	389.27	1.390	0.916
10/31/1981	13.09	71.04	5.43	121.30	129.86	291.40	393.03	1.431	0.919
11/30/1981	12.95	71.22	5.50	127.19	130.24	293.53	396.85	1.500	0.922
12/31/1981	12.55	67.40	5.37	143.24	130.63	295.62	401.29	1.778	0.927
1/31/1982	12.63	60.50	4.79	119.24	131.02	297.50	404.98	1.616	0.931
2/28/1982	11.76	63.92	5.43	111.29	131.35	299.29	408.10	1.459	0.933
3/31/1982	11.25	56.12	4.99	119.24	131.70	301.03	411.80	1.755	0.937
4/30/1982	12.99	66.06	5.09	119.24	132.09	303.01	415.37	1.496	0.940
5/31/1982	8.94	77.28	8.65	112.72	132.37	305.41	418.87	1.301	0.943
6/30/1982	13.90	74.67	5.37	111.29	132.79	307.65	422.21	1.247	0.944
7/31/1982	11.94	71.67	6.00	87.13	133.16	309.87	424.91	1.035	0.945
8/31/1982	11.48	75.13	6.54	95.39	133.51	312.20	427.87	1.094	0.946
9/30/1982	11.88	75.09	6.32	111.29	133.87	314.45	431.20	1.271	0.948
10/31/1982	12.28	69.43	5.65	119.24	134.25	316.60	434.90	1.448	0.950
11/30/1982	11.42	72.39	6.34	119.24	134.59	318.77	438.48	1.413	0.953
12/31/1982	10.86	68.70	6.32	119.24	134.93	320.90	442.17	1.489	0.956
1/31/1983	10.29	67.50	6.56	120.83	135.25	323.00	445.92	1.543	0.959
2/28/1983	11.79	72.93	6.19	111.29	135.58	325.04	449.04	1.304	0.961
3/31/1983	11.57	78.18	6.76	119.24	135.94	327.46	452.73	1.320	0.963

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
4/30/1983	11.17	73.72	6.60	115.26	136.27	329.67	456.19	1.349	0.965
5/31/1983	11.88	75.84	6.39	127.19	136.64	332.02	460.13	1.440	0.968
6/30/1983	11.32	78.47	6.93	127.19	136.98	334.38	463.95	1.408	0.970
7/31/1983	10.97	70.09	6.39	111.29	137.32	336.55	467.40	1.364	0.972
8/31/1983	11.57	79.22	6.85	127.19	137.68	339.01	471.34	1.392	0.975
9/30/1983	11.35	79.37	7.00	127.19	138.02	341.39	475.16	1.393	0.977
10/31/1983	10.68	81.76	7.66	127.19	138.35	343.92	479.10	1.368	0.979
11/30/1983	11.22	78.87	7.03	127.19	138.69	346.29	482.92	1.403	0.982
12/31/1983	11.21	81.49	7.27	127.19	139.03	348.82	486.86	1.364	0.984
1/31/1984	11.24	78.33	6.97	127.19	139.38	351.24	490.80	1.411	0.986
2/29/1984	11.12	81.32	7.31	127.19	139.71	353.60	494.49	1.368	0.988
3/31/1984	11.05	77.82	7.04	127.19	140.05	356.01	498.43	1.422	0.991
4/30/1984	11.03	78.41	7.11	127.19	140.38	358.37	502.25	1.413	0.993
5/31/1984	10.80	75.37	6.98	127.18	140.71	360.70	506.19	1.467	0.996
6/30/1984	10.54	76.19	7.23	127.19	141.03	362.99	510.01	1.458	0.998
7/31/1984	10.94	82.67	7.56	127.19	141.37	365.55	513.95	1.351	1.000
8/31/1984	10.58	81.09	7.66	127.20	141.70	368.07	517.89	1.380	1.002
9/30/1984	10.84	81.28	7.50	127.18	142.02	370.50	521.71	1.373	1.004
10/31/1984	10.67	75.94	7.12	127.19	142.35	372.86	525.65	1.460	1.006
11/30/1984	10.40	76.38	7.34	127.19	142.66	375.15	529.47	1.457	1.009
12/31/1984	9.77	98.62	10.09	127.19	142.97	378.21	533.41	1.168	1.010
1/31/1985	10.37	101.42	9.78	127.19	143.29	381.35	537.35	1.133	1.010
2/28/1985	10.27	79.15	7.71	127.19	143.58	383.57	540.91	1.414	1.012
3/31/1985	10.37	100.87	9.73	127.19	143.90	386.69	544.86	1.138	1.013
4/30/1985	9.46	101.25	10.71	127.18	144.18	389.73	548.67	1.144	1.014
5/31/1985	7.98	100.98	12.65	127.19	144.43	392.86	552.62	1.163	1.015
6/30/1985	7.38	96.91	13.13	127.18	144.65	395.77	556.43	1.215	1.016
7/31/1985	7.91	94.37	11.93	119.24	144.90	398.69	560.13	1.161	1.017
8/31/1985	7.69	95.76	12.46	120.04	145.13	401.66	563.85	1.156	1.018
9/30/1985	7.78	95.95	12.33	119.24	145.37	404.54	567.43	1.145	1.018
10/31/1985	7.59	98.03	12.92	119.24	145.60	407.58	571.12	1.125	1.019
11/30/1985	8.32	100.19	12.04	119.24	145.85	410.59	574.70	1.095	1.019
12/31/1985	6.73	91.09	13.53	119.24	146.06	413.41	578.40	1.215	1.021
1/31/1986	7.41	89.13	12.03	119.22	146.29	416.17	582.09	1.230	1.022
2/28/1986	7.38	90.79	12.31	119.25	146.50	418.72	585.43	1.210	1.023
3/31/1986	5.52	81.20	14.70	119.25	146.67	421.23	589.13	1.371	1.024
4/30/1986	7.40	86.50	11.69	119.25	146.89	423.83	592.70	1.265	1.025
5/31/1986	7.45	97.29	13.06	119.25	147.12	426.84	596.40	1.135	1.026
6/30/1986	7.78	102.87	13.22	119.25	147.35	429.93	599.98	1.074	1.026
7/31/1986	7.52	108.15	14.38	119.25	147.59	433.28	603.68	1.028	1.026
8/31/1986	7.55	109.51	14.51	119.25	147.82	436.68	607.37	1.016	1.026
9/30/1986	7.34	104.78	14.27	119.25	148.04	439.82	610.95	1.060	1.026
10/31/1986	7.09	102.63	14.48	119.25	148.26	443.00	614.65	1.083	1.027
11/30/1986	7.31	103.56	14.17	119.25	148.48	446.11	618.22	1.072	1.027
12/31/1986	7.11	108.10	15.20	119.25	148.70	449.46	621.92	1.032	1.027
1/31/1987	7.46	107.30	14.38	119.25	148.93	452.79	625.62	1.036	1.027
2/28/1987	7.21	100.82	13.99	119.18	149.13	455.61	628.96	1.100	1.027
3/31/1987	7.24	103.98	14.36	119.18	149.36	458.83	632.65	1.068	1.028

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4/30/1987	6.73	92.48	13.74	119.18	149.56	461.61	636.23	1.197	1.028
5/31/1987	6.84	104.23	15.24	119.18	149.77	464.84	639.92	1.070	1.029
6/30/1987	6.96	104.17	14.96	119.18	149.98	467.96	643.50	1.069	1.029
7/31/1987	7.05	109.95	15.59	119.18	150.20	471.37	647.19	1.016	1.029
8/31/1987	6.67	107.98	16.19	119.18	150.41	474.72	650.89	1.037	1.029
9/30/1987	8.71	113.47	13.02	119.18	150.67	478.12	654.46	0.972	1.029
10/31/1987	6.80	116.59	17.16	119.18	150.88	481.74	658.16	0.963	1.028
11/30/1987	8.57	113.66	13.27	119.18	151.14	485.15	661.73	0.972	1.028
12/31/1987	8.62	113.10	13.12	119.24	151.40	488.65	665.43	0.976	1.027
1/31/1988	8.08	107.86	13.35	119.18	151.65	492.00	669.12	1.024	1.027
2/29/1988	7.87	104.95	13.34	119.18	151.88	495.04	672.58	1.053	1.028
3/31/1988	8.26	119.85	14.51	119.18	152.14	498.76	676.27	0.927	1.027
4/30/1988	8.07	115.60	14.32	119.18	152.38	502.22	679.85	0.961	1.027
5/31/1988	8.12	110.81	13.64	119.18	152.63	505.66	683.54	0.999	1.026
6/30/1988	8.26	112.62	13.64	119.18	152.88	509.04	687.12	0.983	1.026
7/31/1988	8.12	118.87	14.65	119.18	153.13	512.72	690.81	0.936	1.026
8/31/1988	7.92	117.72	14.86	119.18	153.38	516.37	694.51	0.946	1.025
9/30/1988	7.81	113.59	14.55	119.18	153.61	519.78	698.08	0.979	1.025
10/31/1988	7.50	107.69	14.36	119.18	153.84	523.12	701.78	1.031	1.025
11/30/1988	7.99	110.21	13.79	119.18	154.08	526.42	705.35	1.005	1.025
12/31/1988	7.80	116.51	14.93	119.18	154.33	530.04	709.05	0.956	1.025
1/31/1989	7.51	113.49	15.12	119.18	154.56	533.55	712.74	0.982	1.024
2/28/1989	7.30	107.40	14.71	119.18	154.76	536.56	716.08	1.036	1.024
3/31/1989	6.79	105.09	15.49	119.19	154.97	539.82	719.78	1.062	1.025
4/30/1989	6.81	106.32	15.62	119.18	155.18	543.01	723.35	1.050	1.025
5/31/1989	5.15	73.06	14.18	88.42	155.34	545.27	726.09	1.127	1.025
6/30/1989	6.42	97.02	15.10	119.18	155.53	548.18	729.67	1.149	1.026
7/31/1989	7.13	101.83	14.28	119.18	155.75	551.34	733.36	1.090	1.026
8/31/1989	7.34	77.04	10.50	119.18	155.98	553.73	737.06	1.406	1.027
9/30/1989	7.09	102.82	14.50	119.24	156.19	556.81	740.63	1.081	1.027
10/31/1989	6.46	102.98	15.93	119.24	156.39	560.01	744.33	1.086	1.028
11/30/1989	6.95	99.77	14.35	119.24	156.60	563.00	747.91	1.114	1.028
12/31/1989	5.92	95.20	16.08	119.24	156.78	565.95	751.60	1.176	1.029
1/31/1990	6.02	99.28	16.49	119.24	156.97	569.03	755.30	1.129	1.029
2/28/1990	6.19	99.88	16.15	119.24	157.14	571.82	758.64	1.121	1.030
3/31/1990	6.17	97.68	15.84	119.24	157.33	574.85	762.33	1.145	1.030
4/30/1990	5.96	102.95	17.26	119.24	157.51	577.94	765.91	1.092	1.030
5/31/1990	6.13	106.32	17.35	119.24	157.70	581.24	769.61	1.057	1.031
6/30/1990	6.36	109.00	17.14	119.24	157.89	584.51	773.18	1.031	1.031
7/31/1990	6.06	104.71	17.28	119.24	158.08	587.75	776.88	1.074	1.031
8/31/1990	6.25	105.04	16.81	119.24	158.28	591.01	780.58	1.068	1.031
9/30/1990	7.37	117.03	15.89	119.24	158.50	594.52	784.15	0.956	1.031
10/31/1990	7.28	124.36	17.07	119.24	158.72	598.37	787.85	0.903	1.030
11/30/1990	7.34	135.47	18.44	119.24	158.94	602.44	791.43	0.833	1.029
12/31/1990	7.04	124.57	17.69	119.24	159.16	606.30	795.12	0.904	1.028
1/31/1991	6.54	116.70	17.85	119.24	159.36	609.92	798.82	0.965	1.028
2/28/1991	6.02	100.39	16.67	119.24	159.53	612.73	802.16	1.117	1.028
3/31/1991	7.30	114.71	15.72	119.24	159.76	616.28	805.86	0.974	1.028

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
4/30/1991	6.85	118.54	17.30	119.24	159.96	619.84	809.43	0.948	1.027
5/31/1991	6.76	110.79	16.39	119.24	160.17	623.28	813.13	1.011	1.027
6/30/1991	6.72	114.45	17.03	119.24	160.38	626.71	816.71	0.981	1.027
7/31/1991	6.68	118.75	17.78	119.24	160.58	630.39	820.40	0.948	1.027
8/31/1991	6.84	126.49	18.50	119.24	160.79	634.31	824.10	0.892	1.026
9/30/1991	6.93	113.53	16.37	119.24	161.00	637.72	827.68	0.987	1.026
10/31/1991	6.34	108.56	17.14	119.24	161.20	641.08	831.37	1.035	1.026
11/30/1991	6.88	109.30	15.88	119.24	161.41	644.36	834.95	1.023	1.026
12/31/1991	6.95	106.03	15.25	119.24	161.62	647.65	838.65	1.052	1.026
1/31/1992	6.50	115.68	17.80	119.24	161.82	651.23	842.34	0.973	1.026
2/29/1992	5.58	112.32	20.14	119.23	161.98	654.49	845.80	1.009	1.026
3/31/1992	5.62	102.81	18.28	119.24	162.16	657.68	849.50	1.097	1.026
4/30/1992	6.02	99.65	16.56	119.24	162.34	660.67	853.07	1.125	1.026
5/31/1992	5.38	93.36	17.35	119.24	162.51	663.56	856.77	1.204	1.027
6/30/1992	5.72	100.61	17.59	119.24	162.68	666.58	860.35	1.118	1.027
7/31/1992	6.11	112.44	18.40	119.24	162.87	670.07	864.04	1.003	1.027
8/31/1992	6.07	108.36	17.84	119.24	163.05	673.43	867.74	1.039	1.027
9/30/1992	5.92	99.28	16.76	119.24	163.23	676.40	871.32	1.130	1.028
10/31/1992	5.71	99.12	17.36	119.24	163.41	679.48	875.01	1.134	1.028
11/30/1992	5.76	101.83	17.67	119.24	163.58	682.53	878.59	1.105	1.028
12/31/1992	5.61	73.97	13.19	87.44	163.76	684.82	881.30	1.095	1.029
1/31/1993	5.93	114.15	19.24	119.24	163.94	688.36	885.00	0.990	1.028
2/28/1993	6.03	122.72	20.35	119.24	164.11	691.80	888.33	0.924	1.028
3/31/1993	6.24	121.95	19.56	119.24	164.30	695.58	892.03	0.928	1.028
4/30/1993	6.47	122.07	18.86	119.24	164.50	699.24	895.61	0.925	1.027
5/31/1993	6.34	123.07	19.42	119.24	164.69	703.06	899.30	0.919	1.027
6/30/1993	6.42	127.38	19.85	119.24	164.89	706.88	902.88	0.889	1.026
7/31/1993	6.22	127.06	20.41	119.24	165.08	710.82	906.58	0.893	1.025
8/31/1993	6.47	114.85	17.74	119.24	165.28	714.38	910.27	0.980	1.025
9/30/1993	6.19	117.70	19.01	119.24	165.46	717.91	913.85	0.960	1.025
10/31/1993	6.31	126.57	20.05	119.24	165.66	721.83	917.55	0.895	1.024
11/30/1993	6.29	116.03	18.44	119.24	165.85	725.31	921.12	0.972	1.024
12/31/1993	6.11	110.71	18.13	119.24	166.04	728.75	924.82	1.018	1.024
1/31/1994	5.74	124.80	21.74	119.24	166.22	732.61	928.52	0.911	1.024
2/28/1994	5.92	113.84	19.22	119.24	166.38	735.80	931.86	0.993	1.023
3/31/1994	5.73	115.29	20.12	119.24	166.56	739.38	935.55	0.983	1.023
4/30/1994	5.53	112.01	20.26	119.24	166.73	742.74	939.13	1.012	1.023
5/31/1994	7.01	138.26	19.71	119.24	166.94	747.02	942.83	0.819	1.022
6/30/1994	7.17	143.38	20.01	119.24	167.16	751.32	946.40	0.790	1.021
7/31/1994	6.24	134.92	21.64	119.24	167.35	755.51	950.10	0.843	1.020
8/31/1994	6.15	125.29	20.38	119.24	167.54	759.39	953.80	0.905	1.020
9/30/1994	5.79	119.75	20.70	119.24	167.72	762.98	957.37	0.948	1.019
10/31/1994	6.15	121.22	19.70	119.24	167.91	766.74	961.07	0.934	1.019
11/30/1994	5.95	109.99	18.50	119.24	168.08	770.04	964.65	1.026	1.019
12/31/1994	5.70	118.53	20.79	119.24	168.26	773.71	968.34	0.958	1.019
1/31/1995	5.59	103.11	18.46	119.24	168.43	776.91	972.04	1.094	1.019
2/28/1995	5.97	121.94	20.41	119.24	168.60	780.32	975.38	0.930	1.019
3/31/1995	5.81	118.52	20.41	119.24	168.78	784.00	979.07	0.957	1.019

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
4/30/1995	5.93	118.99	20.05	119.24	168.96	787.57	982.65	0.952	1.018
5/31/1995	5.81	114.93	19.78	119.24	169.14	791.13	986.35	0.985	1.018
6/30/1995	5.18	106.60	20.59	119.24	169.30	794.33	989.92	1.064	1.018
7/31/1995	5.72	111.14	19.44	119.24	169.47	797.77	993.62	1.018	1.018
8/31/1995	5.96	122.26	20.53	119.24	169.66	801.56	997.32	0.928	1.018
9/30/1995	5.68	118.76	20.91	119.24	169.83	805.13	1000.89	0.956	1.018
10/31/1995	5.42	121.22	22.35	119.24	170.00	808.89	1004.59	0.940	1.017
11/30/1995	5.52	123.73	22.42	119.24	170.16	812.60	1008.17	0.921	1.017
12/31/1995	5.73	119.70	20.88	119.24	170.34	816.31	1011.86	0.948	1.017
1/31/1996	5.66	110.27	19.48	119.24	170.51	819.73	1015.56	1.026	1.017
2/29/1996	5.77	106.28	18.41	119.23	170.68	822.81	1019.02	1.061	1.017
3/31/1996	5.74	111.67	19.46	119.24	170.86	826.27	1022.71	1.013	1.017
4/30/1996	5.87	114.72	19.56	119.24	171.04	829.71	1026.29	0.986	1.017
5/31/1996	5.42	95.85	17.70	119.24	171.20	832.68	1029.99	1.174	1.017
6/30/1996	6.58	111.85	16.99	119.24	171.40	836.04	1033.56	1.004	1.017
7/31/1996	6.06	110.39	18.21	119.24	171.59	839.46	1037.26	1.021	1.017
8/31/1996	5.89	109.37	18.56	119.24	171.77	842.85	1040.96	1.032	1.017
9/30/1996	5.72	115.25	20.15	119.24	171.94	846.31	1044.53	0.983	1.017
10/31/1996	5.63	105.44	18.72	119.24	172.12	849.58	1048.23	1.071	1.017
11/30/1996	5.75	109.08	18.99	119.24	172.29	852.85	1051.81	1.036	1.017
12/31/1996	5.67	105.58	18.62	119.24	172.47	856.12	1055.50	1.069	1.018
1/31/1997	5.46	103.09	18.86	119.24	172.64	859.32	1059.20	1.096	1.018
2/28/1997	5.27	101.69	19.29	119.24	172.78	862.17	1062.54	1.112	1.018
3/31/1997	5.45	107.37	19.71	119.24	172.95	865.49	1066.23	1.054	1.018
4/30/1997	5.56	104.55	18.82	119.24	173.12	868.63	1069.81	1.080	1.018
5/31/1997	5.71	104.56	18.30	119.24	173.30	871.87	1073.51	1.078	1.019
6/30/1997	5.35	92.88	17.37	119.24	173.46	874.66	1077.09	1.211	1.019
7/31/1997	5.10	93.70	18.38	119.24	173.61	877.56	1080.78	1.204	1.020
8/31/1997	5.09	82.45	16.20	115.39	173.77	880.12	1084.36	1.314	1.020
9/30/1997	4.93	90.61	18.37	119.24	173.92	882.84	1087.94	1.245	1.021
10/31/1997	4.75	90.50	19.07	119.24	174.07	885.64	1091.63	1.249	1.022
11/30/1997	4.74	77.28	16.31	119.24	174.21	887.96	1095.21	1.450	1.023
12/31/1997	4.77	85.98	18.02	119.24	174.36	890.63	1098.91	1.310	1.023
1/31/1998	4.65	88.06	18.93	119.24	174.50	893.36	1102.60	1.283	1.024
2/28/1998	4.57	80.87	17.71	119.24	174.63	895.62	1105.94	1.392	1.025
3/31/1998	4.74	83.09	17.55	119.24	174.78	898.20	1109.64	1.354	1.026
4/30/1998	4.68	100.06	21.36	119.24	174.92	901.20	1113.21	1.136	1.026
5/31/1998	4.61	107.33	23.27	119.24	175.06	904.53	1116.91	1.063	1.026
6/30/1998	4.78	106.44	22.27	119.24	175.20	907.72	1120.49	1.070	1.026
7/31/1998	4.68	98.10	20.98	119.24	175.35	910.76	1124.18	1.158	1.027
8/31/1998	4.85	101.36	20.91	119.24	175.50	913.90	1127.88	1.120	1.027
9/30/1998	4.77	105.02	22.00	119.24	175.64	917.05	1131.46	1.084	1.027
10/31/1998	4.86	109.50	22.54	119.24	175.79	920.45	1135.15	1.040	1.027
11/30/1998	4.56	95.18	20.87	119.24	175.93	923.30	1138.73	1.193	1.028
12/31/1998	4.43	98.95	22.32	119.24	176.07	926.37	1142.43	1.151	1.028
1/31/1999	4.50	104.64	23.25	119.24	176.21	929.61	1146.12	1.090	1.028
2/28/1999	4.02	80.05	19.92	119.24	176.32	931.86	1149.46	1.415	1.029
3/31/1999	4.21	91.26	21.70	119.24	176.45	934.69	1153.16	1.246	1.030

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
4/30/1999	4.20	92.84	22.10	119.24	176.57	937.47	1156.73	1.226	1.030
5/31/1999	4.10	86.40	21.09	119.24	176.70	940.15	1160.43	1.315	1.031
6/30/1999	3.71	84.77	22.84	119.24	176.81	942.69	1164.01	1.345	1.032
7/31/1999	4.16	105.56	25.39	119.24	176.94	945.96	1167.70	1.085	1.032
8/31/1999	4.23	111.86	26.44	119.24	177.07	949.43	1171.40	1.025	1.032
9/30/1999	4.24	100.67	23.75	119.24	177.20	952.45	1174.98	1.134	1.032
10/31/1999	4.61	108.75	23.59	119.24	177.34	955.82	1178.67	1.050	1.032
11/30/1999	4.41	106.76	24.21	107.31	177.48	959.03	1181.89	0.963	1.032
12/31/1999	4.56	109.25	23.97	79.49	177.62	962.41	1184.36	0.697	1.031
1/31/2000	4.30	108.16	25.18	79.49	177.75	965.77	1186.82	0.706	1.030
2/29/2000	3.74	89.92	24.04	79.49	177.86	968.37	1189.13	0.847	1.029
3/31/2000	3.48	80.32	23.08	79.49	177.97	970.86	1191.59	0.947	1.029
4/30/2000	3.44	86.70	25.24	79.49	178.07	973.46	1193.98	0.880	1.029
5/31/2000	3.13	76.53	24.45	79.49	178.17	975.84	1196.44	0.996	1.029
6/30/2000	3.61	92.26	25.59	79.49	178.27	978.60	1198.83	0.828	1.028
7/31/2000	3.76	81.23	21.60	79.49	178.39	981.12	1201.29	0.933	1.028
8/31/2000	3.28	79.03	24.08	79.49	178.49	983.57	1203.75	0.964	1.028
9/30/2000	3.42	77.21	22.56	79.49	178.60	985.89	1206.14	0.984	1.028
10/31/2000	3.86	95.15	24.63	79.49	178.72	988.84	1208.60	0.801	1.027
11/30/2000	3.34	97.24	29.14	79.49	178.82	991.76	1210.99	0.789	1.027
12/31/2000	3.40	96.54	28.42	79.49	178.92	994.75	1213.45	0.794	1.026
1/31/2001	3.22	88.34	27.41	79.49	179.02	997.49	1215.92	0.867	1.026
2/28/2001	3.18	85.75	26.98	79.49	179.11	999.89	1218.14	0.892	1.025
3/31/2001	3.05	94.42	30.97	79.49	179.20	1002.81	1220.61	0.814	1.025
4/30/2001	3.04	91.67	30.12	79.49	179.30	1005.57	1222.99	0.838	1.024
5/31/2001	3.02	83.04	27.53	79.49	179.39	1008.14	1225.45	0.922	1.024
6/30/2001	2.80	90.59	32.37	79.49	179.47	1010.86	1227.84	0.850	1.024
7/31/2001	2.82	89.75	31.85	79.49	179.56	1013.64	1230.30	0.857	1.023
8/31/2001	2.42	83.38	34.49	79.49	179.64	1016.22	1232.77	0.925	1.023
9/30/2001	2.79	88.00	31.49	79.49	179.72	1018.86	1235.15	0.874	1.023
10/31/2001	3.05	81.32	26.68	79.49	179.81	1021.39	1237.62	0.940	1.023
11/30/2001	2.96	80.60	27.23	79.49	179.90	1023.80	1240.00	0.950	1.023
12/31/2001	2.95	84.35	28.62	79.49	179.99	1026.42	1242.47	0.909	1.022
1/31/2002	2.92	83.35	28.50	79.49	180.08	1029.00	1244.93	0.920	1.022
2/28/2002	2.63	90.99	34.66	79.49	180.16	1031.55	1247.16	0.848	1.022
3/31/2002	2.68	103.92	38.74	79.49	180.24	1034.77	1249.62	0.745	1.021
4/30/2002	2.85	102.19	35.92	79.49	180.33	1037.84	1252.00	0.756	1.020
5/31/2002	2.65	70.18	26.51	79.50	180.41	1040.01	1254.47	1.090	1.020
6/30/2002	2.58	67.83	26.26	76.20	180.49	1042.05	1256.75	1.080	1.020
7/31/2002	2.25	52.48	23.27	61.81	180.56	1043.67	1258.67	1.127	1.021
8/31/2002	2.42	61.71	25.45	44.94	180.63	1045.59	1260.06	0.699	1.020
9/30/2002	1.98	51.53	26.05	15.28	180.69	1047.13	1260.52	0.285	1.019
10/31/2002	1.79	41.81	23.39		180.75	1048.43	1260.52	0.000	1.018
11/30/2002	4.60	52.50	11.41		180.88	1050.00	1260.52	0.000	1.017
12/31/2002	11.69	114.05	9.76		181.25	1053.54	1260.52	0.000	1.013
1/31/2003	10.46	112.75	10.78		181.57	1057.03	1260.52	0.000	1.010
2/28/2003	10.44	117.32	11.24	1.97	181.86	1060.32	1260.58	0.015	1.007
3/31/2003	9.49	121.78	12.84	13.19	182.16	1064.09	1260.99	0.100	1.004

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
4/30/2003	9.40	124.57	13.25	5.05	182.44	1067.83	1261.14	0.038	1.001
5/31/2003	9.34	124.78	13.37		182.73	1071.70	1261.14	0.000	0.998
6/30/2003	9.22	124.38	13.49		183.00	1075.43	1261.14	0.000	0.995
7/31/2003	8.66	118.28	13.65		183.27	1079.10	1261.14	0.000	0.992
8/31/2003	8.71	123.80	14.21		183.54	1082.94	1261.14	0.000	0.989
9/30/2003	8.40	123.79	14.74		183.80	1086.65	1261.14	0.000	0.986
10/31/2003	8.04	153.94	19.14		184.04	1091.42	1261.14	0.000	0.982
11/30/2003	9.53	231.58	24.29		184.33	1098.37	1261.14	0.000	0.976
12/31/2003	9.47	224.12	23.67		184.62	1105.32	1261.14	0.000	0.971
1/31/2004	9.11	230.88	25.36		184.91	1112.47	1261.14	0.000	0.965
2/29/2004	8.63	219.14	25.38		185.16	1118.83	1261.14	0.000	0.960
3/31/2004	8.61	222.02	25.78		185.42	1125.71	1261.14	0.000	0.955
4/30/2004	8.38	213.07	25.44		185.68	1132.10	1261.14	0.000	0.950
5/31/2004	10.13	213.09	21.04		185.99	1138.71	1261.14	0.000	0.945
6/30/2004	9.17	210.82	22.99		186.26	1145.03	1261.14	0.000	0.941
7/31/2004	7.87	207.52	26.38		186.51	1151.47	1261.14	0.000	0.936
8/31/2004	8.32	218.42	26.24		186.77	1158.24	1261.14	0.000	0.931
9/30/2004	7.65	217.78	28.47		187.00	1164.77	1261.14	0.000	0.927
10/31/2004	7.46	211.06	28.28		187.23	1171.31	1261.14	0.000	0.922
11/30/2004	8.89	204.57	23.00		187.49	1177.45	1261.14	0.000	0.918
12/31/2004	8.42	205.07	24.34		187.75	1183.81	1261.14	0.000	0.913
1/31/2005	8.42	213.03	25.30		188.02	1190.41	1261.14	0.000	0.909
2/28/2005	8.44	209.43	24.83		188.25	1196.28	1261.14	0.000	0.905
3/31/2005	8.57	211.97	24.74		188.52	1202.85	1261.14	0.000	0.900
4/30/2005	9.61	209.14	21.77		188.81	1209.12	1261.14	0.000	0.896
5/31/2005	8.57	209.49	24.45		189.07	1215.62	1261.14	0.000	0.892
6/30/2005	7.10	204.50	28.82		189.28	1221.75	1261.14	0.000	0.888
7/31/2005	8.25	208.35	25.27		189.54	1228.21	1261.14	0.000	0.884
8/31/2005	7.65	215.90	28.23		189.78	1234.90	1261.14	0.000	0.879
9/30/2005	8.22	213.34	25.96		190.02	1241.30	1261.14	0.000	0.875
10/31/2005	8.14	216.14	26.56		190.28	1248.00	1261.14	0.000	0.871
11/30/2005	7.58	214.80	28.32		190.50	1254.45	1261.14	0.000	0.867
12/31/2005	7.37	212.29	28.81		190.73	1261.03	1261.14	0.000	0.863
1/31/2006	6.72	207.56	30.90		190.94	1267.46	1261.14	0.000	0.859
2/28/2006	6.32	206.42	32.66		191.12	1273.24	1261.14	0.000	0.856
3/31/2006	6.35	195.67	30.82		191.31	1279.31	1261.14	0.000	0.852
4/30/2006	6.99	189.29	27.06		191.52	1284.99	1261.14	0.000	0.849
5/31/2006	5.66	189.89	33.57		191.70	1290.87	1261.14	0.000	0.845
6/30/2006	5.30	178.78	33.70		191.86	1296.24	1261.14	0.000	0.842
7/31/2006	5.87	175.02	29.81		192.04	1301.66	1261.14	0.000	0.839
8/31/2006	5.78	169.76	29.38		192.22	1306.93	1261.14	0.000	0.836
9/30/2006	5.87	177.12	30.19		192.40	1312.24	1261.14	0.000	0.833
10/31/2006	4.97	167.28	33.65		192.55	1317.42	1261.14	0.000	0.830
11/30/2006	4.95	170.15	34.38		192.70	1322.53	1261.14	0.000	0.827
12/31/2006	5.29	177.67	33.58		192.86	1328.04	1261.14	0.000	0.824
1/31/2007	4.76	184.70	38.79		193.01	1333.76	1261.14	0.000	0.821
2/28/2007	4.00	192.66	48.15		193.12	1339.16	1261.14	0.000	0.818
3/31/2007	3.79	184.15	48.59		193.24	1344.87	1261.14	0.000	0.815

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
4/30/2007	4.03	185.55	46.09		193.36	1350.43	1261.14	0.000	0.812
5/31/2007	5.59	187.71	33.55		193.53	1356.25	1261.14	0.000	0.809
6/30/2007	6.39	183.48	28.72		193.72	1361.76	1261.14	0.000	0.806
7/31/2007	6.26	174.45	27.85		193.92	1367.16	1261.14	0.000	0.803
8/31/2007	6.81	183.27	26.91		194.13	1372.84	1261.14	0.000	0.800
9/30/2007	5.99	174.66	29.14		194.31	1378.08	1261.14	0.000	0.797
10/31/2007	6.49	213.11	32.82		194.51	1384.69	1261.14	0.000	0.794
11/30/2007	6.29	210.87	33.50		194.70	1391.02	1261.14	0.000	0.790
12/31/2007	5.96	209.36	35.15		194.88	1397.51	1261.14	0.000	0.787
1/31/2008	5.99	210.62	35.14		195.07	1404.04	1261.14	0.000	0.784
2/29/2008	4.98	205.80	41.32		195.22	1410.01	1261.14	0.000	0.781
3/31/2008	5.04	208.71	41.38		195.37	1416.48	1261.14	0.000	0.778
4/30/2008	5.12	211.98	41.40		195.53	1422.83	1261.14	0.000	0.775
5/31/2008	5.17	204.98	39.68		195.69	1429.19	1261.14	0.000	0.771
6/30/2008	4.67	190.58	40.79		195.83	1434.91	1261.14	0.000	0.769
7/31/2008	4.41	193.67	43.89		195.96	1440.91	1261.14	0.000	0.766
8/31/2008	4.89	193.00	39.45		196.11	1446.89	1261.14	0.000	0.763
9/30/2008	2.17	114.08	52.54		196.18	1450.32	1261.14	0.000	0.761
10/31/2008	1.16	86.19	74.32		196.21	1452.99	1261.14	0.000	0.760
11/30/2008	4.16	219.97	52.92		196.34	1459.59	1261.14	0.000	0.757
12/31/2008	3.83	214.37	55.91		196.46	1466.23	1261.14	0.000	0.754
1/31/2009	4.11	224.76	54.75		196.59	1473.20	1261.14	0.000	0.751
2/28/2009	4.15	223.48	53.80		196.70	1479.46	1261.14	0.000	0.748
3/31/2009	4.36	229.51	52.65		196.84	1486.57	1261.14	0.000	0.745
4/30/2009	4.17	224.86	53.89		196.96	1493.32	1261.14	0.000	0.742
5/31/2009	3.86	220.21	57.06		197.08	1500.14	1261.14	0.000	0.739
6/30/2009	4.21	208.42	49.51		197.21	1506.40	1261.14	0.000	0.736
7/31/2009	4.40	222.19	50.53		197.34	1513.28	1261.14	0.000	0.733
8/31/2009	4.85	213.90	44.12		197.49	1519.92	1261.14	0.000	0.730
9/30/2009	5.11	216.18	42.31		197.65	1526.40	1261.14	0.000	0.727
10/31/2009	5.11	215.83	42.23		197.81	1533.09	1261.14	0.000	0.724
11/30/2009	4.96	214.54	43.24		197.96	1539.53	1261.14	0.000	0.722
12/31/2009	4.99	218.34	43.79		198.11	1546.30	1261.14	0.000	0.719
1/31/2010	4.82	218.21	45.26		198.26	1553.06	1261.14	0.000	0.716
2/28/2010	4.84	215.51	44.54		198.39	1559.10	1261.14	0.000	0.714
3/31/2010	4.55	210.98	46.38		198.54	1565.64	1261.14	0.000	0.711
4/30/2010	4.02	194.93	48.46		198.66	1571.48	1261.14	0.000	0.708
5/31/2010	4.26	201.91	47.34		198.79	1577.74	1261.14	0.000	0.706
6/30/2010	4.59	211.40	46.10		198.93	1584.09	1261.14	0.000	0.703
7/31/2010	4.61	212.71	46.15		199.07	1590.68	1261.14	0.000	0.701
8/31/2010	4.81	219.03	45.53		199.22	1597.47	1261.14	0.000	0.698
9/30/2010	4.65	214.40	46.08		199.36	1603.90	1261.14	0.000	0.696
10/31/2010	3.95	190.61	48.29		199.48	1609.81	1261.14	0.000	0.693
11/30/2010	4.29	215.05	50.15		199.61	1616.26	1261.14	0.000	0.691
12/31/2010	4.42	224.92	50.88		199.75	1623.23	1261.14	0.000	0.688
1/31/2011	4.56	230.68	50.62		199.89	1630.39	1261.14	0.000	0.685
2/28/2011	4.59	234.92	51.16		200.02	1636.96	1261.14	0.000	0.683
3/31/2011	4.54	235.21	51.79		200.16	1644.25	1261.14	0.000	0.680

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
4/30/2011	4.38	227.44	51.88		200.29	1651.08	1261.14	0.000	0.678
5/31/2011	4.05	218.64	54.04		200.41	1657.86	1261.14	0.000	0.675
6/30/2011	3.98	213.25	53.58		200.53	1664.25	1261.14	0.000	0.673
7/31/2011	3.16	203.22	64.23		200.63	1670.55	1261.14	0.000	0.670
8/31/2011	3.81	203.93	53.53		200.75	1676.87	1261.14	0.000	0.668
9/30/2011	4.05	220.68	54.45		200.87	1683.50	1261.14	0.000	0.666
10/31/2011	3.67	193.03	52.59		200.98	1689.48	1261.14	0.000	0.664
11/30/2011	2.12	109.12	51.41		201.05	1692.75	1261.14	0.000	0.662
12/31/2011	2.98	160.43	53.79		201.14	1697.73	1261.14	0.000	0.661
1/31/2012	4.19	224.71	53.63		201.27	1704.69	1261.14	0.000	0.658
2/29/2012	4.18	229.34	54.86		201.39	1711.34	1261.14	0.000	0.656
3/31/2012	4.22	228.17	54.11		201.52	1718.42	1261.14	0.000	0.653
4/30/2012	3.98	217.04	54.59		201.64	1724.93	1261.14	0.000	0.651
5/31/2012	4.13	220.02	53.23		201.77	1731.75	1261.14	0.000	0.649
6/30/2012	4.04	219.03	54.21		201.89	1738.32	1261.14	0.000	0.647
7/31/2012	4.10	218.02	53.18		202.02	1745.08	1261.14	0.000	0.644
8/31/2012	3.82	208.30	54.53		202.14	1751.54	1261.14	0.000	0.642
9/30/2012	3.54	212.84	60.14		202.24	1757.92	1261.14	0.000	0.640
10/31/2012	4.02	212.12	52.78		202.37	1764.50	1261.14	0.000	0.638
11/30/2012	4.14	213.79	51.62		202.49	1770.91	1261.14	0.000	0.636
12/31/2012	3.93	209.84	53.38		202.61	1777.41	1261.14	0.000	0.634