

**East Manson Unit No. 7
Waterflood EOR Project**

2017 Annual Report

**February 28, 2018
Crescent Point Energy Corporation**

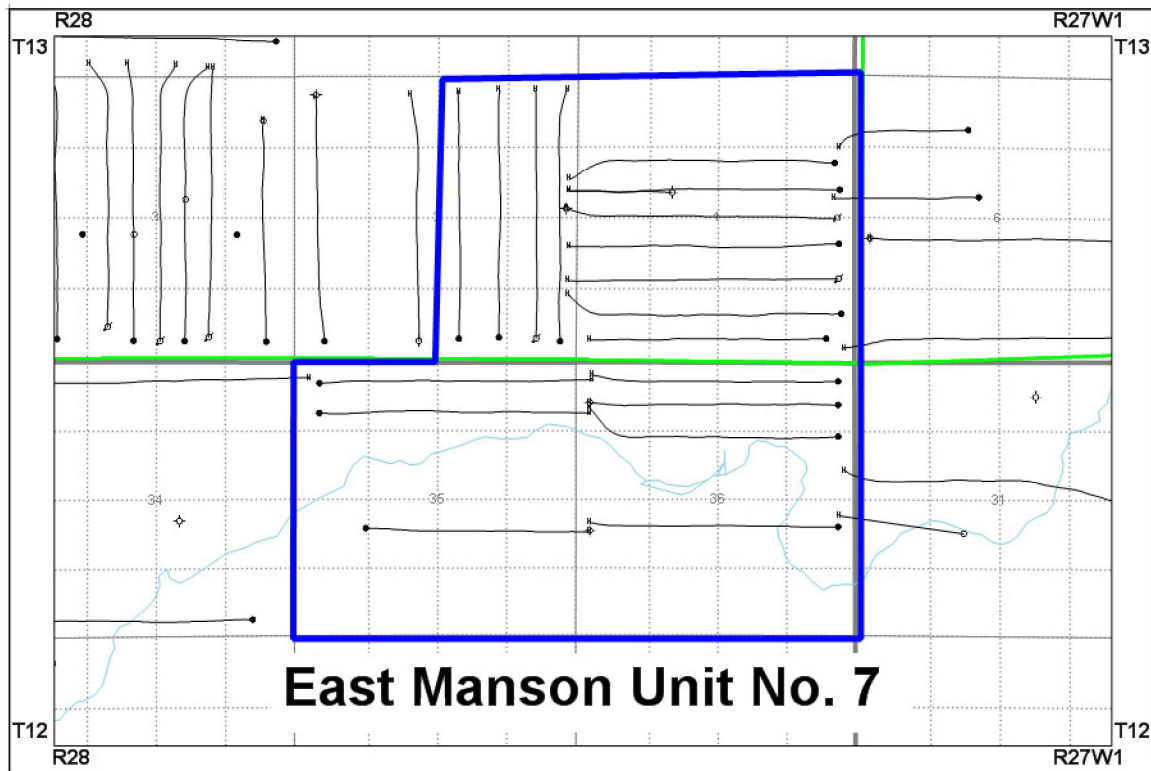
Table of Contents

<u>Section</u>	<u>Page</u>
Introduction	2
Production History	2
Waterflood History	4
Waterflood Operating Strategy	4
Water Source and Quality	4
Injection Wellhead Pressures	4
Reservoir Pressure	5
Well Servicing	5
Voidage Replacement	5
Waterflood Performance	6
List of Appendices	7
Appendix A: Well Name and Status	
Appendix B: Average Monthly Injection Pressures	
Appendix C: Injector Pattern Production/Injection Rates, Cumulative VRRs, Plots and Tables	

Introduction

East Manson Unit No. 7 (EM7) was approved on April 20, 2016. EM7 includes 15 horizontal producing wells and 3 water injection wells located in E/2 2-13-28, Sections 1-13-28, 35-12-28, 36-12-28 as shown in the figure below.

Figure 1: East Manson Unit No. 7 Area Outline



Crescent Point Energy (CPG), in accordance with Section 73 of the Manitoba Drilling and Production Regulation, hereby submits the 2017 Annual Progress Report for EM7.

Production History

The first well that was drilled was 00/09-01-013-28W1/2 and was placed on production March 2013 and a second was drilled in August 2013. In 2014 and 2015, development continued with the drilling of 4 wells and 9 wells respectively. Production peaked in September 2015 at 140.2 m³/d (882.1 bbl/d) with a 37.4% watercut. Production in December 2016 was 58.4 m³/d (367.1 bbl/d) with a 61.7% watercut. Injector conversions and facility work started in July 2016 and water injection commenced in August 2016. The oil production rate, injection rate, and WOR during each month for the whole project are presented in Appendix C. The rate and WOR are plotted in Figure 2.

Figure 2: East Manson Unit No. 7 Production

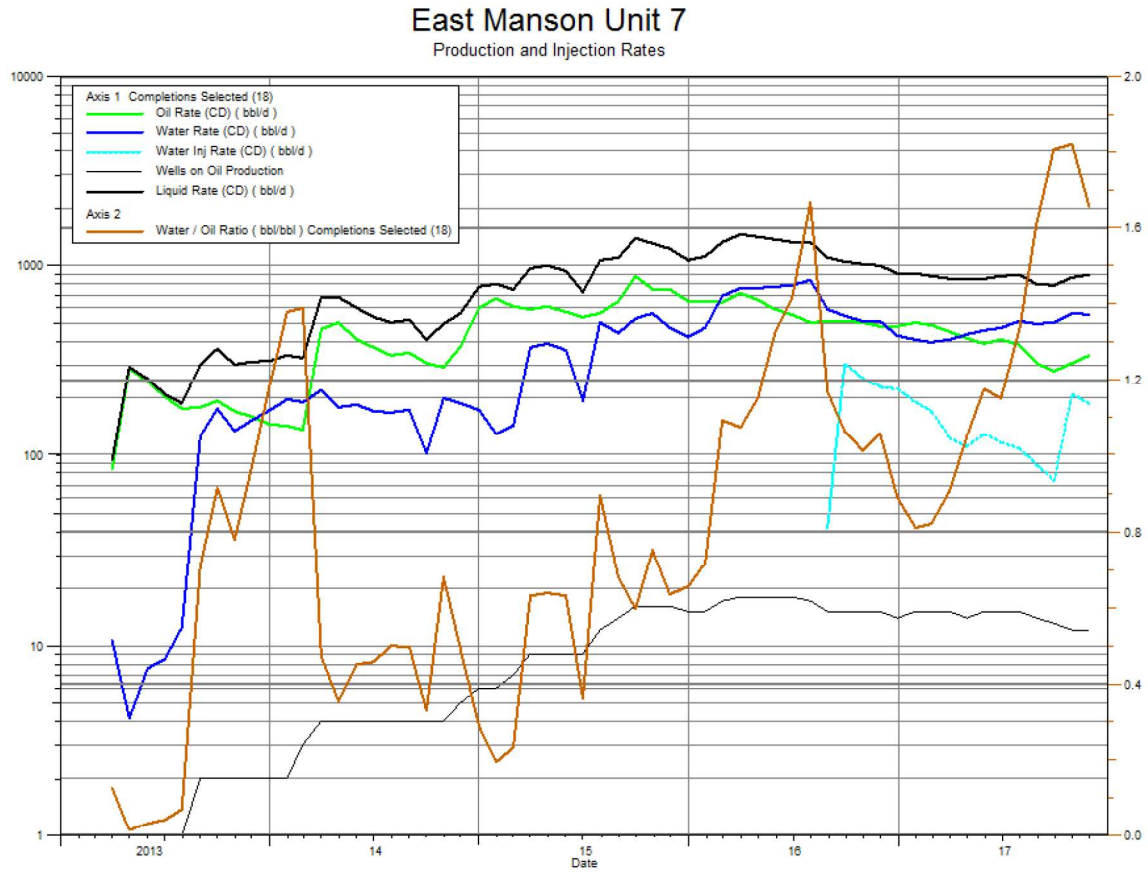
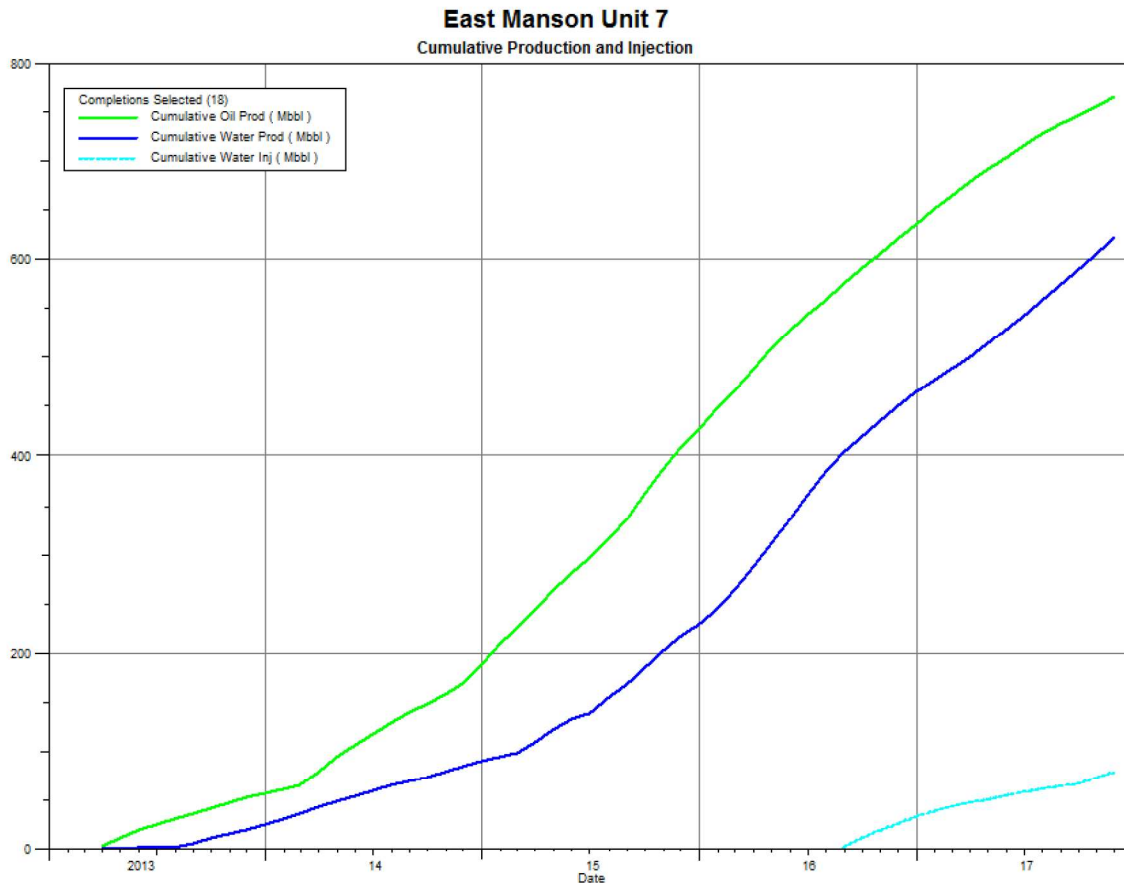


Figure 3 shows the cumulative production for EM7 to the end of November 2017 is 121.7 e^3m^3 (765.54 mbbbl) of oil and 99.1 e^3m^3 (623.24 mbbbl) of water, which represents a cumulative recovery factor to date of 7.9%. The cumulative volume of oil, water produced, and fluid injected for the whole project are presented in Appendix C.

Figure 3: East Manson Unit No. 7 Cumulative Production and Water Injected



Waterflood History

Water injection started in February 2016. As of December 2017, the Unit has 5 active horizontal injection wells at 02/01-02-013-28W1/0, 00/08-01-013-28W1/0, 00/09-01-013-28W1/2, 03/09-01-013-28W1/0 and 00/16-36-012-28W1/0. A summary of each injector is presented in Appendix C.

Waterflood Operating Strategy

Water Source and Quality

The injection water for EM7 will be produced water from the 16-4-13-28W1 battery, where it is treated with scale inhibitor, filtered to 5.0 micron and distributed to the injection system.

Injection Wellhead Pressures

The maximum allowable wellhead injection pressure in EM7 is 5700 kPa. The monthly wellhead injection pressures for each injection well are summarized in Appendix B, showing pressures since January 2017.

Reservoir Pressure

Table 1: East Manson Unit 7 Reservoir Pressures

UWI	Date	Pressure (kPa)
00/01-02-013-28W1/0	2/22/2014	5,717
00/01-01-013-28W1/0	3/4/2014	5,760
00/13-35-012-28W1/0	10/28/2014	5,581
00/05-35-012-28W1/0	1/28/2015	5,709
00/08-36-012-28W1/0	2/6/2015	6,240
02/09-01-013-28W1/0	7/7/2015	3,699
02/01-01-013-28W1/0	7/17/2015	2,508
02/16-36-012-28W1/0	8/17/2015	2,903
02/13-35-012-28W1/0	8/21/2015	3,466
02/02-02-013-28W1/0	8/27/2015	4,939
03/09-01-013-28W1/0	2/19/2016	3,574
00/09-01-013-28W1/0	7/17/2016	2,057
02/01-02-013-28W1/0	8/6/2016	2,921
00/08-01-013-28W1/0	8/6/2016	1,743
02/01-01-013-28W1/0	9/21/2017	2,149
03/09-01-013-28W1/0	8/18/2017	3,434

Well Servicing

Table 2: East Manson Unit 7 2017 Well Servicing

UWI	Date	Well Service
103/09-01-013-28W1/00	3/15/2017	Tubing Repair
103/09-01-013-28W1/00	12/8/2017	Acid Job
102/09-01-013-28W1/02	6/8/2017	Tubing Repair
102/08-01-013-28W1/00	11/2/2017	Tubing Repair
102/02-02-013-28W1/00	5/29/2017	Tubing Repair
102/16-36-012-28W1/00	9/21/2017	Tubing Repair
102/13-35-012-28W1/00	9/14/2017	Tubing Repair
102/01-01-013-28W1/00	5/24/2017	Tubing Repair
100/16-36-012-28W1/00	6/2/2017	Tubing Repair
100/01-02-013-28W1/00	8/22/2017	Tubing Repair

Voidage Replacement

Cumulative voidage for East Manson Unit 7 was 0.05 in November 2017 and continues to climb steadily with a monthly voidage of about 0.21. Calculations, plots and tables of the Voidage Replacement Ratio on a monthly and cumulative basis for each the whole project area is presented in Appendix C.

Waterflood Performance

The original oil-in-place (OOIP) of $1,536.6 \text{ e}^3\text{m}^3$ with cumulative oil recovered to date of $121.7 \text{ e}^3\text{m}^3$ results in a recovery factor of 7.9%. At this time, the ultimate recovery factor has not yet been determined due to the continual increase in production.

Please contact Lauren [REDACTED] at 403-513-1202, by email at ltse@crescentpointenergy.com or at Suite 2000, 585-8th Ave SW, Calgary, Alberta, T2P 1G1 for any other questions or clarification.

Crescent Point Energy Corporation

Lauren [REDACTED]
Senior Reservoir Engineering Technologist

List of Appendices

Appendix A: Well Name and Status

Appendix B: Average Monthly Injection Pressures

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

Appendix A

UWI	Surface Location	Well Status
00/05-35-012-28W1/0	00/05-36-012-28W1/0	Producing
00/13-35-012-28W1/0	00/13-36-012-28W1/0	Producing
02/13-35-012-28W1/0	02/13-36-012-28W1/0	Producing
00/08-36-012-28W1/0	00/05-36-012-28W1/0	Producing
00/09-36-012-28W1/0	00/13-36-012-28W1/0	Producing
00/16-36-012-28W1/0	00/13-36-012-28W1/0	Producing
02/16-36-012-28W1/0	02/13-36-012-28W1/0	Producing
00/01-01-013-28W1/0	00/01-02-013-28W1/0	Producing
02/01-01-013-28W1/0	02/04-01-013-28W1/0	Producing
00/08-01-013-28W1/0	00/08-02-013-28W1/0	Injection
02/08-01-013-28W1/0	02/08-02-013-28W1/0	Producing
00/09-01-013-28W1/2	00/09-02-013-28W1/2	Injection
02/09-01-013-28W1/2	02/09-02-013-28W1/0	Producing
03/09-01-013-28W1/0	03/09-02-013-28W1/0	Producing
00/01-02-013-28W1/0	00/16-02-013-28W1/0	Producing
02/01-02-013-28W1/0	02/16-02-013-28W1/0	Injection
00/02-02-013-28W1/0	00/15-02-013-28W1/0	Producing
02/02-02-013-28W1/0	02/15-02-013-28W1/0	Producing

Appendix B

Average Monthly Injection Pressures

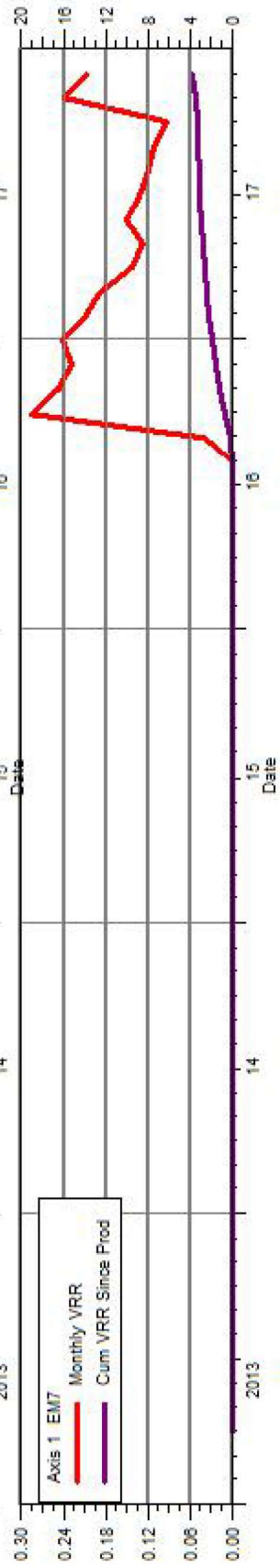
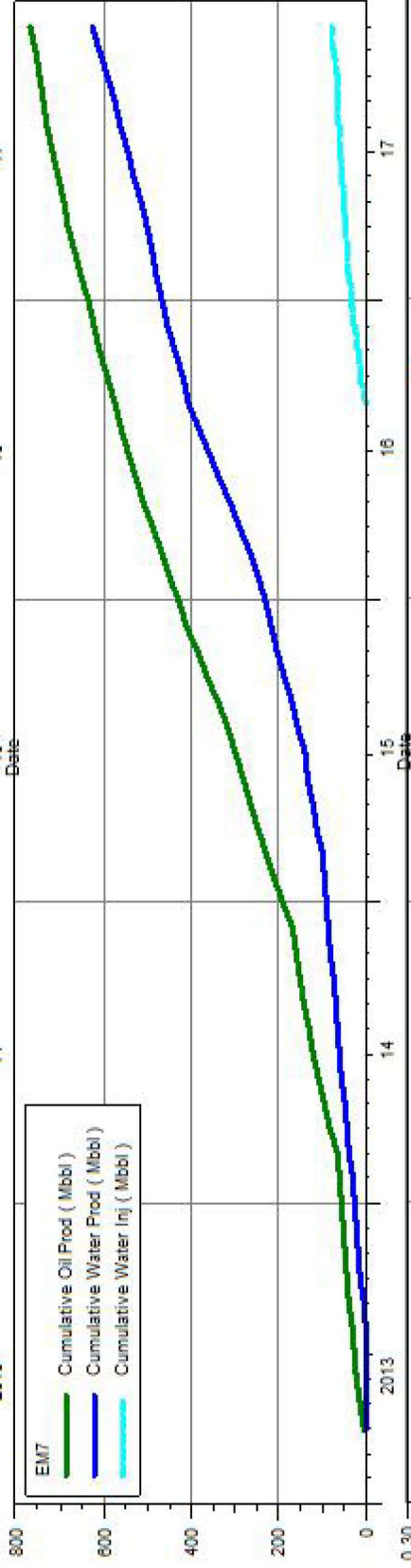
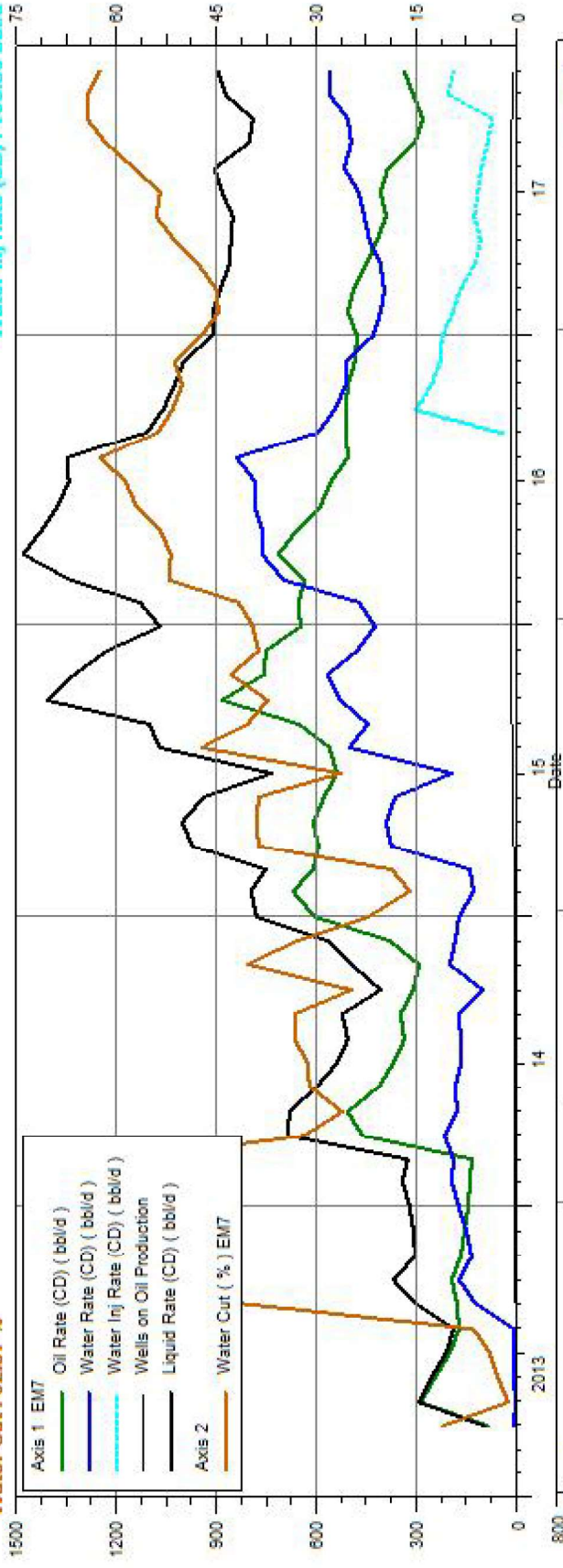
Month	Injection Pressure				
	02/01-01-013-28W1/0	00/08-01-013-28W1/0	00/09-01-013-28W1/2	03/09-01-013-28W1/0	02/01-02-013-28W1/0
Jan-17		3,734.51	3,372.20		4,023.46
Feb-17		4,839.13	4,746.29		4,295.18
Mar-17		4,229.82	4,474.25		4,425.98
Apr-17		4,392.64	4,367.59		4,405.05
May-17		4,501.60	4,495.38		4,508.27
Jun-17		4,549.38	4,523.87		4,542.26
Jul-17		4,643.28	4,628.60		4,616.81
Aug-17		4,636.83	4,623.71		4,605.47
Sep-17		4,435.70	4,559.50		4,583.86
Oct-17	97.48	4,290.31	4,238.59	3,890.06	4,381.72
Nov-17	103.65	4,258.89	4,255.44	4,367.59	4,345.53
Dec-17	107.20	4,373.49	3,667.34	4,255.17	4,113.05

Appendix C
Rates and WRR
Plots and Tables

East Manson Unit 7

Water Cut : 62.37 %

Oil Rate (CD) : 337.36 bbl/d
Water Rate (CD) : 559.23 bbl/d
Water Inj Rate (CD) : 188.86 bbl/d



Date	Oil Rate (CD)	Water Rate (CD)	Water Inj Rate (CD)	Cum Oil Prod	Cum Water Prod	Cum Water Inj	Water Cut	Monthly VRR	Cum VRR Since Prod
	bbl/d	bbl/d	bbl/d	Mbbl	Mbbl	Mbbl	%		
3/31/2010	12.23	0.22		0.38	0.01	0	1.79	0	0
4/30/2010	21.18	0.04		1.01	0.01	0	0.2	0	0
5/31/2010	20.11	0.04		1.64	0.01	0	0.2	0	0
6/30/2010	19.67	1.3		2.23	0.05	0	6.2	0	0
7/31/2010	52.69	17.83		3.86	0.6	0	25.29	0	0
8/31/2010	50.95	24.65		5.44	1.37	0	32.61	0	0
9/30/2010	50.05	24.17		6.94	2.09	0	32.57	0	0
10/31/2010	63.3	13.76		8.9	2.52	0	17.85	0	0
11/30/2010	104.79	7.02		12.05	2.73	0	6.28	0	0
12/31/2010	89.15	13.15		14.81	3.14	0	12.85	0	0
1/31/2011	85.24	9.66		17.45	3.43	0	10.18	0	0
2/28/2011	84.78	5.12		19.83	3.58	0	5.7	0	0
3/31/2011	119.67	79.37		23.54	6.04	0	39.88	0	0
4/30/2011	219.18	196.2		30.11	11.92	0	47.23	0	0
5/31/2011	243.35	140.06		37.66	16.27	0	36.53	0	0
6/30/2011	220.77	118.12		44.28	19.81	0	34.86	0	0
7/31/2011	210.3	82.5		50.8	22.37	0	28.18	0	0
8/31/2011	331.72	109.02		61.08	25.75	0	24.74	0	0
9/30/2011	376.95	237.31		72.39	32.87	0	38.63	0	0
10/31/2011	404.96	310.76		84.95	42.5	0	43.42	0	0
11/30/2011	606.63	656.89		103.14	62.21	0	51.99	0	0
12/31/2011	639.39	799.23		122.97	86.98	0	55.56	0	0
1/31/2012	521.69	673.35		139.14	107.86	0	56.35	0	0
2/29/2012	436.3	499.97		151.79	122.36	0	53.4	0	0
3/31/2012	440.77	551.58		165.45	139.46	0	55.58	0	0
4/30/2012	418.96	503.5		178.02	154.56	0	54.58	0	0
5/31/2012	265.39	361.12		186.25	165.75	0	57.64	0	0
6/30/2012	323.51	374.73		195.96	177	0	53.67	0	0
7/31/2012	319.16	302.24		205.85	186.37	0	48.64	0	0
8/31/2012	286.47	268.47		214.73	194.69	0	48.38	0	0
9/30/2012	264.15	230.56		222.65	201.61	0	46.61	0	0
10/31/2012	249.83	590.63		230.4	219.91	0	70.27	0	0
11/30/2012	242.93	190.39		237.69	225.63	0	43.94	0	0
12/31/2012	218.78	181.47		244.47	231.25	0	45.34	0	0
1/31/2013	214.26	149.72		251.11	235.89	0	41.13	0	0
2/28/2013	227.67	184.11		257.49	241.05	0	44.71	0	0
3/31/2013	236.15	162.26		264.81	246.08	0	40.73	0	0
4/30/2013	196.91	160.14		270.71	250.88	0	44.85	0	0
5/31/2013	135.74	149.9		274.92	255.53	0	52.48	0	0
6/30/2013	167.73	146.28		279.95	259.92	0	46.58	0	0
7/31/2013	176.44	145.38		285.42	264.42	0	45.17	0	0
8/31/2013	160.15	142.49		290.39	268.84	0	47.08	0	0
9/30/2013	175.34	124.16		295.65	272.57	0	41.46	0	0
10/31/2013	180.4	131.84		301.24	276.65	0	42.22	0	0
11/30/2013	180.12	122.29		306.64	280.32	0	40.44	0	0
12/31/2013	159.74	115.37		311.6	283.9	0	41.94	0	0
1/31/2014	169.91	134.93		316.86	288.08	0	44.26	0	0
2/28/2014	169.47	134.92		321.61	291.86	0	44.32	0	0
3/31/2014	158.87	123.77		326.53	295.7	0	43.79	0	0

4/30/2014	147.41	109		330.96	298.97	0	42.51	0	0
5/31/2014	126	181.13		334.86	304.58	0	58.97	0	0
6/30/2014	121.85	160.52		338.52	309.4	0	56.85	0	0
7/31/2014	116.54	112.79		342.13	312.89	0	49.18	0	0
8/31/2014	115.63	110.72		345.71	316.33	0	48.92	0	0
9/30/2014	141.96	129.23		349.97	320.2	0	47.65	0	0
10/31/2014	135.05	125.31		354.16	324.09	0	48.13	0	0
11/30/2014	137.75	109.36		358.29	327.37	0	44.26	0	0
12/31/2014	153.86	123.54		363.06	331.2	0	44.54	0	0
1/31/2015	196.99	127.58		369.17	335.15	0	39.31	0	0
2/28/2015	211.76	182.49		375.1	340.26	0	46.29	0	0
3/31/2015	233.05	225.03		382.32	347.24	0	49.13	0	0
4/30/2015	235.3	191.55		389.38	352.99	0	44.87	0	0
5/31/2015	213.53	172.99		396	358.35	0	44.76	0	0
6/30/2015	215.4	158.25		402.46	363.1	0	42.35	0	0
7/31/2015	167.96	140.91		407.67	367.46	0	45.62	0	0
8/31/2015	168.79	335.1		412.9	377.85	0	66.5	0	0
9/30/2015	171.52	478.15		418.05	392.2	0	73.6	0	0
10/31/2015	156.03	471.51		422.88	406.81	0	75.14	0	0
11/30/2015	172.11	425.86		428.05	419.59	0	71.22	0	0
12/31/2015	164.14	373.7		433.14	431.17	0	69.48	0	0
1/31/2016	148.89	319.5		437.75	441.08	0	68.21	0	0
2/29/2016	132.74	345.2	47.98	441.6	451.09	1.39	72.23	0.1	0.002
3/31/2016	225.09	581.26	333.72	448.58	469.11	11.74	72.08	0.411	0.013
4/30/2016	271.22	592.31	423.72	456.72	486.88	24.45	68.59	0.487	0.026
5/31/2016	243.09	493.59	442.38	464.25	502.18	38.16	67	0.595	0.039
6/30/2016	220.92	407.75	568.83	470.88	514.41	55.23	64.86	0.897	0.055
7/31/2016	186.2	344.13	552.16	476.65	525.08	72.34	64.89	1.032	0.071
8/31/2016	180.66	319.75	534.43	482.25	534.99	88.91	63.9	1.058	0.086
9/30/2016	197.33	514.63	562.64	488.17	550.43	105.79	72.28	0.785	0.101
10/31/2016	244.59	712.29	542.93	495.75	572.51	122.62	74.44	0.564	0.113
11/30/2016	202.64	607.74	527.32	501.83	590.74	138.44	74.99	0.647	0.125
12/31/2016	167.76	442.94	576.13	507.03	604.47	156.3	72.53	0.937	0.139
1/31/2017	246.54	451.61	672.5	514.68	618.47	177.15	64.69	0.955	0.155
2/28/2017	247.37	450.87	624.67	521.6	631.1	194.64	64.57	0.886	0.167
3/31/2017	256.44	335.98	586.76	529.55	641.51	212.83	56.71	0.979	0.18
4/30/2017	234.27	287.61	475.57	536.58	650.14	227.1	55.11	0.901	0.189
5/31/2017	224.36	264.27	390.25	543.54	658.34	239.19	54.08	0.789	0.197
6/30/2017	215.51	290.06	356.93	550	667.04	249.9	57.37	0.698	0.203
7/31/2017	193.26	286.86	338.53	555.99	675.93	260.4	59.75	0.698	0.209
8/31/2017	171.22	214.42	310.05	561.3	682.58	270.01	55.6	0.795	0.215
9/30/2017	168.48	244.32	306.29	566.35	689.91	279.2	59.19	0.734	0.22
10/31/2017	136.75	216.73	348.31	570.59	696.63	289.99	61.31	0.976	0.226
11/30/2017	145.97	230.71	354.2	574.97	703.55	300.62	61.25	0.931	0.232