

TORC OIL & GAS LTD.

EAST MANSON UNIT #6

ENHANCED OIL RECOVERY (EOR) ANNUAL REPORT

Discussion:

East Manson Unit #6 (EMU #6) is the most nascent of TORC's floods in the Manson area, with conversion of the 02/01-28 wellbore taking place in September 2016. Similarly to other flooded units, response was substantial and marked, with over 80 bopd of incremental production being credited to the water that is currently being injected at this takepoint. Immediate offsets at 01-28 and 08-28 have increased by ~30 bopd between the 2 wells, and additional support through the heel of the injection well is being realized in the 02-29 well located in EMU#1, with 50 bopd of incremental volume being captured there.

The 02/01-28 injection well is currently putting away ~300 bpd @ ~580 psi rates which are encouraging, as preliminary appraisal of this section suggested that the reservoir did not have the storage capacity or conductivity of the offsetting units EMU#1 / EMU #3. This patterns performance has encouraged TORC to replicate the realized success by extending the established pattern to the south and into the north half of Section 21 in EMU #3. Additional opportunities are perceived to exist to the north, but will require new wells to be drilled. Further development of this section is anticipated after additional appraisal has been conducted in EMU #3.

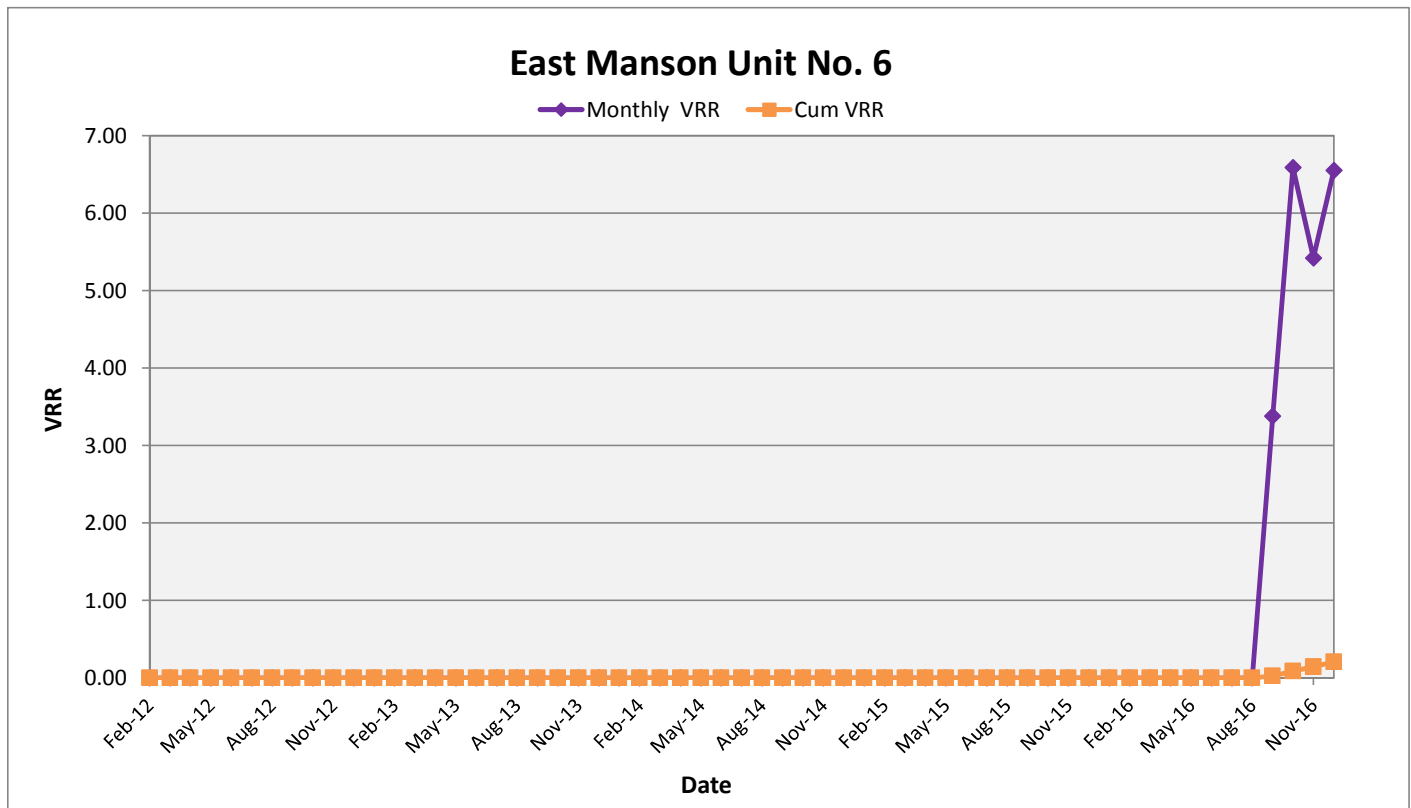
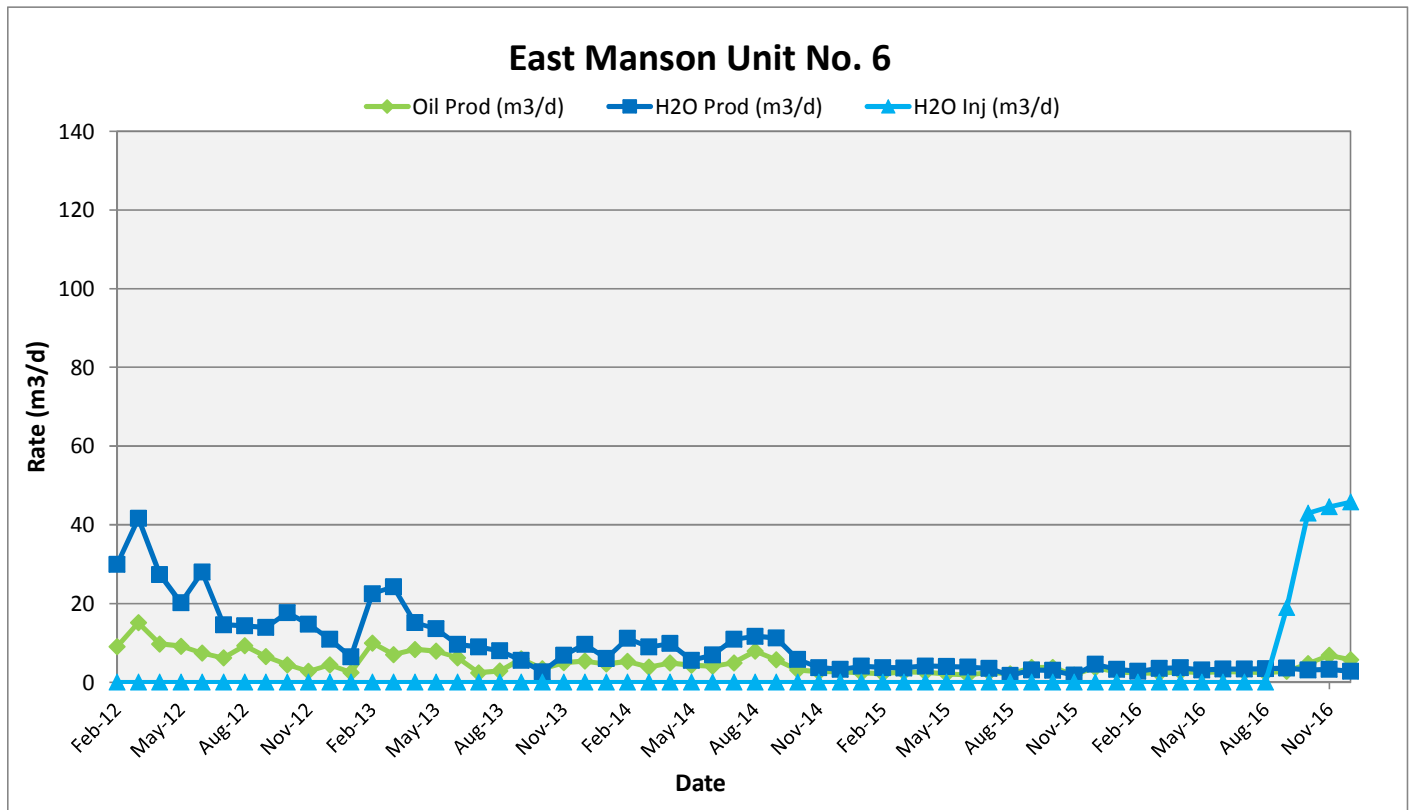
No workovers of note were completed in this unit aside from the conversion itself which was executed as per program with no deviation.

This unit is also fed by TORCs central battery at 13-29-13-28W1 and possesses the same chemical programs that are in place in our other units. Iron sulfide control is applied at the battery, and through rigorous bi-weekly sampling of our fluid has indicated that our tanks have not accumulated concentrations of FeS.

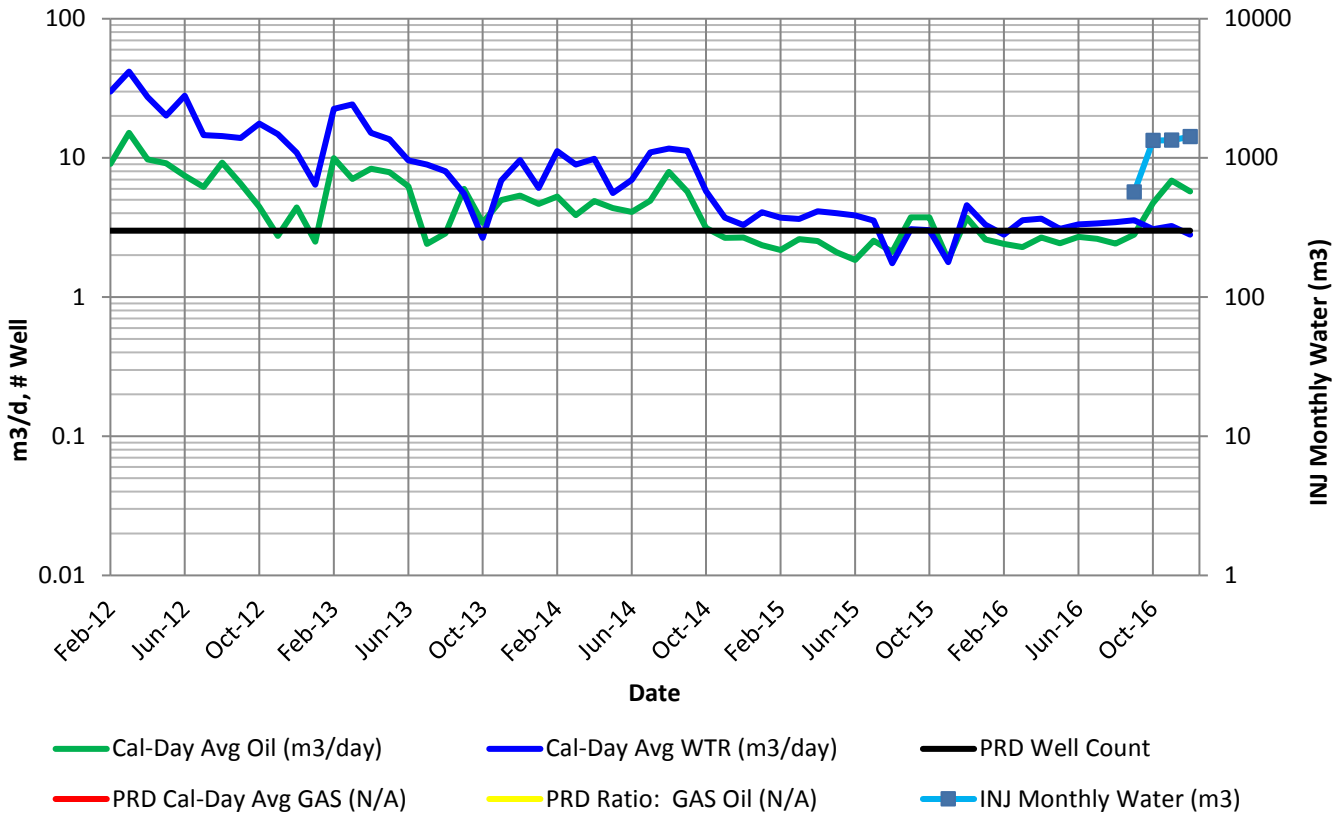
Operationally, the focus on EMU#6 for TORC in 2017 will be continued surveillance and voidage replacement which will be enhanced by work that has been conducted to enhance compatibility with Mannville source water to be utilized in our expanding flood.

East Manson Unit No. 6 (Section 28-013-28W1) - VRR Table																										
Month	Days	Monthly Oil Prod	Monthly Oil Prod	Monthly Gas Prod	Monthly H2O Prod	Monthly H2O Prod	Monthly H2O Inj	Monthly H2O Inj	Oil Prod	Gas Prod	H2O Prod	H2O Inj	Cum Oil	Cum Oil	Cum Gas	Cum H2O	Cum H2O Inj	Prod Well Count	GOR	H2OCut	Voidage	Monthly VRR	Cum GOR	H2OCut	Cum Void	Cum VRR
		(bbl)	(m3)	(E3m3)	(bbl)	(m3)	(bbl)	(m3)	(m3/d)	(E3m3/d)	(m3/d)	(m3/d)	(bbl)	(m3)	(E3m3)	(m3)	(m3)		(m3/m3)	%	(rm3/d)		(m3/m3)	%	(rm3)	
Feb-12	28	1,593	253.3	0	5,280	839.4	0	0	9	0	30	0	1,593	253	0	839	0	3	0	76.8%	37	0.00	0.0	76.8%	1028.6	0.000
Mar-12	31	2,953	469.4	0	8,130	1,292.5	0	0	15	0	42	0	4,546	723	0	2132	0	3	0	73.4%	53	0.00	0.0	74.7%	2670.3	0.000
Apr-12	30	1,837	292.0	0	5,168	821.6	0	0	10	0	27	0	6,383	1015	0	2953	0	3	0	73.8%	35	0.00	0.0	74.4%	3709.3	0.000
May-12	31	1,788	284.3	0	3,937	626.0	0	0	9	0	20	0	8,171	1299	0	3579	0	3	0	68.8%	27	0.00	0.0	73.4%	4546.0	0.000
Jun-12	30	1,406	223.6	0	5,277	839.0	0	0	7	0	28	0	9,578	1523	0	4418	0	3	0	79.0%	34	0.00	0.0	74.4%	5552.5	0.000
Jul-12	31	1,206	191.8	0	2,851	453.2	0	0	6	0	15	0	10,784	1714	0	4872	0	3	0	70.3%	19	0.00	0.0	74.0%	6148.0	0.000
Aug-12	31	1,805	286.9	0	2,795	444.4	0	0	9	0	14	0	12,589	2001	0	5316	0	3	0	60.8%	21	0.00	0.0	72.6%	6804.1	0.000
Sep-12	30	1,232	195.9	0	2,625	417.4	0	0	7	0	14	0	13,821	2197	0	5733	0	3	0	68.1%	19	0.00	0.0	72.3%	7366.6	0.000
Oct-12	31	868	138.0	0	3,448	548.2	0	0	4	0	18	0	14,689	2335	0	6282	0	3	0	79.9%	21	0.00	0.0	72.9%	8018.4	0.000
Nov-12	30	520	82.7	0	2,790	443.5	0	0	3	0	15	0	15,209	2418	0	6725	0	3	0	84.3%	17	0.00	0.0	73.6%	8524.5	0.000
Dec-12	31	857	136.3	0	2,126	338.0	0	0	4	0	11	0	16,066	2554	0	7063	0	3	0	71.3%	14	0.00	0.0	73.4%	8963.7	0.000
Jan-13	31	488	77.6	0	1,254	199.3	0	0	3	0	6	0	16,555	2632	0	7262	0	3	0	72.0%	8	0.00	0.0	73.4%	9220.7	0.000
Feb-13	28	1,758	279.5	0	3,963	630.1	0	0	10	0	23	0	18,313	2911	0	7892	0	3	0	69.3%	30	0.00	0.0	73.1%	10058.0	0.000
Mar-13	31	1,375	218.6	0	4,730	752.0	0	0	7	0	24	0	19,688	3130	0	8645	0	3	0	77.5%	30	0.00	0.0	73.4%	10973.5	0.000
Apr-13	30	1,577	250.7	0	2,854	453.8	0	0	8	0	15	0	21,265	3381	0	9098	0	3	0	64.4%	21	0.00	0.0	72.9%	11612.6	0.000
May-13	31	1,539	244.6	0	2,654	422.0	0	0	8	0	14	0	22,803	3625	0	9520	0	3	0	63.3%	19	0.00	0.0	72.4%	12215.3	0.000
Jun-13	30	1,178	187.3	0	1,814	288.3	0	0	6	0	10	0	23,982	3813	0	9809	0	3	0	60.6%	14	0.00	0.0	72.0%	12641.8	0.000
Jul-13	31	471	74.8	0	1,746	277.5	0	0	2	0	9	0	24,452	3887	0	10086	0	3	0	78.8%	11	0.00	0.0	72.2%	12975.4	0.000
Aug-13	31	559	88.9	0	1,559	247.9	0	0	3	0	8	0	25,012	3976	0	10334	0	3	0	73.6%	10	0.00	0.0	72.2%	13289.5	0.000
Sep-13	30	1,128	179.4	0	1,041	165.6	0	0	6	0	6	0	26,140	4156	0	10500	0	3	0	48.0%	10	0.00	0.0	71.6%	13586.8	0.000
Oct-13	31	668	106.1	0	519	82.4	0	0	3	0	3	0	26,808	4262	0	10582	0	3	0	43.7%	5	0.00	0.0	71.3%	13747.2	0.000
Nov-13	30	940	149.4	0	1,297	206.2	0	0	5	0	7	0	27,747	4411	0	10788	0	3	0	58.0%	11	0.00	0.0	71.0%	14063.5	0.000
Dec-13	31	1,046	166.3	0	1,878	298.5	0	0	5	0	10	0	28,793	4578	0	11087	0	3	0	64.2%	14	0.00	0.0	70.8%	14484.9	0.000
Jan-14	31	911	144.8	0	1,186	188.6	0	0	5	0	6	0	29,704	4722	0	11275	0	3	0	56.6%	10	0.00	0.0	70.5%	14780.1	0.000
Feb-14	28	931	148.0	0	1,971	313.3	0	0	5	0	11	0	30,634	4870	0	11589	0	3	0	67.9%	15	0.00	0.0	70.4%	15203.1	0.000
Mar-14	31	756	120.3	0	1,743	277.0	0	0	4	0	9	0	31,391	4991	0	11866	0	3	0	69.7%	12	0.00	0.0	70.4%	15569.3	0.000
Apr-14	30	924	146.9	0	1,858	295.3	0	0	5	0	10	0	32,315	5137	0	12161	0	3	0	66.8%	13	0.00	0.0	70.3%	15973.4	0.000
May-14	31	850	135.2	0	1,090	173.3	0	0	4	0	6	0	33,165	5273	0	12334	0	3	0	56.2%	9	0.00	0.0	70.1%	16246.2	0.000
Jun-14	30	774	123.1	0	1,311	208.5	0	0	4	0	7	0	33,939	5396	0	12543	0	3	0	62.9%	10	0.00	0.0	69.9%	16545.6	0.000
Jul-14	31	963	153.1	0	2,135	339.5	0	0	5	0	11	0	34,902	5549	0	12882	0	3	0	68.9%	15	0.00	0.0	69.9%	16998.5	0.000
Aug-14	31	1,544	245.5	0	2,279	362.3	0	0	8	0	12	0	36,446	5794	0	13245	0	3	0	59.6%	18	0.00	0.0	69.6%	17541.8	0.000
Sep-14	30	1,079	171.5	0	2,123	337.5	0	0	6	0	11	0	37,524	5966	0	13582	0	3	0	66.3%	15	0.00	0.0	69.5%	18006.2	0.000
Oct-14	31	612	97.2	0	1,126	179.1	0	0	3	0	6	0	38,136	6063	0	13761	0	3	0	64.8%	8	0.00	0.0	69.4%	18257.1	0.000
Nov-14	30	503	80.0	0	701	111.5	0	0	3	0	4	0	38,639	6143	0	13873	0	3	0	58.2%	6	0.00	0.0	69.3%	18427.6	0.000
Dec-14	31	521	82.8	0	642	102.0	0	0	3	0	3	0	39,161	6226	0	13975	0	3	0	55.2%	5	0.00	0.0	69.2%	18590.6	0.000
Jan-15	31	461	73.2	0	793	126.1	0	0	2	0	4	0	39,621	6299	0	14101	0	3	0	63.3%	6	0.00	0.0	69.1%	18770.8	0.000
Feb-15	28	384	61.1	0	654	104.0	0	0	2	0	4	0	40,006	6360	0	14205	0	3	0	63.0%	5	0.00	0.0	69.1%	18920.0	0.000
Mar-15	31	510	81.0	0	709	112.8	0	0	3	0	4	0	40,515	6441	0	14318	0	3	0	58.2%	6	0.00	0.0	69.0%	19092.5	0.000
Apr-15	30	476	75.6	0	778	123.8	0	0	3	0	4	0	40,991	6517	0	14441	0	3	0	62.1%	6	0.00	0.0	68.9%	19272.1	0.000
May-15	31	410	65.2	0	781	124.2	0	0	2	0	4	0	41,401	6582	0	14565	0	3	0	65.6%	6	0.00	0.0	68.9%	19444.5	0.000
Jun-15	30	349	55.4	0	728	115.7	0	0	2	0	4	0	41,750	6638	0	14681	0	3	0	67.6%	5	0.00	0.0	68.9%	19601.2	0.000
Jul-15	31	497	79.0	0	691	109.9	0	0	3	0	4	0	42,247	6716	0	14791	0	3	0	58.2%	5	0.00	0.0	68.8%	19769.3	0.000
Aug-15	31	412	65.4	0	341	54.3	0	0	2	0	2	0	42,658	6782	0	14845	0	3	0	45.3%	3	0.00	0.0	68.6%	19871.6	0.000
Sep-15	30	704	112.0	0	582	92.5	0	0	4	0	3	0	43,363	6894	0	14938	0	3	0	45.2%	6	0.00	0.0	68.4%	20046.3	0.000
Oct-15	31	730	116.1	0	589	93.7	0	0	4	0	3	0	44,093	7010	0	15031	0	3	0	44.7%	6	0.00	0.0	68.2%	20225.2	0.000
Nov-15	30	350	55.6	0	337	53.6	0	0	2	0	2	0	44,443	7066	0	15085	0	3	0	49.1%	3	0.00	0.0	68.1%	20319.6	0.000
Dec-15	31	724	115.1	0	893	142.0	0	0	4	0	5	0	45,167	7181	0	15227	0	3	0	55.2%	7	0.00	0.0	68.0%	20546.3	0.000
Jan-16	31	505	80.3	0	647	102.8	0	0	3	0	3	0	45,672	7261	0	15330	0	3	0	56.2%	5	0.00	0.0	67.9%	20708.3	0.000
Feb-16	28	424	67.3	0	495	78.7	0	0	2	0	3	0	46,095	7328	0	15408	0	3	0	53.9%	5	0.00	0.0	67.8%	20836.5	0.000
Mar-16	31	446	70.9	0	694	110.4	0	0	2	0	4	0	46,541	7399	0	15519	0	3	0	60.9%	5	0.00	0.0	67.7%	20999.2	0.000
Apr-16	30	506	80.4	0	690	109.7	0	0	3	0	4	0	47,047	7480	0	15629	0	3	0	57.7%	6	0.00	0.0	67.6%	21168.1	0.000
May-16	31	475	75.5	0	604	96.0	0	0	2	0	3	0	47,522	7555	0	15725	0	3	0	56.0%	5	0.00	0.0	67.5%	21319.7	0.000
Jun-16	30	510	81.1	0	629	100.1	0	0	3	0	3	0	48,032	7636	0	15825	0	3	0	55.2%	5	0.00	0.0	67.5%	21479.5	0.000
Jul-16	31	512	81.4	0	659	104.8	0	0	3	0	3	0	48,544	7718	0	15929	0	3	0	56.3%	5	0.00	0.0	67.4%		

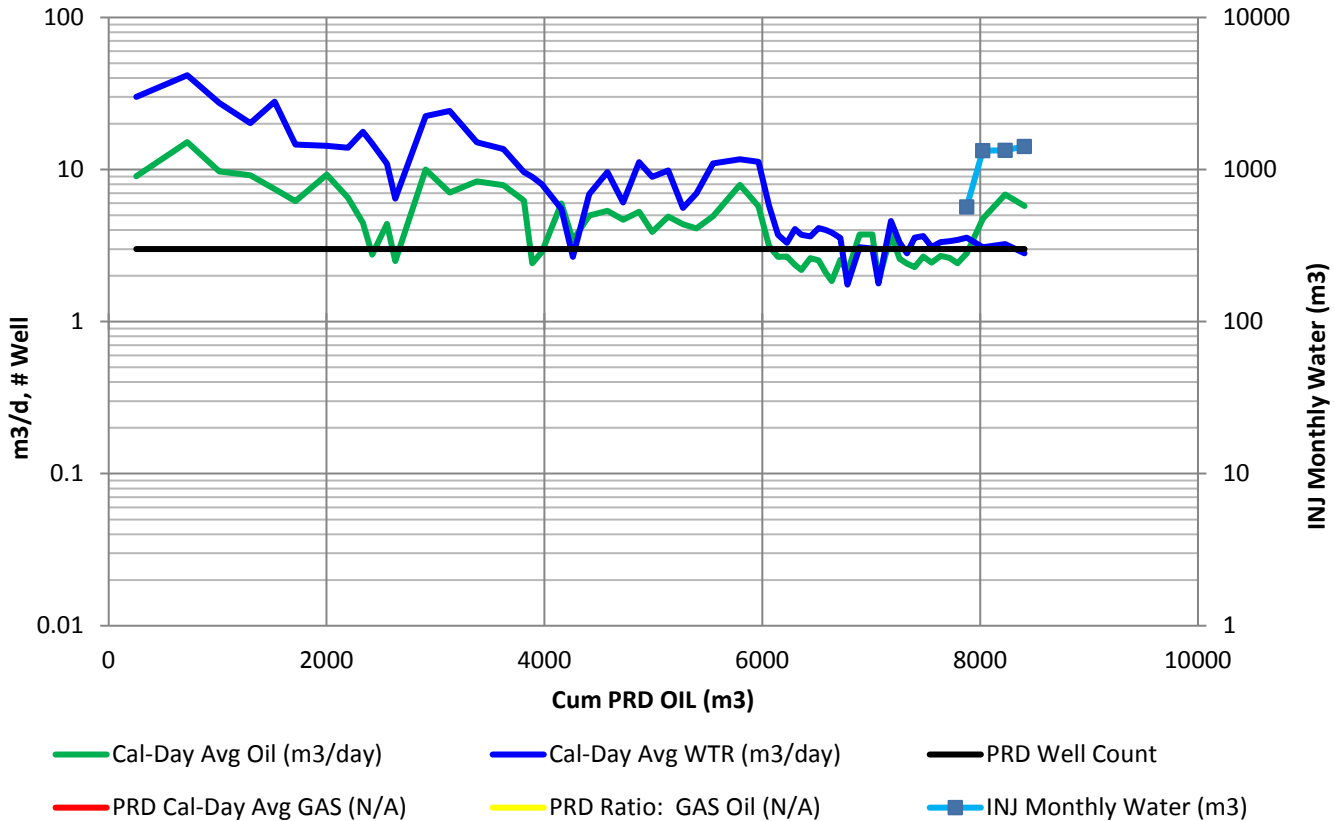
	Date	Oil Prod (m3/d)	Gas Prod (e3m3/d)	H2O Prod (m3/d)	H2O Inj (m3/d)	Monthly VRR	Cum VRR	Cum PRD Oil (m3)	Cum PRD Gas (e3m3)	Cum PRD Water (m3)	Cum INJ Water (m3)
EMU No.6	Dec-2016	6	-	3	46	6.55	0.207	8,408	-	16,423	4,656



East Manson Unit No. 6 - Rate Time



East Manson Unit No. 6 - Rate Cum



East Manson Unit No. 6 - Injection Parameters

Month	Oil Rate (m3/d)	Gas Rate (e3m3/d)	Water Rate (m3/d)	Water Inj Rate (m3/d)	Water Inj Press (psi)	Cum Oil (m3)	Cum Gas (e3m3)	Cum Water (m3)	Cum Inj Water (m3)	GOR (m3/m3)	WOR (m3/m3)
Jan-16	2.6	0.0	3.3	0.0		7,261	0.0	15,330	0.0	0	1.28
Feb-16	2.4	0.0	2.8	0.0		7,328	0.0	15,408	0.0	0	1.17
Mar-16	2.3	0.0	3.6	0.0		7,399	0.0	15,519	0.0	0	1.56
Apr-16	2.7	0.0	3.7	0.0		7,480	0.0	15,629	0.0	0	1.36
May-16	2.4	0.0	3.1	0.0		7,555	0.0	15,725	0.0	0	1.27
Jun-16	2.7	0.0	3.3	0.0		7,636	0.0	15,825	0.0	0	1.23
Jul-16	2.6	0.0	3.4	0.0		7,718	0.0	15,929	0.0	0	1.29
Aug-16	2.4	0.0	3.5	0.0		7,793	0.0	16,036	0.0	0	1.43
Sep-16	2.8	0.0	3.6	19.0		7,877	0.0	16,143	568.6	0	1.27
Oct-16	4.7	0.0	3.1	42.9		8,024	0.0	16,239	1899.5	0	0.65
Nov-16	6.9	0.0	3.2	44.6		8,229	0.0	16,336	3236.2	0	0.47
Dec-16	5.7	0.0	2.8	45.8		8,408	0.0	16,423	4655.8	0	0.49

02/01-28-013-28W1 Rate vs Pressure

