

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

ANNUAL REPORT FOR 2010

July 28, 2011

Tundra Oil and Gas Partnership

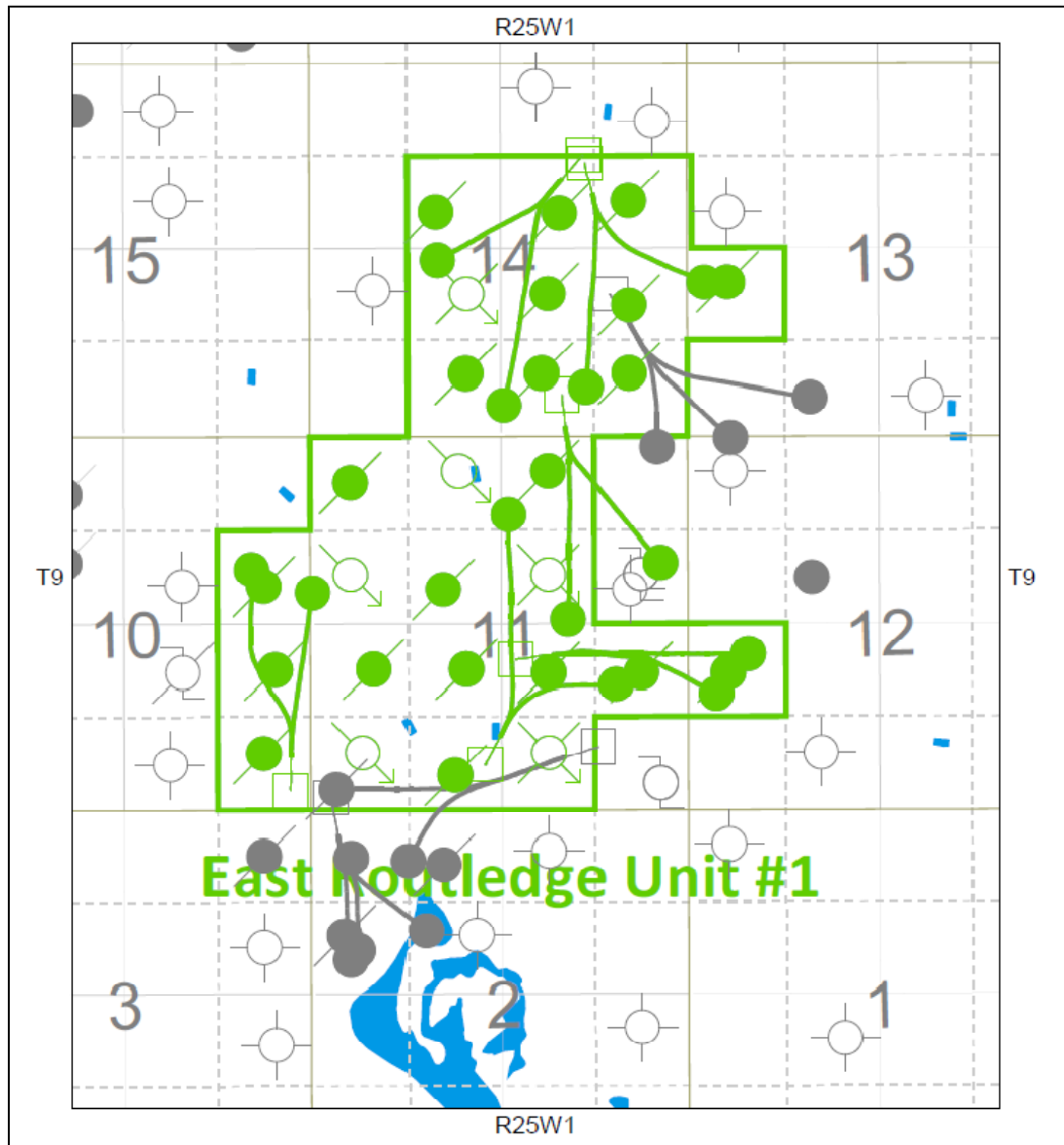
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INTRODUCTION

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 become 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 2010 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 14.0 m³/d of oil and 812 m³/d of water, in December 2010. The water oil ratio (WOR) averaged 52 m³/m³ in 2010. The oil production rate, injection rate, and WOR during each month for each injection pattern and for the whole project are presented in Appendix D. The rates and WOR are presented in Figure 2.

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

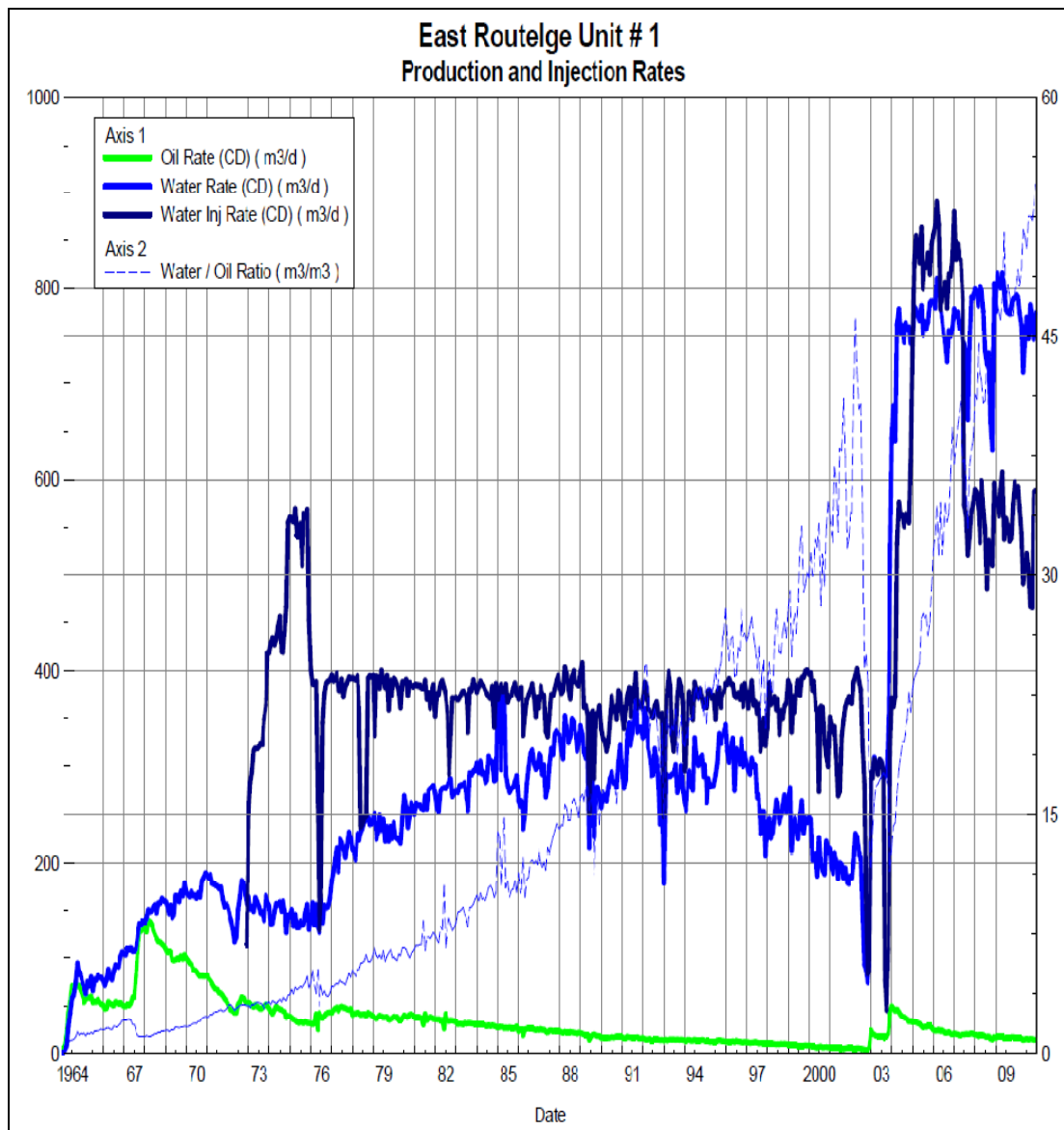
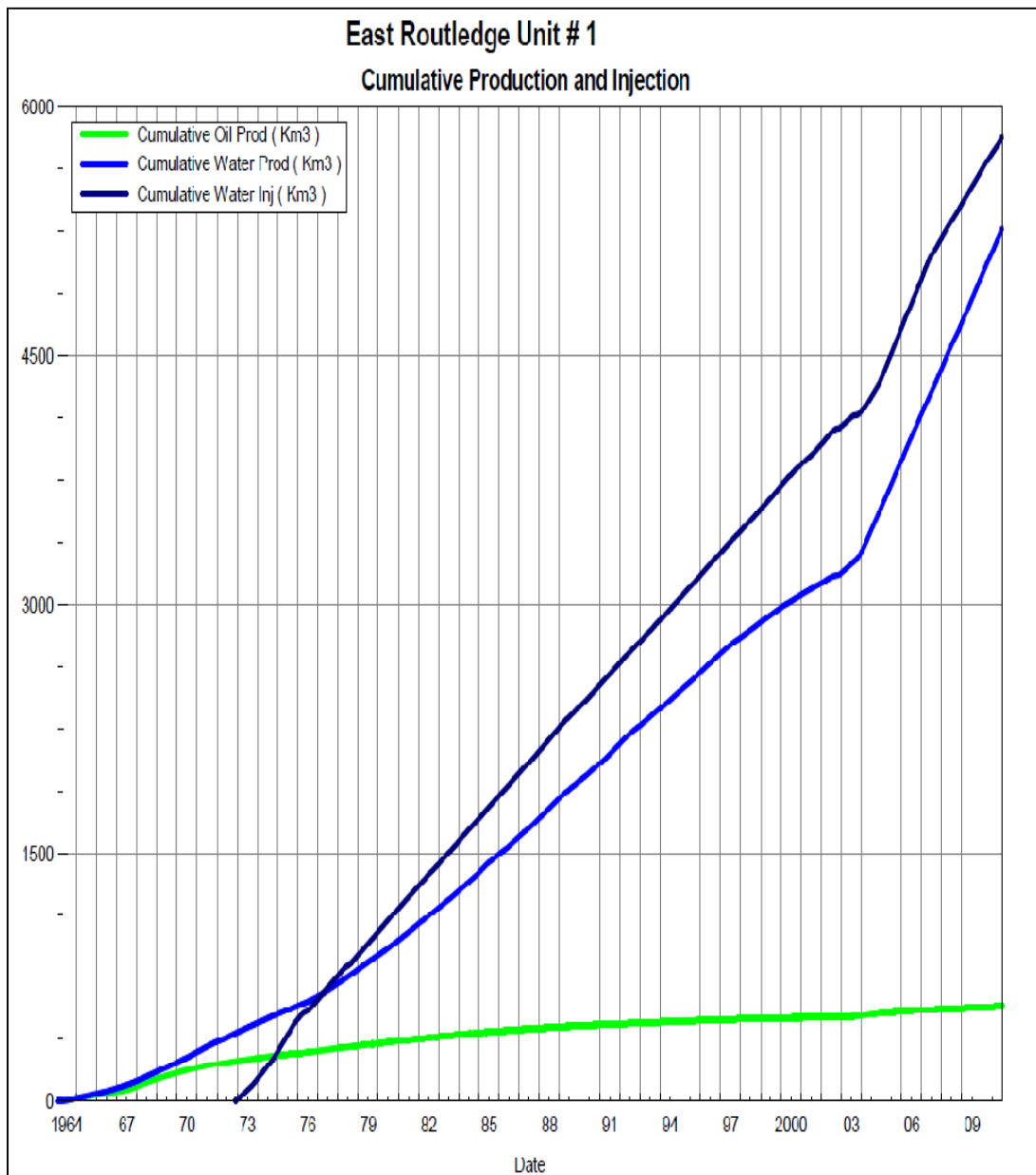


Figure 3 shows the cumulative production for East Routledge Unit No. 1 to the end of December 2010 as 577 E³m³ of oil, and 5267 E³m³ of water. The cumulative water injected is over 5818 E³m³. The cumulative volume of oil, and water produced and fluid

injected for each injection pattern and for the whole project for each injection well is presented in Appendix D.

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



Waterflood History

As of December 2010 the Unit has 3 active vertical injectors and injector patterns in place. Water injection started in August 1964. 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: 4044 kPag for 00/14-11-009-25W1/00, 2137 kPag for 00/12-11-009-25W1/00 and 4491 kPag for 00/04-11-009-25W1/00.

Reservoir Pressure

No reservoir pressure measurements were taken at East Routledge Unit No. 1, in 2010.

Well Servicing

No maintenance was required on 5 wells in West Butler Unit No. 1, in 2010.

Voidage Replacement

Cumulative voidage for the East Routledge Unit No. 1 was 1.1 in December 2010. 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 #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 40yrs. 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 led 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 Hz wells were drilled into the unit, unit production increased nearly 10 fold. A portion of the reserves recovered by each Hz well can be attributed to production acceleration, however, with such a dramatic effect on the unit's overall production, it is clear that incremental reserves were also encountered

when the Hz 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:

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

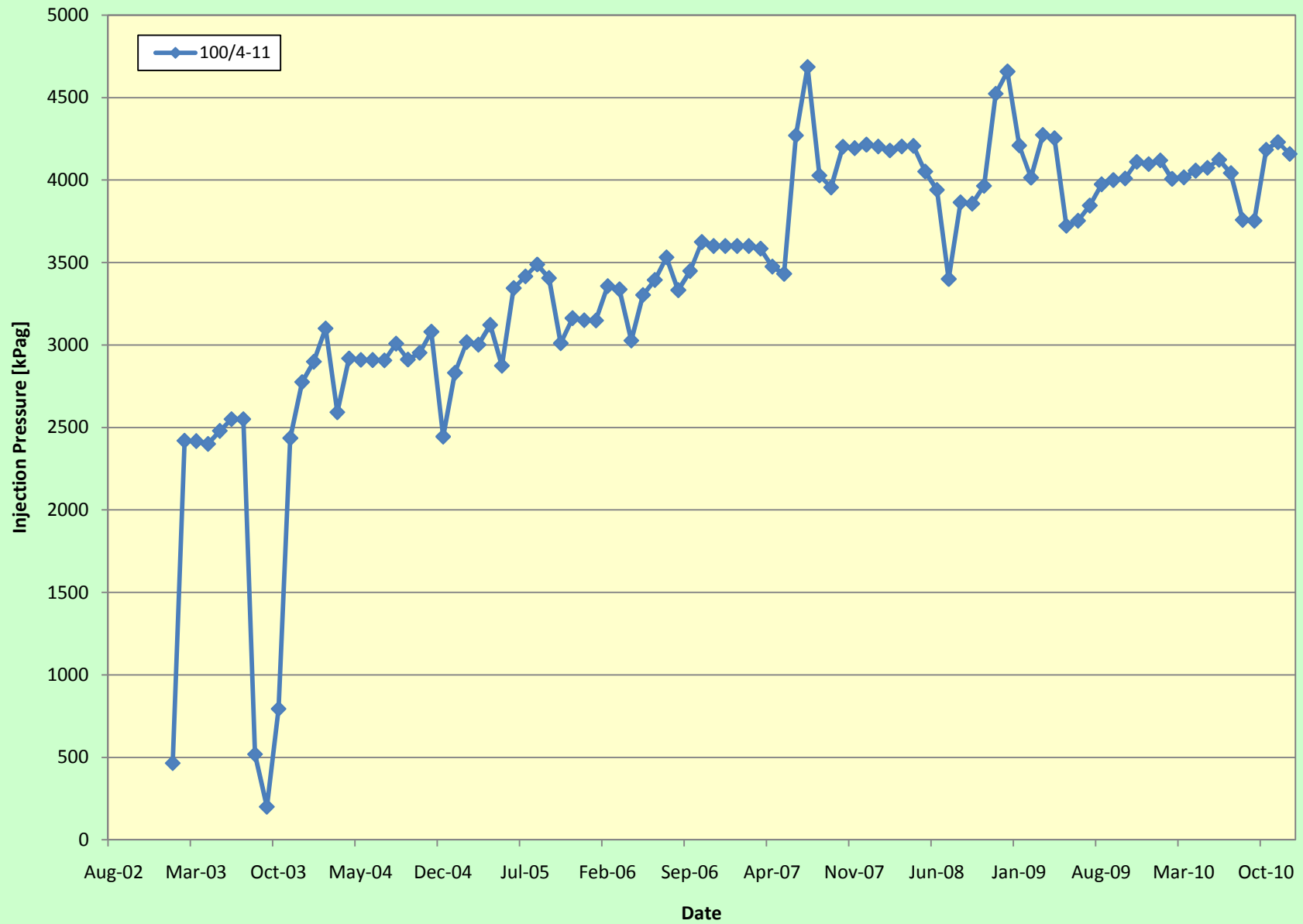
00/02-11-009-25W1/00

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

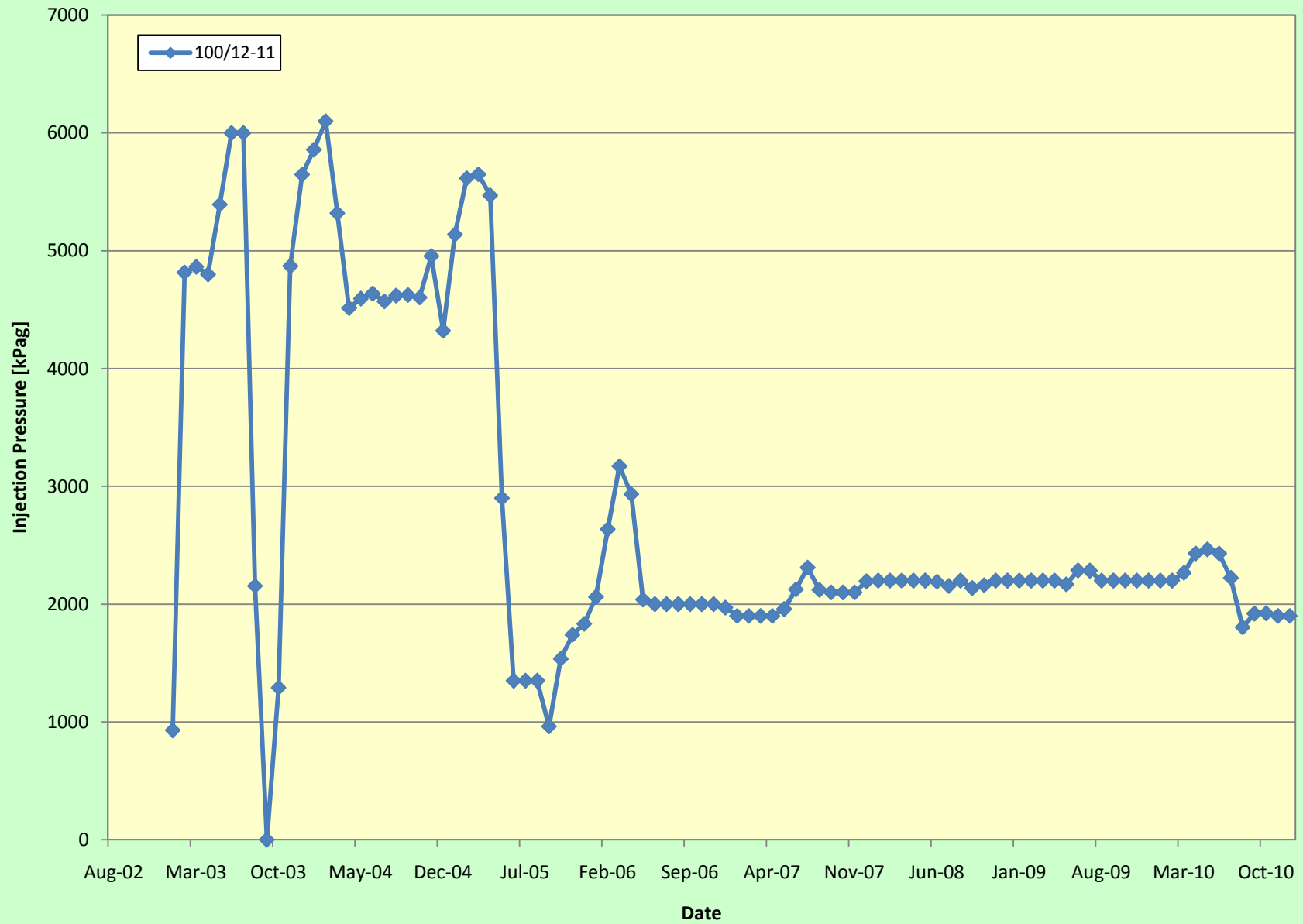
Appendix A

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

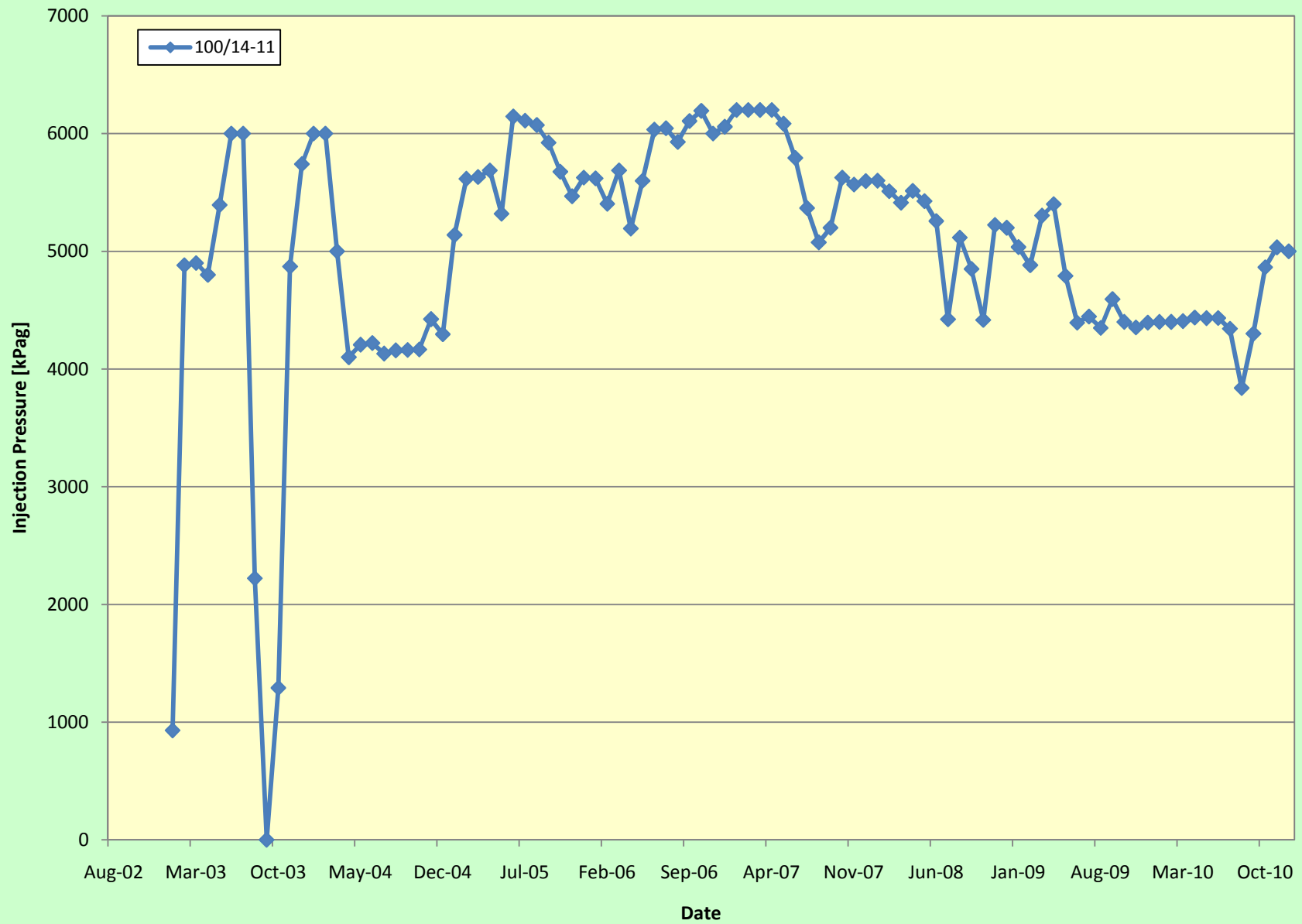
100/4-11 Injection Pressures vs Time



100/12-11 Injection Pressures vs Time



100/14-11 Injection Pressures vs Time



Appendix B

Average Monthly Injection Pressure (kPag)

Month	Pattern		
	100/4-11	100/12-11	100/14-11
Jan-03	465	929	929
Feb-03	2420	4816	4881
Mar-03	2417	4865	4900
Apr-03	2400	4800	4800
May-03	2479	5394	5394
Jun-03	2550	6000	6000
Jul-03	2550	6000	6000
Aug-03	518	2155	2221
Sep-03	200	0	0
Oct-03	794	1290	1290
Nov-03	2435	4870	4870
Dec-03	2775	5647	5741
Jan-04	2898	5858	6000
Feb-04	3100	6100	6000
Mar-04	2592	5319	5000
Apr-04	2918	4513	4100
May-04	2910	4594	4206
Jun-04	2908	4637	4220
Jul-04	2906	4571	4131
Aug-04	3008	4619	4158
Sep-04	2912	4625	4162
Oct-04	2953	4604	4165
Nov-04	3080	4955	4423
Dec-04	2444	4321	4295
Jan-05	2831	5139	5139
Feb-05	3018	5616	5616
Mar-05	3002	5650	5631
Apr-05	3122	5470	5687
May-05	2874	2900	5319
Jun-05	3345	1350	6145
Jul-05	3416	1350	6110
Aug-05	3488	1350	6073
Sep-05	3406	962	5923
Oct-05	3010	1535	5676
Nov-05	3163	1740	5468
Dec-05	3150	1832	5626
Jan-06	3148	2061	5619
Feb-06	3357	2636	5404
Mar-06	3337	3171	5687
Apr-06	3027	2933	5193
May-06	3303	2039	5598

Average Monthly Injection Pressure (kPag)

Month	Pattern		
	100/4-11	100/12-11	100/14-11
Jun-06	3394	2000	6033
Jul-06	3531	2000	6045
Aug-06	3332	2000	5929
Sep-06	3448	2000	6107
Oct-06	3624	2000	6194
Nov-06	3600	2000	6000
Dec-06	3600	1971	6058
Jan-07	3600	1900	6200
Feb-07	3600	1900	6200
Mar-07	3584	1900	6200
Apr-07	3475	1900	6200
May-07	3431	1958	6084
Jun-07	4270	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

Average Monthly Injection Pressure (kPag)

Month	Pattern		
	100/4-11	100/12-11	100/14-11
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

Pattern Name	Injector Location (009-25W)	Injector Surf. Location (009-25W1)	Status	Supported Wells (009-29W1)	No. of Support ed Wells	Allocatio n 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
00/06-14-009-25W1 Injector	00/06-14	Vertical Well	WTR Injection	01-14, 02-14, 03-14, 05-13, 07-14, 08-14, 09-14, 10-14, 11-14, 2/02-14(Surf. 10-14), 2/02-14/2(Surf. 10-14), 2/05-13(Surf. 10-14), 02/06-14/2(Surf. 10-14)	15	1	Apr 1967	Nov 1972	4.4	224.9	50.88	0.0	199.8	1623.2	1261.1	0.0	0.75
00/04-11-009-25W1 Injector	00/04-11	Vertical Well	WTR Injection	01-14, 02-14, 03-11, 05-11, 05-12, 06-11, 07-11, 08-10, 08-11, 2/05-12(Surf. 07-11), 2/08-11(Surf. 03-11), 2/09-10 (Surf. 01-10), 2/09-10/2 (Surf. 01-10), 2/15-11/2, 3/05-21/2	13	1	Jan 1964	Nov 1972	2.10	133.64	63.64	159.42	157.39	1187.21	1705.59	1.19	1.38
00/12-11-009-25W1 Injector	00/12-11	Vertical Well	WTR Injection	01-14, 02-14, 03-14, 05-11, 05-12, 06-11, 07-11, 08-10, 08-11, 09-10, 10-11, 11-11, 13-11, 14-11, 15-11, 2/02-14, 2/02-14/2 (surf. 10-14), 2/05-12(Surf. 07-11), 2/05-13(Surf. 10-14), 2/08-11(Surf. 03-11), 2/09-10 (Surf. 01-10) , 2/10-11 (Surf. 02-14), 2/15-11/2(Surf. 03-11), 3/05-12/2 (Surf. 07-11) , 3/09-11/2 (Surf. 02-14)	26	1	Jan 1964	Nov 1972	7.5	453.3	60.31	439.0	187.4	2173.4	28169.0	1.0	1.28

Completions Selected (39)

Oil Formation Vol. Factor : 1.05 m3/m3

Water Formation Vol Factor : 1.00 m3/m3

Water / Oil Ratio : 55.58 m3/m3

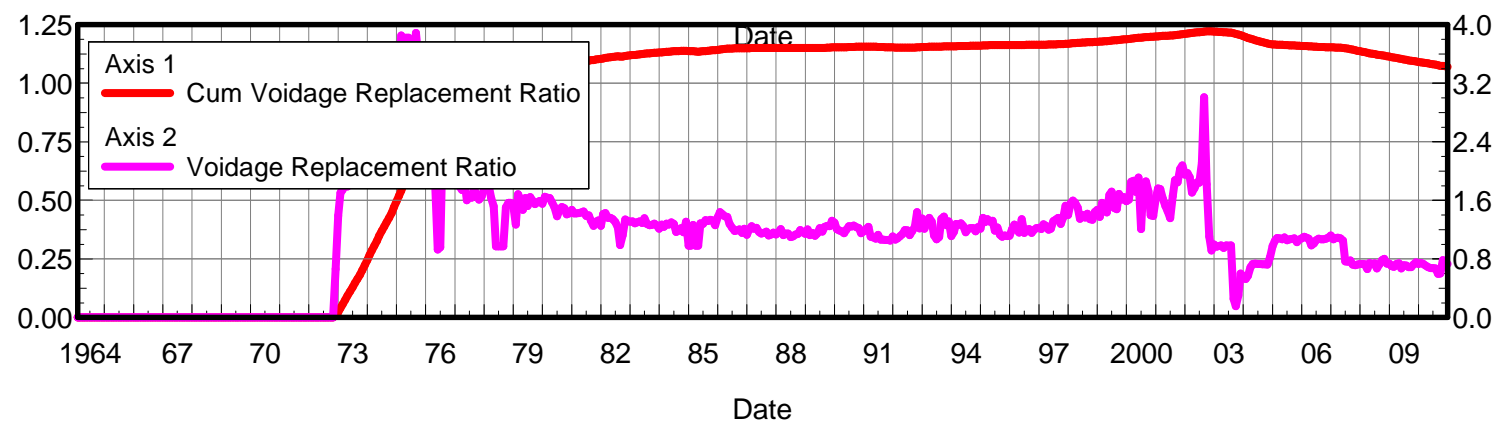
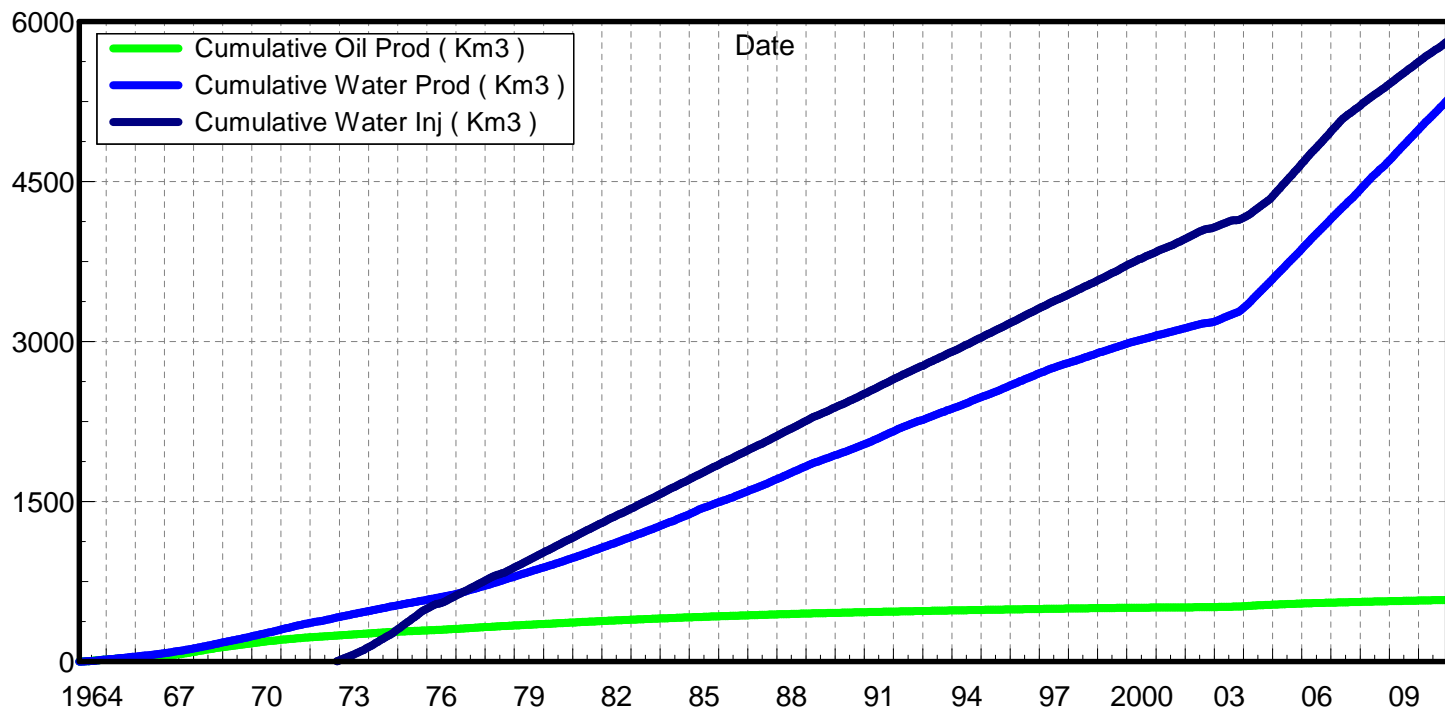
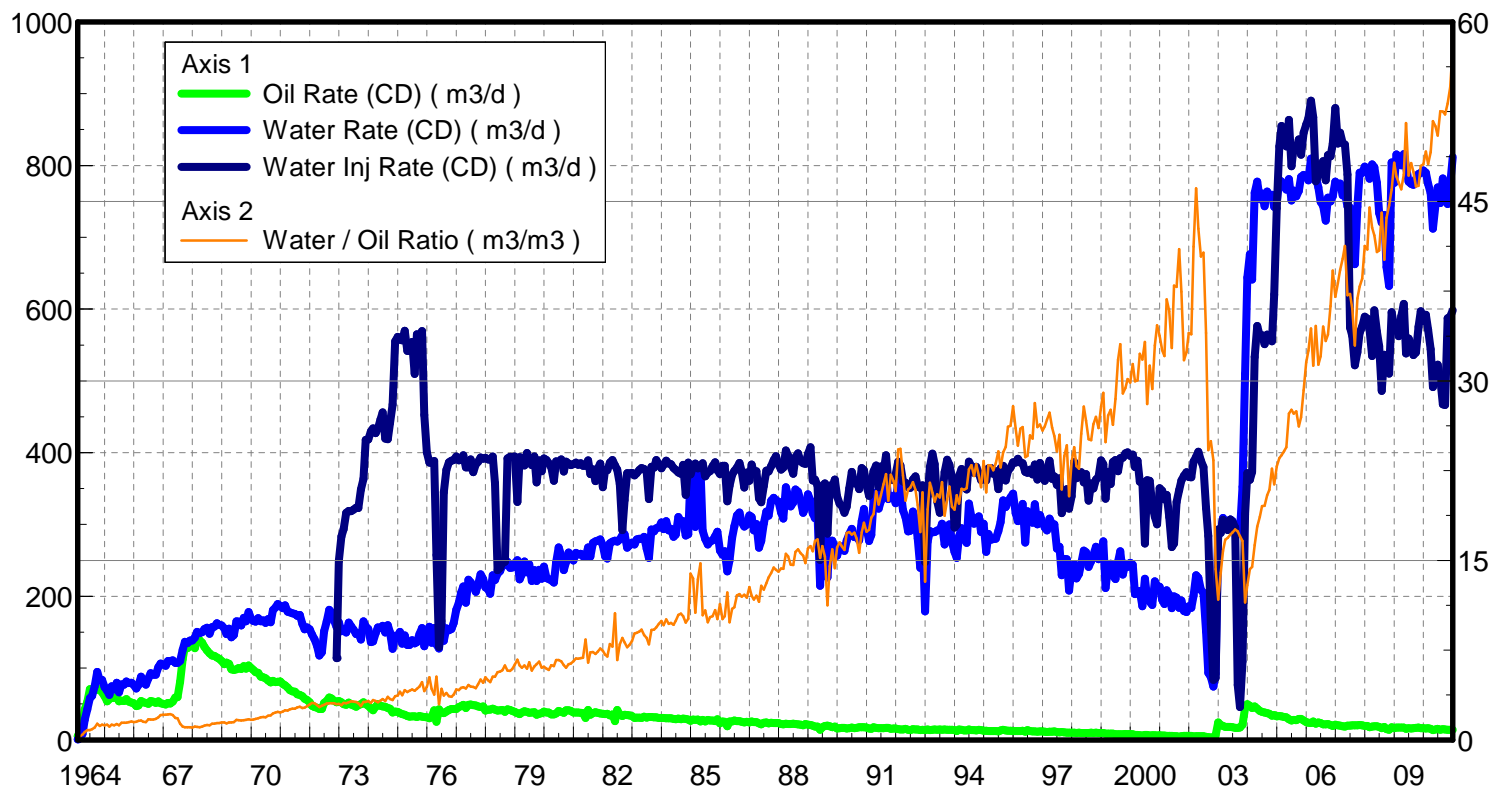
July 26, 2011

Operator: Tundra_Oil_and_Gas_Patnership

Oil Rate (CD) : 15.20 m3/d

Water Rate (CD) : 845.03 m3/d

Water Inj Rate (CD) : 637.47 m3/d



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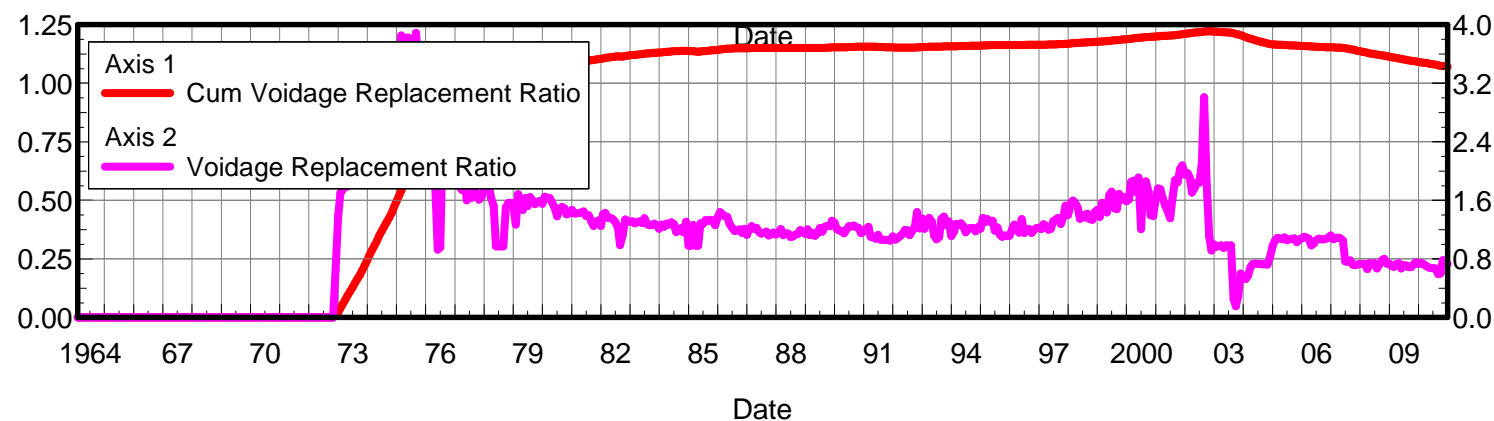
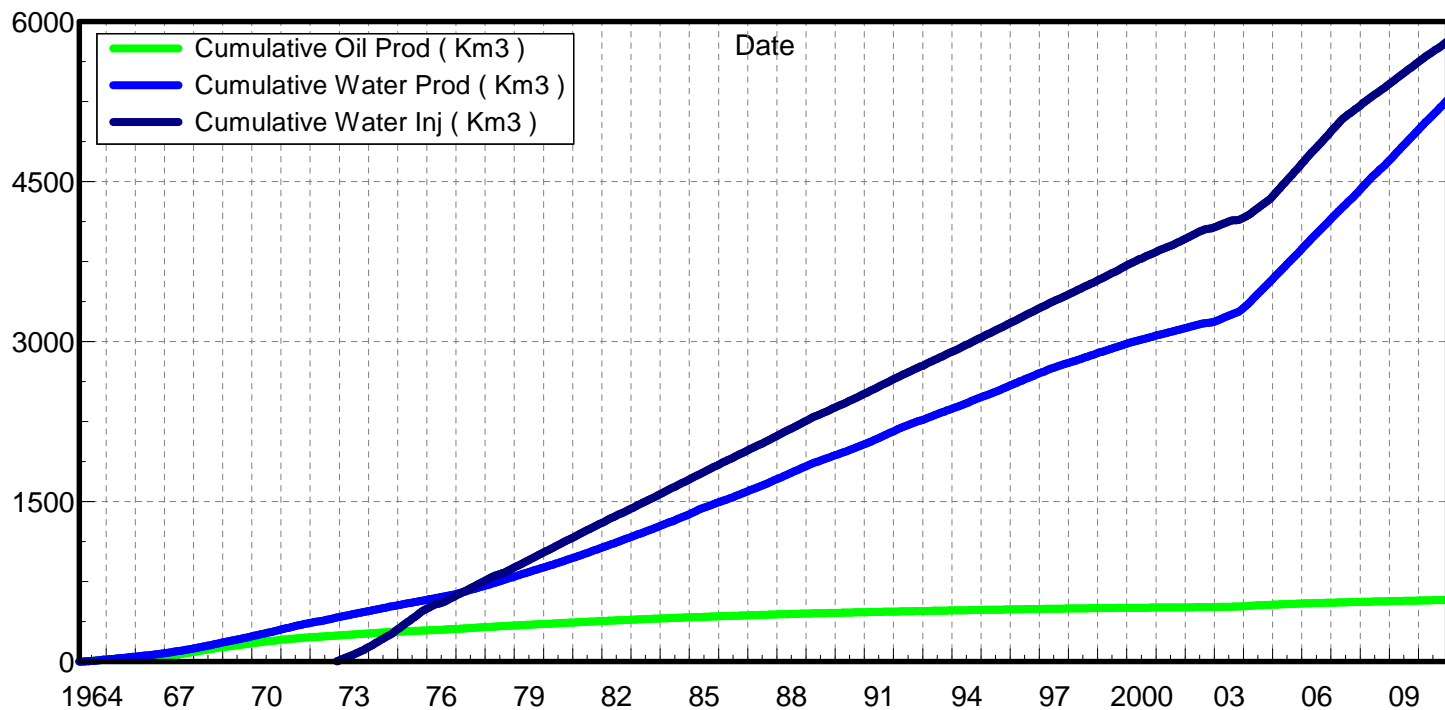
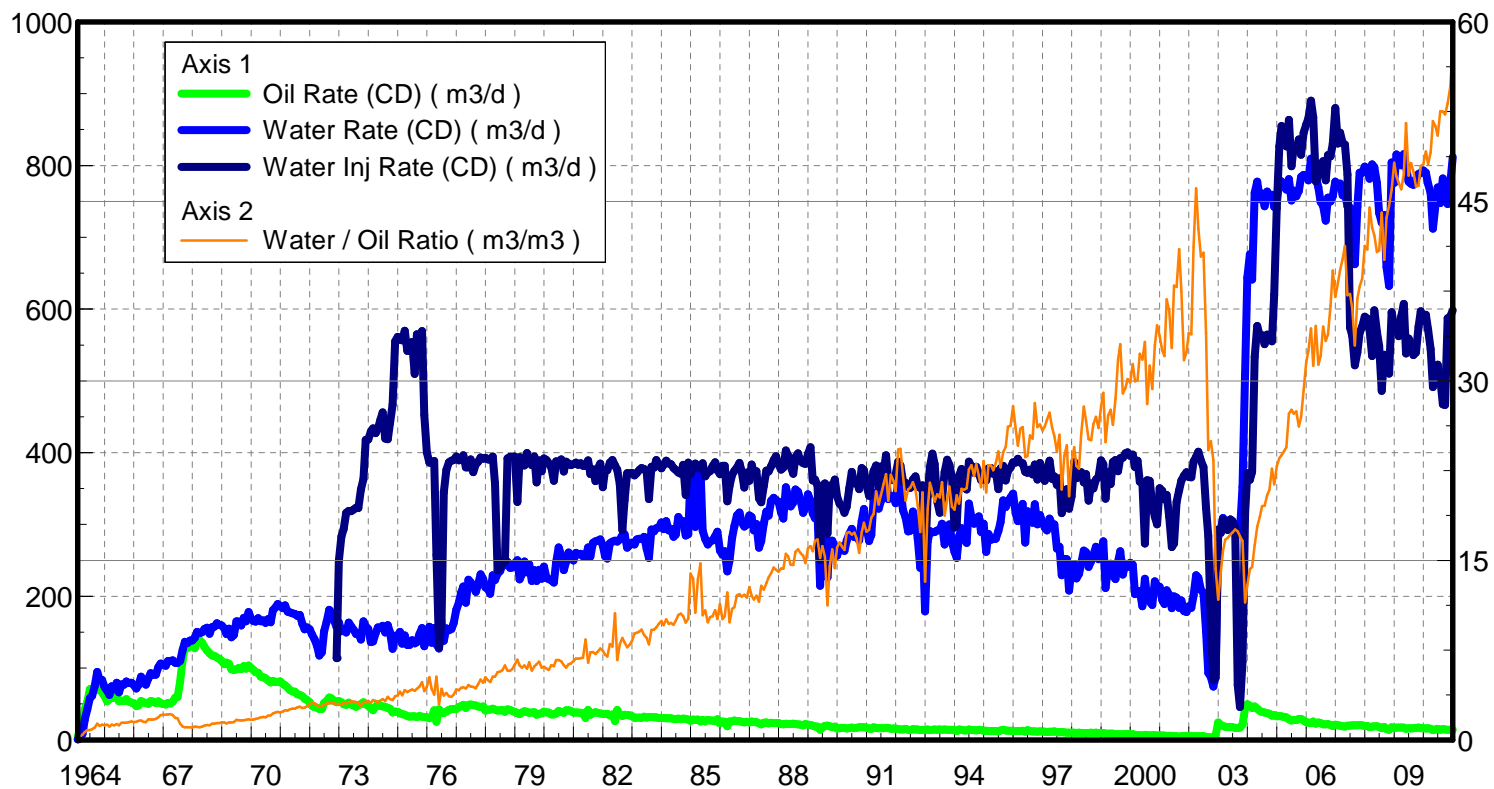
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Date	Oil Rate (CD) m3/d	Water Rate (CD) m3/d	Water Oil Ratio m3/m3	Water Inj Rate (CD) m3/d	Cum Oil Prod Km3	Cum Water Prod Km3	Cum Water Inj Km3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio
1/31/1964	4.97	0.74	0.15		0.15	0.02	0.00	0.000	0.000
2/29/1964	11.94	3.48	0.29		0.50	0.12	0.00	0.000	0.000
3/31/1964	18.65	8.09	0.43		1.08	0.37	0.00	0.000	0.000
4/30/1964	42.65	28.55	0.67		2.36	1.23	0.00	0.000	0.000
5/31/1964	52.66	42.65	0.81		3.99	2.55	0.00	0.000	0.000
6/30/1964	70.65	58.07	0.82		6.11	4.29	0.00	0.000	0.000
7/31/1964	69.07	61.38	0.89		8.25	6.20	0.00	0.000	0.000
8/31/1964	71.90	74.69	1.04		10.48	8.51	0.00	0.000	0.000
9/30/1964	69.68	94.56	1.36		12.57	11.35	0.00	0.000	0.000
10/31/1964	70.95	82.63	1.16		14.77	13.91	0.00	0.000	0.000
11/30/1964	66.32	83.56	1.26		16.76	16.42	0.00	0.000	0.000
12/31/1964	60.74	73.34	1.21		18.64	18.69	0.00	0.000	0.000
1/31/1965	53.78	68.64	1.28		20.31	20.82	0.00	0.000	0.000
2/28/1965	56.81	62.87	1.11		21.90	22.58	0.00	0.000	0.000
3/31/1965	59.19	74.91	1.27		23.73	24.90	0.00	0.000	0.000
4/30/1965	58.22	70.40	1.21		25.48	27.01	0.00	0.000	0.000
5/31/1965	60.11	79.65	1.33		27.34	29.48	0.00	0.000	0.000
6/30/1965	53.81	66.13	1.23		28.96	31.47	0.00	0.000	0.000
7/31/1965	54.45	77.34	1.42		30.65	33.86	0.00	0.000	0.000
8/31/1965	54.12	76.94	1.42		32.33	36.25	0.00	0.000	0.000
9/30/1965	57.08	81.49	1.43		34.04	38.69	0.00	0.000	0.000
10/31/1965	53.08	78.98	1.49		35.68	41.14	0.00	0.000	0.000
11/30/1965	51.91	79.50	1.53		37.24	43.53	0.00	0.000	0.000
12/31/1965	51.27	76.58	1.49		38.83	45.90	0.00	0.000	0.000
1/31/1966	46.95	71.54	1.52		40.29	48.12	0.00	0.000	0.000
2/28/1966	47.84	76.50	1.60		41.62	50.26	0.00	0.000	0.000
3/31/1966	54.22	87.92	1.62		43.31	52.99	0.00	0.000	0.000
4/30/1966	52.42	79.94	1.53		44.88	55.39	0.00	0.000	0.000
5/31/1966	51.44	76.99	1.50		46.47	57.77	0.00	0.000	0.000
6/30/1966	49.97	85.91	1.72		47.97	60.35	0.00	0.000	0.000
7/31/1966	54.30	92.76	1.71		49.65	63.22	0.00	0.000	0.000
8/31/1966	53.45	90.92	1.70		51.31	66.04	0.00	0.000	0.000
9/30/1966	51.32	90.63	1.77		52.85	68.76	0.00	0.000	0.000
10/31/1966	53.93	101.38	1.88		54.52	71.90	0.00	0.000	0.000
11/30/1966	51.27	106.43	2.08		56.06	75.10	0.00	0.000	0.000
12/31/1966	50.08	104.91	2.09		57.61	78.35	0.00	0.000	0.000
1/31/1967	49.45	103.41	2.09		59.15	81.56	0.00	0.000	0.000
2/28/1967	51.62	109.88	2.13		60.59	84.63	0.00	0.000	0.000
3/31/1967	50.80	109.82	2.16		62.17	88.04	0.00	0.000	0.000
4/30/1967	53.13	110.80	2.09		63.76	91.36	0.00	0.000	0.000
5/31/1967	58.89	107.31	1.82		65.59	94.69	0.00	0.000	0.000
6/30/1967	59.51	107.42	1.81		67.37	97.91	0.00	0.000	0.000
7/31/1967	80.95	109.92	1.36		69.88	101.32	0.00	0.000	0.000
8/31/1967	112.78	125.37	1.11		73.38	105.20	0.00	0.000	0.000
9/30/1967	129.86	136.49	1.05		77.27	109.30	0.00	0.000	0.000
10/31/1967	127.85	135.06	1.06		81.24	113.49	0.00	0.000	0.000
11/30/1967	131.68	138.34	1.05		85.19	117.64	0.00	0.000	0.000
12/31/1967	132.46	138.39	1.04		89.29	121.93	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 Replacement Ratio
1/31/1968	127.81	142.32	1.11		93.26	126.34	0.00	0.000	0.000
2/29/1968	139.68	150.51	1.08		97.31	130.70	0.00	0.000	0.000
3/31/1968	138.72	148.57	1.07		101.61	135.31	0.00	0.000	0.000
4/30/1968	135.39	149.95	1.11		105.67	139.81	0.00	0.000	0.000
5/31/1968	129.59	154.28	1.19		109.69	144.59	0.00	0.000	0.000
6/30/1968	124.50	156.13	1.25		113.42	149.27	0.00	0.000	0.000
7/31/1968	120.59	147.96	1.23		117.16	153.86	0.00	0.000	0.000
8/31/1968	117.32	157.34	1.34		120.80	158.74	0.00	0.000	0.000
9/30/1968	116.84	157.74	1.35		124.30	163.47	0.00	0.000	0.000
10/31/1968	114.91	162.37	1.41		127.86	168.50	0.00	0.000	0.000
11/30/1968	113.10	160.20	1.42		131.26	173.31	0.00	0.000	0.000
12/31/1968	109.92	159.51	1.45		134.66	178.25	0.00	0.000	0.000
1/31/1969	105.63	155.29	1.47		137.94	183.07	0.00	0.000	0.000
2/28/1969	107.60	147.26	1.37		140.95	187.19	0.00	0.000	0.000
3/31/1969	106.00	155.12	1.46		144.24	192.00	0.00	0.000	0.000
4/30/1969	98.10	142.93	1.46		147.18	196.29	0.00	0.000	0.000
5/31/1969	97.64	146.00	1.50		150.21	200.81	0.00	0.000	0.000
6/30/1969	98.24	165.13	1.68		153.15	205.77	0.00	0.000	0.000
7/31/1969	99.96	164.90	1.65		156.25	210.88	0.00	0.000	0.000
8/31/1969	98.73	159.36	1.61		159.31	215.82	0.00	0.000	0.000
9/30/1969	102.57	169.91	1.66		162.39	220.92	0.00	0.000	0.000
10/31/1969	99.02	165.18	1.67		165.46	226.04	0.00	0.000	0.000
11/30/1969	103.63	178.11	1.72		168.57	231.38	0.00	0.000	0.000
12/31/1969	99.90	168.51	1.69		171.67	236.60	0.00	0.000	0.000
1/31/1970	97.23	165.60	1.70		174.68	241.74	0.00	0.000	0.000
2/28/1970	94.42	164.60	1.74		177.32	246.35	0.00	0.000	0.000
3/31/1970	93.53	169.81	1.82		180.22	251.61	0.00	0.000	0.000
4/30/1970	88.05	165.15	1.88		182.86	256.57	0.00	0.000	0.000
5/31/1970	87.26	166.68	1.91		185.57	261.73	0.00	0.000	0.000
6/30/1970	85.98	162.74	1.89		188.15	266.62	0.00	0.000	0.000
7/31/1970	82.87	168.16	2.03		190.72	271.83	0.00	0.000	0.000
8/31/1970	80.26	164.05	2.04		193.21	276.91	0.00	0.000	0.000
9/30/1970	82.06	180.57	2.20		195.67	282.33	0.00	0.000	0.000
10/31/1970	80.49	184.14	2.29		198.16	288.04	0.00	0.000	0.000
11/30/1970	80.96	189.32	2.34		200.59	293.72	0.00	0.000	0.000
12/31/1970	81.20	186.59	2.30		203.11	299.50	0.00	0.000	0.000
1/31/1971	77.90	183.51	2.36		205.52	305.19	0.00	0.000	0.000
2/28/1971	75.96	187.52	2.47		207.65	310.44	0.00	0.000	0.000
3/31/1971	73.06	178.58	2.44		209.92	315.98	0.00	0.000	0.000
4/30/1971	69.40	177.62	2.56		212.00	321.31	0.00	0.000	0.000
5/31/1971	67.37	176.43	2.62		214.09	326.78	0.00	0.000	0.000
6/30/1971	66.98	175.59	2.62		216.10	332.04	0.00	0.000	0.000
7/31/1971	63.53	172.79	2.72		218.06	337.40	0.00	0.000	0.000
8/31/1971	62.85	174.13	2.77		220.01	342.80	0.00	0.000	0.000
9/30/1971	60.75	161.77	2.66		221.84	347.65	0.00	0.000	0.000
10/31/1971	57.22	153.90	2.69		223.61	352.42	0.00	0.000	0.000
11/30/1971	55.73	156.85	2.81		225.28	357.13	0.00	0.000	0.000
12/31/1971	52.22	154.05	2.95		226.90	361.90	0.00	0.000	0.000

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1/31/1972	47.57	146.85	3.09		228.37	366.46	0.00	0.000	0.000
2/29/1972	45.61	140.16	3.07		229.70	370.52	0.00	0.000	0.000
3/31/1972	45.00	130.81	2.91		231.09	374.58	0.00	0.000	0.000
4/30/1972	42.85	117.33	2.74		232.38	378.10	0.00	0.000	0.000
5/31/1972	42.92	121.83	2.84		233.71	381.87	0.00	0.000	0.000
6/30/1972	51.44	151.16	2.94		235.25	386.41	0.00	0.000	0.000
7/31/1972	54.26	164.69	3.04		236.93	391.51	0.00	0.000	0.000
8/31/1972	59.11	181.00	3.06		238.77	397.12	0.00	0.000	0.000
9/30/1972	57.88	177.78	3.07		240.50	402.46	0.00	0.000	0.000
10/31/1972	54.50	166.32	3.05		242.19	407.61	0.00	0.000	0.000
11/30/1972	52.51	157.16	2.99	113.87	243.77	412.33	3.42	0.661	0.007
12/31/1972	54.18	163.80	3.02	249.51	245.45	417.41	11.15	1.390	0.023
1/31/1973	52.25	151.44	2.90	283.21	247.07	422.10	19.93	1.700	0.040
2/28/1973	49.86	153.90	3.09	293.52	248.46	426.41	28.15	1.744	0.056
3/31/1973	48.97	149.44	3.05	316.42	249.98	431.04	37.96	1.934	0.075
4/30/1973	51.77	163.37	3.16	319.06	251.53	435.94	47.53	1.789	0.093
5/31/1973	49.16	158.41	3.22	318.55	253.06	440.85	57.40	1.845	0.112
6/30/1973	48.06	153.77	3.20	320.77	254.50	445.47	67.03	1.913	0.129
7/31/1973	46.39	147.36	3.18	323.60	255.94	450.04	77.06	2.013	0.147
8/31/1973	48.48	148.84	3.07	323.00	257.44	454.65	87.07	1.983	0.165
9/30/1973	49.62	139.98	2.82	348.64	258.93	458.85	97.53	2.259	0.183
10/31/1973	52.25	165.30	3.16	363.63	260.55	463.97	108.80	2.016	0.202
11/30/1973	49.64	158.01	3.18	417.99	262.04	468.71	121.34	2.425	0.223
12/31/1973	47.71	154.68	3.24	418.52	263.52	473.51	134.32	2.484	0.244
1/31/1974	43.98	136.40	3.10	429.27	264.88	477.74	147.63	2.879	0.266
2/28/1974	41.25	137.12	3.32	434.12	266.04	481.58	159.78	2.913	0.286
3/31/1974	45.95	148.87	3.24	427.44	267.46	486.19	173.03	2.636	0.307
4/30/1974	49.92	156.75	3.14	433.27	268.96	490.89	186.03	2.531	0.327
5/31/1974	47.54	155.98	3.28	445.95	270.43	495.73	199.85	2.627	0.348
6/30/1974	46.72	158.92	3.40	456.28	271.83	500.50	213.54	2.646	0.369
7/31/1974	45.99	149.73	3.26	419.57	273.26	505.14	226.55	2.574	0.388
8/31/1974	44.50	159.76	3.59	418.70	274.64	510.09	239.53	2.425	0.406
9/30/1974	43.71	149.35	3.42	441.71	275.95	514.57	252.78	2.727	0.425
10/31/1974	38.18	127.01	3.33	466.75	277.13	518.51	267.25	3.381	0.446
11/30/1974	39.54	144.93	3.67	555.35	278.32	522.86	283.91	3.552	0.471
12/31/1974	39.03	144.77	3.71	561.24	279.53	527.35	301.31	3.596	0.495
1/31/1975	37.43	150.52	4.02	557.49	280.69	532.01	318.59	3.455	0.520
2/28/1975	35.84	134.02	3.74	556.30	281.69	535.76	334.17	3.853	0.541
3/31/1975	35.03	145.52	4.15	570.01	282.78	540.27	351.84	3.662	0.566
4/30/1975	33.04	132.18	4.00	541.77	283.77	544.24	368.09	3.823	0.588
5/31/1975	32.27	132.36	4.10	541.86	284.77	548.34	384.89	3.824	0.610
6/30/1975	32.93	139.04	4.22	554.13	285.76	552.51	401.51	3.730	0.632
7/31/1975	32.62	134.30	4.12	509.76	286.77	556.68	417.31	3.547	0.652
8/31/1975	31.88	136.05	4.27	564.81	287.76	560.90	434.82	3.888	0.675
9/30/1975	33.09	147.14	4.45	560.60	288.75	565.31	451.64	3.577	0.696
10/31/1975	32.21	155.76	4.84	569.23	289.75	570.14	469.29	3.448	0.718
11/30/1975	31.87	130.39	4.09	452.50	290.71	574.05	482.86	3.241	0.734
12/31/1975	31.65	140.53	4.44	400.30	291.69	578.41	495.27	2.674	0.747

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1/31/1976	30.16	157.63	5.23	386.32	292.62	583.29	507.25	2.322	0.759
2/29/1976	31.69	135.51	4.28	385.72	293.54	587.22	518.43	2.666	0.771
3/31/1976	41.25	155.78	3.78	388.36	294.82	592.05	530.47	2.316	0.783
4/30/1976	25.25	133.15	5.27	257.54	295.58	596.05	538.20	1.834	0.790
5/31/1976	42.45	127.22	3.00	129.73	296.89	599.99	542.22	0.930	0.791
6/30/1976	38.00	161.71	4.26	165.66	298.03	604.84	547.19	0.959	0.792
7/31/1976	37.15	137.77	3.71	345.01	299.18	609.11	557.89	2.323	0.802
8/31/1976	39.54	155.14	3.92	376.17	300.41	613.92	569.55	2.258	0.813
9/30/1976	41.83	152.54	3.65	386.50	301.66	618.50	581.14	2.348	0.823
10/31/1976	43.01	154.28	3.59	389.05	303.00	623.28	593.20	2.334	0.834
11/30/1976	43.14	162.80	3.77	389.84	304.29	628.17	604.90	2.224	0.845
12/31/1976	42.89	181.07	4.22	394.93	305.62	633.78	617.14	2.041	0.855
1/31/1977	45.79	191.11	4.17	389.36	307.04	639.70	629.21	1.905	0.864
2/28/1977	47.24	204.79	4.34	390.79	308.36	645.44	640.15	1.789	0.871
3/31/1977	48.63	213.95	4.40	396.67	309.87	652.07	652.45	1.740	0.880
4/30/1977	44.40	190.80	4.30	379.66	311.20	657.79	663.84	1.864	0.888
5/31/1977	48.64	223.16	4.59	379.51	312.71	664.71	675.60	1.600	0.895
6/30/1977	49.23	219.49	4.46	390.63	314.19	671.30	687.32	1.671	0.902
7/31/1977	48.27	213.53	4.42	372.67	315.68	677.92	698.88	1.638	0.909
8/31/1977	47.77	205.98	4.31	383.96	317.17	684.30	710.78	1.747	0.916
9/30/1977	46.50	215.92	4.64	387.29	318.56	690.78	722.40	1.689	0.923
10/31/1977	45.85	230.65	5.03	393.18	319.98	697.93	734.59	1.612	0.929
11/30/1977	46.83	223.82	4.78	391.75	321.39	704.64	746.34	1.650	0.936
12/31/1977	40.69	212.57	5.22	392.70	322.65	711.23	758.51	1.750	0.943
1/31/1978	42.18	210.34	4.99	390.80	323.96	717.75	770.63	1.756	0.950
2/28/1978	42.03	203.34	4.84	390.16	325.13	723.45	781.55	1.811	0.956
3/31/1978	43.48	229.25	5.27	394.61	326.48	730.55	793.78	1.632	0.962
4/30/1978	42.10	222.74	5.29	357.09	327.74	737.24	804.50	1.520	0.967
5/31/1978	40.83	231.41	5.67	236.26	329.01	744.41	811.82	0.971	0.967
6/30/1978	41.12	235.13	5.72	239.60	330.24	751.46	819.01	0.970	0.967
7/31/1978	41.64	242.80	5.83	247.23	331.53	758.99	826.67	0.970	0.967
8/31/1978	39.14	243.60	6.22	248.02	332.75	766.54	834.36	0.973	0.967
9/30/1978	42.76	247.91	5.80	391.90	334.03	773.98	846.12	1.506	0.972
10/31/1978	41.58	239.53	5.76	394.45	335.32	781.40	858.35	1.568	0.977
11/30/1978	40.52	239.88	5.92	393.84	336.53	788.60	870.16	1.565	0.982
12/31/1978	39.04	246.39	6.31	394.56	337.74	796.24	882.39	1.531	0.987
1/31/1979	37.42	250.40	6.69	331.62	338.90	804.00	892.67	1.269	0.990
2/28/1979	36.01	223.59	6.21	394.00	339.91	810.26	903.71	1.684	0.995
3/31/1979	38.34	230.84	6.02	393.13	341.10	817.42	915.89	1.625	1.000
4/30/1979	39.99	248.34	6.21	382.04	342.30	824.87	927.35	1.470	1.004
5/31/1979	39.23	233.51	5.95	399.69	343.52	832.11	939.74	1.632	1.009
6/30/1979	37.68	244.28	6.48	389.04	344.65	839.44	951.42	1.525	1.013
7/31/1979	38.20	221.46	5.80	382.52	345.83	846.30	963.27	1.645	1.018
8/31/1979	38.49	236.66	6.15	394.51	347.02	853.64	975.50	1.592	1.023
9/30/1979	34.98	221.52	6.33	358.52	348.07	860.28	986.26	1.548	1.026
10/31/1979	36.19	236.74	6.54	389.52	349.20	867.62	998.33	1.576	1.031
11/30/1979	37.24	224.29	6.02	374.26	350.31	874.35	1009.56	1.592	1.035
12/31/1979	39.42	241.18	6.12	392.22	351.53	881.83	1021.72	1.553	1.039

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1/31/1980	37.96	225.55	5.94	389.99	352.71	888.82	1033.81	1.649	1.043
2/29/1980	38.37	224.17	5.84	385.23	353.82	895.32	1044.98	1.637	1.047
3/31/1980	35.56	222.42	6.25	379.34	354.93	902.22	1056.74	1.630	1.052
4/30/1980	35.60	219.14	6.16	361.03	355.99	908.79	1067.57	1.574	1.055
5/31/1980	37.01	247.15	6.68	387.93	357.14	916.45	1079.60	1.504	1.059
6/30/1980	40.17	268.16	6.68	386.82	358.35	924.50	1091.20	1.383	1.061
7/31/1980	39.23	257.13	6.56	390.79	359.56	932.47	1103.32	1.456	1.065
8/31/1980	37.81	236.45	6.25	373.94	360.74	939.80	1114.91	1.512	1.068
9/30/1980	41.13	247.67	6.02	387.45	361.97	947.23	1126.53	1.493	1.071
10/31/1980	41.33	261.11	6.32	384.92	363.25	955.32	1138.47	1.410	1.074
11/30/1980	40.31	257.44	6.39	382.52	364.46	963.04	1149.94	1.421	1.076
12/31/1980	38.05	249.93	6.57	384.11	365.64	970.79	1161.85	1.472	1.079
1/31/1981	38.20	260.42	6.82	386.18	366.82	978.87	1173.82	1.423	1.082
2/28/1981	38.14	258.35	6.77	383.17	367.89	986.10	1184.55	1.422	1.084
3/31/1981	37.87	259.24	6.84	385.39	369.07	994.14	1196.50	1.426	1.087
4/30/1981	37.25	255.48	6.86	381.89	370.18	1001.80	1207.95	1.434	1.089
5/31/1981	30.40	254.62	8.37	381.57	371.13	1009.69	1219.78	1.449	1.092
6/30/1981	41.56	268.33	6.46	389.36	372.37	1017.74	1231.46	1.389	1.094
7/31/1981	34.87	255.04	7.31	370.12	373.45	1025.65	1242.94	1.396	1.096
8/31/1981	37.44	274.53	7.33	376.80	374.61	1034.16	1254.62	1.320	1.098
9/30/1981	38.58	276.69	7.17	360.26	375.77	1042.46	1265.42	1.252	1.099
10/31/1981	37.70	277.69	7.37	377.59	376.94	1051.07	1277.13	1.308	1.101
11/30/1981	36.65	279.40	7.62	384.91	378.04	1059.45	1288.68	1.327	1.103
12/31/1981	36.32	270.85	7.46	352.00	379.17	1067.85	1299.59	1.251	1.104
1/31/1982	35.79	255.61	7.14	375.85	380.27	1075.77	1311.24	1.413	1.106
2/28/1982	36.25	252.43	6.96	375.53	381.29	1082.84	1321.76	1.428	1.108
3/31/1982	34.26	274.10	8.00	386.34	382.35	1091.34	1333.73	1.360	1.110
4/30/1982	35.42	276.34	7.80	389.68	383.41	1099.63	1345.42	1.360	1.111
5/31/1982	26.22	277.41	10.58	382.36	384.23	1108.23	1357.28	1.342	1.113
6/30/1982	41.49	276.34	6.66	376.32	385.47	1116.52	1368.56	1.305	1.114
7/31/1982	34.95	279.39	8.00	356.45	386.56	1125.18	1379.61	1.231	1.115
8/31/1982	33.45	285.26	8.53	292.05	387.59	1134.02	1388.67	0.990	1.114
9/30/1982	35.22	286.60	8.14	334.19	388.65	1142.62	1398.69	1.126	1.114
10/31/1982	34.57	267.86	7.75	371.55	389.72	1150.92	1410.21	1.337	1.116
11/30/1982	34.15	270.63	7.93	371.08	390.74	1159.04	1421.34	1.323	1.117
12/31/1982	33.30	274.95	8.26	372.19	391.78	1167.56	1432.88	1.308	1.119
1/31/1983	30.61	272.13	8.89	368.53	392.73	1176.00	1444.31	1.312	1.120
2/28/1983	31.20	279.38	8.95	371.39	393.60	1183.82	1454.71	1.288	1.121
3/31/1983	30.95	280.30	9.06	375.85	394.56	1192.51	1466.36	1.299	1.122
4/30/1983	30.41	279.90	9.21	378.87	395.47	1200.91	1477.72	1.312	1.123
5/31/1983	32.33	282.91	8.75	377.27	396.47	1209.68	1489.42	1.291	1.125
6/30/1983	31.22	266.34	8.53	373.30	397.41	1217.67	1500.62	1.356	1.126
7/31/1983	31.78	253.54	7.98	335.46	398.40	1225.53	1511.02	1.277	1.127
8/31/1983	31.92	292.94	9.18	380.46	399.38	1234.61	1522.81	1.259	1.128
9/30/1983	31.47	290.20	9.22	379.18	400.33	1243.32	1534.19	1.267	1.129
10/31/1983	31.38	295.06	9.40	390.00	401.30	1252.46	1546.28	1.282	1.130
11/30/1983	30.50	295.63	9.69	383.79	402.22	1261.33	1557.79	1.261	1.131
12/31/1983	30.49	302.95	9.94	378.07	403.16	1270.72	1569.51	1.213	1.131

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 Replacement Ratio
1/31/1984	30.60	293.61	9.60	383.32	404.11	1279.83	1581.39	1.267	1.132
2/29/1984	30.24	304.87	10.08	389.04	404.99	1288.67	1592.68	1.241	1.133
3/31/1984	30.06	291.70	9.70	385.07	405.92	1297.71	1604.61	1.282	1.134
4/30/1984	30.05	293.91	9.78	383.95	406.82	1306.53	1616.13	1.269	1.135
5/31/1984	29.41	282.87	9.62	378.86	407.73	1315.30	1627.88	1.300	1.136
6/30/1984	28.68	285.98	9.97	376.16	408.59	1323.88	1639.16	1.278	1.137
7/31/1984	29.74	310.27	10.43	372.35	409.52	1333.49	1650.70	1.168	1.137
8/31/1984	28.81	304.06	10.56	370.57	410.41	1342.92	1662.19	1.186	1.137
9/30/1984	29.50	304.77	10.33	383.15	411.29	1352.06	1673.69	1.223	1.138
10/31/1984	29.03	284.75	9.81	341.19	412.19	1360.89	1684.26	1.164	1.138
11/30/1984	28.30	286.38	10.12	386.02	413.04	1369.48	1695.84	1.310	1.139
12/31/1984	26.61	369.81	13.90	369.81	413.87	1380.95	1707.31	0.980	1.138
1/31/1985	28.19	380.30	13.49	380.30	414.74	1392.73	1719.10	0.979	1.136
2/28/1985	27.94	296.79	10.62	385.07	415.52	1401.04	1729.88	1.263	1.137
3/31/1985	28.20	378.23	13.41	378.23	416.40	1412.77	1741.60	0.979	1.136
4/30/1985	25.74	379.65	14.75	379.65	417.17	1424.16	1752.99	0.981	1.135
5/31/1985	27.96	291.39	10.42	385.39	418.04	1433.19	1764.94	1.287	1.136
6/30/1985	25.85	279.64	10.82	366.93	418.81	1441.58	1775.95	1.278	1.136
7/31/1985	27.70	272.34	9.83	372.50	419.67	1450.02	1787.50	1.329	1.138
8/31/1985	26.91	276.34	10.27	374.26	420.50	1458.59	1799.10	1.317	1.139
9/30/1985	26.85	277.74	10.35	381.24	421.31	1466.92	1810.54	1.335	1.140
10/31/1985	26.16	283.75	10.85	386.65	422.12	1475.72	1822.52	1.327	1.141
11/30/1985	28.67	289.83	10.11	375.53	422.98	1484.41	1833.79	1.260	1.141
12/31/1985	23.21	263.52	11.35	370.28	423.70	1492.58	1845.27	1.370	1.142
1/31/1986	25.52	257.84	10.10	381.57	424.49	1500.58	1857.09	1.439	1.144
2/28/1986	25.43	262.75	10.33	381.94	425.20	1507.93	1867.79	1.414	1.145
3/31/1986	19.05	234.90	12.33	332.33	425.79	1515.21	1878.09	1.382	1.146
4/30/1986	25.49	250.28	9.82	353.95	426.56	1522.72	1888.71	1.374	1.147
5/31/1986	25.69	281.48	10.96	369.22	427.36	1531.45	1900.15	1.278	1.148
6/30/1986	26.85	297.59	11.08	374.62	428.16	1540.38	1911.39	1.227	1.149
7/31/1986	25.93	312.90	12.07	379.08	428.97	1550.08	1923.14	1.183	1.149
8/31/1986	26.00	316.81	12.19	385.91	429.77	1559.90	1935.11	1.190	1.149
9/30/1986	25.32	303.13	11.97	373.67	430.53	1568.99	1946.32	1.204	1.149
10/31/1986	24.46	296.90	12.14	351.56	431.29	1578.20	1957.22	1.157	1.149
11/30/1986	25.18	299.59	11.90	372.24	432.04	1587.18	1968.38	1.213	1.150
12/31/1986	24.50	312.72	12.77	360.63	432.80	1596.88	1979.56	1.128	1.150
1/31/1987	25.74	310.44	12.06	383.53	433.60	1606.50	1991.45	1.207	1.150
2/28/1987	24.88	291.69	11.73	372.17	434.30	1614.67	2001.87	1.245	1.150
3/31/1987	24.98	300.82	12.04	374.07	435.07	1623.99	2013.47	1.214	1.151
4/30/1987	23.20	267.57	11.53	336.25	435.77	1632.02	2023.56	1.226	1.151
5/31/1987	21.50	276.87	12.88	330.85	436.43	1640.60	2033.81	1.169	1.151
6/30/1987	24.02	301.39	12.55	353.58	437.16	1649.65	2044.42	1.147	1.151
7/31/1987	24.32	318.09	13.08	375.19	437.91	1659.51	2056.05	1.154	1.151
8/31/1987	23.01	312.41	13.58	373.60	438.62	1669.19	2067.63	1.171	1.151
9/30/1987	23.87	333.08	13.96	381.23	439.34	1679.18	2079.07	1.121	1.151
10/31/1987	23.42	337.31	14.41	389.65	440.06	1689.64	2091.15	1.132	1.151
11/30/1987	23.46	333.64	14.22	395.05	440.77	1699.65	2103.00	1.160	1.151
12/31/1987	23.60	331.99	14.07	383.48	441.50	1709.94	2114.89	1.132	1.151

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 Replacement Ratio
1/31/1988	22.09	316.63	14.33	376.30	442.18	1719.76	2126.55	1.165	1.151
2/29/1988	21.56	308.08	14.29	379.16	442.81	1728.69	2137.55	1.206	1.151
3/31/1988	22.60	351.83	15.57	403.16	443.51	1739.60	2150.05	1.125	1.151
4/30/1988	22.12	339.36	15.34	396.16	444.17	1749.78	2161.93	1.146	1.151
5/31/1988	22.23	325.28	14.63	380.75	444.86	1759.86	2173.74	1.148	1.151
6/30/1988	22.61	330.58	14.62	370.42	445.54	1769.78	2184.85	1.099	1.151
7/31/1988	22.21	348.94	15.71	393.62	446.23	1780.60	2197.05	1.108	1.150
8/31/1988	21.70	345.54	15.92	399.18	446.90	1791.31	2209.42	1.135	1.150
9/30/1988	21.38	333.45	15.60	388.22	447.54	1801.31	2221.07	1.143	1.150
10/31/1988	20.54	316.11	15.39	385.35	448.18	1811.11	2233.02	1.197	1.151
11/30/1988	21.88	323.51	14.79	384.40	448.84	1820.82	2244.55	1.165	1.151
12/31/1988	21.38	342.01	16.00	398.23	449.50	1831.42	2256.89	1.144	1.151
1/31/1989	20.56	333.13	16.20	407.45	450.14	1841.74	2269.53	1.202	1.151
2/28/1989	19.99	315.27	15.77	361.36	450.70	1850.57	2279.64	1.126	1.151
3/31/1989	18.57	308.48	16.61	362.64	451.27	1860.14	2290.89	1.155	1.151
4/30/1989	18.63	312.07	16.75	354.21	451.83	1869.50	2301.51	1.116	1.151
5/31/1989	14.11	214.46	15.20	250.91	452.27	1876.15	2309.29	1.148	1.151
6/30/1989	17.60	284.79	16.18	353.73	452.80	1884.69	2319.90	1.220	1.151
7/31/1989	19.53	298.95	15.31	357.23	453.40	1893.96	2330.98	1.173	1.151
8/31/1989	20.09	226.11	11.25	287.47	454.03	1900.97	2339.89	1.239	1.151
9/30/1989	19.09	277.19	14.52	354.05	454.60	1909.28	2350.51	1.252	1.152
10/31/1989	17.42	277.62	15.93	352.94	455.14	1917.89	2361.45	1.249	1.152
11/30/1989	18.73	268.97	14.36	362.48	455.70	1925.96	2372.32	1.321	1.153
12/31/1989	15.96	256.64	16.08	338.79	456.19	1933.91	2382.83	1.297	1.153
1/31/1990	16.21	267.66	16.51	328.61	456.70	1942.21	2393.01	1.207	1.154
2/28/1990	16.66	269.27	16.16	326.23	457.16	1949.75	2402.15	1.190	1.154
3/31/1990	16.60	263.34	15.86	316.21	457.68	1957.91	2411.95	1.179	1.154
4/30/1990	16.05	277.57	17.29	324.80	458.16	1966.24	2421.69	1.151	1.154
5/31/1990	16.50	286.65	17.37	350.07	458.67	1975.13	2432.55	1.201	1.154
6/30/1990	17.12	293.85	17.16	373.13	459.19	1983.94	2443.74	1.249	1.154
7/31/1990	16.31	282.29	17.31	357.23	459.69	1992.69	2454.81	1.245	1.155
8/31/1990	16.83	283.19	16.83	361.36	460.21	2001.47	2466.02	1.254	1.155
9/30/1990	17.77	277.80	15.64	349.28	460.75	2009.81	2476.50	1.234	1.156
10/31/1990	17.58	304.88	17.34	378.85	461.29	2019.26	2488.24	1.222	1.156
11/30/1990	17.72	321.56	18.14	375.35	461.82	2028.90	2499.50	1.149	1.156
12/31/1990	16.99	295.70	17.41	354.53	462.35	2038.07	2510.49	1.179	1.156
1/31/1991	15.77	277.02	17.56	339.74	462.84	2046.66	2521.02	1.207	1.156
2/28/1991	15.36	285.34	18.58	358.66	463.27	2054.65	2531.06	1.238	1.156
3/31/1991	17.67	333.62	18.88	374.08	463.82	2064.99	2542.66	1.104	1.156
4/30/1991	16.60	344.77	20.77	382.03	464.31	2075.33	2554.12	1.093	1.156
5/31/1991	16.37	322.22	19.68	351.82	464.82	2085.32	2565.03	1.076	1.156
6/30/1991	16.28	332.87	20.44	380.76	465.31	2095.31	2576.45	1.128	1.155
7/31/1991	16.17	345.38	21.35	372.97	465.81	2106.02	2588.01	1.065	1.155
8/31/1991	16.55	367.88	22.22	396.65	466.32	2117.42	2600.31	1.064	1.155
9/30/1991	16.78	335.61	20.00	361.04	466.83	2127.49	2611.14	1.060	1.154
10/31/1991	15.34	339.75	22.15	364.06	467.30	2138.02	2622.43	1.058	1.154
11/30/1991	15.69	339.75	21.66	361.52	467.77	2148.21	2633.27	1.050	1.153
12/31/1991	15.85	329.60	20.80	369.63	468.27	2158.43	2644.73	1.106	1.153

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 Replacement Ratio
1/31/1992	14.82	359.59	24.27	387.44	468.72	2169.58	2656.74	1.065	1.153
2/29/1992	14.37	349.57	24.32	382.35	469.14	2179.71	2667.83	1.081	1.152
3/31/1992	14.49	319.98	22.08	359.77	469.59	2189.63	2678.98	1.110	1.152
4/30/1992	15.51	310.14	19.99	358.02	470.06	2198.94	2689.72	1.138	1.152
5/31/1992	13.88	290.56	20.93	351.98	470.49	2207.95	2700.63	1.195	1.152
6/30/1992	13.81	291.34	21.09	351.19	470.90	2216.69	2711.17	1.189	1.152
7/31/1992	14.75	318.00	21.55	362.47	471.36	2226.54	2722.41	1.125	1.152
8/31/1992	14.67	306.46	20.89	366.93	471.81	2236.04	2733.78	1.181	1.152
9/30/1992	14.31	280.77	19.62	353.09	472.24	2244.47	2744.37	1.239	1.153
10/31/1992	13.79	239.76	17.38	351.19	472.67	2251.90	2755.26	1.441	1.154
11/30/1992	13.92	287.99	20.69	354.68	473.09	2260.54	2765.90	1.215	1.154
12/31/1992	13.54	178.94	13.22	247.53	473.51	2266.09	2773.58	1.354	1.154
1/31/1993	14.33	276.12	19.27	339.26	473.95	2274.65	2784.09	1.211	1.154
2/28/1993	13.54	290.94	21.48	379.96	474.33	2282.79	2794.73	1.289	1.155
3/31/1993	14.00	289.12	20.65	398.88	474.76	2291.76	2807.10	1.361	1.156
4/30/1993	14.53	289.40	19.92	384.10	475.20	2300.44	2818.62	1.308	1.156
5/31/1993	14.22	291.75	20.51	332.11	475.64	2309.48	2828.92	1.122	1.156
6/30/1993	14.41	291.99	20.26	316.05	476.07	2318.24	2838.40	1.067	1.156
7/31/1993	13.98	301.22	21.55	335.61	476.51	2327.58	2848.80	1.099	1.156
8/31/1993	14.53	272.28	18.74	372.65	476.96	2336.02	2860.35	1.348	1.156
9/30/1993	13.91	279.04	20.06	390.14	477.37	2344.39	2872.06	1.378	1.157
10/31/1993	14.17	300.07	21.17	382.98	477.81	2353.69	2883.93	1.259	1.157
11/30/1993	14.12	275.08	19.48	366.13	478.24	2361.94	2894.91	1.312	1.158
12/31/1993	13.61	262.00	19.26	295.55	478.66	2370.07	2904.07	1.111	1.158
1/31/1994	12.39	253.26	20.44	299.84	479.04	2377.92	2913.37	1.167	1.158
2/28/1994	14.33	283.07	19.75	367.40	479.44	2385.84	2923.66	1.279	1.158
3/31/1994	14.05	294.68	20.98	377.42	479.88	2394.98	2935.36	1.263	1.158
4/30/1994	13.35	279.17	20.91	364.70	480.28	2403.35	2946.30	1.289	1.159
5/31/1994	13.05	274.54	21.04	348.64	480.69	2411.87	2957.11	1.253	1.159
6/30/1994	14.54	328.99	22.62	387.59	481.12	2421.73	2968.73	1.163	1.159
7/31/1994	13.51	310.07	22.96	380.92	481.54	2431.35	2980.54	1.213	1.159
8/31/1994	13.64	300.95	22.06	372.01	481.96	2440.68	2992.07	1.220	1.160
9/30/1994	13.38	308.33	23.04	380.60	482.36	2449.93	3003.49	1.219	1.160
10/31/1994	14.09	311.16	22.09	371.06	482.80	2459.57	3015.00	1.177	1.160
11/30/1994	13.70	289.40	21.12	361.84	483.21	2468.25	3025.85	1.233	1.160
12/31/1994	12.93	301.14	23.30	369.95	483.61	2477.59	3037.32	1.213	1.160
1/31/1995	12.66	261.97	20.69	361.20	484.01	2485.71	3048.52	1.360	1.161
2/28/1995	12.49	286.65	22.95	378.37	484.36	2493.74	3059.11	1.304	1.161
3/31/1995	12.15	278.62	22.93	378.69	484.73	2502.37	3070.85	1.342	1.162
4/30/1995	12.41	279.71	22.55	370.74	485.10	2510.77	3081.97	1.309	1.163
5/31/1995	12.11	279.95	23.12	374.08	485.48	2519.44	3093.57	1.320	1.163
6/30/1995	12.06	290.99	24.12	349.12	485.84	2528.17	3104.04	1.186	1.163
7/31/1995	13.33	303.38	22.76	378.05	486.25	2537.58	3115.76	1.230	1.163
8/31/1995	13.89	333.73	24.02	381.71	486.69	2547.92	3127.59	1.130	1.163
9/30/1995	13.24	324.20	24.49	361.36	487.08	2557.65	3138.44	1.102	1.163
10/31/1995	12.64	330.89	26.18	374.55	487.47	2567.91	3150.05	1.120	1.163
11/30/1995	12.87	337.76	26.25	379.01	487.86	2578.04	3161.42	1.110	1.163
12/31/1995	12.30	342.93	27.88	386.48	488.24	2588.67	3173.40	1.115	1.162

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 Replacement Ratio
1/31/1996	12.14	315.91	26.03	386.16	488.62	2598.46	3185.37	1.209	1.163
2/29/1996	12.38	304.46	24.59	391.41	488.98	2607.29	3196.72	1.271	1.163
3/31/1996	12.31	319.92	26.00	386.32	489.36	2617.21	3208.70	1.194	1.163
4/30/1996	12.58	328.65	26.13	385.37	489.74	2627.07	3220.26	1.160	1.163
5/31/1996	11.62	274.59	23.63	373.44	490.10	2635.58	3231.83	1.344	1.164
6/30/1996	13.41	318.42	23.75	371.86	490.50	2645.14	3242.99	1.154	1.164
7/31/1996	12.35	314.28	25.44	376.46	490.88	2654.88	3254.66	1.184	1.164
8/31/1996	12.01	302.59	25.19	369.95	491.25	2664.26	3266.13	1.209	1.164
9/30/1996	11.66	328.13	28.14	383.62	491.60	2674.10	3277.64	1.157	1.164
10/31/1996	11.48	300.20	26.14	362.47	491.96	2683.41	3288.87	1.194	1.164
11/30/1996	11.88	312.99	26.35	386.00	492.32	2692.80	3300.45	1.220	1.164
12/31/1996	11.72	302.95	25.86	375.35	492.68	2702.19	3312.09	1.225	1.164
1/31/1997	11.29	295.80	26.20	360.73	493.03	2711.36	3323.27	1.206	1.164
2/28/1997	10.90	291.79	26.77	376.15	493.33	2719.53	3333.80	1.275	1.165
3/31/1997	11.26	308.07	27.35	389.02	493.68	2729.08	3345.86	1.250	1.165
4/30/1997	11.49	300.00	26.10	363.59	494.03	2738.08	3356.77	1.199	1.165
5/31/1997	11.82	300.02	25.39	367.24	494.39	2747.38	3368.16	1.210	1.165
6/30/1997	11.05	266.52	24.11	355.00	494.73	2755.38	3378.81	1.316	1.166
7/31/1997	10.54	268.88	25.51	364.38	495.05	2763.71	3390.10	1.340	1.166
8/31/1997	10.96	229.34	20.93	316.01	495.39	2770.82	3399.90	1.359	1.167
9/30/1997	10.63	252.04	23.71	326.54	495.71	2778.38	3409.69	1.280	1.167
10/31/1997	10.22	251.73	24.62	349.12	496.03	2786.18	3420.52	1.371	1.168
11/30/1997	10.21	207.90	20.36	322.09	496.33	2792.42	3430.18	1.528	1.168
12/31/1997	10.28	239.16	23.26	339.26	496.65	2799.84	3440.70	1.401	1.169
1/31/1998	10.01	244.93	24.47	386.95	496.96	2807.43	3452.69	1.561	1.170
2/28/1998	9.84	224.92	22.87	364.23	497.24	2813.73	3462.89	1.599	1.171
3/31/1998	10.20	231.10	22.66	366.61	497.56	2820.89	3474.26	1.566	1.172
4/30/1998	9.61	245.73	25.58	372.81	497.84	2828.26	3485.44	1.500	1.173
5/31/1998	9.46	263.57	27.86	358.82	498.14	2836.43	3496.56	1.347	1.173
6/30/1998	9.80	261.40	26.66	370.27	498.43	2844.28	3507.67	1.401	1.174
7/31/1998	9.58	240.92	25.14	333.22	498.73	2851.74	3518.00	1.367	1.174
8/31/1998	9.94	248.93	25.05	357.39	499.04	2859.46	3529.08	1.419	1.175
9/30/1998	9.78	257.91	26.37	349.92	499.33	2867.20	3539.58	1.342	1.175
10/31/1998	9.96	268.90	27.00	362.47	499.64	2875.53	3550.81	1.334	1.176
11/30/1998	9.66	251.75	26.05	365.97	499.93	2883.09	3561.79	1.438	1.176
12/31/1998	9.40	261.71	27.85	389.18	500.22	2891.20	3573.86	1.472	1.177
1/31/1999	9.54	276.75	29.01	383.94	500.51	2899.78	3585.76	1.374	1.178
2/28/1999	8.51	211.72	24.89	335.93	500.75	2905.71	3595.17	1.568	1.179
3/31/1999	8.91	241.37	27.10	373.28	501.03	2913.19	3606.74	1.530	1.179
4/30/1999	8.90	245.53	27.60	356.28	501.30	2920.55	3617.43	1.436	1.180
5/31/1999	8.68	228.52	26.32	387.12	501.57	2927.64	3629.43	1.676	1.181
6/30/1999	7.87	224.20	28.49	389.66	501.80	2934.36	3641.12	1.721	1.182
7/31/1999	7.80	247.90	31.77	374.08	502.04	2942.05	3652.71	1.495	1.183
8/31/1999	7.94	262.69	33.08	392.36	502.29	2950.19	3664.88	1.481	1.184
9/30/1999	7.96	230.39	28.96	393.00	502.53	2957.10	3676.67	1.689	1.185
10/31/1999	8.35	245.59	29.40	399.04	502.79	2964.72	3689.04	1.609	1.186
11/30/1999	8.00	241.09	30.15	400.31	503.03	2971.95	3701.05	1.645	1.187
12/31/1999	8.26	246.74	29.85	395.70	503.28	2979.60	3713.31	1.588	1.188

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 Replacement Ratio
1/31/2000	7.78	244.25	31.41	397.29	503.52	2987.17	3725.63	1.612	1.189
2/29/2000	6.78	203.07	29.95	379.96	503.72	2993.06	3736.65	1.853	1.190
3/31/2000	6.86	206.26	30.05	388.86	503.93	2999.45	3748.70	1.867	1.192
4/30/2000	6.43	207.53	32.26	359.30	504.13	3005.68	3759.48	1.716	1.193
5/31/2000	5.86	186.27	31.78	359.14	504.31	3011.46	3770.61	1.911	1.194
6/30/2000	6.75	224.54	33.25	273.29	504.51	3018.19	3778.81	1.207	1.194
7/31/2000	7.05	197.69	28.06	361.84	504.73	3024.32	3790.03	1.812	1.195
8/31/2000	6.15	192.35	31.28	361.04	504.92	3030.28	3801.22	1.860	1.197
9/30/2000	6.41	187.93	29.33	327.02	505.11	3035.92	3811.03	1.723	1.198
10/31/2000	6.71	221.00	32.95	310.96	505.32	3042.77	3820.67	1.395	1.198
11/30/2000	6.20	214.65	34.64	300.15	505.51	3049.21	3829.68	1.387	1.198
12/31/2000	6.31	213.10	33.77	350.55	505.70	3055.82	3840.55	1.631	1.199
1/31/2001	5.99	195.02	32.57	347.22	505.89	3061.86	3851.31	1.765	1.200
2/28/2001	5.90	189.29	32.08	334.81	506.05	3067.16	3860.68	1.753	1.201
3/31/2001	5.66	208.43	36.82	341.17	506.23	3073.62	3871.26	1.624	1.202
4/30/2001	5.65	202.37	35.82	310.49	506.40	3079.70	3880.57	1.522	1.203
5/31/2001	5.60	183.32	32.74	268.68	506.57	3085.38	3888.90	1.453	1.203
6/30/2001	5.27	199.98	37.97	273.29	506.73	3091.38	3897.10	1.356	1.204
7/31/2001	5.23	198.12	37.86	331.31	506.89	3097.52	3907.37	1.660	1.204
8/31/2001	4.49	184.07	41.02	347.69	507.03	3103.23	3918.15	1.876	1.206
9/30/2001	5.19	194.27	37.46	361.36	507.19	3109.05	3928.99	1.846	1.207
10/31/2001	5.66	179.52	31.73	367.88	507.36	3114.62	3940.40	2.031	1.208
11/30/2001	5.49	177.92	32.39	372.81	507.53	3119.96	3951.58	2.077	1.210
12/31/2001	5.48	186.20	33.99	366.21	507.70	3125.73	3962.93	1.950	1.211
1/31/2002	5.43	183.99	33.91	365.81	507.86	3131.43	3974.27	1.971	1.212
2/28/2002	4.87	200.86	41.23	387.75	508.00	3137.06	3985.13	1.917	1.214
3/31/2002	4.98	229.40	46.09	394.27	508.15	3144.17	3997.35	1.708	1.215
4/30/2002	5.28	225.58	42.72	401.43	508.31	3150.94	4009.40	1.768	1.216
5/31/2002	5.17	209.01	40.39	389.06	508.47	3157.41	4021.46	1.848	1.217
6/30/2002	5.03	204.91	40.71	380.11	508.62	3163.56	4032.86	1.842	1.218
7/31/2002	4.45	151.51	34.01	322.94	508.76	3168.26	4042.87	2.113	1.219
8/31/2002	3.86	93.38	24.20	284.36	508.88	3171.15	4051.69	3.009	1.221
9/30/2002	3.50	87.44	24.96	160.95	508.99	3173.78	4056.51	1.820	1.221
10/31/2002	3.18	74.40	23.37	83.48	509.09	3176.08	4059.10	1.108	1.221
11/30/2002	6.47	92.23	14.26	86.10	509.28	3178.85	4061.68	0.915	1.221
12/31/2002	24.42	286.15	11.72	293.26	510.04	3187.72	4070.78	1.000	1.221
1/31/2003	20.84	291.16	13.97	288.05	510.68	3196.75	4079.71	0.969	1.220
2/28/2003	19.58	308.98	15.78	306.64	511.23	3205.40	4088.29	0.975	1.219
3/31/2003	18.08	302.55	16.73	302.87	511.79	3214.78	4097.68	0.984	1.219
4/30/2003	17.90	302.43	16.90	292.00	512.33	3223.85	4106.44	0.949	1.218
5/31/2003	17.87	306.71	17.16	306.71	512.88	3233.36	4115.95	0.983	1.217
6/30/2003	17.56	304.78	17.36	303.53	513.41	3242.50	4125.05	0.980	1.216
7/31/2003	16.83	295.88	17.58	295.90	513.93	3251.67	4134.23	0.984	1.216
8/31/2003	16.95	295.19	17.41	76.48	514.46	3260.82	4136.60	0.255	1.213
9/30/2003	17.08	290.51	17.01	45.57	514.97	3269.54	4137.97	0.154	1.210
10/31/2003	21.18	352.15	16.63	109.29	515.63	3280.46	4141.35	0.305	1.208
11/30/2003	44.32	509.68	11.50	314.50	516.96	3295.75	4150.79	0.602	1.205
12/31/2003	49.80	643.91	12.93	371.32	518.50	3315.71	4162.30	0.564	1.201

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 Replacement Ratio
1/31/2004	47.39	676.36	14.27	362.16	519.97	3336.68	4173.53	0.525	1.197
2/29/2004	44.38	641.39	14.45	373.17	521.26	3355.28	4184.35	0.570	1.193
3/31/2004	46.82	761.94	16.27	533.23	522.71	3378.90	4200.88	0.688	1.190
4/30/2004	43.62	777.68	17.83	576.60	524.02	3402.23	4218.18	0.730	1.187
5/31/2004	40.43	752.98	18.63	562.42	525.27	3425.57	4235.61	0.736	1.184
6/30/2004	38.95	760.89	19.53	563.77	526.44	3448.40	4252.52	0.730	1.181
7/31/2004	38.02	743.38	19.55	551.16	527.62	3471.44	4269.61	0.731	1.178
8/31/2004	37.35	763.63	20.45	564.32	528.77	3495.11	4287.10	0.729	1.175
9/30/2004	36.18	756.52	20.91	559.07	529.86	3517.81	4303.88	0.729	1.172
10/31/2004	33.53	759.49	22.65	555.13	530.90	3541.35	4321.09	0.722	1.169
11/30/2004	34.75	742.39	21.37	620.27	531.94	3563.62	4339.69	0.824	1.167
12/31/2004	32.76	748.41	22.84	740.37	532.96	3586.82	4362.64	0.977	1.166
1/31/2005	33.11	779.80	23.55	826.57	533.98	3611.00	4388.27	1.047	1.165
2/28/2005	32.67	777.38	23.80	855.17	534.90	3632.76	4412.21	1.087	1.165
3/31/2005	31.94	771.06	24.14	842.35	535.89	3656.67	4438.33	1.080	1.164
4/30/2005	31.35	766.50	24.45	826.78	536.83	3679.66	4463.13	1.066	1.164
5/31/2005	28.64	781.16	27.27	863.79	537.72	3703.88	4489.91	1.094	1.163
6/30/2005	27.22	751.05	27.59	799.16	538.53	3726.41	4513.88	1.053	1.163
7/31/2005	28.05	765.06	27.27	825.36	539.40	3750.13	4539.47	1.067	1.162
8/31/2005	27.57	757.19	27.46	821.95	540.26	3773.60	4564.95	1.074	1.162
9/30/2005	29.19	764.82	26.20	836.33	541.13	3796.55	4590.04	1.082	1.161
10/31/2005	29.06	784.14	26.98	815.00	542.03	3820.85	4615.30	1.028	1.160
11/30/2005	26.94	786.81	29.21	845.73	542.84	3844.46	4640.67	1.064	1.160
12/31/2005	24.88	785.17	31.55	856.75	543.61	3868.80	4667.23	1.081	1.159
1/31/2006	23.95	779.40	32.54	865.68	544.36	3892.96	4694.07	1.101	1.159
2/28/2006	23.56	809.84	34.37	890.22	545.01	3915.63	4719.00	1.090	1.159
3/31/2006	25.46	796.41	31.28	867.09	545.80	3940.32	4745.88	1.079	1.158
4/30/2006	22.68	784.79	34.60	778.20	546.48	3963.87	4769.22	0.983	1.157
5/31/2006	24.55	769.36	31.34	785.96	547.25	3987.72	4793.59	1.012	1.156
6/30/2006	23.39	749.36	32.04	799.12	547.95	4010.20	4817.56	1.057	1.156
7/31/2006	21.54	743.80	34.54	806.01	548.61	4033.26	4842.55	1.075	1.155
8/31/2006	21.69	723.15	33.34	779.25	549.29	4055.67	4866.70	1.068	1.155
9/30/2006	22.31	755.29	33.86	814.74	549.96	4078.33	4891.15	1.070	1.154
10/31/2006	20.67	749.72	36.26	812.80	550.60	4101.57	4916.34	1.076	1.154
11/30/2006	19.31	757.17	39.22	829.97	551.18	4124.29	4941.24	1.088	1.153
12/31/2006	21.00	777.65	37.03	879.86	551.83	4148.40	4968.52	1.123	1.153
1/31/2007	20.19	770.57	38.17	830.43	552.45	4172.28	4994.26	1.070	1.153
2/28/2007	19.73	774.84	39.27	845.89	553.01	4193.98	5017.95	1.084	1.153
3/31/2007	18.86	758.28	40.21	831.24	553.59	4217.49	5043.71	1.088	1.152
4/30/2007	18.46	762.05	41.27	829.12	554.14	4240.35	5068.59	1.080	1.152
5/31/2007	20.00	742.97	37.15	787.26	554.76	4263.38	5092.99	1.051	1.151
6/30/2007	19.89	741.48	37.28	574.29	555.36	4285.62	5110.22	0.769	1.149
7/31/2007	20.32	732.01	36.03	562.60	555.99	4308.32	5127.66	0.762	1.147
8/31/2007	20.11	662.75	32.96	521.62	556.61	4328.86	5143.83	0.780	1.146
9/30/2007	20.14	742.87	36.89	540.15	557.22	4351.15	5160.04	0.721	1.144
10/31/2007	20.86	790.08	37.87	567.17	557.86	4375.64	5177.62	0.712	1.141
11/30/2007	20.48	789.74	38.56	575.53	558.48	4399.33	5194.88	0.723	1.139
12/31/2007	19.35	798.54	41.28	589.57	559.08	4424.09	5213.16	0.733	1.137

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 Replacement Ratio
1/31/2008	19.42	796.04	40.99	586.76	559.68	4448.76	5231.35	0.732	1.135
2/29/2008	17.56	781.41	44.49	571.32	560.19	4471.43	5247.92	0.726	1.133
3/31/2008	18.73	801.68	42.80	534.46	560.77	4496.28	5264.49	0.662	1.130
4/30/2008	18.91	797.45	42.16	598.43	561.34	4520.20	5282.44	0.745	1.128
5/31/2008	19.03	775.82	40.78	568.66	561.93	4544.25	5300.07	0.728	1.126
6/30/2008	17.95	734.10	40.90	548.30	562.47	4566.27	5316.52	0.742	1.124
7/31/2008	16.35	720.38	44.06	486.20	562.97	4588.61	5331.59	0.671	1.122
8/31/2008	18.23	731.40	40.12	536.38	563.54	4611.28	5348.22	0.728	1.120
9/30/2008	15.09	658.39	43.63	518.79	563.99	4631.03	5363.78	0.783	1.119
10/31/2008	14.15	632.06	44.65	509.94	564.43	4650.62	5379.59	0.802	1.118
11/30/2008	17.49	804.31	45.99	595.88	564.95	4674.75	5397.47	0.736	1.116
12/31/2008	16.08	775.96	48.24	575.49	565.45	4698.81	5415.31	0.737	1.114
1/31/2009	17.32	815.61	47.09	574.26	565.99	4724.09	5433.11	0.700	1.112
2/28/2009	17.30	805.85	46.58	562.46	566.47	4746.66	5448.86	0.694	1.110
3/31/2009	17.38	800.09	46.02	589.87	567.01	4771.46	5467.14	0.733	1.108
4/30/2009	17.26	815.67	47.25	607.25	567.53	4795.93	5485.36	0.740	1.106
5/31/2009	15.48	798.00	51.54	538.21	568.01	4820.67	5502.05	0.671	1.104
6/30/2009	16.48	777.35	47.16	559.31	568.51	4843.99	5518.83	0.715	1.102
7/31/2009	16.07	774.59	48.20	551.76	569.00	4868.00	5535.93	0.708	1.100
8/31/2009	16.28	773.27	47.49	536.06	569.51	4891.97	5552.55	0.689	1.098
9/30/2009	16.89	781.32	46.26	539.43	570.02	4915.41	5568.73	0.686	1.096
10/31/2009	17.02	788.08	46.30	575.01	570.54	4939.84	5586.56	0.725	1.094
11/30/2009	16.46	789.55	47.96	597.15	571.04	4963.53	5604.47	0.752	1.093
12/31/2009	16.49	792.96	48.09	583.19	571.55	4988.11	5622.55	0.731	1.091
1/31/2010	16.07	790.15	49.16	592.36	572.05	5012.60	5640.91	0.745	1.089
2/28/2010	16.09	774.28	48.11	571.38	572.50	5034.28	5656.91	0.734	1.088
3/31/2010	15.50	761.30	49.11	543.94	572.98	5057.89	5673.77	0.710	1.086
4/30/2010	13.77	712.19	51.71	491.54	573.39	5079.25	5688.52	0.686	1.085
5/31/2010	14.52	744.84	51.29	506.68	573.84	5102.34	5704.23	0.676	1.083
6/30/2010	15.23	769.32	50.50	522.78	574.30	5125.42	5719.91	0.676	1.081
7/31/2010	14.23	747.48	52.54	503.05	574.74	5148.59	5735.50	0.669	1.079
8/31/2010	14.89	781.83	52.52	467.42	575.20	5172.83	5749.99	0.595	1.077
9/30/2010	14.73	769.84	52.28	466.34	575.64	5195.92	5763.98	0.602	1.075
10/31/2010	14.04	746.57	53.18	587.03	576.08	5219.07	5782.18	0.782	1.074
11/30/2010	14.19	773.81	54.53	589.40	576.50	5242.28	5799.86	0.758	1.072
12/31/2010	14.03	811.85	57.86	598.40	576.94	5267.45	5818.41	0.733	1.071

Pattern: 0/04-11-009-25 Set: East Routledge Unit

Oil Formation Vol. Factor : 1.05 m3/m3

Water Formation Vol Factor : 1.00 m3/m3

Water / Oil Ratio : 54.63 m3/m3

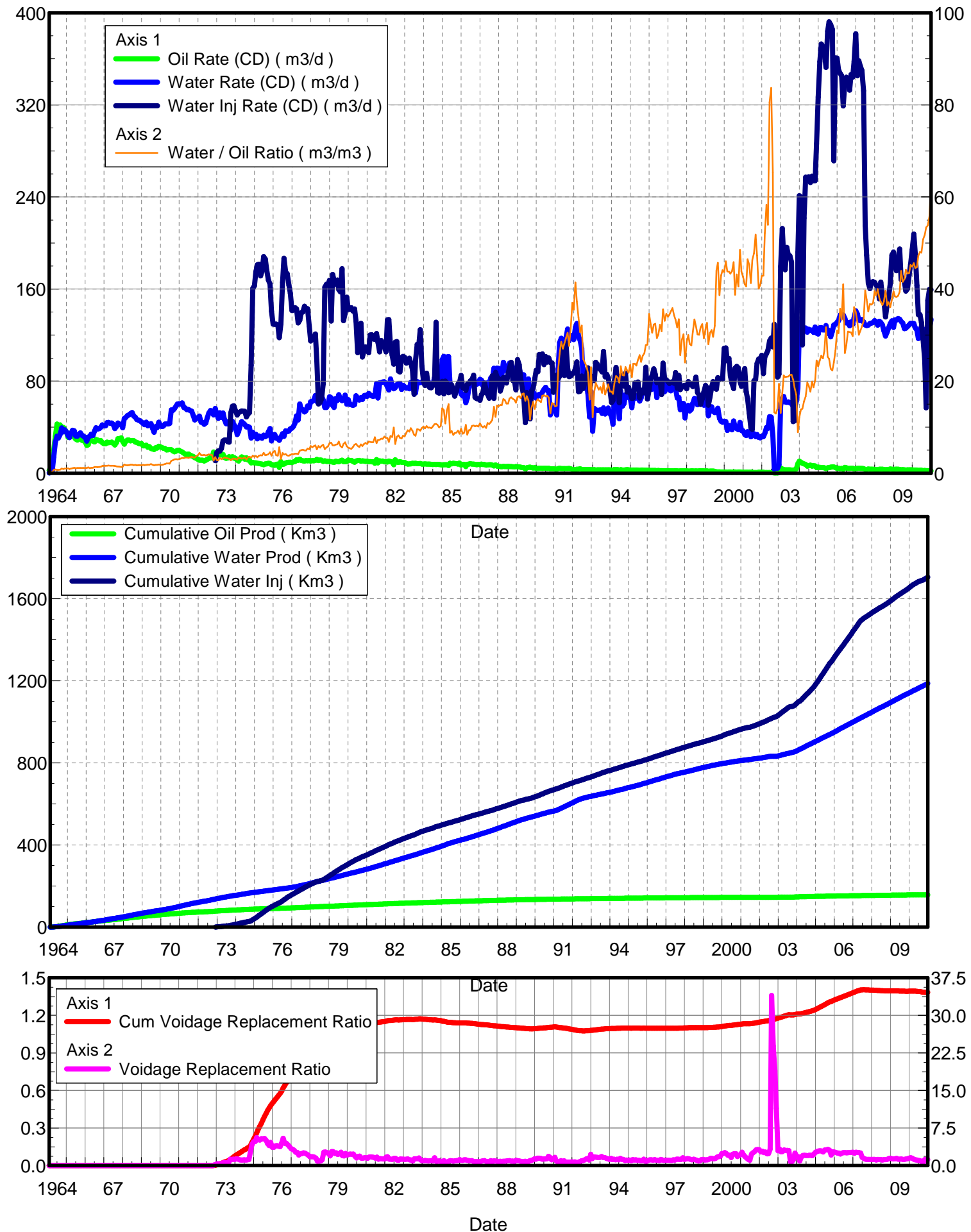
July 26, 2011

Operator: Tundra_Oil_and_Gas_Patnership

Oil Rate (CD) : 2.48 m3/d

Water Rate (CD) : 135.35 m3/d

Water Inj Rate (CD) : 168.58 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 Replacement 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

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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	0.182	0.002
12/31/1972	17.81	51.56	2.89	17.68	77.98	138.43	0.88	0.312	0.005
1/31/1973	17.18	47.67	2.78	19.28	78.51	139.91	1.48	0.366	0.009
2/28/1973	15.81	52.55	3.32	19.15	78.95	141.38	2.01	0.335	0.012
3/31/1973	15.89	48.45	3.05	21.29	79.45	142.88	2.67	0.401	0.016
4/30/1973	16.25	52.39	3.22	28.11	79.93	144.45	3.52	0.492	0.021
5/31/1973	13.63	46.64	3.42	28.87	80.36	145.90	4.41	0.571	0.026
6/30/1973	12.99	43.14	3.32	28.78	80.75	147.19	5.28	0.614	0.031
7/31/1973	13.33	43.05	3.23	27.42	81.16	148.53	6.13	0.585	0.036
8/31/1973	14.45	45.34	3.14	26.94	81.61	149.93	6.96	0.544	0.040
9/30/1973	13.47	37.42	2.78	52.49	82.01	151.06	8.54	1.270	0.049
10/31/1973	14.38	45.00	3.13	58.15	82.46	152.45	10.34	1.183	0.059
11/30/1973	13.20	42.23	3.20	58.55	82.85	153.72	12.09	1.272	0.068
12/31/1973	12.94	40.17	3.10	54.09	83.25	154.96	13.77	1.232	0.077
1/31/1974	11.33	33.66	2.97	50.47	83.61	156.01	15.34	1.366	0.085
2/28/1974	10.68	36.35	3.40	52.75	83.90	157.03	16.81	1.337	0.093
3/31/1974	12.73	41.76	3.28	53.44	84.30	158.32	18.47	1.176	0.101
4/30/1974	14.14	44.85	3.17	54.03	84.72	159.67	20.09	1.104	0.109
5/31/1974	13.42	43.50	3.24	53.91	85.14	161.01	21.76	1.138	0.117
6/30/1974	12.15	42.27	3.48	53.69	85.50	162.28	23.37	1.173	0.125
7/31/1974	13.55	40.20	2.97	49.03	85.92	163.53	24.89	1.111	0.132
8/31/1974	11.51	40.52	3.52	51.42	86.28	164.78	26.49	1.173	0.140
9/30/1974	11.14	39.94	3.59	52.69	86.61	165.98	28.07	1.221	0.147
10/31/1974	9.08	30.62	3.37	93.87	86.90	166.93	30.98	2.823	0.161
11/30/1974	9.36	35.54	3.80	160.56	87.18	168.00	35.79	4.198	0.185
12/31/1974	8.99	31.71	3.53	162.96	87.46	168.98	40.85	4.749	0.210
1/31/1975	8.97	33.72	3.76	174.95	87.73	170.03	46.27	4.818	0.237
2/28/1975	8.64	29.94	3.47	181.09	87.98	170.86	51.34	5.582	0.262
3/31/1975	8.48	32.35	3.82	181.68	88.24	171.87	56.97	5.220	0.289
4/30/1975	8.05	31.27	3.89	171.38	88.48	172.81	62.11	5.101	0.313
5/31/1975	7.88	30.35	3.85	175.40	88.72	173.75	67.55	5.375	0.339
6/30/1975	7.46	33.01	4.43	188.16	88.95	174.74	73.20	5.350	0.365
7/31/1975	8.15	31.86	3.91	185.98	89.20	175.73	78.96	5.434	0.392
8/31/1975	8.16	32.58	3.99	176.48	89.45	176.74	84.43	5.051	0.417
9/30/1975	8.66	35.86	4.14	167.95	89.71	177.81	89.47	4.378	0.439
10/31/1975	8.48	38.77	4.57	164.22	89.98	179.01	94.56	3.984	0.461
11/30/1975	7.34	28.06	3.82	140.68	90.20	179.85	98.78	4.661	0.480
12/31/1975	7.21	33.28	4.61	129.57	90.42	180.89	102.80	3.664	0.497

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1/31/1976	6.90	33.53	4.86	129.41	90.63	181.93	106.81	3.642	0.513
2/29/1976	7.81	30.63	3.92	129.46	90.86	182.81	110.56	3.936	0.529
3/31/1976	7.87	30.10	3.83	128.77	91.10	183.75	114.56	3.977	0.545
4/30/1976	5.07	28.57	5.64	117.79	91.26	184.60	118.09	3.921	0.560
5/31/1976	10.09	31.51	3.12	129.73	91.57	185.58	122.11	3.768	0.576
6/30/1976	7.81	34.42	4.41	165.66	91.80	186.61	127.08	4.517	0.596
7/31/1976	7.91	31.97	4.04	186.81	92.05	187.61	132.87	5.453	0.620
8/31/1976	8.81	36.80	4.17	174.73	92.32	188.75	138.29	4.440	0.642
9/30/1976	9.33	36.19	3.88	173.14	92.60	189.83	143.48	4.453	0.662
10/31/1976	9.59	36.60	3.82	163.44	92.90	190.97	148.55	4.151	0.682
11/30/1976	9.62	38.63	4.01	156.29	93.19	192.13	153.24	3.774	0.699
12/31/1976	9.41	39.18	4.16	141.34	93.48	193.34	157.62	3.373	0.715
1/31/1977	9.95	40.86	4.11	141.82	93.79	194.61	162.02	3.242	0.731
2/28/1977	10.26	43.79	4.27	143.88	94.08	195.83	166.05	3.077	0.744
3/31/1977	11.76	49.92	4.24	142.77	94.44	197.38	170.47	2.677	0.759
4/30/1977	11.10	46.21	4.17	130.53	94.77	198.77	174.39	2.641	0.771
5/31/1977	12.29	60.12	4.89	132.91	95.15	200.63	178.51	2.087	0.782
6/30/1977	11.20	55.99	5.00	139.59	95.49	202.31	182.70	2.357	0.795
7/31/1977	10.80	55.22	5.11	140.07	95.82	204.02	187.04	2.401	0.807
8/31/1977	10.68	53.32	4.99	145.00	96.16	205.67	191.53	2.571	0.820
9/30/1977	11.00	54.30	4.94	142.77	96.49	207.30	195.82	2.484	0.833
10/31/1977	10.83	58.45	5.40	142.93	96.82	209.12	200.25	2.321	0.844
11/30/1977	11.01	57.09	5.19	127.99	97.15	210.83	204.09	2.124	0.854
12/31/1977	10.55	62.14	5.89	114.95	97.48	212.75	207.65	1.763	0.862
1/31/1978	11.05	62.42	5.65	116.23	97.82	214.69	211.25	1.771	0.869
2/28/1978	10.82	63.44	5.86	117.65	98.12	216.47	214.55	1.767	0.876
3/31/1978	11.13	67.50	6.06	120.99	98.47	218.56	218.30	1.711	0.884
4/30/1978	11.97	62.24	5.20	97.78	98.83	220.43	221.23	1.488	0.888
5/31/1978	10.90	64.65	5.93	60.26	99.17	222.43	223.10	0.889	0.888
6/30/1978	11.51	64.14	5.57	61.69	99.51	224.35	224.95	0.914	0.889
7/31/1978	11.28	67.07	5.95	64.71	99.86	226.43	226.96	0.920	0.889
8/31/1978	10.26	63.50	6.19	77.43	100.18	228.40	229.36	1.165	0.891
9/30/1978	10.88	57.15	5.25	161.69	100.51	230.12	234.21	2.682	0.904
10/31/1978	10.21	57.10	5.59	164.08	100.82	231.89	239.29	2.732	0.917
11/30/1978	10.24	59.65	5.82	163.69	101.13	233.68	244.20	2.614	0.929
12/31/1978	10.19	66.42	6.52	167.66	101.45	235.74	249.40	2.417	0.941
1/31/1979	9.91	65.49	6.61	132.19	101.75	237.77	253.50	1.934	0.949
2/28/1979	9.70	58.95	6.08	172.64	102.02	239.42	258.33	2.795	0.961
3/31/1979	9.45	57.16	6.05	167.72	102.32	241.19	263.53	2.800	0.973
4/30/1979	10.39	64.83	6.24	164.07	102.63	243.13	268.45	2.419	0.984
5/31/1979	10.10	63.26	6.26	167.89	102.94	245.09	273.66	2.537	0.996
6/30/1979	9.93	68.23	6.87	159.46	103.24	247.14	278.44	2.243	1.005
7/31/1979	10.89	64.41	5.92	157.56	103.58	249.14	283.33	2.332	1.015
8/31/1979	11.28	63.10	5.60	177.65	103.93	251.09	288.83	2.677	1.027
9/30/1979	10.07	64.19	6.37	132.59	104.23	253.02	292.81	1.976	1.034
10/31/1979	10.10	67.91	6.72	138.80	104.54	255.12	297.11	1.959	1.041
11/30/1979	10.23	60.06	5.87	152.95	104.85	256.93	301.70	2.427	1.050
12/31/1979	11.49	63.90	5.56	142.45	105.21	258.91	306.12	2.119	1.058

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 Replacement Ratio
1/31/1980	11.05	59.76	5.41	142.45	105.55	260.76	310.54	2.263	1.066
2/29/1980	11.21	59.39	5.30	143.72	105.87	262.48	314.70	2.295	1.074
3/31/1980	10.34	58.93	5.70	141.02	106.19	264.31	319.07	2.277	1.082
4/30/1980	9.60	59.56	6.21	142.75	106.48	266.10	323.36	2.290	1.089
5/31/1980	10.61	67.34	6.35	132.12	106.81	268.18	327.45	1.876	1.095
6/30/1980	10.98	65.37	5.95	104.77	107.14	270.14	330.60	1.529	1.098
7/31/1980	11.17	63.55	5.69	122.26	107.49	272.11	334.39	1.831	1.103
8/31/1980	10.46	65.78	6.29	130.21	107.81	274.15	338.42	1.892	1.108
9/30/1980	10.84	64.10	5.91	100.96	108.14	276.08	341.45	1.502	1.111
10/31/1980	10.61	67.28	6.34	106.05	108.46	278.16	344.74	1.508	1.114
11/30/1980	10.30	67.70	6.57	109.70	108.77	280.19	348.03	1.552	1.117
12/31/1980	10.51	66.86	6.36	108.59	109.10	282.27	351.40	1.553	1.120
1/31/1981	10.06	69.26	6.89	104.77	109.41	284.41	354.64	1.452	1.122
2/28/1981	10.00	67.99	6.80	120.04	109.69	286.32	358.00	1.694	1.126
3/31/1981	9.99	67.15	6.72	120.19	110.00	288.40	361.73	1.716	1.130
4/30/1981	9.90	66.72	6.74	116.70	110.30	290.40	365.23	1.677	1.133
5/31/1981	8.62	67.31	7.81	116.38	110.56	292.49	368.84	1.667	1.137
6/30/1981	11.87	77.78	6.55	121.31	110.92	294.82	372.48	1.494	1.139
7/31/1981	9.08	65.32	7.19	113.68	111.20	296.85	376.00	1.673	1.143
8/31/1981	10.82	78.52	7.25	105.41	111.54	299.28	379.27	1.291	1.144
9/30/1981	10.49	78.69	7.50	115.26	111.85	301.64	382.73	1.410	1.146
10/31/1981	10.58	79.21	7.49	113.20	112.18	304.10	386.24	1.376	1.148
11/30/1981	9.98	79.46	7.96	110.02	112.48	306.48	389.54	1.336	1.149
12/31/1981	10.13	77.62	7.66	105.41	112.79	308.89	392.81	1.309	1.150
1/31/1982	9.82	75.07	7.65	133.23	113.10	311.21	396.94	1.710	1.154
2/28/1982	10.64	72.36	6.80	133.39	113.40	313.24	400.67	1.768	1.158
3/31/1982	10.12	81.98	8.10	109.86	113.71	315.78	404.08	1.294	1.159
4/30/1982	9.75	76.75	7.87	102.55	114.00	318.08	407.15	1.289	1.160
5/31/1982	7.39	73.31	9.93	94.75	114.23	320.36	410.09	1.256	1.160
6/30/1982	11.64	74.20	6.37	113.84	114.58	322.58	413.51	1.468	1.162
7/31/1982	9.75	76.99	7.89	114.31	114.88	324.97	417.05	1.432	1.164
8/31/1982	9.45	77.70	8.22	88.71	115.18	327.38	419.80	1.103	1.164
9/30/1982	10.13	77.99	7.70	87.92	115.48	329.72	422.44	1.086	1.163
10/31/1982	9.64	72.80	7.55	100.48	115.78	331.97	425.55	1.329	1.164
11/30/1982	9.39	76.47	8.15	101.59	116.06	334.27	428.60	1.283	1.165
12/31/1982	9.41	75.19	7.99	100.64	116.35	336.60	431.72	1.292	1.166
1/31/1983	8.44	73.87	8.76	95.71	116.61	338.89	434.69	1.254	1.167
2/28/1983	7.96	74.26	9.33	98.25	116.84	340.97	437.44	1.283	1.167
3/31/1983	8.12	73.38	9.04	100.00	117.09	343.24	440.54	1.321	1.168
4/30/1983	8.06	78.86	9.78	95.71	117.33	345.61	443.41	1.179	1.168
5/31/1983	8.58	79.12	9.22	89.99	117.60	348.06	446.20	1.103	1.168
6/30/1983	8.51	71.17	8.36	68.52	117.85	350.20	448.25	0.931	1.166
7/31/1983	8.58	69.86	8.14	97.94	118.12	352.36	451.29	1.354	1.168
8/31/1983	8.33	79.66	9.56	111.93	118.38	354.83	454.76	1.364	1.169
9/30/1983	8.30	78.58	9.47	111.29	118.62	357.19	458.10	1.374	1.170
10/31/1983	8.50	78.84	9.27	124.81	118.89	359.63	461.97	1.535	1.172
11/30/1983	8.01	78.87	9.85	93.01	119.13	362.00	464.76	1.146	1.172
12/31/1983	8.00	81.23	10.15	79.81	119.38	364.52	467.23	0.955	1.171

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 Replacement Ratio
1/31/1984	8.04	78.33	9.74	76.31	119.63	366.94	469.60	0.946	1.169
2/29/1984	7.94	81.33	10.24	86.97	119.86	369.30	472.12	1.040	1.169
3/31/1984	7.89	77.82	9.86	76.47	120.10	371.72	474.49	0.955	1.167
4/30/1984	7.90	78.41	9.93	74.41	120.34	374.07	476.72	0.922	1.166
5/31/1984	7.72	75.55	9.78	74.25	120.58	376.41	479.02	0.954	1.165
6/30/1984	7.53	76.39	10.14	78.06	120.80	378.70	481.37	0.994	1.164
7/31/1984	7.81	82.88	10.61	76.63	121.05	381.27	483.74	0.900	1.162
8/31/1984	7.57	81.19	10.73	131.12	121.28	383.79	487.81	1.573	1.165
9/30/1984	7.75	81.38	10.50	70.43	121.51	386.23	489.92	0.842	1.163
10/31/1984	7.63	76.03	9.97	69.64	121.75	388.59	492.08	0.890	1.161
11/30/1984	7.43	76.47	10.29	74.41	121.97	390.88	494.31	0.946	1.160
12/31/1984	6.99	98.74	14.13	79.81	122.19	393.94	496.79	0.792	1.157
1/31/1985	7.40	101.55	13.73	69.00	122.42	397.09	498.92	0.665	1.154
2/28/1985	7.34	79.25	10.80	79.97	122.62	399.31	501.16	0.983	1.153
3/31/1985	7.40	100.99	13.64	78.38	122.85	402.44	503.59	0.760	1.150
4/30/1985	6.76	101.37	15.00	69.95	123.06	405.48	505.69	0.677	1.147
5/31/1985	8.73	77.00	8.82	70.59	123.33	407.87	507.88	0.888	1.145
6/30/1985	8.07	73.90	9.16	76.79	123.57	410.08	510.18	1.007	1.144
7/31/1985	8.64	71.97	8.33	72.02	123.84	412.31	512.42	0.967	1.143
8/31/1985	8.40	73.02	8.70	66.93	124.10	414.58	514.49	0.887	1.142
9/30/1985	8.23	72.46	8.81	71.54	124.34	416.75	516.64	0.956	1.141
10/31/1985	8.01	74.03	9.24	77.43	124.59	419.05	519.04	1.014	1.141
11/30/1985	8.78	75.53	8.60	78.54	124.85	421.31	521.39	1.006	1.140
12/31/1985	7.11	68.67	9.66	84.90	125.07	423.44	524.03	1.200	1.140
1/31/1986	7.82	67.19	8.60	74.25	125.32	425.52	526.33	1.069	1.140
2/28/1986	7.79	68.48	8.79	74.74	125.54	427.44	528.42	1.057	1.139
3/31/1986	5.84	61.21	10.49	71.87	125.72	429.34	530.65	1.143	1.139
4/30/1986	7.80	65.23	8.36	77.28	125.95	431.30	532.97	1.145	1.139
5/31/1986	7.87	73.36	9.32	77.75	126.19	433.57	535.38	1.028	1.139
6/30/1986	8.23	77.55	9.42	80.14	126.44	435.90	537.78	1.003	1.138
7/31/1986	7.95	81.54	10.26	81.41	126.69	438.42	540.30	0.971	1.137
8/31/1986	7.96	82.56	10.37	85.23	126.93	440.98	542.95	1.004	1.137
9/30/1986	7.75	79.00	10.19	65.83	127.17	443.35	544.92	0.810	1.135
10/31/1986	7.50	77.38	10.32	64.87	127.40	445.75	546.93	0.815	1.133
11/30/1986	7.71	78.08	10.12	64.56	127.63	448.10	548.87	0.804	1.132
12/31/1986	7.50	81.50	10.86	63.44	127.86	450.62	550.84	0.758	1.130
1/31/1987	7.89	80.90	10.26	68.21	128.11	453.13	552.95	0.820	1.128
2/28/1987	7.62	76.02	9.97	69.60	128.32	455.26	554.90	0.890	1.127
3/31/1987	7.65	78.40	10.24	78.34	128.56	457.69	557.33	0.972	1.126
4/30/1987	7.10	69.73	9.82	72.46	128.77	459.78	559.50	1.009	1.126
5/31/1987	7.21	78.58	10.89	68.81	129.00	462.22	561.64	0.853	1.124
6/30/1987	7.36	78.55	10.67	65.15	129.22	464.57	563.59	0.808	1.123
7/31/1987	7.45	82.90	11.13	69.60	129.45	467.14	565.75	0.818	1.121
8/31/1987	7.05	81.42	11.55	84.70	129.67	469.67	568.37	1.015	1.121
9/30/1987	6.32	91.26	14.43	64.99	129.86	472.40	570.32	0.698	1.118
10/31/1987	7.17	87.91	12.26	87.72	130.08	475.13	573.04	0.975	1.118
11/30/1987	6.21	91.42	14.71	83.59	130.26	477.87	575.55	0.897	1.116
12/31/1987	6.25	90.97	14.55	82.04	130.46	480.69	578.09	0.884	1.115

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 Replacement Ratio
1/31/1988	5.85	86.76	14.84	71.35	130.64	483.38	580.30	0.807	1.113
2/29/1988	5.71	84.42	14.78	75.32	130.80	485.83	582.49	0.875	1.112
3/31/1988	5.99	96.40	16.11	82.95	130.99	488.82	585.06	0.845	1.111
4/30/1988	5.86	92.99	15.87	82.95	131.17	491.61	587.55	0.876	1.110
5/31/1988	5.89	89.13	15.14	78.34	131.35	494.37	589.98	0.862	1.108
6/30/1988	5.99	90.58	15.13	86.29	131.53	497.09	592.57	0.935	1.107
7/31/1988	5.88	95.61	16.26	91.69	131.71	500.05	595.41	0.942	1.106
8/31/1988	5.75	94.68	16.47	96.30	131.89	502.99	598.39	1.000	1.106
9/30/1988	5.66	91.37	16.14	80.57	132.06	505.73	600.81	0.866	1.105
10/31/1988	5.44	86.61	15.94	80.09	132.23	508.41	603.29	0.908	1.104
11/30/1988	5.79	88.64	15.30	72.46	132.40	511.07	605.47	0.802	1.102
12/31/1988	5.66	93.71	16.55	98.68	132.58	513.98	608.53	1.035	1.102
1/31/1989	5.45	91.28	16.76	94.23	132.75	516.81	611.45	1.015	1.101
2/28/1989	5.29	86.39	16.32	82.63	132.89	519.23	613.76	0.940	1.101
3/31/1989	4.91	84.53	17.20	74.53	133.05	521.85	616.07	0.867	1.099
4/30/1989	4.93	85.51	17.33	67.69	133.19	524.41	618.10	0.779	1.098
5/31/1989	3.74	58.76	15.73	44.02	133.31	526.23	619.47	0.736	1.097
6/30/1989	4.66	78.03	16.74	70.24	133.45	528.57	621.57	0.885	1.096
7/31/1989	5.17	81.91	15.84	64.52	133.61	531.11	623.57	0.774	1.094
8/31/1989	5.32	61.95	11.65	47.20	133.77	533.03	625.04	0.743	1.093
9/30/1989	4.98	70.39	14.14	71.22	133.92	535.15	627.17	0.992	1.093
10/31/1989	4.55	70.50	15.50	73.93	134.06	537.33	629.47	1.029	1.093
11/30/1989	4.89	68.30	13.97	82.03	134.21	539.38	631.93	1.177	1.093
12/31/1989	4.17	65.17	15.64	89.51	134.34	541.40	634.70	1.349	1.094
1/31/1990	4.23	67.97	16.08	88.24	134.47	543.51	637.44	1.275	1.095
2/28/1990	4.35	68.38	15.72	103.18	134.59	545.42	640.33	1.482	1.096
3/31/1990	4.33	66.87	15.44	101.11	134.73	547.50	643.46	1.484	1.097
4/30/1990	4.19	70.49	16.83	103.65	134.85	549.61	646.57	1.446	1.098
5/31/1990	4.30	72.79	16.91	94.43	134.99	551.87	649.50	1.275	1.099
6/30/1990	4.46	74.62	16.71	101.43	135.12	554.11	652.54	1.336	1.100
7/31/1990	4.25	71.68	16.85	96.50	135.25	556.33	655.53	1.323	1.101
8/31/1990	4.39	71.91	16.39	100.16	135.39	558.56	658.64	1.369	1.102
9/30/1990	3.89	50.73	13.03	96.18	135.51	560.08	661.52	1.855	1.104
10/31/1990	3.85	58.74	15.24	95.86	135.62	561.90	664.49	1.602	1.105
11/30/1990	3.88	58.72	15.11	70.27	135.74	563.66	666.60	1.174	1.106
12/31/1990	3.72	54.00	14.50	77.58	135.86	565.34	669.01	1.409	1.106
1/31/1991	3.46	50.59	14.64	85.37	135.96	566.90	671.65	1.655	1.108
2/28/1991	4.01	90.57	22.58	82.04	136.08	569.44	673.95	0.894	1.107
3/31/1991	4.38	113.51	25.93	84.26	136.21	572.96	676.56	0.734	1.105
4/30/1991	4.11	117.31	28.54	87.60	136.34	576.48	679.19	0.739	1.103
5/31/1991	4.05	109.64	27.05	110.49	136.46	579.88	682.62	0.997	1.102
6/30/1991	4.03	113.26	28.09	85.05	136.58	583.27	685.17	0.743	1.100
7/31/1991	4.00	117.52	29.36	112.88	136.71	586.92	688.67	0.951	1.099
8/31/1991	4.10	125.17	30.53	91.41	136.83	590.80	691.50	0.723	1.097
9/30/1991	4.16	115.06	27.68	83.94	136.96	594.25	694.02	0.722	1.095
10/31/1991	3.80	119.43	31.46	84.42	137.08	597.95	696.64	0.700	1.093
11/30/1991	3.24	119.75	37.00	86.49	137.17	601.54	699.23	0.717	1.090
12/31/1991	3.27	116.18	35.52	87.12	137.27	605.15	701.93	0.744	1.089

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 Replacement Ratio
1/31/1992	3.06	126.75	41.43	90.94	137.37	609.07	704.75	0.712	1.086
2/29/1992	3.49	130.11	37.28	96.66	137.47	612.85	707.55	0.737	1.084
3/31/1992	3.52	119.10	33.86	70.91	137.58	616.54	709.75	0.590	1.081
4/30/1992	3.77	115.43	30.63	71.22	137.69	620.00	711.89	0.611	1.079
5/31/1992	3.37	108.15	32.08	84.42	137.80	623.36	714.51	0.774	1.077
6/30/1992	3.06	75.88	24.81	73.61	137.89	625.63	716.71	0.959	1.077
7/31/1992	3.27	78.39	24.00	79.65	137.99	628.06	719.18	1.004	1.077
8/31/1992	3.25	75.55	23.26	84.10	138.09	630.40	721.79	1.100	1.077
9/30/1992	3.17	69.21	21.84	91.57	138.19	632.48	724.54	1.306	1.077
10/31/1992	3.05	48.82	15.99	70.91	138.28	633.99	726.74	1.427	1.078
11/30/1992	3.08	70.99	23.04	80.13	138.37	636.12	729.14	1.115	1.078
12/31/1992	2.99	36.43	12.17	84.10	138.47	637.25	731.75	2.255	1.080
1/31/1993	3.17	56.22	17.73	80.45	138.56	639.00	734.24	1.408	1.081
2/28/1993	2.81	54.94	19.58	96.34	138.64	640.53	736.94	1.728	1.083
3/31/1993	2.90	54.60	18.82	94.59	138.73	642.23	739.87	1.706	1.084
4/30/1993	3.01	54.65	18.16	91.41	138.82	643.87	742.61	1.647	1.086
5/31/1993	2.94	55.09	18.72	90.14	138.91	645.57	745.41	1.611	1.087
6/30/1993	2.98	52.02	17.44	88.08	139.00	647.13	748.05	1.665	1.088
7/31/1993	2.90	56.88	19.63	105.88	139.09	648.90	751.33	1.835	1.090
8/31/1993	3.01	51.41	17.09	83.78	139.19	650.49	753.93	1.602	1.091
9/30/1993	2.89	52.69	18.25	85.85	139.27	652.07	756.50	1.604	1.093
10/31/1993	2.94	56.66	19.30	82.99	139.36	653.83	759.08	1.443	1.094
11/30/1993	2.92	51.94	17.77	72.97	139.45	655.39	761.27	1.382	1.094
12/31/1993	2.79	49.33	17.70	61.37	139.54	656.92	763.17	1.224	1.095
1/31/1994	2.46	42.48	17.24	63.27	139.61	658.23	765.13	1.465	1.095
2/28/1994	3.32	64.77	19.53	79.65	139.71	660.05	767.36	1.212	1.096
3/31/1994	3.30	69.60	21.10	91.89	139.81	662.20	770.21	1.302	1.096
4/30/1994	3.08	64.06	20.80	74.56	139.90	664.13	772.45	1.148	1.096
5/31/1994	2.40	47.29	19.66	61.21	139.98	665.59	774.34	1.276	1.097
6/30/1994	3.06	71.18	23.24	84.58	140.07	667.73	776.88	1.174	1.097
7/31/1994	2.73	58.23	21.33	84.90	140.15	669.53	779.51	1.438	1.098
8/31/1994	2.85	60.59	21.25	75.67	140.24	671.41	781.86	1.232	1.098
9/30/1994	2.96	68.25	23.07	86.96	140.33	673.46	784.47	1.258	1.099
10/31/1994	3.07	68.61	22.32	70.59	140.43	675.59	786.66	1.016	1.098
11/30/1994	3.02	65.78	21.81	74.56	140.52	677.56	788.89	1.119	1.098
12/31/1994	2.79	65.53	23.51	69.63	140.60	679.59	791.05	1.050	1.098
1/31/1995	2.73	57.01	20.90	65.02	140.69	681.36	793.07	1.125	1.098
2/28/1995	2.81	66.98	23.80	65.34	140.77	683.23	794.90	0.964	1.098
3/31/1995	2.74	65.11	23.77	78.38	140.85	685.25	797.33	1.189	1.098
4/30/1995	2.79	65.36	23.39	73.45	140.93	687.21	799.53	1.110	1.098
5/31/1995	2.75	67.61	24.63	79.33	141.02	689.31	801.99	1.160	1.098
6/30/1995	2.44	62.71	25.67	65.34	141.09	691.19	803.95	1.030	1.098
7/31/1995	2.70	65.38	24.20	72.18	141.18	693.22	806.19	1.091	1.098
8/31/1995	2.82	71.92	25.54	69.79	141.26	695.45	808.35	0.960	1.098
9/30/1995	2.68	69.86	26.05	70.91	141.34	697.54	810.48	1.004	1.098
10/31/1995	2.56	71.31	27.84	92.05	141.42	699.75	813.33	1.278	1.098
11/30/1995	2.61	72.79	27.91	64.55	141.50	701.94	815.27	0.878	1.097
12/31/1995	2.37	82.16	34.63	72.18	141.58	704.48	817.50	0.871	1.097

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 Replacement Ratio
1/31/1996	2.34	75.68	32.36	81.87	141.65	706.83	820.04	1.072	1.097
2/29/1996	2.39	72.94	30.52	84.90	141.72	708.94	822.50	1.153	1.097
3/31/1996	2.37	76.65	32.30	90.62	141.79	711.32	825.31	1.172	1.097
4/30/1996	2.42	78.74	32.47	85.85	141.86	713.68	827.89	1.081	1.097
5/31/1996	2.24	65.78	29.36	78.69	141.93	715.72	830.33	1.185	1.097
6/30/1996	2.50	75.21	30.10	80.60	142.01	717.98	832.75	1.061	1.097
7/31/1996	2.30	74.23	32.25	81.56	142.08	720.28	835.27	1.089	1.097
8/31/1996	2.24	69.15	30.84	68.36	142.15	722.42	837.39	0.979	1.097
9/30/1996	2.18	77.50	35.61	95.71	142.21	724.75	840.27	1.225	1.097
10/31/1996	2.14	70.90	33.10	81.40	142.28	726.95	842.79	1.138	1.097
11/30/1996	2.22	76.71	34.61	81.08	142.35	729.25	845.22	1.048	1.097
12/31/1996	2.19	74.25	33.97	79.65	142.41	731.55	847.69	1.064	1.097
1/31/1997	2.11	72.50	34.42	78.06	142.48	733.80	850.11	1.068	1.097
2/28/1997	2.04	71.52	35.13	79.01	142.54	735.80	852.32	1.096	1.097
3/31/1997	2.10	75.50	35.87	79.49	142.60	738.14	854.79	1.044	1.097
4/30/1997	2.15	73.53	34.25	78.22	142.67	740.35	857.13	1.055	1.097
5/31/1997	2.21	73.53	33.33	87.44	142.74	742.62	859.84	1.179	1.097
6/30/1997	2.06	65.32	31.66	73.93	142.80	744.58	862.06	1.121	1.097
7/31/1997	1.97	65.90	33.46	84.90	142.86	746.63	864.69	1.277	1.097
8/31/1997	2.15	55.11	25.65	72.62	142.92	748.34	866.94	1.303	1.098
9/30/1997	2.09	60.56	29.02	75.04	142.99	750.15	869.20	1.227	1.098
10/31/1997	2.00	60.49	30.20	75.99	143.05	752.03	871.55	1.244	1.099
11/30/1997	2.00	48.12	24.04	76.47	143.11	753.47	873.85	1.570	1.099
12/31/1997	2.02	57.47	28.48	73.29	143.17	755.25	876.12	1.262	1.100
1/31/1998	1.96	58.86	30.01	79.65	143.23	757.08	878.59	1.340	1.100
2/28/1998	1.93	54.05	28.05	77.10	143.29	758.59	880.75	1.412	1.101
3/31/1998	2.00	55.54	27.77	77.42	143.35	760.31	883.15	1.380	1.101
4/30/1998	1.98	60.65	30.68	75.36	143.41	762.13	885.41	1.231	1.102
5/31/1998	1.95	65.05	33.41	77.42	143.47	764.15	887.81	1.180	1.102
6/30/1998	2.02	64.51	31.99	83.62	143.53	766.08	890.31	1.285	1.102
7/31/1998	1.97	59.46	30.14	69.95	143.59	767.93	892.48	1.165	1.103
8/31/1998	2.04	61.43	30.08	68.04	143.65	769.83	894.59	1.097	1.103
9/30/1998	2.01	63.65	31.67	59.78	143.71	771.74	896.39	0.931	1.102
10/31/1998	2.05	66.36	32.40	64.71	143.78	773.80	898.39	0.966	1.102
11/30/1998	2.02	59.18	29.32	70.75	143.84	775.57	900.51	1.184	1.102
12/31/1998	1.96	61.52	31.31	76.31	143.90	777.48	902.88	1.229	1.102
1/31/1999	1.99	65.05	32.63	74.40	143.96	779.50	905.19	1.134	1.102
2/28/1999	1.77	49.76	28.04	59.14	144.01	780.89	906.84	1.176	1.102
3/31/1999	1.86	56.74	30.51	66.29	144.07	782.65	908.90	1.157	1.103
4/30/1999	1.86	57.72	31.09	75.20	144.12	784.38	911.15	1.291	1.103
5/31/1999	1.81	53.71	29.60	79.65	144.18	786.05	913.62	1.469	1.104
6/30/1999	1.65	52.70	32.04	73.93	144.23	787.63	915.84	1.390	1.104
7/31/1999	1.21	53.24	43.95	72.97	144.27	789.28	918.10	1.362	1.105
8/31/1999	1.23	56.41	45.72	82.99	144.30	791.03	920.67	1.462	1.106
9/30/1999	1.24	47.76	38.67	81.24	144.34	792.46	923.11	1.688	1.107
10/31/1999	1.05	45.06	42.98	82.35	144.37	793.86	925.67	1.815	1.108
11/30/1999	1.00	44.24	44.09	81.56	144.40	795.18	928.11	1.832	1.109
12/31/1999	1.04	45.27	43.65	108.58	144.44	796.59	931.48	2.383	1.111

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 Replacement Ratio
1/31/2000	0.97	44.82	46.00	108.90	144.47	797.98	934.85	2.415	1.113
2/29/2000	0.85	37.26	43.84	97.61	144.49	799.06	937.68	2.602	1.115
3/31/2000	0.95	41.47	43.80	99.68	144.52	800.34	940.77	2.388	1.117
4/30/2000	0.94	40.91	43.36	84.58	144.55	801.57	943.31	2.054	1.118
5/31/2000	0.86	37.64	43.87	78.06	144.58	802.74	945.73	2.060	1.120
6/30/2000	0.99	45.38	45.84	73.61	144.61	804.10	947.94	1.612	1.121
7/31/2000	1.03	39.95	38.77	91.25	144.64	805.34	950.77	2.267	1.122
8/31/2000	0.90	38.87	43.19	92.85	144.67	806.54	953.65	2.373	1.124
9/30/2000	0.94	37.98	40.55	91.41	144.69	807.68	956.39	2.390	1.126
10/31/2000	0.91	44.07	48.53	79.65	144.72	809.05	958.86	1.797	1.127
11/30/2000	0.85	37.13	43.77	75.52	144.75	810.16	961.12	2.020	1.128
12/31/2000	0.86	36.87	42.64	83.62	144.77	811.30	963.72	2.253	1.130
1/31/2001	0.82	33.74	41.09	90.94	144.80	812.35	966.54	2.677	1.131
2/28/2001	0.81	32.74	40.57	70.90	144.82	813.27	968.52	2.150	1.133
3/31/2001	0.78	36.06	46.48	64.71	144.85	814.38	970.53	1.783	1.133
4/30/2001	0.77	35.01	45.27	52.15	144.87	815.43	972.09	1.480	1.134
5/31/2001	0.77	31.71	41.31	39.43	144.89	816.42	973.31	1.235	1.134
6/30/2001	0.75	34.60	46.33	38.00	144.92	817.46	974.45	1.091	1.134
7/31/2001	0.72	34.27	47.75	80.28	144.94	818.52	976.94	2.328	1.135
8/31/2001	0.61	31.84	51.82	81.40	144.96	819.50	979.47	2.542	1.137
9/30/2001	0.71	33.61	47.33	95.23	144.98	820.51	982.32	2.816	1.139
10/31/2001	0.77	31.06	40.11	99.20	145.00	821.48	985.40	3.171	1.141
11/30/2001	0.75	30.78	40.95	99.84	145.02	822.40	988.39	3.221	1.144
12/31/2001	0.75	32.21	42.86	102.38	145.05	823.40	991.57	3.157	1.146
1/31/2002	0.74	31.83	42.90	86.48	145.07	824.38	994.25	2.699	1.148
2/28/2002	0.67	34.74	52.16	101.27	145.09	825.36	997.08	2.899	1.150
3/31/2002	0.68	39.68	58.30	103.81	145.11	826.59	1000.30	2.603	1.152
4/30/2002	0.72	39.02	53.95	106.68	145.13	827.76	1003.50	2.719	1.154
5/31/2002	0.61	49.12	80.57	114.95	145.15	829.28	1007.07	2.332	1.156
6/30/2002	0.58	48.81	83.68	117.37	145.17	830.75	1010.59	2.396	1.158
7/31/2002	0.51	33.06	65.28	109.81	145.18	831.77	1013.99	3.307	1.160
8/31/2002	0.28	3.73	13.21	129.42	145.19	831.89	1018.00	33.978	1.165
9/30/2002	0.34	4.43	12.97	108.25	145.20	832.02	1021.25	23.902	1.168
10/31/2002	0.31	4.33	14.13	83.48	145.21	832.15	1023.84	18.898	1.171
11/30/2002	0.38	7.41	19.42	86.10	145.22	832.38	1026.42	11.444	1.174
12/31/2002	4.53	59.30	13.10	179.61	145.36	834.21	1031.99	2.963	1.178
1/31/2003	3.68	63.89	17.36	212.61	145.48	836.19	1038.58	3.273	1.183
2/28/2003	3.14	66.65	21.22	187.21	145.57	838.06	1043.82	2.771	1.186
3/31/2003	2.96	61.89	20.90	176.74	145.66	839.98	1049.30	2.817	1.190
4/30/2003	2.94	61.62	20.96	196.27	145.75	841.83	1055.19	3.142	1.194
5/31/2003	2.95	61.90	21.01	188.87	145.84	843.75	1061.04	3.010	1.198
6/30/2003	2.87	61.32	21.33	188.83	145.92	845.59	1066.71	3.039	1.202
7/31/2003	2.83	60.60	21.40	183.39	146.01	847.46	1072.39	2.986	1.205
8/31/2003	2.86	58.14	20.32	44.81	146.10	849.27	1073.78	0.760	1.204
9/30/2003	3.04	56.35	18.52	45.57	146.19	850.96	1075.15	0.796	1.204
10/31/2003	3.66	62.51	17.07	79.94	146.31	852.90	1077.63	1.257	1.204
11/30/2003	8.30	73.99	8.91	191.90	146.55	855.11	1083.38	2.512	1.207
12/31/2003	10.42	126.73	12.16	241.10	146.88	859.04	1090.86	1.858	1.210

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 Replacement Ratio
1/31/2004	9.48	131.25	13.85	239.87	147.17	863.11	1098.29	1.790	1.213
2/29/2004	8.61	120.68	14.01	111.48	147.42	866.61	1101.53	0.905	1.211
3/31/2004	8.07	126.02	15.62	221.70	147.67	870.52	1108.40	1.727	1.214
4/30/2004	7.55	126.15	16.72	257.18	147.90	874.30	1116.12	2.004	1.217
5/31/2004	6.22	122.51	19.69	254.29	148.09	878.10	1124.00	2.046	1.221
6/30/2004	6.59	125.00	18.97	257.58	148.29	881.85	1131.73	2.030	1.224
7/31/2004	7.02	124.21	17.71	252.53	148.51	885.70	1139.55	2.000	1.227
8/31/2004	6.25	124.40	19.90	257.99	148.70	889.56	1147.55	2.044	1.231
9/30/2004	6.56	122.34	18.64	254.05	148.90	893.23	1155.17	2.045	1.234
10/31/2004	6.31	127.05	20.12	254.09	149.09	897.17	1163.05	1.972	1.237
11/30/2004	4.97	121.67	24.49	286.17	149.24	900.82	1171.64	2.325	1.241
12/31/2004	5.22	121.03	23.20	326.73	149.40	904.57	1181.76	2.666	1.247
1/31/2005	5.15	126.28	24.53	357.60	149.56	908.48	1192.85	2.799	1.253
2/28/2005	4.96	126.58	25.50	372.85	149.70	912.03	1203.29	2.912	1.260
3/31/2005	4.99	124.49	24.96	370.83	149.86	915.89	1214.79	2.945	1.266
4/30/2005	4.70	124.55	26.53	366.07	150.00	919.62	1225.77	2.907	1.273
5/31/2005	4.05	128.37	31.71	352.50	150.12	923.60	1236.69	2.721	1.279
6/30/2005	4.80	121.38	25.31	383.89	150.27	927.24	1248.21	3.127	1.286
7/31/2005	4.99	123.94	24.84	392.21	150.42	931.09	1260.37	3.128	1.293
8/31/2005	5.23	118.41	22.65	389.70	150.58	934.76	1272.45	3.250	1.301
9/30/2005	5.52	123.28	22.32	385.55	150.75	938.46	1284.02	3.087	1.307
10/31/2005	5.36	128.77	24.01	271.51	150.91	942.45	1292.43	2.083	1.311
11/30/2005	4.87	129.36	26.58	360.75	151.06	946.33	1303.26	2.759	1.316
12/31/2005	4.23	131.13	30.99	360.61	151.19	950.39	1314.44	2.725	1.322
1/31/2006	4.35	132.41	30.42	350.44	151.33	954.50	1325.30	2.622	1.328
2/28/2006	3.85	137.38	35.71	347.47	151.43	958.34	1335.03	2.509	1.332
3/31/2006	4.12	137.25	33.35	345.40	151.56	962.60	1345.74	2.495	1.337
4/30/2006	3.35	137.51	41.02	319.12	151.66	966.72	1355.31	2.304	1.341
5/31/2006	5.15	134.56	26.11	340.13	151.82	970.90	1365.85	2.500	1.346
6/30/2006	4.70	130.61	27.81	343.95	151.96	974.81	1376.17	2.606	1.351
7/31/2006	4.25	131.00	30.80	342.80	152.10	978.88	1386.80	2.592	1.356
8/31/2006	4.18	128.04	30.66	332.73	152.22	982.84	1397.11	2.574	1.361
9/30/2006	4.30	131.43	30.58	346.29	152.35	986.79	1407.50	2.610	1.365
10/31/2006	4.34	129.40	29.81	343.95	152.49	990.80	1418.16	2.633	1.370
11/30/2006	3.75	135.24	36.07	357.75	152.60	994.86	1428.90	2.624	1.375
12/31/2006	4.03	141.13	35.02	381.76	152.73	999.23	1440.73	2.683	1.381
1/31/2007	4.22	138.26	32.77	345.25	152.86	1003.52	1451.43	2.475	1.385
2/28/2007	4.42	132.96	30.05	358.30	152.98	1007.24	1461.47	2.669	1.390
3/31/2007	4.28	132.63	31.02	353.21	153.11	1011.35	1472.42	2.639	1.395
4/30/2007	4.19	133.42	31.86	349.86	153.24	1015.35	1482.91	2.599	1.399
5/31/2007	3.99	131.51	33.00	332.30	153.36	1019.43	1493.21	2.505	1.404
6/30/2007	3.24	128.74	39.68	215.33	153.46	1023.29	1499.67	1.661	1.405
7/31/2007	3.40	128.23	37.75	189.42	153.56	1027.27	1505.55	1.466	1.405
8/31/2007	3.66	128.55	35.16	165.28	153.68	1031.25	1510.67	1.275	1.404
9/30/2007	3.54	130.13	36.73	160.41	153.78	1035.16	1515.48	1.223	1.404
10/31/2007	3.56	130.34	36.64	165.88	153.89	1039.20	1520.62	1.263	1.403
11/30/2007	3.54	130.78	36.93	166.46	154.00	1043.12	1525.62	1.263	1.403
12/31/2007	3.35	132.60	39.55	165.81	154.10	1047.23	1530.76	1.241	1.402

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 Replacement Ratio
1/31/2008	3.40	131.31	38.63	163.23	154.21	1051.30	1535.82	1.234	1.401
2/29/2008	3.21	128.57	40.02	161.87	154.30	1055.03	1540.51	1.250	1.401
3/31/2008	3.47	132.06	38.01	151.43	154.41	1059.12	1545.21	1.138	1.400
4/30/2008	3.52	130.88	37.22	166.14	154.52	1063.05	1550.19	1.260	1.399
5/31/2008	3.53	128.82	36.54	153.95	154.63	1067.04	1554.96	1.186	1.399
6/30/2008	3.32	123.82	37.27	150.20	154.73	1070.76	1559.47	1.204	1.398
7/31/2008	3.01	119.25	39.66	135.72	154.82	1074.46	1563.68	1.130	1.397
8/31/2008	3.36	122.52	36.45	146.86	154.92	1078.25	1568.23	1.189	1.396
9/30/2008	3.40	126.30	37.13	153.44	155.03	1082.04	1572.83	1.205	1.396
10/31/2008	3.60	129.94	36.10	164.46	155.14	1086.07	1577.93	1.256	1.395
11/30/2008	3.52	132.46	37.68	189.49	155.24	1090.04	1583.61	1.420	1.395
12/31/2008	3.21	126.77	39.53	192.03	155.34	1093.97	1589.57	1.504	1.396
1/31/2009	3.47	133.26	38.39	180.80	155.45	1098.11	1595.17	1.347	1.396
2/28/2009	3.48	133.07	38.28	175.87	155.55	1101.83	1600.10	1.312	1.395
3/31/2009	3.48	134.30	38.54	186.23	155.65	1105.99	1605.87	1.376	1.395
4/30/2009	3.40	133.88	39.39	194.78	155.76	1110.01	1611.71	1.444	1.395
5/31/2009	3.00	131.83	43.95	168.29	155.85	1114.10	1616.93	1.268	1.395
6/30/2009	3.14	130.48	41.56	169.59	155.94	1118.01	1622.02	1.291	1.395
7/31/2009	2.98	125.68	42.14	166.30	156.04	1121.91	1627.17	1.314	1.394
8/31/2009	2.85	125.89	44.21	158.17	156.12	1125.81	1632.08	1.248	1.394
9/30/2009	2.93	127.31	43.39	160.18	156.21	1129.63	1636.88	1.250	1.393
10/31/2009	2.96	128.89	43.48	172.18	156.30	1133.63	1642.22	1.327	1.393
11/30/2009	2.88	130.22	45.22	181.09	156.39	1137.53	1647.65	1.382	1.393
12/31/2009	2.90	130.19	44.87	194.24	156.48	1141.57	1653.67	1.482	1.393
1/31/2010	2.85	130.04	45.63	207.72	156.57	1145.60	1660.11	1.587	1.394
2/28/2010	2.84	126.39	44.55	190.69	156.65	1149.14	1665.45	1.499	1.394
3/31/2010	2.78	124.44	44.79	163.14	156.73	1153.00	1670.51	1.302	1.394
4/30/2010	2.48	117.10	47.28	137.72	156.81	1156.51	1674.64	1.169	1.393
5/31/2010	2.58	124.15	48.06	137.81	156.89	1160.36	1678.91	1.103	1.392
6/30/2010	2.67	127.71	47.89	130.97	156.97	1164.19	1682.84	1.019	1.391
7/31/2010	2.33	118.07	50.78	116.19	157.04	1167.85	1686.44	0.979	1.390
8/31/2010	2.42	124.97	51.73	98.59	157.12	1171.72	1689.50	0.785	1.388
9/30/2010	2.31	123.19	53.38	56.86	157.19	1175.42	1691.21	0.459	1.385
10/31/2010	2.32	125.05	53.81	150.01	157.26	1179.30	1695.86	1.193	1.385
11/30/2010	2.25	125.79	55.78	159.61	157.32	1183.07	1700.65	1.262	1.384
12/31/2010	2.10	133.64	63.76	159.42	157.39	1187.21	1705.59	1.188	1.384

Pattern: 0/12-11-009-25 Set: East Routledge Unit

Oil Formation Vol. Factor : 1.05 m3/m3

Water Formation Vol Factor : 1.00 m3/m3

Water / Oil Ratio : 57.97 m3/m3

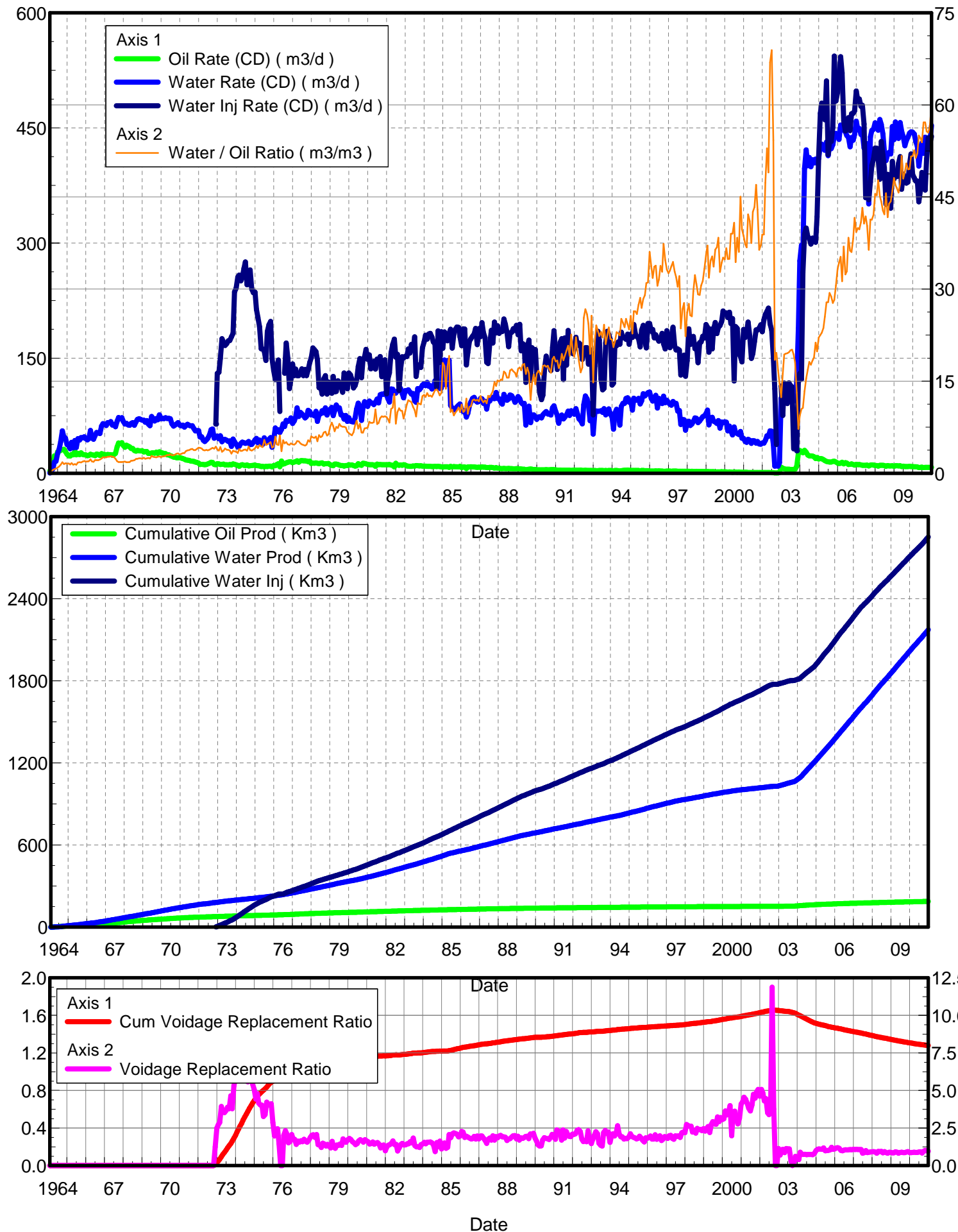
July 26, 2011

Operator: Tundra_Oil_and_Gas_Patnership

Oil Rate (CD) : 8.18 m3/d

Water Rate (CD) : 474.47 m3/d

Water Inj Rate (CD) : 468.89 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 Replacement 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 Replacement Ratio
1/31/1968	33.76	63.95	1.89		37.84	70.30	0.00	0.000	0.000
2/29/1968	36.60	65.10	1.78		38.90	72.18	0.00	0.000	0.000
3/31/1968	35.39	62.87	1.78		39.99	74.13	0.00	0.000	0.000
4/30/1968	34.42	62.53	1.82		41.03	76.01	0.00	0.000	0.000
5/31/1968	32.21	64.78	2.01		42.03	78.02	0.00	0.000	0.000
6/30/1968	32.19	65.92	2.05		42.99	79.99	0.00	0.000	0.000
7/31/1968	29.47	62.56	2.12		43.90	81.93	0.00	0.000	0.000
8/31/1968	28.78	67.13	2.33		44.80	84.02	0.00	0.000	0.000
9/30/1968	29.85	70.20	2.35		45.69	86.12	0.00	0.000	0.000
10/31/1968	29.38	70.96	2.42		46.60	88.32	0.00	0.000	0.000
11/30/1968	29.00	70.26	2.42		47.47	90.43	0.00	0.000	0.000
12/31/1968	29.33	69.20	2.36		48.38	92.57	0.00	0.000	0.000
1/31/1969	27.57	69.23	2.51		49.24	94.72	0.00	0.000	0.000
2/28/1969	28.36	66.54	2.35		50.03	96.58	0.00	0.000	0.000
3/31/1969	28.16	68.65	2.44		50.90	98.71	0.00	0.000	0.000
4/30/1969	25.75	64.02	2.49		51.68	100.63	0.00	0.000	0.000
5/31/1969	25.73	61.95	2.41		52.47	102.55	0.00	0.000	0.000
6/30/1969	26.28	73.94	2.81		53.26	104.77	0.00	0.000	0.000
7/31/1969	26.54	71.23	2.68		54.09	106.98	0.00	0.000	0.000
8/31/1969	25.98	68.12	2.62		54.89	109.09	0.00	0.000	0.000
9/30/1969	27.42	71.41	2.60		55.71	111.23	0.00	0.000	0.000
10/31/1969	25.71	69.66	2.71		56.51	113.39	0.00	0.000	0.000
11/30/1969	27.86	76.03	2.73		57.35	115.67	0.00	0.000	0.000
12/31/1969	26.91	71.09	2.64		58.18	117.88	0.00	0.000	0.000
1/31/1970	26.25	71.42	2.72		58.99	120.09	0.00	0.000	0.000
2/28/1970	25.62	71.01	2.77		59.71	122.08	0.00	0.000	0.000
3/31/1970	25.50	72.39	2.84		60.50	124.32	0.00	0.000	0.000
4/30/1970	24.04	71.39	2.97		61.22	126.46	0.00	0.000	0.000
5/31/1970	24.03	71.52	2.98		61.97	128.68	0.00	0.000	0.000
6/30/1970	22.86	70.96	3.10		62.65	130.81	0.00	0.000	0.000
7/31/1970	22.07	64.41	2.92		63.34	132.81	0.00	0.000	0.000
8/31/1970	20.90	61.41	2.94		63.99	134.71	0.00	0.000	0.000
9/30/1970	20.67	62.72	3.03		64.61	136.59	0.00	0.000	0.000
10/31/1970	20.20	64.29	3.18		65.23	138.59	0.00	0.000	0.000
11/30/1970	20.34	65.84	3.24		65.84	140.56	0.00	0.000	0.000
12/31/1970	20.49	62.75	3.06		66.48	142.51	0.00	0.000	0.000
1/31/1971	19.61	61.70	3.15		67.09	144.42	0.00	0.000	0.000
2/28/1971	19.18	62.79	3.27		67.62	146.18	0.00	0.000	0.000
3/31/1971	18.25	59.96	3.28		68.19	148.04	0.00	0.000	0.000
4/30/1971	17.26	62.27	3.61		68.71	149.90	0.00	0.000	0.000
5/31/1971	17.11	63.91	3.73		69.24	151.88	0.00	0.000	0.000
6/30/1971	16.63	62.41	3.75		69.74	153.76	0.00	0.000	0.000
7/31/1971	15.89	61.75	3.89		70.23	155.67	0.00	0.000	0.000
8/31/1971	15.61	61.99	3.97		70.71	157.59	0.00	0.000	0.000
9/30/1971	15.49	58.13	3.75		71.18	159.34	0.00	0.000	0.000
10/31/1971	14.65	55.30	3.78		71.63	161.05	0.00	0.000	0.000
11/30/1971	14.02	55.52	3.96		72.05	162.72	0.00	0.000	0.000
12/31/1971	13.29	55.54	4.18		72.46	164.44	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 Replacement Ratio
1/31/1972	11.39	47.10	4.14		72.82	165.90	0.00	0.000	0.000
2/29/1972	11.74	47.41	4.04		73.16	167.27	0.00	0.000	0.000
3/31/1972	11.43	43.07	3.77		73.51	168.61	0.00	0.000	0.000
4/30/1972	11.12	41.46	3.73		73.84	169.85	0.00	0.000	0.000
5/31/1972	11.45	43.39	3.79		74.20	171.20	0.00	0.000	0.000
6/30/1972	12.28	45.70	3.72		74.57	172.57	0.00	0.000	0.000
7/31/1972	12.96	49.80	3.84		74.97	174.11	0.00	0.000	0.000
8/31/1972	14.25	56.84	3.99		75.41	175.87	0.00	0.000	0.000
9/30/1972	14.03	57.76	4.12		75.83	177.61	0.00	0.000	0.000
10/31/1972	11.45	45.70	3.99		76.19	179.02	0.00	0.000	0.000
11/30/1972	11.11	48.06	4.33	64.16	76.52	180.47	1.92	1.251	0.010
12/31/1972	12.52	48.35	3.86	130.01	76.91	181.96	5.96	2.502	0.029
1/31/1973	12.08	44.71	3.70	131.35	77.28	183.35	10.03	2.725	0.049
2/28/1973	11.47	48.80	4.26	149.76	77.60	184.72	14.22	2.873	0.069
3/31/1973	11.78	41.07	3.49	175.43	77.97	185.99	19.66	3.944	0.094
4/30/1973	11.86	43.91	3.70	170.55	78.33	187.31	24.78	3.603	0.118
5/31/1973	10.94	43.96	4.02	166.46	78.66	188.67	29.94	3.533	0.142
6/30/1973	11.18	42.84	3.83	168.77	79.00	189.96	35.00	3.663	0.164
7/31/1973	10.85	41.22	3.80	172.57	79.34	191.23	40.35	3.890	0.188
8/31/1973	11.47	42.27	3.68	172.85	79.69	192.54	45.71	3.792	0.212
9/30/1973	10.97	35.03	3.19	177.76	80.02	193.59	51.04	4.653	0.235
10/31/1973	12.13	44.53	3.67	182.26	80.40	194.97	56.69	3.794	0.260
11/30/1973	11.55	41.14	3.56	236.22	80.74	196.21	63.78	5.310	0.290
12/31/1973	10.84	37.81	3.49	241.22	81.08	197.38	71.25	5.891	0.323
1/31/1974	10.37	34.07	3.29	255.58	81.40	198.44	79.18	6.895	0.357
2/28/1974	9.00	35.30	3.92	258.15	81.65	199.43	86.41	6.811	0.387
3/31/1974	10.67	38.83	3.64	250.79	81.98	200.63	94.18	5.984	0.420
4/30/1974	11.05	40.48	3.66	254.83	82.31	201.84	101.82	5.834	0.451
5/31/1974	10.33	39.63	3.84	266.65	82.63	203.07	110.09	6.257	0.485
6/30/1974	10.08	39.06	3.87	275.40	82.94	204.24	118.35	6.562	0.519
7/31/1974	10.83	39.70	3.67	245.52	83.27	205.47	125.96	5.732	0.549
8/31/1974	9.56	41.33	4.33	246.24	83.57	206.76	133.60	5.584	0.579
9/30/1974	9.86	37.39	3.79	264.87	83.86	207.88	141.54	6.582	0.610
10/31/1974	10.09	37.47	3.71	240.01	84.18	209.04	148.98	5.943	0.638
11/30/1974	10.41	40.22	3.86	235.09	84.49	210.25	156.04	5.438	0.665
12/31/1974	10.70	43.42	4.06	236.06	84.82	211.59	163.35	5.075	0.692
1/31/1975	10.13	45.25	4.47	213.42	85.14	212.99	169.97	4.429	0.715
2/28/1975	9.65	39.68	4.11	203.11	85.41	214.11	175.66	4.782	0.736
3/31/1975	9.39	43.11	4.59	190.79	85.70	215.44	181.57	4.163	0.756
4/30/1975	8.63	37.75	4.37	162.11	85.96	216.57	186.44	4.028	0.772
5/31/1975	8.87	37.72	4.25	161.96	86.23	217.74	191.46	4.020	0.789
6/30/1975	8.52	46.20	5.42	159.02	86.49	219.13	196.23	3.268	0.804
7/31/1975	8.85	40.69	4.60	146.85	86.76	220.39	200.78	3.395	0.818
8/31/1975	8.74	41.15	4.71	184.72	87.03	221.67	206.51	4.230	0.837
9/30/1975	9.12	44.34	4.86	193.63	87.31	223.00	212.31	4.121	0.855
10/31/1975	9.18	46.52	5.07	197.81	87.59	224.44	218.45	4.022	0.875
11/30/1975	8.11	33.86	4.18	149.07	87.83	225.46	222.92	4.117	0.889
12/31/1975	10.11	43.84	4.34	133.79	88.15	226.81	227.07	2.861	0.900

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 Replacement Ratio
1/31/1976	9.90	59.05	5.96	121.77	88.45	228.65	230.84	1.967	0.908
2/29/1976	11.47	54.07	4.71	139.21	88.79	230.21	234.88	2.426	0.918
3/31/1976	12.34	56.59	4.59	147.54	89.17	231.97	239.45	2.453	0.929
4/30/1976	8.58	53.00	6.18	80.40	89.43	233.56	241.86	1.449	0.932
5/31/1976	15.82	57.15	3.61		89.92	235.33	241.86	0.000	0.925
6/30/1976	11.99	64.33	5.36		90.28	237.26	241.86	0.000	0.918
7/31/1976	12.55	60.94	4.85	130.37	90.67	239.15	245.90	2.019	0.927
8/31/1976	13.59	68.80	5.06	169.64	91.09	241.28	251.16	2.333	0.938
9/30/1976	14.37	67.64	4.71	149.77	91.52	243.31	255.66	2.086	0.948
10/31/1976	14.78	68.41	4.63	110.34	91.98	245.43	259.08	1.518	0.952
11/30/1976	14.82	72.19	4.87	122.26	92.42	247.60	262.75	1.599	0.958
12/31/1976	13.78	64.78	4.70	142.29	92.85	249.60	267.16	2.069	0.966
1/31/1977	14.64	68.14	4.65	127.19	93.30	251.72	271.10	1.757	0.973
2/28/1977	15.11	73.02	4.83	135.61	93.72	253.76	274.90	1.752	0.979
3/31/1977	16.21	85.14	5.25	127.19	94.23	256.40	278.84	1.416	0.983
4/30/1977	14.27	74.05	5.19	127.19	94.66	258.62	282.65	1.627	0.988
5/31/1977	16.27	79.34	4.88	131.16	95.16	261.08	286.72	1.561	0.993
6/30/1977	16.52	77.42	4.69	136.04	95.66	263.40	290.80	1.655	0.999
7/31/1977	16.28	75.04	4.61	127.19	96.16	265.73	294.75	1.595	1.004
8/31/1977	16.09	72.20	4.49	135.14	96.66	267.97	298.93	1.758	1.010
9/30/1977	15.85	74.05	4.67	127.19	97.13	270.19	302.75	1.618	1.015
10/31/1977	15.25	81.91	5.37	134.98	97.61	272.73	306.93	1.564	1.020
11/30/1977	15.62	80.34	5.15	144.52	98.08	275.14	311.27	1.703	1.026
12/31/1977	12.60	75.83	6.02	150.56	98.47	277.49	315.94	1.894	1.033
1/31/1978	13.22	76.96	5.82	163.28	98.88	279.88	321.00	2.021	1.041
2/28/1978	12.98	74.72	5.76	161.21	99.24	281.97	325.51	2.054	1.048
3/31/1978	13.50	80.71	5.98	158.35	99.66	284.47	330.42	1.871	1.055
4/30/1978	13.01	67.66	5.20	148.02	100.05	286.50	334.86	2.072	1.062
5/31/1978	12.34	76.34	6.19	111.29	100.43	288.87	338.31	1.393	1.064
6/30/1978	13.18	77.51	5.88	112.72	100.83	291.19	341.69	1.386	1.067
7/31/1978	13.52	81.45	6.02	103.03	101.25	293.72	344.89	1.207	1.068
8/31/1978	11.86	78.66	6.63	122.90	101.61	296.16	348.70	1.497	1.071
9/30/1978	12.56	85.10	6.78	127.19	101.99	298.71	352.51	1.433	1.074
10/31/1978	12.33	75.80	6.15	103.18	102.37	301.06	355.71	1.300	1.076
11/30/1978	12.67	80.34	6.34	118.86	102.75	303.47	359.28	1.415	1.078
12/31/1978	11.09	83.45	7.52	111.65	103.10	306.06	362.74	1.288	1.080
1/31/1979	10.41	85.66	8.23	104.08	103.42	308.71	365.97	1.174	1.081
2/28/1979	9.80	75.05	7.66	126.01	103.69	310.81	369.49	1.618	1.084
3/31/1979	11.89	81.35	6.84	106.16	104.06	313.34	372.79	1.252	1.085
4/30/1979	11.80	89.06	7.55	106.68	104.42	316.01	375.99	1.154	1.086
5/31/1979	11.42	84.31	7.38	120.51	104.77	318.62	379.72	1.375	1.088
6/30/1979	10.57	85.10	8.05	118.29	105.09	321.17	383.27	1.342	1.090
7/31/1979	9.94	76.14	7.66	113.67	105.40	323.53	386.79	1.439	1.093
8/31/1979	9.98	75.60	7.58	105.57	105.70	325.88	390.07	1.345	1.094
9/30/1979	9.32	70.46	7.56	130.53	105.98	327.99	393.98	1.784	1.099
10/31/1979	10.04	75.22	7.49	123.53	106.30	330.32	397.81	1.581	1.102
11/30/1979	9.99	67.64	6.77	110.02	106.60	332.35	401.11	1.560	1.104
12/31/1979	11.10	72.42	6.52	130.53	106.94	334.60	405.16	1.726	1.108

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 Replacement Ratio
1/31/1980	10.67	67.72	6.35	128.30	107.27	336.70	409.14	1.812	1.113
2/29/1980	10.88	67.30	6.18	122.27	107.59	338.65	412.68	1.736	1.116
3/31/1980	9.99	66.78	6.68	111.13	107.90	340.72	416.13	1.595	1.119
4/30/1980	9.23	72.41	7.85	114.41	108.17	342.89	419.56	1.524	1.121
5/31/1980	9.76	83.52	8.55	120.67	108.48	345.48	423.30	1.398	1.123
6/30/1980	12.57	91.41	7.27	138.95	108.85	348.22	427.47	1.462	1.126
7/31/1980	10.86	87.48	8.06	149.29	109.19	350.94	432.10	1.647	1.130
8/31/1980	10.39	68.98	6.64	124.49	109.51	353.07	435.96	1.729	1.133
9/30/1980	12.91	85.22	6.60	147.38	109.90	355.63	440.38	1.657	1.137
10/31/1980	12.78	93.27	7.30	151.68	110.29	358.52	445.08	1.564	1.140
11/30/1980	12.26	90.18	7.35	161.53	110.66	361.23	449.93	1.723	1.144
12/31/1980	11.70	87.00	7.44	148.34	111.02	363.92	454.52	1.641	1.148
1/31/1981	11.23	94.07	8.38	154.21	111.37	366.84	459.30	1.585	1.151
2/28/1981	11.14	91.57	8.22	135.94	111.68	369.40	463.11	1.434	1.153
3/31/1981	11.14	91.33	8.20	138.00	112.03	372.24	467.39	1.460	1.155
4/30/1981	10.74	89.42	8.32	145.95	112.35	374.92	471.77	1.577	1.158
5/31/1981	8.88	92.31	10.40	135.62	112.63	377.78	475.97	1.429	1.160
6/30/1981	12.04	96.59	8.02	148.81	112.99	380.68	480.44	1.487	1.162
7/31/1981	11.18	91.48	8.18	145.15	113.34	383.51	484.94	1.533	1.165
8/31/1981	11.37	102.22	8.99	152.15	113.69	386.68	489.65	1.442	1.167
9/30/1981	11.12	102.98	9.27	125.76	114.02	389.77	493.43	1.184	1.167
10/31/1981	11.19	102.89	9.19	143.09	114.37	392.96	497.86	1.348	1.169
11/30/1981	11.22	104.30	9.29	147.70	114.71	396.09	502.29	1.373	1.170
12/31/1981	11.14	101.73	9.13	103.35	115.05	399.24	505.50	0.985	1.169
1/31/1982	10.99	96.85	8.81	123.37	115.39	402.25	509.32	1.233	1.169
2/28/1982	11.27	92.72	8.23	130.85	115.71	404.84	512.98	1.363	1.170
3/31/1982	10.50	109.85	10.46	157.24	116.03	408.25	517.86	1.393	1.172
4/30/1982	10.25	109.53	10.69	167.89	116.34	411.53	522.89	1.492	1.175
5/31/1982	8.05	104.17	12.93	174.89	116.59	414.76	528.32	1.642	1.178
6/30/1982	12.94	104.33	8.06	151.20	116.98	417.89	532.85	1.399	1.180
7/31/1982	10.75	107.09	9.96	155.01	117.31	421.21	537.66	1.407	1.181
8/31/1982	10.26	108.56	10.58	107.95	117.63	424.58	541.00	0.968	1.180
9/30/1982	10.83	110.62	10.22	134.98	117.95	427.90	545.05	1.187	1.180
10/31/1982	10.26	104.23	10.16	151.83	118.27	431.13	549.76	1.416	1.181
11/30/1982	11.01	98.19	8.92	150.24	118.60	434.07	554.27	1.482	1.183
12/31/1982	10.71	107.75	10.06	152.31	118.93	437.41	558.99	1.374	1.185
1/31/1983	9.57	107.38	11.22	151.99	119.23	440.74	563.70	1.380	1.186
2/28/1983	9.16	108.86	11.88	161.85	119.49	443.79	568.23	1.451	1.188
3/31/1983	9.01	105.67	11.73	156.60	119.77	447.07	573.09	1.446	1.190
4/30/1983	8.89	103.16	11.60	167.89	120.03	450.16	578.12	1.588	1.192
5/31/1983	9.61	103.82	10.80	160.10	120.33	453.38	583.09	1.502	1.194
6/30/1983	9.17	94.38	10.30	177.59	120.61	456.21	588.42	1.830	1.198
7/31/1983	9.99	92.45	9.25	126.23	120.92	459.08	592.33	1.324	1.199
8/31/1983	9.66	110.21	11.41	141.34	121.22	462.49	596.71	1.251	1.199
9/30/1983	9.62	108.82	11.31	140.70	121.50	465.76	600.93	1.261	1.200
10/31/1983	9.89	111.00	11.23	138.00	121.81	469.20	605.21	1.212	1.200
11/30/1983	9.13	114.75	12.56	163.60	122.09	472.64	610.12	1.394	1.201
12/31/1983	9.14	116.69	12.77	171.07	122.37	476.26	615.42	1.434	1.203

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 Replacement Ratio
1/31/1984	9.17	113.97	12.42	179.81	122.65	479.79	620.99	1.542	1.205
2/29/1984	9.06	118.34	13.06	174.89	122.92	483.22	626.07	1.446	1.207
3/31/1984	9.01	113.22	12.56	181.41	123.20	486.73	631.69	1.566	1.209
4/30/1984	9.01	114.08	12.66	182.36	123.47	490.16	637.16	1.563	1.212
5/31/1984	8.82	109.80	12.45	177.43	123.74	493.56	642.66	1.579	1.214
6/30/1984	8.60	111.01	12.91	170.91	124.00	496.89	647.79	1.506	1.216
7/31/1984	8.91	120.43	13.51	168.53	124.27	500.62	653.01	1.370	1.217
8/31/1984	8.64	117.99	13.66	112.25	124.54	504.28	656.49	0.932	1.215
9/30/1984	8.85	118.26	13.37	185.53	124.81	507.83	662.06	1.536	1.217
10/31/1984	8.70	110.50	12.70	144.36	125.08	511.25	666.53	1.277	1.218
11/30/1984	8.48	111.12	13.10	184.42	125.33	514.59	672.07	1.624	1.220
12/31/1984	7.98	143.50	17.98	162.80	125.58	519.04	677.11	1.117	1.219
1/31/1985	8.44	147.57	17.48	184.11	125.84	523.61	682.82	1.227	1.219
2/28/1985	8.38	115.16	13.75	177.91	126.07	526.83	687.80	1.513	1.221
3/31/1985	8.45	146.77	17.37	172.66	126.34	531.38	693.15	1.157	1.221
4/30/1985	7.71	147.32	19.10	182.51	126.57	535.80	698.63	1.220	1.221
5/31/1985	8.85	88.40	9.98	187.61	126.84	538.54	704.45	2.062	1.225
6/30/1985	8.19	84.83	10.36	162.96	127.09	541.09	709.33	1.869	1.228
7/31/1985	8.78	82.62	9.41	181.24	127.36	543.65	714.95	2.128	1.232
8/31/1985	8.52	83.83	9.84	187.29	127.62	546.25	720.76	2.170	1.236
9/30/1985	8.49	86.67	10.21	190.46	127.88	548.85	726.47	2.137	1.240
10/31/1985	8.27	88.54	10.70	189.98	128.13	551.59	732.36	2.089	1.244
11/30/1985	9.06	90.41	9.98	177.75	128.41	554.31	737.69	1.911	1.247
12/31/1985	7.34	82.20	11.20	166.14	128.63	556.86	742.84	1.970	1.250
1/31/1986	8.07	80.43	9.97	188.11	128.88	559.35	748.68	2.273	1.255
2/28/1986	8.04	81.97	10.19	187.95	129.11	561.64	753.94	2.229	1.259
3/31/1986	6.03	73.27	12.16	141.20	129.30	563.92	758.32	1.882	1.261
4/30/1986	8.06	78.08	9.69	157.42	129.54	566.26	763.04	1.958	1.264
5/31/1986	8.12	87.81	10.81	172.21	129.79	568.98	768.38	1.910	1.267
6/30/1986	8.50	92.83	10.93	175.23	130.04	571.76	773.63	1.839	1.270
7/31/1986	8.20	97.61	11.90	178.41	130.30	574.79	779.16	1.784	1.272
8/31/1986	8.22	98.83	12.02	181.43	130.55	577.85	784.79	1.793	1.275
9/30/1986	8.01	94.56	11.81	188.58	130.79	580.69	790.45	1.947	1.278
10/31/1986	7.74	92.61	11.97	167.44	131.03	583.56	795.64	1.765	1.280
11/30/1986	7.96	93.45	11.74	188.43	131.27	586.37	801.29	1.968	1.283
12/31/1986	7.75	97.55	12.60	177.93	131.51	589.39	806.81	1.783	1.286
1/31/1987	8.14	96.84	11.90	196.06	131.77	592.39	812.88	1.976	1.289
2/28/1987	7.87	90.99	11.57	183.38	131.99	594.94	818.02	1.966	1.292
3/31/1987	7.90	93.84	11.87	176.55	132.23	597.85	823.49	1.837	1.295
4/30/1987	7.34	83.47	11.38	144.61	132.45	600.35	827.83	1.690	1.296
5/31/1987	7.45	94.06	12.63	142.86	132.68	603.27	832.26	1.485	1.297
6/30/1987	7.60	94.02	12.38	169.24	132.91	606.09	837.33	1.759	1.299
7/31/1987	7.69	99.23	12.90	186.40	133.15	609.16	843.11	1.837	1.302
8/31/1987	7.28	97.45	13.39	169.72	133.37	612.19	848.37	1.705	1.304
9/30/1987	6.56	97.33	14.84	197.05	133.57	615.11	854.29	1.986	1.307
10/31/1987	7.40	105.22	14.21	182.75	133.80	618.37	859.95	1.702	1.309
11/30/1987	6.44	97.50	15.13	192.28	133.99	621.29	865.72	1.935	1.312
12/31/1987	6.49	97.01	14.96	182.20	134.19	624.30	871.37	1.842	1.314

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 Replacement Ratio
1/31/1988	6.07	92.53	15.25	185.77	134.38	627.17	877.13	1.970	1.317
2/29/1988	5.93	90.03	15.19	184.66	134.55	629.78	882.48	2.013	1.320
3/31/1988	6.21	102.82	16.56	201.02	134.75	632.97	888.71	1.922	1.323
4/30/1988	6.08	99.17	16.32	194.03	134.93	635.94	894.53	1.922	1.325
5/31/1988	6.11	95.06	15.56	183.23	135.12	638.89	900.21	1.892	1.328
6/30/1988	6.21	96.61	15.55	164.95	135.30	641.79	905.16	1.676	1.329
7/31/1988	6.10	101.97	16.72	182.75	135.49	644.95	910.83	1.762	1.331
8/31/1988	5.96	100.98	16.93	183.70	135.68	648.08	916.52	1.789	1.333
9/30/1988	5.88	97.45	16.59	188.47	135.86	651.00	922.18	1.901	1.336
10/31/1988	5.64	92.38	16.37	186.08	136.03	653.87	927.95	1.979	1.339
11/30/1988	6.01	94.54	15.73	192.76	136.21	656.70	933.73	2.002	1.341
12/31/1988	5.88	99.94	17.01	180.36	136.39	659.80	939.32	1.775	1.343
1/31/1989	5.65	97.35	17.23	194.03	136.57	662.82	945.33	1.960	1.346
2/28/1989	5.49	92.13	16.78	159.55	136.72	665.40	949.80	1.702	1.347
3/31/1989	5.10	90.15	17.66	168.92	136.88	668.19	955.04	1.844	1.349
4/30/1989	5.12	91.19	17.82	167.33	137.03	670.93	960.06	1.806	1.351
5/31/1989	3.88	62.67	16.16	118.47	137.15	672.87	963.73	1.857	1.353
6/30/1989	4.84	83.22	17.21	164.31	137.30	675.37	968.66	1.942	1.355
7/31/1989	5.36	87.36	16.29	173.53	137.46	678.08	974.04	1.952	1.357
8/31/1989	5.52	66.07	11.97	121.09	137.64	680.12	977.79	1.789	1.358
9/30/1989	5.17	75.89	14.68	163.59	137.79	682.40	982.70	2.114	1.361
10/31/1989	4.72	76.00	16.09	159.78	137.94	684.76	987.65	2.065	1.363
11/30/1989	5.08	73.64	14.50	161.21	138.09	686.97	992.49	2.146	1.365
12/31/1989	4.33	70.26	16.24	130.05	138.22	689.14	996.52	1.819	1.367
1/31/1990	4.39	73.28	16.69	121.14	138.36	691.42	1000.28	1.625	1.368
2/28/1990	4.51	73.72	16.34	103.81	138.49	693.48	1003.18	1.384	1.368
3/31/1990	4.50	72.10	16.02	95.87	138.63	695.71	1006.16	1.306	1.367
4/30/1990	4.35	76.00	17.48	101.91	138.76	697.99	1009.21	1.319	1.367
5/31/1990	4.47	78.48	17.56	136.40	138.89	700.43	1013.44	1.710	1.368
6/30/1990	4.64	80.45	17.34	152.46	139.03	702.84	1018.02	1.864	1.370
7/31/1990	4.42	77.29	17.50	141.49	139.17	705.24	1022.40	1.801	1.371
8/31/1990	4.56	77.53	17.01	141.97	139.31	707.64	1026.80	1.801	1.373
9/30/1990	4.64	75.86	16.36	133.86	139.45	709.92	1030.82	1.734	1.374
10/31/1990	4.59	85.45	18.61	163.75	139.59	712.56	1035.89	1.887	1.376
11/30/1990	4.63	87.80	18.98	185.85	139.73	715.20	1041.47	2.085	1.378
12/31/1990	4.43	80.74	18.22	157.71	139.87	717.70	1046.36	1.923	1.380
1/31/1991	4.12	75.64	18.37	135.13	140.00	720.05	1050.55	1.759	1.381
2/28/1991	3.80	65.07	17.14	157.39	140.10	721.87	1054.95	2.379	1.384
3/31/1991	4.15	73.35	17.66	170.58	140.23	724.14	1060.24	2.288	1.386
4/30/1991	3.90	75.80	19.44	175.19	140.35	726.42	1065.50	2.277	1.389
5/31/1991	3.85	70.84	18.42	122.10	140.47	728.61	1069.28	1.697	1.390
6/30/1991	3.83	73.18	19.12	176.47	140.58	730.81	1074.58	2.375	1.393
7/31/1991	3.80	75.93	19.96	140.85	140.70	733.16	1078.94	1.829	1.394
8/31/1991	3.89	80.88	20.79	186.01	140.82	735.67	1084.71	2.268	1.397
9/30/1991	3.94	75.30	19.09	157.86	140.94	737.93	1089.45	2.065	1.399
10/31/1991	3.60	81.41	22.59	160.41	141.05	740.45	1094.42	1.945	1.401
11/30/1991	4.02	79.36	19.75	155.80	141.17	742.83	1099.09	1.935	1.403
12/31/1991	4.06	76.99	18.97	163.27	141.30	745.22	1104.15	2.089	1.405

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1/31/1992	3.80	84.00	22.13	177.26	141.42	747.82	1109.65	2.083	1.407
2/29/1992	3.87	77.35	19.99	166.45	141.53	750.07	1114.48	2.121	1.409
3/31/1992	3.90	70.80	18.15	169.63	141.65	752.26	1119.73	2.358	1.412
4/30/1992	4.17	68.62	16.44	167.56	141.77	754.32	1124.76	2.400	1.414
5/31/1992	3.74	64.30	17.20	148.33	141.89	756.31	1129.36	2.269	1.416
6/30/1992	3.52	89.17	25.30	158.34	142.00	758.99	1134.11	1.756	1.418
7/31/1992	3.77	100.63	26.72	163.59	142.11	762.11	1139.18	1.608	1.418
8/31/1992	3.74	96.98	25.91	163.59	142.23	765.11	1144.25	1.668	1.419
9/30/1992	3.65	88.85	24.33	142.28	142.34	767.78	1148.52	1.583	1.420
10/31/1992	3.52	68.43	19.43	161.05	142.45	769.90	1153.51	2.319	1.422
11/30/1992	3.55	91.14	25.66	155.32	142.55	772.63	1158.17	1.685	1.423
12/31/1992	3.45	51.07	14.79	75.99	142.66	774.22	1160.53	1.460	1.423
1/31/1993	3.66	78.80	21.54	139.58	142.77	776.66	1164.86	1.748	1.424
2/28/1993	3.37	81.24	24.10	164.38	142.87	778.94	1169.46	1.999	1.426
3/31/1993	3.49	80.74	23.16	185.05	142.98	781.44	1175.20	2.264	1.428
4/30/1993	3.62	80.81	22.36	173.45	143.09	783.86	1180.40	2.119	1.430
5/31/1993	3.54	81.47	23.03	122.73	143.19	786.39	1184.20	1.488	1.431
6/30/1993	3.59	79.33	22.13	108.74	143.30	788.77	1187.47	1.353	1.430
7/31/1993	3.48	84.12	24.18	110.49	143.41	791.38	1190.89	1.298	1.430
8/31/1993	3.61	76.03	21.04	169.63	143.52	793.73	1196.15	2.201	1.432
9/30/1993	3.46	77.92	22.53	185.05	143.63	796.07	1201.70	2.345	1.435
10/31/1993	3.53	83.79	23.75	180.76	143.74	798.67	1207.30	2.131	1.437
11/30/1993	3.51	76.82	21.86	173.92	143.84	800.97	1212.52	2.235	1.439
12/31/1993	3.36	73.06	21.75	114.94	143.95	803.24	1216.09	1.553	1.439
1/31/1994	2.80	57.45	20.55	117.33	144.03	805.02	1219.72	2.014	1.441
2/28/1994	3.66	78.42	21.44	168.52	144.13	807.21	1224.44	2.120	1.442
3/31/1994	3.63	83.43	22.98	166.29	144.25	809.80	1229.60	1.969	1.444
4/30/1994	3.40	77.49	22.78	170.90	144.35	812.12	1234.72	2.178	1.446
5/31/1994	2.79	62.67	22.43	168.20	144.44	814.07	1239.94	2.650	1.449
6/30/1994	3.46	87.13	25.17	183.78	144.54	816.68	1245.45	2.085	1.451
7/31/1994	3.72	91.17	24.52	176.78	144.65	819.51	1250.93	1.916	1.452
8/31/1994	3.83	91.17	23.78	177.10	144.77	822.33	1256.42	1.919	1.454
9/30/1994	3.88	97.48	25.15	174.40	144.89	825.26	1261.65	1.769	1.455
10/31/1994	4.05	98.20	24.25	181.24	145.02	828.30	1267.27	1.824	1.456
11/30/1994	3.96	92.64	23.41	168.04	145.13	831.08	1272.31	1.792	1.457
12/31/1994	3.69	94.46	25.62	181.08	145.25	834.01	1277.93	1.896	1.459
1/31/1995	3.61	82.17	22.73	176.95	145.36	836.56	1283.41	2.126	1.461
2/28/1995	3.70	97.73	26.40	193.80	145.46	839.29	1288.84	1.961	1.462
3/31/1995	3.60	94.99	26.37	181.08	145.58	842.24	1294.45	1.886	1.464
4/30/1995	3.68	95.36	25.93	178.05	145.69	845.10	1299.79	1.847	1.465
5/31/1995	3.55	97.41	27.42	175.51	145.80	848.12	1305.23	1.783	1.466
6/30/1995	3.16	90.35	28.56	164.54	145.89	850.83	1310.17	1.803	1.467
7/31/1995	3.50	94.20	26.93	186.64	146.00	853.75	1315.96	1.960	1.469
8/31/1995	3.65	103.62	28.41	192.68	146.11	856.96	1321.93	1.841	1.470
9/30/1995	3.47	100.66	29.00	171.22	146.22	859.98	1327.07	1.684	1.471
10/31/1995	3.32	102.74	30.98	163.27	146.32	863.17	1332.13	1.575	1.471
11/30/1995	3.38	104.87	31.07	195.23	146.42	866.31	1337.98	1.844	1.472
12/31/1995	2.94	105.90	36.06	195.07	146.51	869.60	1344.03	1.827	1.474

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 Replacement Ratio
1/31/1996	2.89	97.56	33.72	185.05	146.60	872.62	1349.77	1.881	1.475
2/29/1996	2.96	94.02	31.82	187.28	146.69	875.35	1355.20	1.974	1.477
3/31/1996	2.94	98.80	33.64	176.46	146.78	878.41	1360.67	1.771	1.478
4/30/1996	3.00	101.49	33.83	180.28	146.87	881.45	1366.08	1.761	1.479
5/31/1996	2.78	84.80	30.55	175.51	146.95	884.08	1371.52	2.050	1.480
6/30/1996	3.09	97.43	31.51	172.02	147.05	887.01	1376.68	1.750	1.481
7/31/1996	2.85	96.16	33.78	175.67	147.14	889.99	1382.12	1.811	1.482
8/31/1996	2.77	90.88	32.82	182.35	147.22	892.80	1387.78	1.989	1.484
9/30/1996	2.69	100.40	37.37	168.68	147.30	895.82	1392.84	1.667	1.484
10/31/1996	2.65	91.85	34.70	161.84	147.38	898.66	1397.85	1.747	1.485
11/30/1996	2.87	95.06	33.18	185.69	147.47	901.52	1403.43	1.936	1.486
12/31/1996	2.83	92.02	32.56	176.47	147.56	904.37	1408.90	1.901	1.488
1/31/1997	2.72	89.84	33.00	163.43	147.64	907.15	1413.96	1.803	1.489
2/28/1997	2.63	88.62	33.72	177.90	147.72	909.63	1418.94	1.990	1.490
3/31/1997	2.72	93.57	34.43	190.30	147.80	912.54	1424.84	2.017	1.492
4/30/1997	2.77	91.12	32.86	166.14	147.88	915.27	1429.83	1.807	1.492
5/31/1997	2.85	91.12	31.97	160.57	147.97	918.09	1434.80	1.746	1.493
6/30/1997	2.67	80.95	30.37	161.84	148.05	920.52	1439.66	1.980	1.494
7/31/1997	2.54	81.67	32.11	160.25	148.13	923.05	1444.63	1.945	1.496
8/31/1997	2.69	63.54	23.60	128.00	148.21	925.02	1448.60	1.990	1.497
9/30/1997	2.62	69.83	26.70	132.27	148.29	927.12	1452.56	1.874	1.497
10/31/1997	2.51	69.74	27.73	153.89	148.37	929.28	1457.33	2.184	1.499
11/30/1997	2.51	56.02	22.32	126.39	148.44	930.96	1461.13	2.227	1.500
12/31/1997	2.53	66.26	26.20	146.74	148.52	933.01	1465.67	2.190	1.502
1/31/1998	2.46	67.85	27.60	188.07	148.60	935.12	1471.50	2.743	1.504
2/28/1998	2.42	62.31	25.73	167.89	148.67	936.86	1476.21	2.664	1.507
3/31/1998	2.51	64.03	25.54	169.95	148.75	938.85	1481.47	2.625	1.509
4/30/1998	2.27	67.29	29.62	178.22	148.81	940.87	1486.82	2.623	1.511
5/31/1998	2.24	72.18	32.26	162.16	148.88	943.10	1491.85	2.227	1.513
6/30/1998	2.32	71.58	30.85	167.41	148.95	945.25	1496.87	2.317	1.515
7/31/1998	2.26	65.97	29.13	144.03	149.02	947.30	1501.33	2.162	1.516
8/31/1998	2.35	68.17	29.03	170.11	149.10	949.41	1506.61	2.471	1.518
9/30/1998	2.31	70.62	30.57	170.90	149.16	951.53	1511.73	2.397	1.520
10/31/1998	2.35	73.64	31.31	178.53	149.24	953.81	1517.27	2.402	1.522
11/30/1998	2.25	74.81	33.30	175.99	149.30	956.06	1522.55	2.332	1.524
12/31/1998	2.19	77.77	35.56	193.64	149.37	958.47	1528.55	2.470	1.526
1/31/1999	2.22	82.24	37.08	190.30	149.44	961.02	1534.45	2.296	1.528
2/28/1999	1.98	62.91	31.86	157.55	149.50	962.78	1538.86	2.482	1.530
3/31/1999	2.07	71.73	34.66	187.75	149.56	965.00	1544.68	2.596	1.532
4/30/1999	2.07	72.97	35.31	161.84	149.62	967.19	1549.54	2.200	1.533
5/31/1999	2.02	67.91	33.65	188.23	149.69	969.29	1555.37	2.748	1.536
6/30/1999	1.83	66.62	36.41	196.50	149.74	971.29	1561.27	2.926	1.539
7/31/1999	1.76	64.82	36.84	181.87	149.79	973.30	1566.91	2.784	1.541
8/31/1999	1.79	68.69	38.37	190.14	149.85	975.43	1572.80	2.747	1.544
9/30/1999	1.79	58.81	32.79	192.52	149.90	977.20	1578.58	3.245	1.547
10/31/1999	1.95	66.77	34.27	197.45	149.96	979.27	1584.70	2.932	1.550
11/30/1999	1.87	65.55	35.12	211.44	150.02	981.23	1591.04	3.199	1.553
12/31/1999	1.93	67.08	34.81	207.63	150.08	983.31	1597.48	3.070	1.556

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 Replacement Ratio
1/31/2000	1.81	66.41	36.66	208.90	150.14	985.37	1603.95	3.121	1.559
2/29/2000	1.58	55.21	34.88	202.86	150.18	986.97	1609.84	3.644	1.562
3/31/2000	1.76	61.45	34.92	209.69	150.24	988.88	1616.34	3.384	1.566
4/30/2000	1.41	54.93	39.00	195.23	150.28	990.53	1622.19	3.528	1.569
5/31/2000	1.28	50.03	39.02	201.59	150.32	992.08	1628.44	4.000	1.573
6/30/2000	1.48	60.31	40.79	120.19	150.36	993.89	1632.05	1.979	1.573
7/31/2000	1.54	53.10	34.40	191.09	150.41	995.53	1637.97	3.569	1.576
8/31/2000	1.35	51.66	38.36	188.71	150.45	997.13	1643.82	3.626	1.580
9/30/2000	1.40	50.47	36.05	156.12	150.49	998.65	1648.51	3.069	1.582
10/31/2000	1.21	54.35	45.05	151.83	150.53	1000.33	1653.21	2.776	1.584
11/30/2000	1.15	45.61	39.72	145.15	150.57	1001.70	1657.57	3.159	1.586
12/31/2000	1.17	45.28	38.67	187.44	150.60	1003.10	1663.38	4.109	1.589
1/31/2001	1.11	41.44	37.29	176.79	150.64	1004.39	1668.86	4.233	1.592
2/28/2001	1.09	40.22	36.80	184.42	150.67	1005.51	1674.02	4.549	1.596
3/31/2001	1.05	44.29	42.18	196.97	150.70	1006.89	1680.13	4.417	1.599
4/30/2001	1.05	43.00	41.08	178.85	150.73	1008.18	1685.49	4.130	1.603
5/31/2001	1.04	38.95	37.50	149.76	150.76	1009.39	1690.14	3.815	1.605
6/30/2001	1.00	42.49	42.57	155.80	150.79	1010.66	1694.81	3.642	1.608
7/31/2001	0.97	42.10	43.36	171.54	150.82	1011.96	1700.13	4.048	1.611
8/31/2001	0.83	39.11	47.00	186.80	150.85	1013.18	1705.92	4.747	1.614
9/30/2001	0.96	41.28	42.93	186.64	150.88	1014.42	1711.52	4.491	1.618
10/31/2001	1.05	38.15	36.39	189.18	150.91	1015.60	1717.38	4.920	1.621
11/30/2001	1.02	37.81	37.13	193.48	150.94	1016.73	1723.19	5.078	1.625
12/31/2001	1.02	39.57	38.88	184.33	150.97	1017.96	1728.90	4.624	1.629
1/31/2002	1.00	39.10	38.91	199.84	151.00	1019.17	1735.10	5.074	1.633
2/28/2002	0.90	42.68	47.33	206.99	151.03	1020.37	1740.89	4.821	1.636
3/31/2002	0.92	48.75	52.93	210.96	151.06	1021.88	1747.43	4.304	1.640
4/30/2002	0.98	47.93	48.99	215.26	151.09	1023.32	1753.89	4.464	1.644
5/31/2002	0.82	55.15	66.92	194.61	151.11	1025.03	1759.92	3.513	1.647
6/30/2002	0.79	54.68	68.92	186.54	151.14	1026.67	1765.52	3.397	1.649
7/31/2002	0.70	37.96	54.24	151.32	151.16	1027.84	1770.21	3.965	1.652
8/31/2002	0.49	9.12	18.49	110.00	151.17	1028.13	1773.62	11.870	1.655
9/30/2002	0.50	9.80	19.59	37.42	151.19	1028.42	1774.74	3.764	1.655
10/31/2002	0.55	9.14	16.77		151.21	1028.70	1774.74	0.000	1.655
11/30/2002	0.94	13.73	14.68		151.23	1029.11	1774.74	0.000	1.654
12/31/2002	7.86	97.46	12.40	113.65	151.48	1032.14	1778.27	1.139	1.653
1/31/2003	6.46	104.98	16.24	75.43	151.68	1035.39	1780.60	0.706	1.650
2/28/2003	5.64	109.04	19.34	117.46	151.84	1038.44	1783.89	1.061	1.648
3/31/2003	5.25	102.20	19.47	112.94	152.00	1041.61	1787.39	1.089	1.647
4/30/2003	5.26	102.82	19.55	90.69	152.16	1044.70	1790.11	0.869	1.644
5/31/2003	5.19	102.37	19.72	117.84	152.32	1047.87	1793.77	1.135	1.643
6/30/2003	5.07	101.56	20.02	114.70	152.47	1050.92	1797.21	1.113	1.641
7/31/2003	4.96	99.99	20.16	112.52	152.62	1054.02	1800.70	1.109	1.640
8/31/2003	5.00	96.67	19.35	31.68	152.78	1057.01	1801.68	0.323	1.636
9/30/2003	5.24	94.55	18.05		152.94	1059.85	1801.68	0.000	1.632
10/31/2003	9.08	119.29	13.13	29.35	153.22	1063.55	1802.59	0.241	1.627
11/30/2003	26.11	188.51	7.22	122.60	154.00	1069.20	1806.27	0.625	1.622
12/31/2003	29.49	276.59	9.38	130.23	154.91	1077.78	1810.30	0.457	1.613

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 Replacement Ratio
1/31/2004	28.40	297.02	10.46	122.29	155.79	1086.98	1814.09	0.401	1.602
2/29/2004	26.74	285.02	10.66	261.69	156.57	1095.25	1821.68	0.894	1.597
3/31/2004	29.76	396.97	13.34	311.53	157.49	1107.56	1831.34	0.768	1.588
4/30/2004	27.30	421.43	15.44	319.42	158.31	1120.20	1840.92	0.744	1.579
5/31/2004	23.69	400.71	16.91	308.13	159.05	1132.62	1850.47	0.756	1.570
6/30/2004	22.70	411.51	18.13	306.19	159.73	1144.97	1859.66	0.732	1.561
7/31/2004	22.61	399.28	17.66	298.64	160.43	1157.34	1868.92	0.736	1.553
8/31/2004	22.24	408.57	18.37	306.34	161.12	1170.01	1878.41	0.738	1.544
9/30/2004	21.44	404.15	18.85	305.02	161.76	1182.13	1887.57	0.743	1.536
10/31/2004	19.23	409.25	21.28	301.04	162.36	1194.82	1896.90	0.726	1.528
11/30/2004	20.37	404.05	19.83	334.10	162.97	1206.94	1906.92	0.815	1.521
12/31/2004	18.59	410.30	22.07	413.63	163.54	1219.66	1919.74	0.995	1.515
1/31/2005	19.01	427.93	22.51	468.97	164.13	1232.93	1934.28	1.082	1.511
2/28/2005	18.75	428.82	22.87	482.32	164.66	1244.93	1947.79	1.111	1.507
3/31/2005	17.86	422.34	23.64	471.52	165.21	1258.03	1962.40	1.103	1.503
4/30/2005	16.51	420.90	25.49	460.71	165.71	1270.65	1976.22	1.082	1.499
5/31/2005	15.50	431.50	27.84	511.29	166.19	1284.03	1992.07	1.173	1.495
6/30/2005	14.85	413.95	27.87	415.27	166.63	1296.45	2004.53	0.993	1.491
7/31/2005	14.50	425.84	29.38	433.14	167.08	1309.65	2017.96	1.007	1.486
8/31/2005	14.69	422.88	28.78	432.25	167.54	1322.76	2031.36	1.012	1.481
9/30/2005	15.45	428.21	27.72	450.78	168.00	1335.61	2044.88	1.042	1.477
10/31/2005	15.56	439.22	28.23	543.50	168.48	1349.22	2061.73	1.225	1.475
11/30/2005	14.49	442.65	30.56	484.98	168.92	1362.50	2076.28	1.085	1.471
12/31/2005	13.28	441.75	33.25	496.14	169.33	1376.20	2091.66	1.113	1.468
1/31/2006	12.69	435.01	34.29	515.24	169.72	1389.68	2107.63	1.175	1.465
2/28/2006	12.88	453.71	35.24	542.75	170.08	1402.38	2122.83	1.187	1.462
3/31/2006	14.43	451.06	31.26	521.69	170.53	1416.37	2139.00	1.146	1.459
4/30/2006	12.10	446.95	36.93	459.08	170.90	1429.78	2152.77	1.019	1.455
5/31/2006	13.74	444.92	32.39	445.84	171.32	1443.57	2166.60	0.993	1.451
6/30/2006	13.39	439.97	32.87	455.17	171.72	1456.77	2180.25	1.026	1.447
7/31/2006	11.41	437.77	38.37	463.21	172.08	1470.34	2194.61	1.050	1.444
8/31/2006	11.73	425.36	36.25	446.52	172.44	1483.52	2208.45	1.041	1.440
9/30/2006	12.14	437.42	36.03	468.45	172.80	1496.65	2222.51	1.062	1.437
10/31/2006	11.36	434.02	38.20	468.85	173.16	1510.10	2237.04	1.072	1.434
11/30/2006	10.61	441.41	41.61	472.22	173.47	1523.34	2251.21	1.062	1.431
12/31/2006	11.68	458.85	39.29	498.10	173.84	1537.57	2266.65	1.078	1.428
1/31/2007	11.21	447.62	39.94	485.18	174.18	1551.44	2281.69	1.076	1.424
2/28/2007	11.31	449.22	39.73	487.59	174.50	1564.02	2295.34	1.078	1.422
3/31/2007	10.79	441.50	40.91	478.02	174.84	1577.71	2310.16	1.075	1.419
4/30/2007	10.25	443.08	43.23	479.26	175.14	1591.00	2324.54	1.074	1.416
5/31/2007	10.42	423.76	40.67	454.96	175.47	1604.14	2338.64	1.066	1.413
6/30/2007	10.26	429.25	41.85	358.96	175.77	1617.01	2349.41	0.830	1.409
7/31/2007	10.66	429.33	40.29	373.18	176.10	1630.32	2360.98	0.863	1.404
8/31/2007	9.64	350.92	36.39	356.34	176.40	1641.20	2372.03	1.007	1.402
9/30/2007	10.60	438.08	41.33	379.74	176.72	1654.35	2383.42	0.861	1.398
10/31/2007	10.81	446.63	41.31	401.29	177.06	1668.19	2395.86	0.892	1.393
11/30/2007	10.65	448.08	42.08	409.07	177.38	1681.63	2408.13	0.907	1.390
12/31/2007	10.04	456.58	45.49	423.76	177.69	1695.79	2421.27	0.922	1.386

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 Replacement Ratio
1/31/2008	10.03	454.11	45.29	423.54	178.00	1709.86	2434.40	0.927	1.382
2/29/2008	9.37	447.04	47.72	409.45	178.27	1722.83	2446.27	0.910	1.379
3/31/2008	10.21	460.92	45.14	383.03	178.59	1737.12	2458.14	0.826	1.374
4/30/2008	10.28	454.58	44.24	432.29	178.89	1750.75	2471.11	0.945	1.371
5/31/2008	10.34	442.02	42.77	414.72	179.21	1764.46	2483.97	0.932	1.368
6/30/2008	9.95	419.70	42.17	398.10	179.51	1777.05	2495.91	0.942	1.365
7/31/2008	8.93	407.46	45.61	350.48	179.79	1789.68	2506.78	0.855	1.361
8/31/2008	9.98	415.88	41.69	389.53	180.10	1802.57	2518.85	0.930	1.358
9/30/2008	9.52	418.02	43.92	365.35	180.38	1815.11	2529.81	0.868	1.355
10/31/2008	9.40	415.94	44.27	345.48	180.68	1828.01	2540.52	0.825	1.351
11/30/2008	9.82	451.88	46.03	406.39	180.97	1841.56	2552.71	0.894	1.348
12/31/2008	9.04	434.82	48.09	383.46	181.25	1855.04	2564.60	0.877	1.345
1/31/2009	9.74	457.58	46.97	393.46	181.55	1869.23	2576.80	0.855	1.341
2/28/2009	9.67	449.31	46.46	386.60	181.82	1881.81	2587.62	0.855	1.338
3/31/2009	9.54	436.27	45.73	403.65	182.12	1895.33	2600.14	0.919	1.335
4/30/2009	9.69	456.93	47.15	412.47	182.41	1909.04	2612.51	0.897	1.332
5/31/2009	8.62	445.96	51.71	369.92	182.68	1922.86	2623.98	0.825	1.328
6/30/2009	9.13	438.45	48.00	389.71	182.95	1936.02	2635.67	0.884	1.325
7/31/2009	8.69	426.73	49.10	385.46	183.22	1949.25	2647.62	0.898	1.322
8/31/2009	8.59	433.48	50.47	377.89	183.49	1962.68	2659.33	0.867	1.319
9/30/2009	8.85	437.83	49.50	379.25	183.75	1975.82	2670.71	0.861	1.316
10/31/2009	8.95	443.37	49.55	402.84	184.03	1989.56	2683.20	0.903	1.313
11/30/2009	8.62	444.80	51.59	416.06	184.29	2002.91	2695.68	0.930	1.311
12/31/2009	8.60	444.44	51.66	388.95	184.56	2016.69	2707.74	0.870	1.308
1/31/2010	8.40	441.89	52.59	384.64	184.82	2030.38	2719.66	0.866	1.305
2/28/2010	8.42	432.38	51.37	380.69	185.05	2042.49	2730.32	0.876	1.303
3/31/2010	8.18	425.87	52.09	380.80	185.30	2055.69	2742.13	0.889	1.300
4/30/2010	7.27	400.16	55.01	353.82	185.52	2067.70	2752.74	0.880	1.298
5/31/2010	7.67	418.78	54.57	368.86	185.76	2080.68	2764.18	0.876	1.295
6/30/2010	7.98	430.21	53.91	391.81	186.00	2093.59	2775.93	0.906	1.293
7/31/2010	7.29	416.70	57.15	386.85	186.23	2106.50	2787.92	0.924	1.290
8/31/2010	7.66	437.83	57.16	368.83	186.46	2120.08	2799.36	0.838	1.288
9/30/2010	7.77	432.25	55.66	409.48	186.70	2133.04	2811.64	0.942	1.286
10/31/2010	7.77	430.92	55.48	437.02	186.94	2146.40	2825.19	1.009	1.284
11/30/2010	7.65	432.97	56.62	429.79	187.17	2159.39	2838.08	0.988	1.282
12/31/2010	7.52	453.29	60.31	438.97	187.40	2173.44	2851.69	0.964	1.280

Pattern: 0/06-14-009-25 Set: East Routledge Unit

Oil Formation Vol. Factor : 1.05 m3/m3

Water Formation Vol Factor : 1.00 m3/m3

Water / Oil Ratio : 51.79 m3/m3

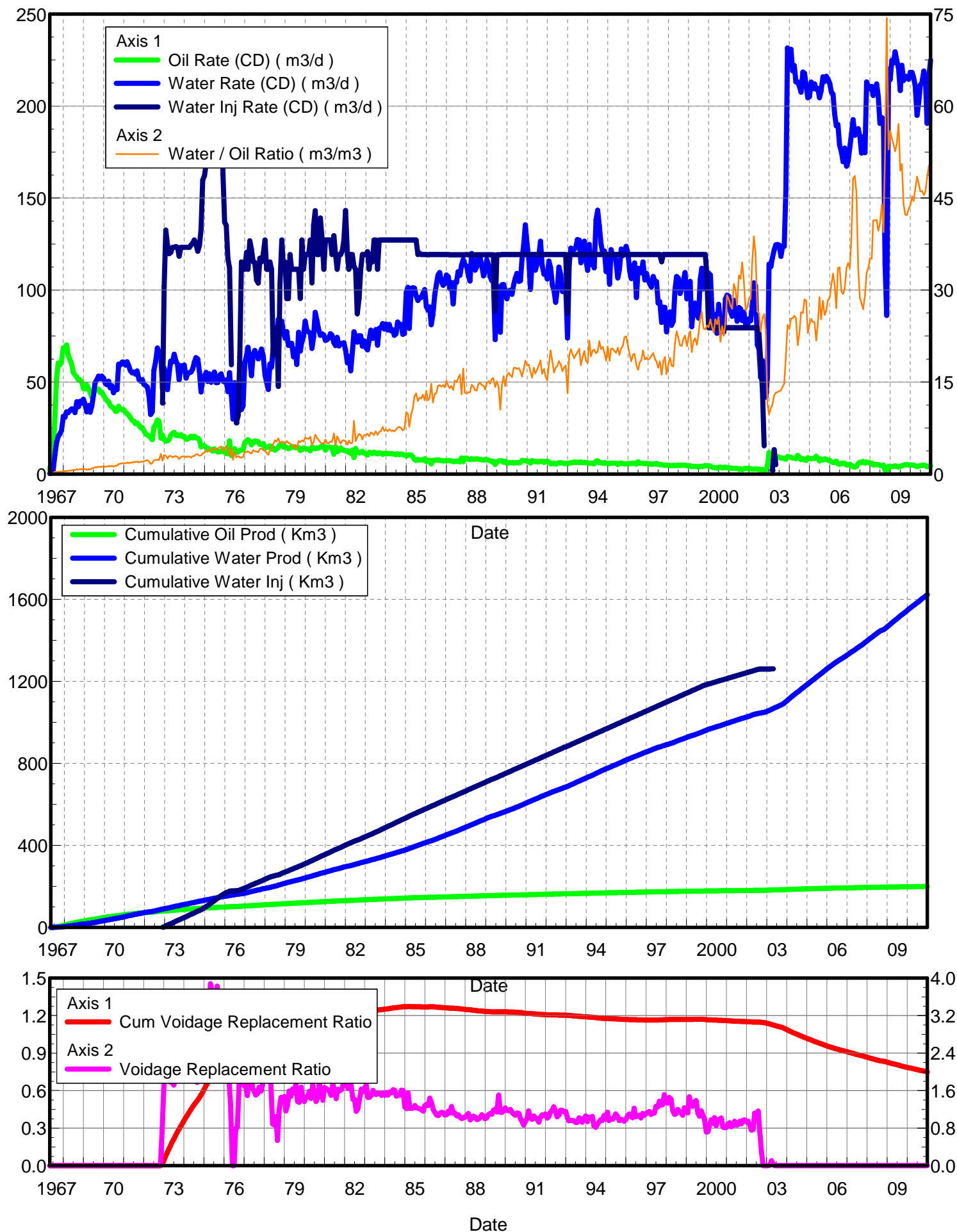
July 26, 2011

Operator: Tundra_Oil_and_Gas_Patnership

Oil Rate (CD) : 4.54 m3/d

Water Rate (CD) : 235.21 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 Replacement 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 Replacement 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	0.739	0.010
12/31/1972	18.60	57.54	3.09	101.82	80.21	91.22	4.32	1.618	0.038
1/31/1973	17.94	53.19	2.96	132.58	80.76	92.87	8.43	2.271	0.072
2/28/1973	18.02	45.89	2.55	124.61	81.27	94.16	11.92	2.438	0.101
3/31/1973	18.67	54.37	2.91	119.69	81.85	95.84	15.63	2.002	0.131
4/30/1973	21.03	61.30	2.91	120.40	82.48	97.68	19.24	1.787	0.158
5/31/1973	22.18	60.97	2.75	123.22	83.16	99.57	23.06	1.829	0.187
6/30/1973	22.68	65.13	2.87	123.22	83.85	101.52	26.75	1.719	0.213
7/31/1973	21.07	61.50	2.92	123.60	84.50	103.43	30.59	1.829	0.239
8/31/1973	21.38	59.72	2.79	123.22	85.16	105.28	34.41	1.870	0.265
9/30/1973	20.75	51.26	2.47	118.39	85.78	106.82	37.96	2.068	0.288
10/31/1973	21.37	58.86	2.75	123.22	86.45	108.64	41.78	1.895	0.313
11/30/1973	20.34	58.42	2.87	123.22	87.06	110.40	45.47	1.916	0.335
12/31/1973	20.50	59.23	2.89	123.22	87.69	112.23	49.29	1.891	0.358
1/31/1974	18.86	52.13	2.76	123.22	88.28	113.85	53.11	2.140	0.381
2/28/1974	18.97	54.39	2.87	123.22	88.81	115.37	56.56	2.058	0.401
3/31/1974	19.52	55.08	2.82	123.22	89.41	117.08	60.38	2.029	0.422
4/30/1974	20.57	55.42	2.69	124.41	90.03	118.74	64.11	2.027	0.443
5/31/1974	19.70	57.03	2.90	125.40	90.64	120.51	68.00	1.999	0.463
6/30/1974	20.59	60.67	2.95	127.19	91.26	122.33	71.82	1.909	0.483
7/31/1974	19.71	63.21	3.21	125.01	91.87	124.29	75.69	1.814	0.502
8/31/1974	19.55	62.48	3.20	121.04	92.48	126.23	79.45	1.776	0.519
9/30/1974	18.56	55.79	3.01	124.14	93.03	127.90	83.17	2.030	0.537
10/31/1974	14.82	44.66	3.01	132.86	93.49	129.28	87.29	2.714	0.558
11/30/1974	15.53	52.17	3.36	159.70	93.96	130.85	92.08	2.818	0.583
12/31/1974	15.30	53.55	3.50	162.21	94.43	132.51	97.11	2.798	0.608
1/31/1975	14.49	55.26	3.81	169.12	94.88	134.22	102.35	2.845	0.633
2/28/1975	13.90	50.29	3.62	172.11	95.27	135.63	107.17	3.169	0.657
3/31/1975	13.66	54.41	3.98	197.54	95.69	137.32	113.29	3.385	0.687

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 Replacement Ratio
4/30/1975	13.14	49.91	3.80	208.28	96.09	138.81	119.54	3.878	0.718
5/31/1975	12.46	51.04	4.10	204.51	96.47	140.40	125.88	3.743	0.748
6/30/1975	13.67	55.47	4.06	206.95	96.88	142.06	132.09	3.483	0.777
7/31/1975	12.53	49.64	3.96	176.94	97.27	143.60	137.57	3.322	0.801
8/31/1975	12.04	49.72	4.13	203.61	97.65	145.14	143.89	3.827	0.830
9/30/1975	12.22	53.53	4.38	199.01	98.01	146.75	149.86	3.487	0.856
10/31/1975	12.22	54.44	4.46	207.20	98.39	148.43	156.28	3.574	0.883
11/30/1975	13.55	50.52	3.73	162.74	98.80	149.95	161.16	2.989	0.903
12/31/1975	11.98	50.04	4.18	136.94	99.17	151.50	165.41	2.559	0.918
1/31/1976	11.11	51.11	4.60	135.14	99.51	153.09	169.60	2.488	0.933
2/29/1976	11.11	44.75	4.03	117.05	99.84	154.38	172.99	2.440	0.944
3/31/1976	17.95	55.10	3.07	112.05	100.39	156.09	176.46	1.858	0.953
4/30/1976	10.13	42.67	4.21	59.36	100.70	157.37	178.25	1.302	0.956
5/31/1976	12.58	29.78	2.37		101.09	158.30	178.25	0.000	0.950
6/30/1976	13.78	49.62	3.60		101.50	159.78	178.25	0.000	0.942
7/31/1976	11.78	31.95	2.71	27.82	101.86	160.77	179.11	0.787	0.942
8/31/1976	12.09	35.28	2.92	31.80	102.24	161.87	180.09	0.820	0.941
9/30/1976	12.79	34.69	2.71	63.59	102.62	162.91	182.00	1.657	0.945
10/31/1976	13.15	35.08	2.67	115.27	103.03	164.00	185.57	2.964	0.958
11/30/1976	13.19	37.02	2.81	111.29	103.43	165.11	188.91	2.726	0.969
12/31/1976	16.85	60.41	3.58	111.29	103.95	166.98	192.36	1.705	0.976
1/31/1977	18.13	64.34	3.55	120.35	104.51	168.97	196.09	1.730	0.984
2/28/1977	18.70	68.94	3.69	111.29	105.03	170.90	199.21	1.497	0.990
3/31/1977	17.79	61.76	3.47	126.71	105.59	172.82	203.14	1.894	0.999
4/30/1977	15.86	53.41	3.37	121.94	106.06	174.42	206.80	2.102	1.008
5/31/1977	16.88	64.95	3.85	115.43	106.59	176.43	210.38	1.653	1.015
6/30/1977	18.02	67.10	3.72	115.00	107.13	178.45	213.83	1.590	1.021
7/31/1977	17.69	65.01	3.68	105.41	107.67	180.46	217.09	1.503	1.026
8/31/1977	17.53	62.57	3.57	103.82	108.22	182.40	220.31	1.535	1.031
9/30/1977	16.13	65.52	4.06	117.33	108.70	184.37	223.83	1.672	1.037
10/31/1977	16.26	67.88	4.18	115.27	109.21	186.47	227.41	1.588	1.043
11/30/1977	16.54	64.34	3.89	119.24	109.70	188.40	230.98	1.725	1.049
12/31/1977	14.18	53.80	3.79	127.19	110.14	190.07	234.93	2.197	1.059
1/31/1978	14.39	49.83	3.46	111.29	110.59	191.62	238.38	2.061	1.066
2/28/1978	14.73	45.94	3.12	111.29	111.00	192.90	241.49	2.217	1.073
3/31/1978	15.35	59.77	3.89	115.27	111.48	194.75	245.06	1.795	1.080
4/30/1978	13.59	58.00	4.27	111.29	111.88	196.49	248.40	1.797	1.085
5/31/1978	14.11	68.67	4.87	64.71	112.32	198.62	250.41	0.889	1.084
6/30/1978	12.95	71.23	5.50	65.19	112.71	200.76	252.37	0.869	1.081
7/31/1978	13.63	72.05	5.29	79.49	113.13	202.99	254.83	1.046	1.081
8/31/1978	14.46	84.10	5.82	47.70	113.58	205.60	256.31	0.540	1.075
9/30/1978	15.98	81.64	5.11	103.02	114.06	208.05	259.40	1.194	1.076
10/31/1978	15.82	83.09	5.25	127.19	114.55	210.63	263.34	1.451	1.080
11/30/1978	14.75	76.63	5.20	111.29	114.99	212.92	266.68	1.376	1.083
12/31/1978	14.89	73.82	4.96	115.25	115.45	215.21	270.25	1.475	1.087
1/31/1979	14.37	77.38	5.38	95.35	115.90	217.61	273.21	1.169	1.088
2/28/1979	13.81	69.89	5.06	95.35	116.29	219.57	275.88	1.291	1.090
3/31/1979	14.16	70.75	5.00	119.24	116.72	221.76	279.58	1.593	1.094

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 Replacement Ratio
4/30/1979	14.88	71.05	4.77	111.29	117.17	223.89	282.91	1.477	1.097
5/31/1979	14.81	63.72	4.30	111.29	117.63	225.87	286.36	1.636	1.102
6/30/1979	14.32	67.72	4.73	111.29	118.06	227.90	289.70	1.549	1.106
7/31/1979	14.40	59.57	4.14	111.29	118.51	229.75	293.15	1.746	1.110
8/31/1979	14.34	77.04	5.37	111.29	118.95	232.14	296.60	1.371	1.113
9/30/1979	12.87	66.81	5.19	95.39	119.34	234.14	299.46	1.353	1.115
10/31/1979	13.20	72.01	5.46	127.19	119.75	236.37	303.41	1.677	1.120
11/30/1979	14.15	74.98	5.30	111.29	120.17	238.62	306.75	1.407	1.122
12/31/1979	13.97	83.06	5.95	119.24	120.60	241.20	310.44	1.369	1.124
1/31/1980	13.50	77.67	5.75	119.24	121.02	243.60	314.14	1.462	1.128
2/29/1980	13.49	77.22	5.72	119.24	121.41	245.84	317.60	1.470	1.130
3/31/1980	12.65	76.61	6.06	127.19	121.81	248.22	321.54	1.585	1.134
4/30/1980	14.54	68.20	4.69	103.87	122.24	250.26	324.66	1.435	1.137
5/31/1980	14.30	74.55	5.21	135.14	122.69	252.58	328.85	1.717	1.142
6/30/1980	13.74	87.87	6.39	143.09	123.10	255.21	333.14	1.558	1.146
7/31/1980	14.07	83.05	5.90	119.24	123.53	257.79	336.83	1.369	1.148
8/31/1980	14.15	78.23	5.53	119.24	123.97	260.21	340.53	1.448	1.150
9/30/1980	14.63	75.43	5.16	139.12	124.41	262.47	344.70	1.746	1.155
10/31/1980	15.37	76.13	4.95	127.19	124.89	264.83	348.65	1.579	1.158
11/30/1980	14.94	75.41	5.05	111.29	125.34	267.10	351.99	1.396	1.160
12/31/1980	12.98	72.63	5.60	127.19	125.74	269.35	355.93	1.665	1.164
1/31/1981	14.55	73.03	5.02	127.21	126.19	271.61	359.87	1.647	1.168
2/28/1981	14.66	74.02	5.05	127.19	126.60	273.68	363.43	1.625	1.171
3/31/1981	14.39	76.23	5.30	127.19	127.05	276.05	367.38	1.582	1.175
4/30/1981	14.27	75.34	5.28	119.24	127.47	278.31	370.95	1.501	1.177
5/31/1981	10.79	71.33	6.61	129.57	127.81	280.52	374.97	1.740	1.181
6/30/1981	14.87	69.76	4.69	119.24	128.25	282.61	378.55	1.610	1.184
7/31/1981	12.11	74.28	6.13	111.29	128.63	284.91	382.00	1.431	1.186
8/31/1981	12.67	69.57	5.49	119.24	129.02	287.07	385.69	1.628	1.189
9/30/1981	14.25	70.82	4.97	119.24	129.45	289.20	389.27	1.591	1.192
10/31/1981	13.09	71.04	5.43	121.30	129.86	291.40	393.03	1.621	1.195
11/30/1981	12.95	71.22	5.50	127.19	130.24	293.53	396.85	1.697	1.198
12/31/1981	12.55	67.40	5.37	143.24	130.63	295.62	401.29	2.017	1.204
1/31/1982	12.63	60.50	4.79	119.24	131.02	297.50	404.98	1.859	1.207
2/28/1982	11.76	63.92	5.43	111.29	131.35	299.29	408.10	1.653	1.210
3/31/1982	11.25	56.12	4.99	119.24	131.70	301.03	411.80	2.008	1.214
4/30/1982	12.99	66.06	5.09	119.24	132.09	303.01	415.37	1.708	1.217
5/31/1982	8.94	77.28	8.65	112.72	132.37	305.41	418.87	1.411	1.219
6/30/1982	13.90	74.67	5.37	111.29	132.79	307.65	422.21	1.414	1.220
7/31/1982	11.94	71.67	6.00	87.13	133.16	309.87	424.91	1.160	1.220
8/31/1982	11.48	75.13	6.54	95.39	133.51	312.20	427.87	1.216	1.220
9/30/1982	11.88	75.09	6.32	111.29	133.87	314.45	431.20	1.417	1.221
10/31/1982	12.28	69.43	5.65	119.24	134.25	316.60	434.90	1.634	1.224
11/30/1982	11.42	72.39	6.34	119.24	134.59	318.77	438.48	1.575	1.226
12/31/1982	10.86	68.70	6.32	119.24	134.93	320.90	442.17	1.660	1.229
1/31/1983	10.29	67.50	6.56	120.83	135.25	323.00	445.92	1.715	1.231
2/28/1983	11.79	72.93	6.19	111.29	135.58	325.04	449.04	1.458	1.233
3/31/1983	11.57	78.18	6.76	119.24	135.94	327.46	452.73	1.463	1.234

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 Replacement Ratio
4/30/1983	11.17	73.72	6.60	115.26	136.27	329.67	456.19	1.498	1.236
5/31/1983	11.88	75.84	6.39	127.19	136.64	332.02	460.13	1.604	1.238
6/30/1983	11.32	78.47	6.93	127.19	136.98	334.38	463.95	1.556	1.241
7/31/1983	10.97	70.09	6.39	111.29	137.32	336.55	467.40	1.519	1.242
8/31/1983	11.57	79.22	6.85	127.19	137.68	339.01	471.34	1.540	1.244
9/30/1983	11.35	79.37	7.00	127.19	138.02	341.39	475.16	1.539	1.246
10/31/1983	10.68	81.76	7.66	127.19	138.35	343.92	479.10	1.499	1.248
11/30/1983	11.22	78.87	7.03	127.19	138.69	346.29	482.92	1.549	1.250
12/31/1983	11.21	81.49	7.27	127.19	139.03	348.82	486.86	1.501	1.251
1/31/1984	11.24	78.33	6.97	127.19	139.38	351.24	490.80	1.559	1.253
2/29/1984	11.12	81.32	7.31	127.19	139.71	353.60	494.49	1.504	1.255
3/31/1984	11.05	77.82	7.04	127.19	140.05	356.01	498.43	1.570	1.257
4/30/1984	11.03	78.41	7.11	127.19	140.38	358.37	502.25	1.559	1.259
5/31/1984	10.80	75.37	6.98	127.18	140.71	360.70	506.19	1.620	1.261
6/30/1984	10.54	76.19	7.23	127.19	141.03	362.99	510.01	1.605	1.263
7/31/1984	10.94	82.67	7.56	127.19	141.37	365.55	513.95	1.482	1.265
8/31/1984	10.58	81.09	7.66	127.20	141.70	368.07	517.89	1.512	1.266
9/30/1984	10.84	81.28	7.50	127.18	142.02	370.50	521.71	1.507	1.268
10/31/1984	10.67	75.94	7.12	127.19	142.35	372.86	525.65	1.610	1.270
11/30/1984	10.40	76.38	7.34	127.19	142.66	375.15	529.47	1.602	1.272
12/31/1984	9.77	98.62	10.09	127.19	142.97	378.21	533.41	1.254	1.271
1/31/1985	10.37	101.42	9.78	127.19	143.29	381.35	537.35	1.218	1.271
2/28/1985	10.27	79.15	7.71	127.19	143.58	383.57	540.91	1.549	1.272
3/31/1985	10.37	100.87	9.73	127.19	143.90	386.69	544.86	1.225	1.272
4/30/1985	9.46	101.25	10.71	127.18	144.18	389.73	548.67	1.223	1.272
5/31/1985	7.98	100.98	12.65	127.19	144.43	392.86	552.62	1.231	1.271
6/30/1985	7.38	96.91	13.13	127.18	144.65	395.77	556.43	1.284	1.272
7/31/1985	7.91	94.37	11.93	119.24	144.90	398.69	560.13	1.234	1.271
8/31/1985	7.69	95.76	12.46	120.04	145.13	401.66	563.85	1.225	1.271
9/30/1985	7.78	95.95	12.33	119.24	145.37	404.54	567.43	1.214	1.271
10/31/1985	7.59	98.03	12.92	119.24	145.60	407.58	571.12	1.190	1.270
11/30/1985	8.32	100.19	12.04	119.24	145.85	410.59	574.70	1.162	1.269
12/31/1985	6.73	91.09	13.53	119.24	146.06	413.41	578.40	1.282	1.269
1/31/1986	7.41	89.13	12.03	119.22	146.29	416.17	582.09	1.306	1.270
2/28/1986	7.38	90.79	12.31	119.25	146.50	418.72	585.43	1.283	1.270
3/31/1986	5.52	81.20	14.70	119.25	146.67	421.23	589.13	1.440	1.271
4/30/1986	7.40	86.50	11.69	119.25	146.89	423.83	592.70	1.345	1.271
5/31/1986	7.45	97.29	13.06	119.25	147.12	426.84	596.40	1.199	1.271
6/30/1986	7.78	102.87	13.22	119.25	147.35	429.93	599.98	1.134	1.270
7/31/1986	7.52	108.15	14.38	119.25	147.59	433.28	603.68	1.081	1.268
8/31/1986	7.55	109.51	14.51	119.25	147.82	436.68	607.37	1.068	1.267
9/30/1986	7.34	104.78	14.27	119.25	148.04	439.82	610.95	1.116	1.266
10/31/1986	7.09	102.63	14.48	119.25	148.26	443.00	614.65	1.139	1.265
11/30/1986	7.31	103.56	14.17	119.25	148.48	446.11	618.22	1.129	1.264
12/31/1986	7.11	108.10	15.20	119.25	148.70	449.46	621.92	1.083	1.263
1/31/1987	7.46	107.30	14.38	119.25	148.93	452.79	625.62	1.089	1.262
2/28/1987	7.21	100.82	13.99	119.18	149.13	455.61	628.96	1.158	1.261
3/31/1987	7.24	103.98	14.36	119.18	149.36	458.83	632.65	1.124	1.260

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 Replacement Ratio
4/30/1987	6.73	92.48	13.74	119.18	149.56	461.61	636.23	1.262	1.260
5/31/1987	6.84	104.23	15.24	119.18	149.77	464.84	639.92	1.122	1.259
6/30/1987	6.96	104.17	14.96	119.18	149.98	467.96	643.50	1.122	1.258
7/31/1987	7.05	109.95	15.59	119.18	150.20	471.37	647.19	1.064	1.257
8/31/1987	6.67	107.98	16.19	119.18	150.41	474.72	650.89	1.084	1.256
9/30/1987	8.71	113.47	13.02	119.18	150.67	478.12	654.46	1.028	1.254
10/31/1987	6.80	116.59	17.16	119.18	150.88	481.74	658.16	1.005	1.253
11/30/1987	8.57	113.66	13.27	119.18	151.14	485.15	661.73	1.026	1.251
12/31/1987	8.62	113.10	13.12	119.24	151.40	488.65	665.43	1.032	1.250
1/31/1988	8.08	107.86	13.35	119.18	151.65	492.00	669.12	1.082	1.249
2/29/1988	7.87	104.95	13.34	119.18	151.88	495.04	672.58	1.112	1.248
3/31/1988	8.26	119.85	14.51	119.18	152.14	498.76	676.27	0.975	1.246
4/30/1988	8.07	115.60	14.32	119.18	152.38	502.22	679.85	1.011	1.244
5/31/1988	8.12	110.81	13.64	119.18	152.63	505.66	683.54	1.053	1.243
6/30/1988	8.26	112.62	13.64	119.18	152.88	509.04	687.12	1.036	1.242
7/31/1988	8.12	118.87	14.65	119.18	153.13	512.72	690.81	0.983	1.240
8/31/1988	7.92	117.72	14.86	119.18	153.38	516.37	694.51	0.993	1.239
9/30/1988	7.81	113.59	14.55	119.18	153.61	519.78	698.08	1.029	1.237
10/31/1988	7.50	107.69	14.36	119.18	153.84	523.12	701.78	1.085	1.236
11/30/1988	7.99	110.21	13.79	119.18	154.08	526.42	705.35	1.059	1.235
12/31/1988	7.80	116.51	14.93	119.18	154.33	530.04	709.05	1.003	1.234
1/31/1989	7.51	113.49	15.12	119.18	154.56	533.55	712.74	1.030	1.233
2/28/1989	7.30	107.40	14.71	119.18	154.76	536.56	716.08	1.088	1.232
3/31/1989	6.79	105.09	15.49	119.19	154.97	539.82	719.78	1.113	1.231
4/30/1989	6.81	106.32	15.62	119.18	155.18	543.01	723.35	1.101	1.230
5/31/1989	5.15	73.06	14.18	88.42	155.34	545.27	726.09	1.186	1.230
6/30/1989	6.42	97.02	15.10	119.18	155.53	548.18	729.67	1.205	1.230
7/31/1989	7.13	101.83	14.28	119.18	155.75	551.34	733.36	1.147	1.230
8/31/1989	7.34	77.04	10.50	119.18	155.98	553.73	737.06	1.506	1.231
9/30/1989	7.09	102.82	14.50	119.24	156.19	556.81	740.63	1.137	1.230
10/31/1989	6.46	102.98	15.93	119.24	156.39	560.01	744.33	1.137	1.230
11/30/1989	6.95	99.77	14.35	119.24	156.60	563.00	747.91	1.172	1.230
12/31/1989	5.92	95.20	16.08	119.24	156.78	565.95	751.60	1.230	1.230
1/31/1990	6.02	99.28	16.49	119.24	156.97	569.03	755.30	1.180	1.229
2/28/1990	6.19	99.88	16.15	119.24	157.14	571.82	758.64	1.173	1.229
3/31/1990	6.17	97.68	15.84	119.24	157.33	574.85	762.33	1.199	1.229
4/30/1990	5.96	102.95	17.26	119.24	157.51	577.94	765.91	1.139	1.228
5/31/1990	6.13	106.32	17.35	119.24	157.70	581.24	769.61	1.103	1.228
6/30/1990	6.36	109.00	17.14	119.24	157.89	584.51	773.18	1.076	1.227
7/31/1990	6.06	104.71	17.28	119.24	158.08	587.75	776.88	1.120	1.226
8/31/1990	6.25	105.04	16.81	119.24	158.28	591.01	780.58	1.116	1.226
9/30/1990	7.37	117.03	15.89	119.24	158.50	594.52	784.15	1.001	1.225
10/31/1990	7.28	124.36	17.07	119.24	158.72	598.37	787.85	0.943	1.223
11/30/1990	7.34	135.47	18.44	119.24	158.94	602.44	791.43	0.867	1.221
12/31/1990	7.04	124.57	17.69	119.24	159.16	606.30	795.12	0.942	1.219
1/31/1991	6.54	116.70	17.85	119.24	159.36	609.92	798.82	1.005	1.218
2/28/1991	6.02	100.39	16.67	119.24	159.53	612.73	802.16	1.168	1.217
3/31/1991	7.30	114.71	15.72	119.24	159.76	616.28	805.86	1.021	1.216

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 Replacement Ratio
4/30/1991	6.85	118.54	17.30	119.24	159.96	619.84	809.43	0.989	1.215
5/31/1991	6.76	110.79	16.39	119.24	160.17	623.28	813.13	1.058	1.214
6/30/1991	6.72	114.45	17.03	119.24	160.38	626.71	816.71	1.024	1.213
7/31/1991	6.68	118.75	17.78	119.24	160.58	630.39	820.40	0.988	1.212
8/31/1991	6.84	126.49	18.50	119.24	160.79	634.31	824.10	0.928	1.210
9/30/1991	6.93	113.53	16.37	119.24	161.00	637.72	827.68	1.032	1.210
10/31/1991	6.34	108.56	17.14	119.24	161.20	641.08	831.37	1.080	1.209
11/30/1991	6.88	109.30	15.88	119.24	161.41	644.36	834.95	1.071	1.208
12/31/1991	6.95	106.03	15.25	119.24	161.62	647.65	838.65	1.104	1.208
1/31/1992	6.50	115.68	17.80	119.24	161.82	651.23	842.34	1.014	1.207
2/29/1992	5.58	112.32	20.14	119.23	161.98	654.49	845.80	1.047	1.206
3/31/1992	5.62	102.81	18.28	119.24	162.16	657.68	849.50	1.142	1.206
4/30/1992	6.02	99.65	16.56	119.24	162.34	660.67	853.07	1.176	1.206
5/31/1992	5.38	93.36	17.35	119.24	162.51	663.56	856.77	1.256	1.206
6/30/1992	5.72	100.61	17.59	119.24	162.68	666.58	860.35	1.166	1.206
7/31/1992	6.11	112.44	18.40	119.24	162.87	670.07	864.04	1.044	1.205
8/31/1992	6.07	108.36	17.84	119.24	163.05	673.43	867.74	1.083	1.204
9/30/1992	5.92	99.28	16.76	119.24	163.23	676.40	871.32	1.181	1.204
10/31/1992	5.71	99.12	17.36	119.24	163.41	679.48	875.01	1.183	1.204
11/30/1992	5.76	101.83	17.67	119.24	163.58	682.53	878.59	1.152	1.204
12/31/1992	5.61	73.97	13.19	87.44	163.76	684.82	881.30	1.157	1.204
1/31/1993	5.93	114.15	19.24	119.24	163.94	688.36	885.00	1.029	1.203
2/28/1993	6.03	122.72	20.35	119.24	164.11	691.80	888.33	0.958	1.202
3/31/1993	6.24	121.95	19.56	119.24	164.30	695.58	892.03	0.963	1.200
4/30/1993	6.47	122.07	18.86	119.24	164.50	699.24	895.61	0.962	1.199
5/31/1993	6.34	123.07	19.42	119.24	164.69	703.06	899.30	0.955	1.198
6/30/1993	6.42	127.38	19.85	119.24	164.89	706.88	902.88	0.923	1.197
7/31/1993	6.22	127.06	20.41	119.24	165.08	710.82	906.58	0.925	1.195
8/31/1993	6.47	114.85	17.74	119.24	165.28	714.38	910.27	1.022	1.194
9/30/1993	6.19	117.70	19.01	119.24	165.46	717.91	913.85	0.998	1.193
10/31/1993	6.31	126.57	20.05	119.24	165.66	721.83	917.55	0.929	1.192
11/30/1993	6.29	116.03	18.44	119.24	165.85	725.31	921.12	1.012	1.191
12/31/1993	6.11	110.71	18.13	119.24	166.04	728.75	924.82	1.060	1.191
1/31/1994	5.74	124.80	21.74	119.24	166.22	732.61	928.52	0.943	1.189
2/28/1994	5.92	113.84	19.22	119.24	166.38	735.80	931.86	1.032	1.189
3/31/1994	5.73	115.29	20.12	119.24	166.56	739.38	935.55	1.020	1.188
4/30/1994	5.53	112.01	20.26	119.24	166.73	742.74	939.13	1.050	1.187
5/31/1994	7.01	138.26	19.71	119.24	166.94	747.02	942.83	0.850	1.185
6/30/1994	7.17	143.38	20.01	119.24	167.16	751.32	946.40	0.820	1.183
7/31/1994	6.24	134.92	21.64	119.24	167.35	755.51	950.10	0.872	1.182
8/31/1994	6.15	125.29	20.38	119.24	167.54	759.39	953.80	0.938	1.181
9/30/1994	5.79	119.75	20.70	119.24	167.72	762.98	957.37	0.982	1.180
10/31/1994	6.15	121.22	19.70	119.24	167.91	766.74	961.07	0.969	1.179
11/30/1994	5.95	109.99	18.50	119.24	168.08	770.04	964.65	1.067	1.178
12/31/1994	5.70	118.53	20.79	119.24	168.26	773.71	968.34	0.992	1.177
1/31/1995	5.59	103.11	18.46	119.24	168.43	776.91	972.04	1.139	1.177
2/28/1995	5.97	121.94	20.41	119.24	168.60	780.32	975.38	0.964	1.176
3/31/1995	5.81	118.52	20.41	119.24	168.78	784.00	979.07	0.992	1.176

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 Replacement Ratio
4/30/1995	5.93	118.99	20.05	119.24	168.96	787.57	982.65	0.988	1.175
5/31/1995	5.81	114.93	19.78	119.24	169.14	791.13	986.35	1.023	1.174
6/30/1995	5.18	106.60	20.59	119.24	169.30	794.33	989.92	1.103	1.174
7/31/1995	5.72	111.14	19.44	119.24	169.47	797.77	993.62	1.057	1.173
8/31/1995	5.96	122.26	20.53	119.24	169.66	801.56	997.32	0.962	1.172
9/30/1995	5.68	118.76	20.91	119.24	169.83	805.13	1000.89	0.990	1.172
10/31/1995	5.42	121.22	22.35	119.24	170.00	808.89	1004.59	0.971	1.171
11/30/1995	5.52	123.73	22.42	119.24	170.16	812.60	1008.17	0.951	1.170
12/31/1995	5.73	119.70	20.88	119.24	170.34	816.31	1011.86	0.982	1.169
1/31/1996	5.66	110.27	19.48	119.24	170.51	819.73	1015.56	1.065	1.169
2/29/1996	5.77	106.28	18.41	119.23	170.68	822.81	1019.02	1.105	1.168
3/31/1996	5.74	111.67	19.46	119.24	170.86	826.27	1022.71	1.052	1.168
4/30/1996	5.87	114.72	19.56	119.24	171.04	829.71	1026.29	1.024	1.167
5/31/1996	5.42	95.85	17.70	119.24	171.20	832.68	1029.99	1.224	1.168
6/30/1996	6.58	111.85	16.99	119.24	171.40	836.04	1033.56	1.048	1.167
7/31/1996	6.06	110.39	18.21	119.24	171.59	839.46	1037.26	1.063	1.167
8/31/1996	5.89	109.37	18.56	119.24	171.77	842.85	1040.96	1.073	1.166
9/30/1996	5.72	115.25	20.15	119.24	171.94	846.31	1044.53	1.020	1.166
10/31/1996	5.63	105.44	18.72	119.24	172.12	849.58	1048.23	1.114	1.166
11/30/1996	5.75	109.08	18.99	119.24	172.29	852.85	1051.81	1.077	1.165
12/31/1996	5.67	105.58	18.62	119.24	172.47	856.12	1055.50	1.112	1.165
1/31/1997	5.46	103.09	18.86	119.24	172.64	859.32	1059.20	1.139	1.165
2/28/1997	5.27	101.69	19.29	119.24	172.78	862.17	1062.54	1.155	1.165
3/31/1997	5.45	107.37	19.71	119.24	172.95	865.49	1066.23	1.094	1.165
4/30/1997	5.56	104.55	18.82	119.24	173.12	868.63	1069.81	1.123	1.164
5/31/1997	5.71	104.56	18.30	119.24	173.30	871.87	1073.51	1.123	1.164
6/30/1997	5.35	92.88	17.37	119.24	173.46	874.66	1077.09	1.263	1.165
7/31/1997	5.10	93.70	18.38	119.24	173.61	877.56	1080.78	1.253	1.165
8/31/1997	5.09	82.45	16.20	115.39	173.77	880.12	1084.36	1.375	1.166
9/30/1997	4.93	90.61	18.37	119.24	173.92	882.84	1087.94	1.295	1.166
10/31/1997	4.75	90.50	19.07	119.24	174.07	885.64	1091.63	1.298	1.166
11/30/1997	4.74	77.28	16.31	119.24	174.21	887.96	1095.21	1.516	1.167
12/31/1997	4.77	85.98	18.02	119.24	174.36	890.63	1098.91	1.365	1.168
1/31/1998	4.65	88.06	18.93	119.24	174.50	893.36	1102.60	1.334	1.168
2/28/1998	4.57	80.87	17.71	119.24	174.63	895.62	1105.94	1.451	1.169
3/31/1998	4.74	83.09	17.55	119.24	174.78	898.20	1109.64	1.412	1.170
4/30/1998	4.68	100.06	21.36	119.24	174.92	901.20	1113.21	1.176	1.170
5/31/1998	4.61	107.33	23.27	119.24	175.06	904.53	1116.91	1.097	1.169
6/30/1998	4.78	106.44	22.27	119.24	175.20	907.72	1120.49	1.106	1.169
7/31/1998	4.68	98.10	20.98	119.24	175.35	910.76	1124.18	1.199	1.169
8/31/1998	4.85	101.36	20.91	119.24	175.50	913.90	1127.88	1.160	1.169
9/30/1998	4.77	105.02	22.00	119.24	175.64	917.05	1131.46	1.121	1.169
10/31/1998	4.86	109.50	22.54	119.24	175.79	920.45	1135.15	1.075	1.169
11/30/1998	4.56	95.18	20.87	119.24	175.93	923.30	1138.73	1.236	1.169
12/31/1998	4.43	98.95	22.32	119.24	176.07	926.37	1142.43	1.190	1.169
1/31/1999	4.50	104.64	23.25	119.24	176.21	929.61	1146.12	1.125	1.169
2/28/1999	4.02	80.05	19.92	119.24	176.32	931.86	1149.46	1.468	1.170
3/31/1999	4.21	91.26	21.70	119.24	176.45	934.69	1153.16	1.289	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 Replacement Ratio
4/30/1999	4.20	92.84	22.10	119.24	176.57	937.47	1156.73	1.268	1.170
5/31/1999	4.10	86.40	21.09	119.24	176.70	940.15	1160.43	1.361	1.171
6/30/1999	3.71	84.77	22.84	119.24	176.81	942.69	1164.01	1.389	1.171
7/31/1999	4.16	105.56	25.39	119.24	176.94	945.96	1167.70	1.117	1.171
8/31/1999	4.23	111.86	26.44	119.24	177.07	949.43	1171.40	1.054	1.171
9/30/1999	4.24	100.67	23.75	119.24	177.20	952.45	1174.98	1.170	1.171
10/31/1999	4.61	108.75	23.59	119.24	177.34	955.82	1178.67	1.083	1.170
11/30/1999	4.41	106.76	24.21	107.31	177.48	959.03	1181.89	0.993	1.170
12/31/1999	4.56	109.25	23.97	79.49	177.62	962.41	1184.36	0.719	1.168
1/31/2000	4.30	108.16	25.18	79.49	177.75	965.77	1186.82	0.727	1.167
2/29/2000	3.74	89.92	24.04	79.49	177.86	968.37	1189.13	0.874	1.166
3/31/2000	3.48	80.32	23.08	79.49	177.97	970.86	1191.59	0.977	1.166
4/30/2000	3.44	86.70	25.24	79.49	178.07	973.46	1193.98	0.906	1.165
5/31/2000	3.13	76.53	24.45	79.49	178.17	975.84	1196.44	1.027	1.165
6/30/2000	3.61	92.26	25.59	79.49	178.27	978.60	1198.83	0.852	1.164
7/31/2000	3.76	81.23	21.60	79.49	178.39	981.12	1201.29	0.966	1.163
8/31/2000	3.28	79.03	24.08	79.49	178.49	983.57	1203.75	0.994	1.163
9/30/2000	3.42	77.21	22.56	79.49	178.60	985.89	1206.14	1.016	1.162
10/31/2000	3.86	95.15	24.63	79.49	178.72	988.84	1208.60	0.826	1.162
11/30/2000	3.34	97.24	29.14	79.49	178.82	991.76	1210.99	0.809	1.161
12/31/2000	3.40	96.54	28.42	79.49	178.92	994.75	1213.45	0.815	1.160
1/31/2001	3.22	88.34	27.41	79.49	179.02	997.49	1215.92	0.890	1.159
2/28/2001	3.18	85.75	26.98	79.49	179.11	999.89	1218.14	0.917	1.158
3/31/2001	3.05	94.42	30.97	79.49	179.20	1002.81	1220.61	0.834	1.157
4/30/2001	3.04	91.67	30.12	79.49	179.30	1005.57	1222.99	0.859	1.157
5/31/2001	3.02	83.04	27.53	79.49	179.39	1008.14	1225.45	0.947	1.156
6/30/2001	2.80	90.59	32.37	79.49	179.47	1010.86	1227.84	0.870	1.155
7/31/2001	2.82	89.75	31.85	79.49	179.56	1013.64	1230.30	0.878	1.155
8/31/2001	2.42	83.38	34.49	79.49	179.64	1016.22	1232.77	0.945	1.154
9/30/2001	2.79	88.00	31.49	79.49	179.72	1018.86	1235.15	0.895	1.153
10/31/2001	3.05	81.32	26.68	79.49	179.81	1021.39	1237.62	0.967	1.153
11/30/2001	2.96	80.60	27.23	79.49	179.90	1023.80	1240.00	0.976	1.153
12/31/2001	2.95	84.35	28.62	79.49	179.99	1026.42	1242.47	0.933	1.152
1/31/2002	2.92	83.35	28.50	79.49	180.08	1029.00	1244.93	0.944	1.152
2/28/2002	2.63	90.99	34.66	79.49	180.16	1031.55	1247.16	0.866	1.151
3/31/2002	2.68	103.92	38.74	79.49	180.24	1034.77	1249.62	0.759	1.150
4/30/2002	2.85	102.19	35.92	79.49	180.33	1037.84	1252.00	0.772	1.149
5/31/2002	2.65	70.18	26.51	79.50	180.41	1040.01	1254.47	1.121	1.149
6/30/2002	2.58	67.83	26.26	76.20	180.49	1042.05	1256.75	1.111	1.149
7/31/2002	2.25	52.48	23.27	61.81	180.56	1043.67	1258.67	1.163	1.149
8/31/2002	2.42	61.71	25.45	44.94	180.63	1045.59	1260.06	0.720	1.148
9/30/2002	1.98	51.53	26.05	15.28	180.69	1047.13	1260.52	0.293	1.147
10/31/2002	1.79	41.81	23.39		180.75	1048.43	1260.52	0.000	1.145
11/30/2002	4.60	52.50	11.41		180.88	1050.00	1260.52	0.000	1.144
12/31/2002	11.69	114.05	9.76		181.25	1053.54	1260.52	0.000	1.140
1/31/2003	10.46	112.75	10.78		181.57	1057.03	1260.52	0.000	1.136
2/28/2003	10.44	117.32	11.24	1.97	181.86	1060.32	1260.58	0.016	1.133
3/31/2003	9.49	121.78	12.84	13.19	182.16	1064.09	1260.99	0.106	1.129

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 Replacement Ratio
4/30/2003	9.40	124.57	13.25	5.05	182.44	1067.83	1261.14	0.040	1.125
5/31/2003	9.34	124.78	13.37		182.73	1071.70	1261.14	0.000	1.121
6/30/2003	9.22	124.38	13.49		183.00	1075.43	1261.14	0.000	1.118
7/31/2003	8.66	118.28	13.65		183.27	1079.10	1261.14	0.000	1.114
8/31/2003	8.71	123.80	14.21		183.54	1082.94	1261.14	0.000	1.110
9/30/2003	8.40	123.79	14.74		183.80	1086.65	1261.14	0.000	1.106
10/31/2003	8.04	153.94	19.14		184.04	1091.42	1261.14	0.000	1.102
11/30/2003	9.53	231.58	24.29		184.33	1098.37	1261.14	0.000	1.095
12/31/2003	9.47	224.12	23.67		184.62	1105.32	1261.14	0.000	1.088
1/31/2004	9.11	230.88	25.36		184.91	1112.47	1261.14	0.000	1.082
2/29/2004	8.63	219.14	25.38		185.16	1118.83	1261.14	0.000	1.076
3/31/2004	8.61	222.02	25.78		185.42	1125.71	1261.14	0.000	1.069
4/30/2004	8.38	213.07	25.44		185.68	1132.10	1261.14	0.000	1.064
5/31/2004	10.13	213.09	21.04		185.99	1138.71	1261.14	0.000	1.058
6/30/2004	9.17	210.82	22.99		186.26	1145.03	1261.14	0.000	1.052
7/31/2004	7.87	207.52	26.38		186.51	1151.47	1261.14	0.000	1.046
8/31/2004	8.32	218.42	26.24		186.77	1158.24	1261.14	0.000	1.040
9/30/2004	7.65	217.78	28.47		187.00	1164.77	1261.14	0.000	1.035
10/31/2004	7.46	211.06	28.28		187.23	1171.31	1261.14	0.000	1.029
11/30/2004	8.89	204.57	23.00		187.49	1177.45	1261.14	0.000	1.024
12/31/2004	8.42	205.07	24.34		187.75	1183.81	1261.14	0.000	1.019
1/31/2005	8.42	213.03	25.30		188.02	1190.41	1261.14	0.000	1.013
2/28/2005	8.44	209.43	24.83		188.25	1196.28	1261.14	0.000	1.008
3/31/2005	8.57	211.97	24.74		188.52	1202.85	1261.14	0.000	1.003
4/30/2005	9.61	209.14	21.77		188.81	1209.12	1261.14	0.000	0.998
5/31/2005	8.57	209.49	24.45		189.07	1215.62	1261.14	0.000	0.993
6/30/2005	7.10	204.50	28.82		189.28	1221.75	1261.14	0.000	0.988
7/31/2005	8.25	208.35	25.27		189.54	1228.21	1261.14	0.000	0.983
8/31/2005	7.65	215.90	28.23		189.78	1234.90	1261.14	0.000	0.978
9/30/2005	8.22	213.34	25.96		190.02	1241.30	1261.14	0.000	0.973
10/31/2005	8.14	216.14	26.56		190.28	1248.00	1261.14	0.000	0.968
11/30/2005	7.58	214.80	28.32		190.50	1254.45	1261.14	0.000	0.963
12/31/2005	7.37	212.29	28.81		190.73	1261.03	1261.14	0.000	0.958
1/31/2006	6.72	207.56	30.90		190.94	1267.46	1261.14	0.000	0.953
2/28/2006	6.32	206.42	32.66		191.12	1273.24	1261.14	0.000	0.949
3/31/2006	6.35	195.67	30.82		191.31	1279.31	1261.14	0.000	0.945
4/30/2006	6.99	189.29	27.06		191.52	1284.99	1261.14	0.000	0.941
5/31/2006	5.66	189.89	33.57		191.70	1290.87	1261.14	0.000	0.937
6/30/2006	5.30	178.78	33.70		191.86	1296.24	1261.14	0.000	0.933
7/31/2006	5.87	175.02	29.81		192.04	1301.66	1261.14	0.000	0.929
8/31/2006	5.78	169.76	29.38		192.22	1306.93	1261.14	0.000	0.926
9/30/2006	5.87	177.12	30.19		192.40	1312.24	1261.14	0.000	0.922
10/31/2006	4.97	167.28	33.65		192.55	1317.42	1261.14	0.000	0.918
11/30/2006	4.95	170.15	34.38		192.70	1322.53	1261.14	0.000	0.915
12/31/2006	5.29	177.67	33.58		192.86	1328.04	1261.14	0.000	0.911
1/31/2007	4.76	184.70	38.79		193.01	1333.76	1261.14	0.000	0.908
2/28/2007	4.00	192.66	48.15		193.12	1339.16	1261.14	0.000	0.904
3/31/2007	3.79	184.15	48.59		193.24	1344.87	1261.14	0.000	0.900

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 Replacement Ratio
4/30/2007	4.03	185.55	46.09		193.36	1350.43	1261.14	0.000	0.897
5/31/2007	5.59	187.71	33.55		193.53	1356.25	1261.14	0.000	0.893
6/30/2007	6.39	183.48	28.72		193.72	1361.76	1261.14	0.000	0.890
7/31/2007	6.26	174.45	27.85		193.92	1367.16	1261.14	0.000	0.886
8/31/2007	6.81	183.27	26.91		194.13	1372.84	1261.14	0.000	0.883
9/30/2007	5.99	174.66	29.14		194.31	1378.08	1261.14	0.000	0.879
10/31/2007	6.49	213.11	32.82		194.51	1384.69	1261.14	0.000	0.875
11/30/2007	6.29	210.87	33.50		194.70	1391.02	1261.14	0.000	0.871
12/31/2007	5.96	209.36	35.15		194.88	1397.51	1261.14	0.000	0.867
1/31/2008	5.99	210.62	35.14		195.07	1404.04	1261.14	0.000	0.864
2/29/2008	4.98	205.80	41.32		195.22	1410.01	1261.14	0.000	0.860
3/31/2008	5.04	208.71	41.38		195.37	1416.48	1261.14	0.000	0.856
4/30/2008	5.12	211.98	41.40		195.53	1422.83	1261.14	0.000	0.852
5/31/2008	5.17	204.98	39.68		195.69	1429.19	1261.14	0.000	0.849
6/30/2008	4.67	190.58	40.79		195.83	1434.91	1261.14	0.000	0.846
7/31/2008	4.41	193.67	43.89		195.96	1440.91	1261.14	0.000	0.842
8/31/2008	4.89	193.00	39.45		196.11	1446.89	1261.14	0.000	0.839
9/30/2008	2.17	114.08	52.54		196.18	1450.32	1261.14	0.000	0.837
10/31/2008	1.16	86.19	74.32		196.21	1452.99	1261.14	0.000	0.835
11/30/2008	4.16	219.97	52.92		196.34	1459.59	1261.14	0.000	0.832
12/31/2008	3.83	214.37	55.91		196.46	1466.23	1261.14	0.000	0.828
1/31/2009	4.11	224.76	54.75		196.59	1473.20	1261.14	0.000	0.824
2/28/2009	4.15	223.48	53.80		196.70	1479.46	1261.14	0.000	0.821
3/31/2009	4.36	229.51	52.65		196.84	1486.57	1261.14	0.000	0.817
4/30/2009	4.17	224.86	53.89		196.96	1493.32	1261.14	0.000	0.813
5/31/2009	3.86	220.21	57.06		197.08	1500.14	1261.14	0.000	0.810
6/30/2009	4.21	208.42	49.51		197.21	1506.40	1261.14	0.000	0.807
7/31/2009	4.40	222.19	50.53		197.34	1513.28	1261.14	0.000	0.803
8/31/2009	4.85	213.90	44.12		197.49	1519.92	1261.14	0.000	0.800
9/30/2009	5.11	216.18	42.31		197.65	1526.40	1261.14	0.000	0.796
10/31/2009	5.11	215.83	42.23		197.81	1533.09	1261.14	0.000	0.793
11/30/2009	4.96	214.54	43.24		197.96	1539.53	1261.14	0.000	0.790
12/31/2009	4.99	218.34	43.79		198.11	1546.30	1261.14	0.000	0.786
1/31/2010	4.82	218.21	45.26		198.26	1553.06	1261.14	0.000	0.783
2/28/2010	4.84	215.51	44.54		198.39	1559.10	1261.14	0.000	0.780
3/31/2010	4.55	210.98	46.38		198.54	1565.64	1261.14	0.000	0.777
4/30/2010	4.02	194.93	48.46		198.66	1571.48	1261.14	0.000	0.774
5/31/2010	4.26	201.91	47.34		198.79	1577.74	1261.14	0.000	0.771
6/30/2010	4.59	211.40	46.10		198.93	1584.09	1261.14	0.000	0.768
7/31/2010	4.61	212.71	46.15		199.07	1590.68	1261.14	0.000	0.765
8/31/2010	4.81	219.03	45.53		199.22	1597.47	1261.14	0.000	0.762
9/30/2010	4.65	214.40	46.08		199.36	1603.90	1261.14	0.000	0.759
10/31/2010	3.95	190.61	48.29		199.48	1609.81	1261.14	0.000	0.756
11/30/2010	4.29	215.05	50.15		199.61	1616.26	1261.14	0.000	0.753
12/31/2010	4.42	224.92	50.88		199.75	1623.23	1261.14	0.000	0.750