

February 18, 2011

Manitoba Innovation, Energy and Mines
Box 1359, 227 King Street West
Virden, Manitoba
R0M 2C0

Attention: Jennifer Abel, Chief Petroleum Engineer, Virden Office

RE: Annual Report – Enhanced Oil Recovery Project

As per section 73 of the Drilling and Production Regulations, ARC Resources Ltd. as operator of an Enhanced Oil Recovery (EOR) project, is submitting an annual report for the Waterflood project in the Goodlands area of Manitoba.

The injection wells within this waterflood, were originally drilled as Lower Amaranth producers. They were converted between 2002 and 2004 to water injectors to provide pressure support to the Lower Amaranth zone, while offsetting infill locations were drilled as new producers. The Lower Amaranth development was initially produced through vertical wells. More recently, there have been significant advancements to drilling and completion techniques in the area, leading to increased economic recovery through horizontal drilling and optimized completions. Vertical wells have had limited drainage due to the heterogeneity of the Lower Amaranth reservoir, therefore future development plans of the Lower Amaranth consist of these newer horizontal infill drilling and completion programs.

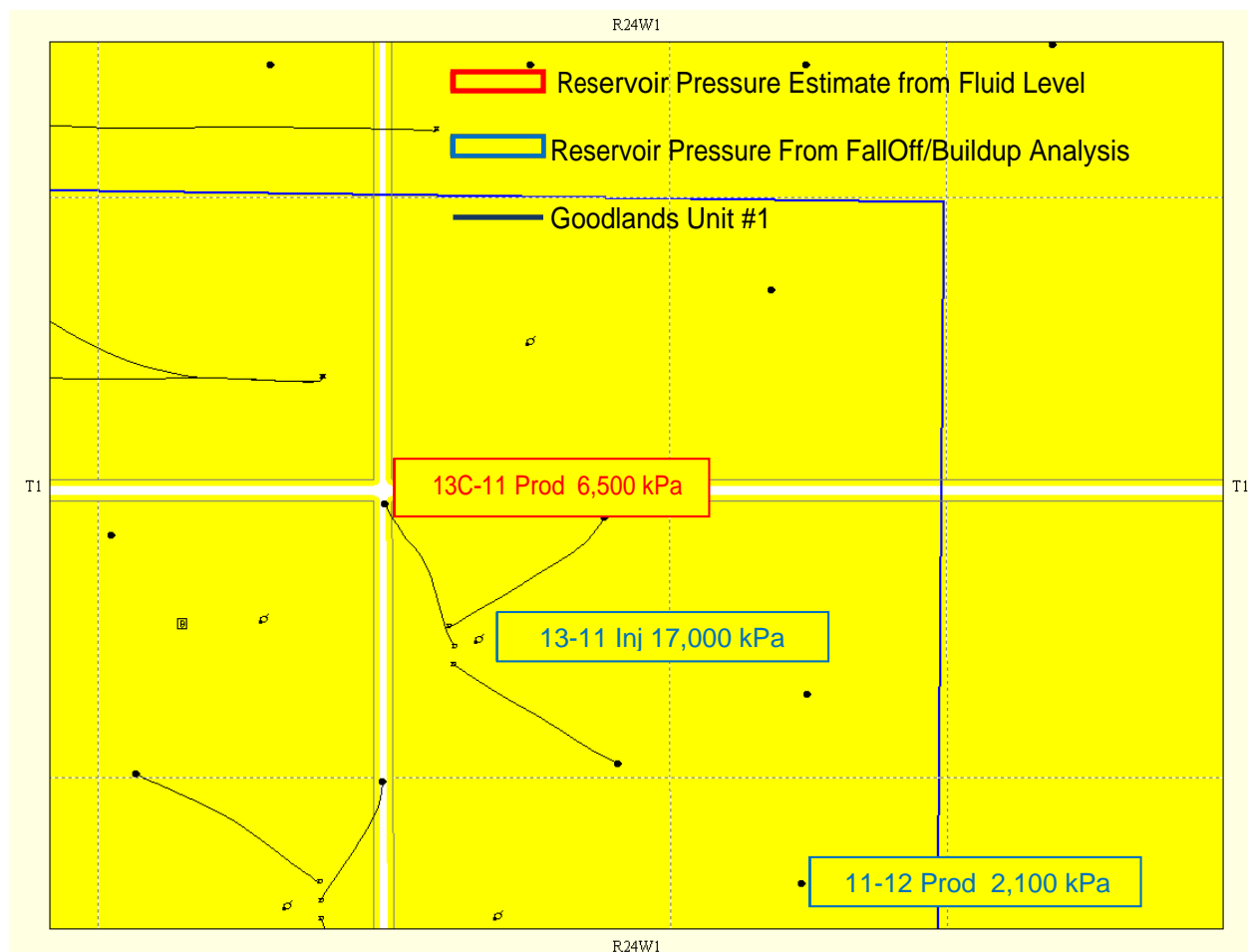
Please refer to the attached documents for information and data relating to the annual report for the Waterflood project in the Goodlands area of Manitoba.

Sincerely,

Alicia Kilmer, P.Eng.

In addition to the improved drilling and recovery techniques, recent pressure work in the area suggests that despite attempting secondary pressure support, the Lower Amaranth Member has seen limited energy support. This is in part due to the heterogeneous nature of the formation caused by the thin discontinuous lenses of reservoir quality throughout the area. Proof of this can be seen in Figure 1, which shows pressure data from fall-off and build-up testing and fluid level analysis.

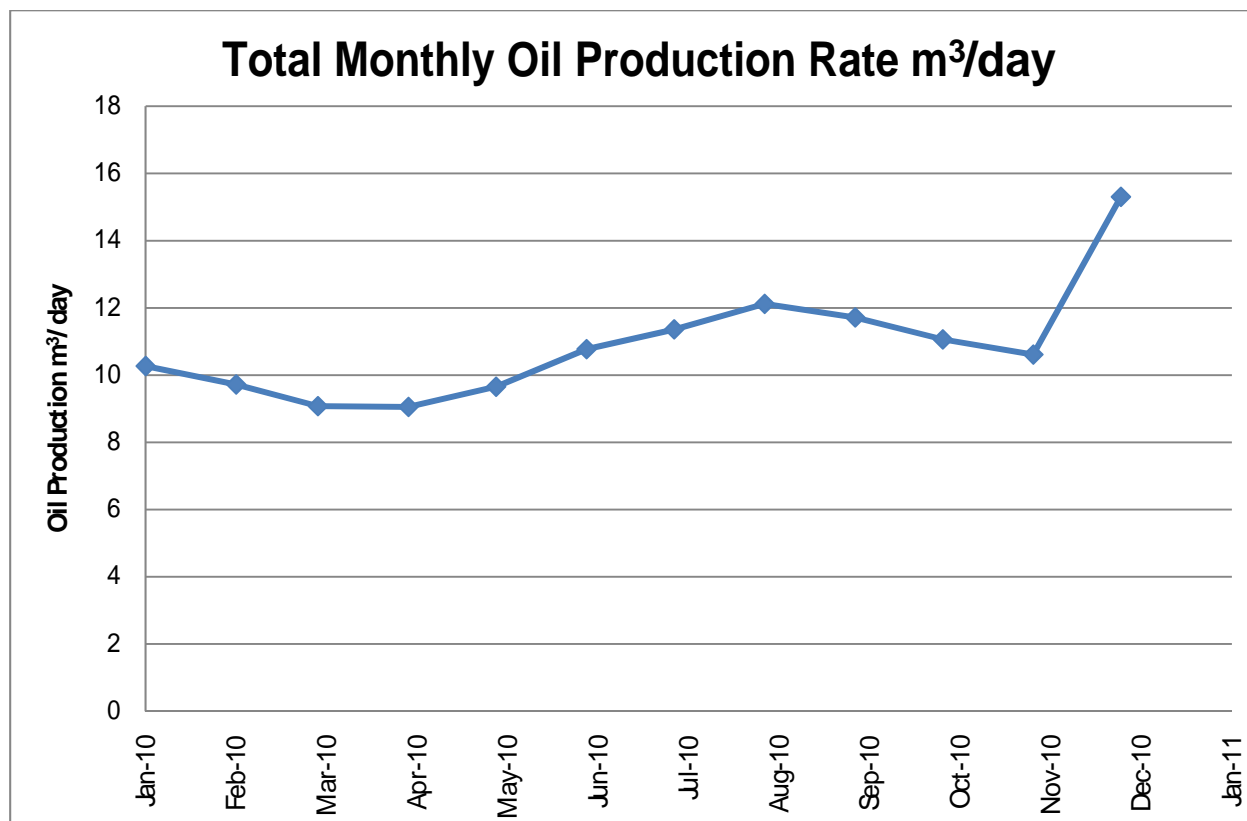
Figure 1: Area Pressure Test summary May-June 2009



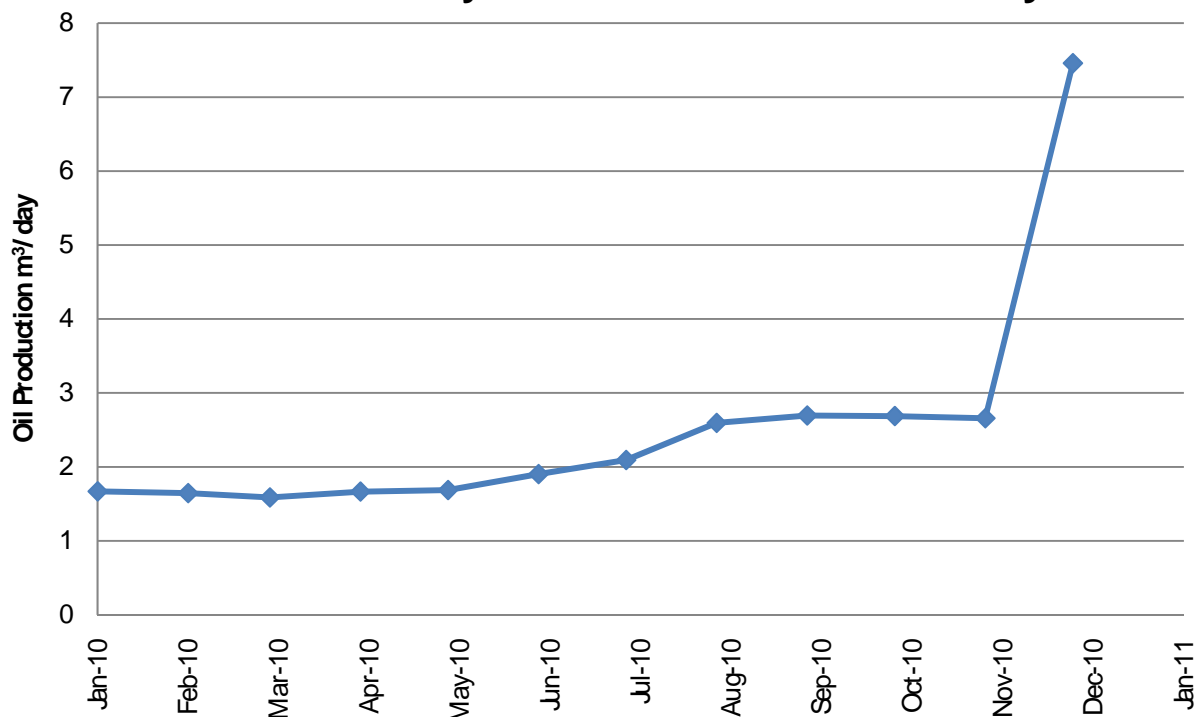
Comparing the pressures shown in Figure 1, it is obvious that the heterogeneity of the reservoir is preventing the injector 13-11 from providing good pressure support to the surrounding wells. This is noted from the wide variance in pressures in the immediate area. The idea of strong heterogeneity is also supported by the high reservoir pressure at the 13-11 injector, along with the -6.4 skin factor determined from the fall off test. The high pressure differential between 13C-11 and 13-11 indicates that the injected fluid does not effectively dissipate throughout the pattern. The large negative skin value supports the idea that water injection is limited by area permeability and not wellbore damage that may be caused by scale, wax or other reservoir damaging factors. It is believed that this issue exists throughout the unit and the entire Amaranth pool in this area.

A(i): Monthly Oil Production Rate

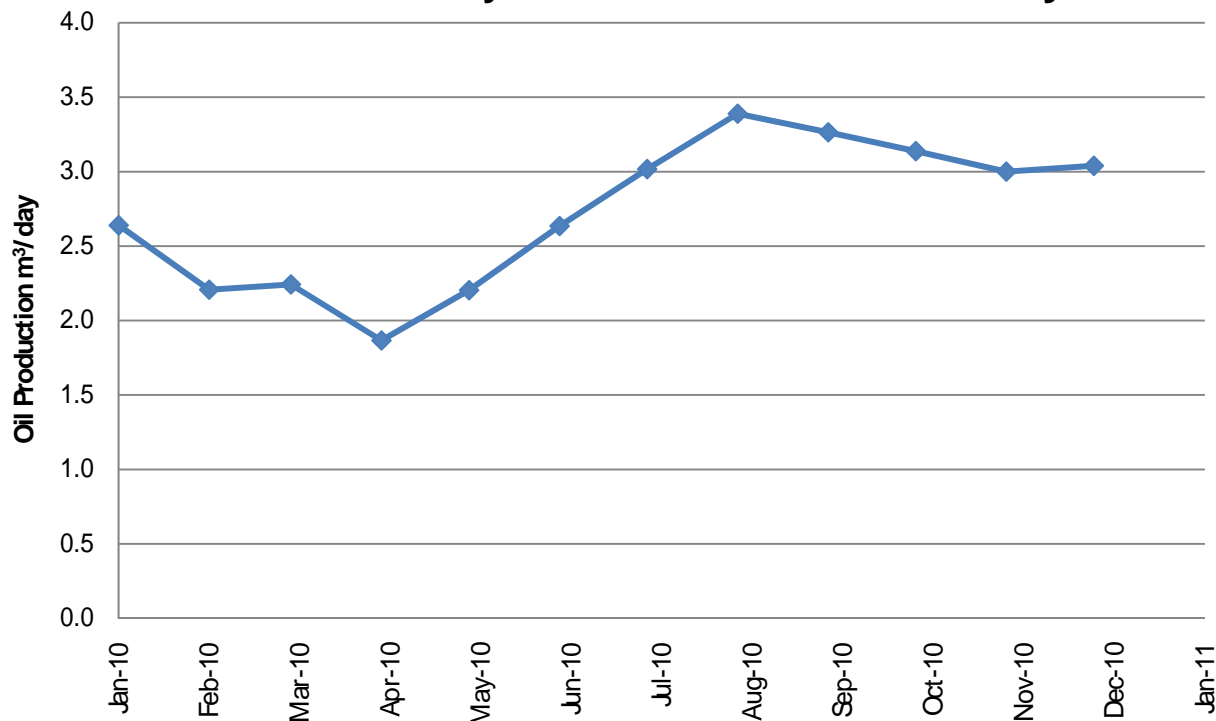
Monthly Oil Production Rate m ³ /day							
DATE	TOTAL	Pattern A	Pattern B	Pattern C	Pattern D	Pattern E	Pattern F
Jan-10	10.27	1.67	2.64	1.99	1.72	1.63	0.62
Feb-10	9.72	1.65	2.21	1.97	1.66	1.65	0.59
Mar-10	9.08	1.59	2.24	1.90	1.56	1.19	0.59
Apr-10	9.05	1.67	1.87	2.01	1.73	1.16	0.63
May-10	9.65	1.69	2.20	1.95	1.67	1.52	0.63
Jun-10	10.77	1.90	2.63	1.97	1.70	1.96	0.61
Jul-10	11.36	2.09	3.02	1.96	1.71	1.99	0.60
Aug-10	12.12	2.59	3.39	1.95	1.66	1.95	0.57
Sep-10	11.72	2.70	3.26	1.98	1.46	1.76	0.55
Oct-10	11.06	2.69	3.14	2.03	1.17	1.73	0.30
Nov-10	10.61	2.66	3.00	1.97	1.09	1.59	0.32
Dec-10	15.30	7.46	3.04	1.98	0.99	1.49	0.34



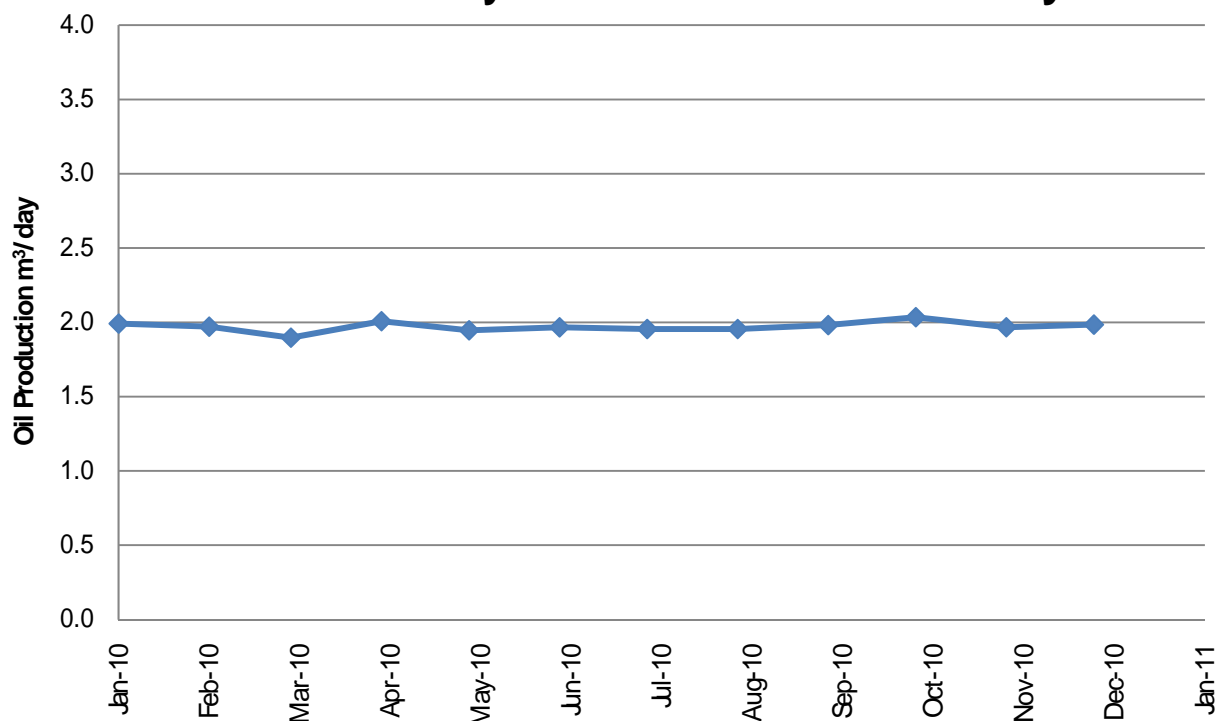
Pattern A Monthly Oil Production Rate m³/day



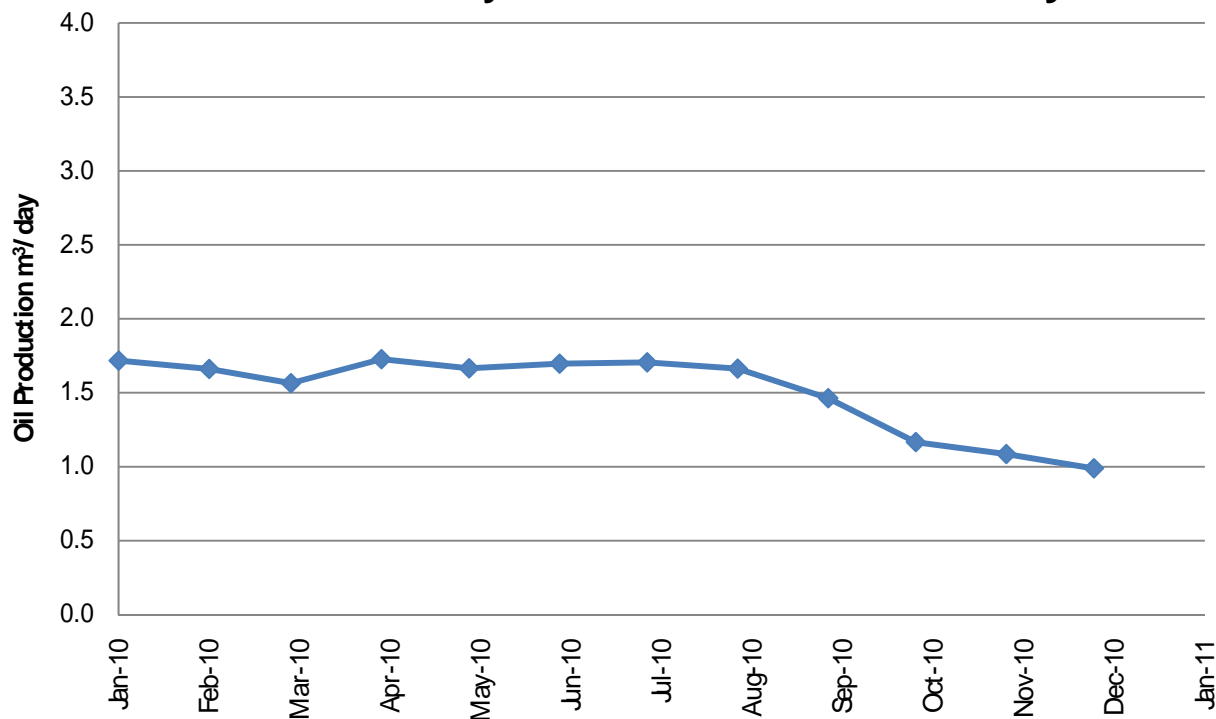
Pattern B Monthly Oil Production Rate m³/day



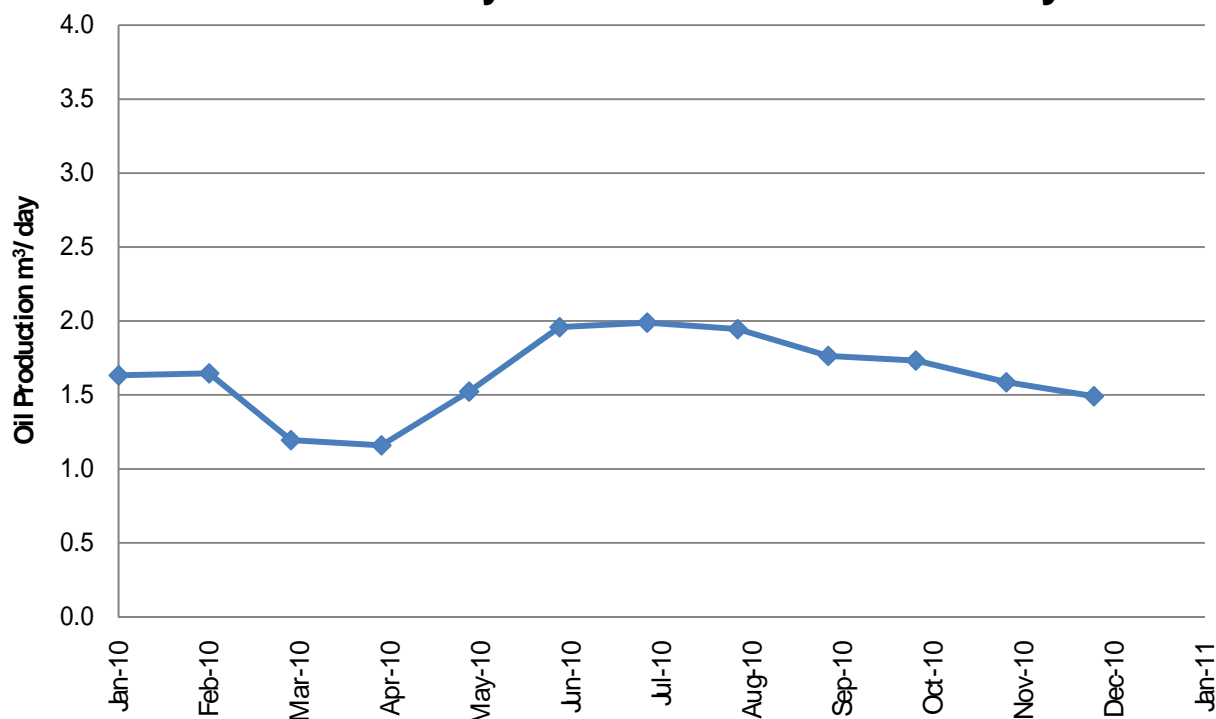
Pattern C Monthly Oil Production Rate m³/day



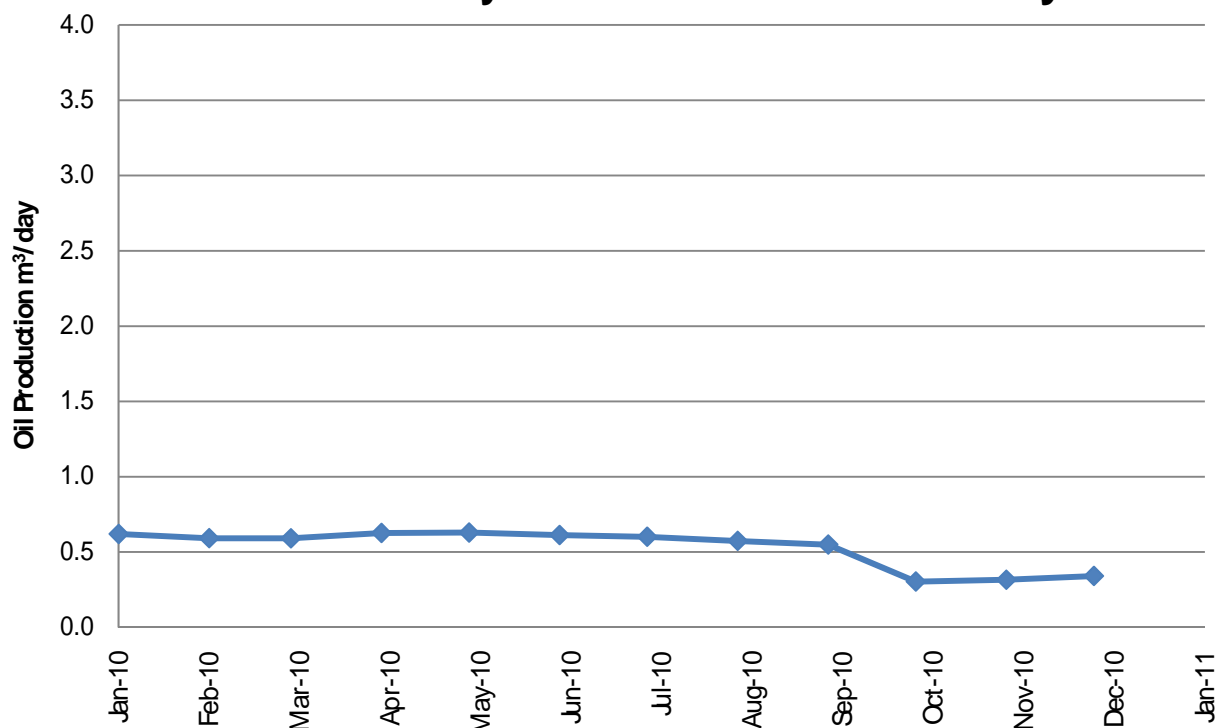
Pattern D Monthly Oil Production Rate m³/day



Pattern E Monthly Oil Production Rate m³/day

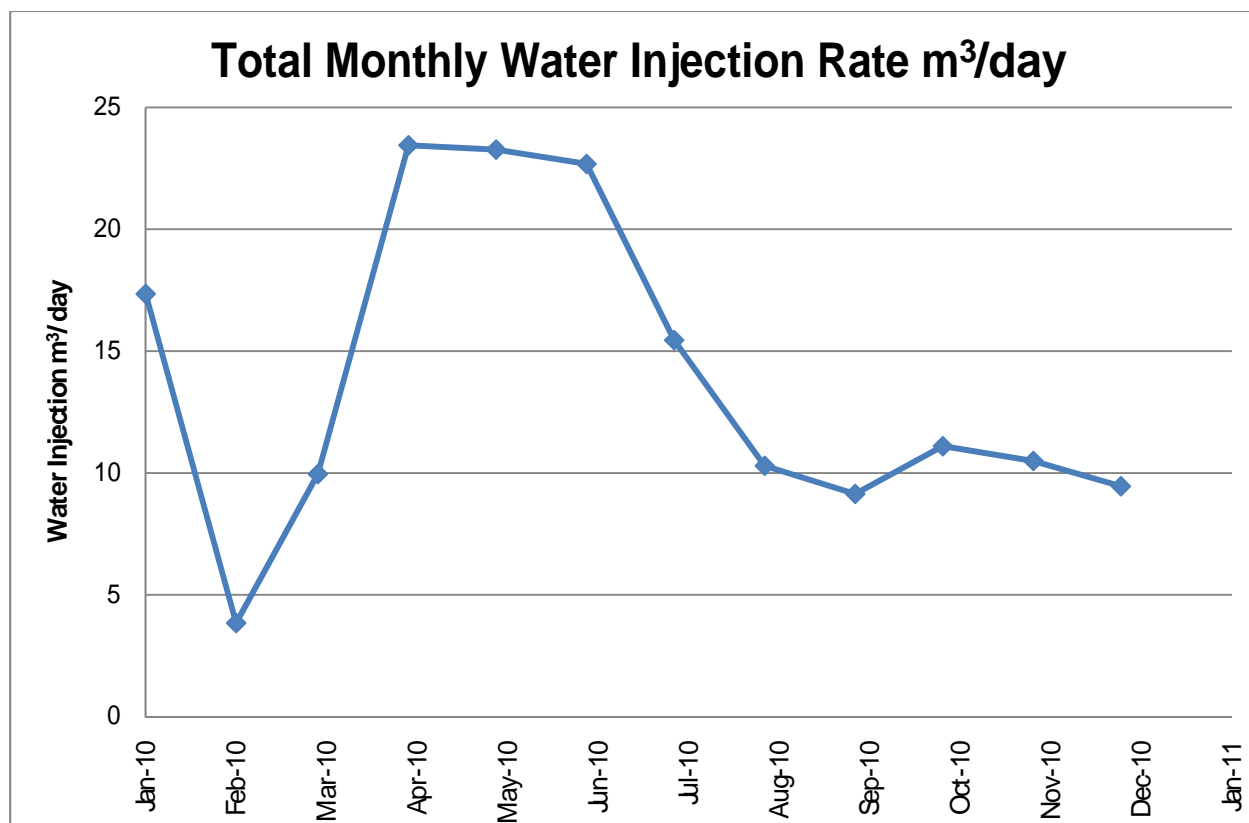


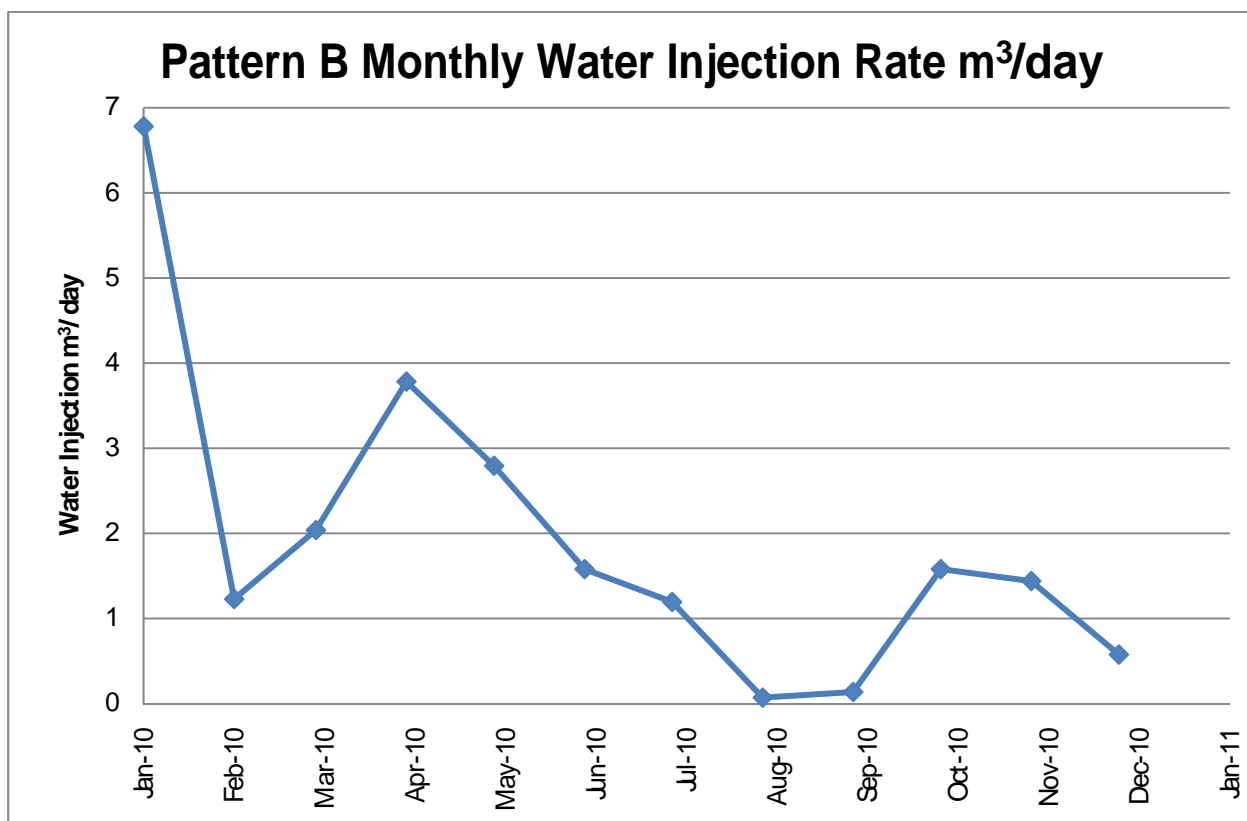
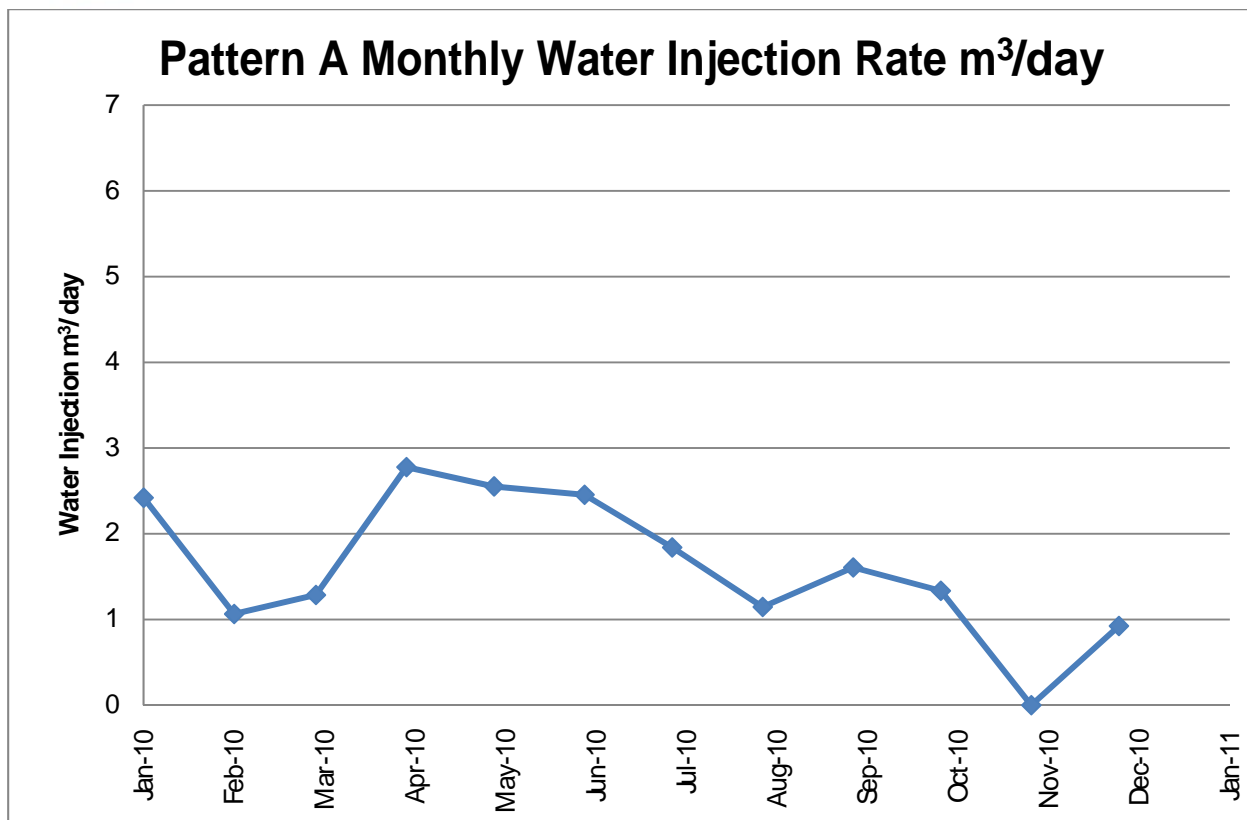
Pattern F Monthly Oil Production Rate m³/day

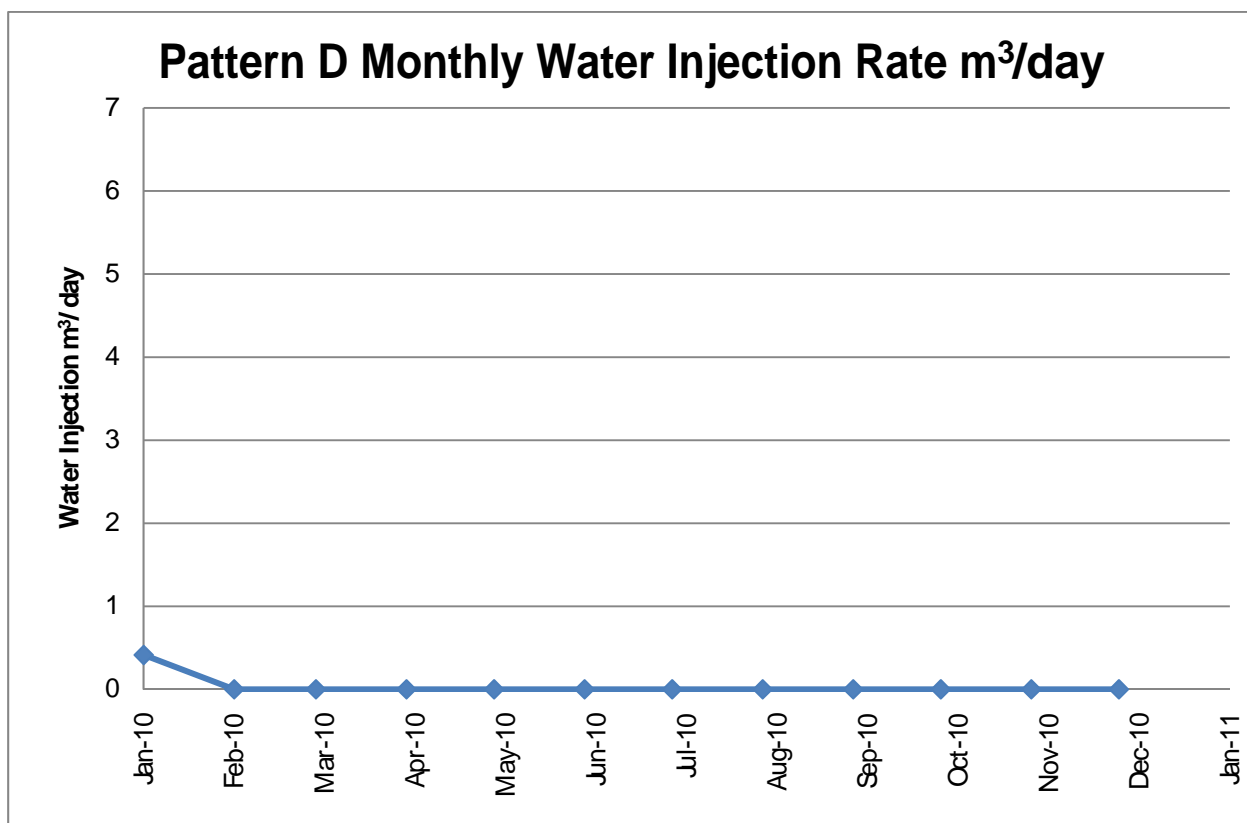
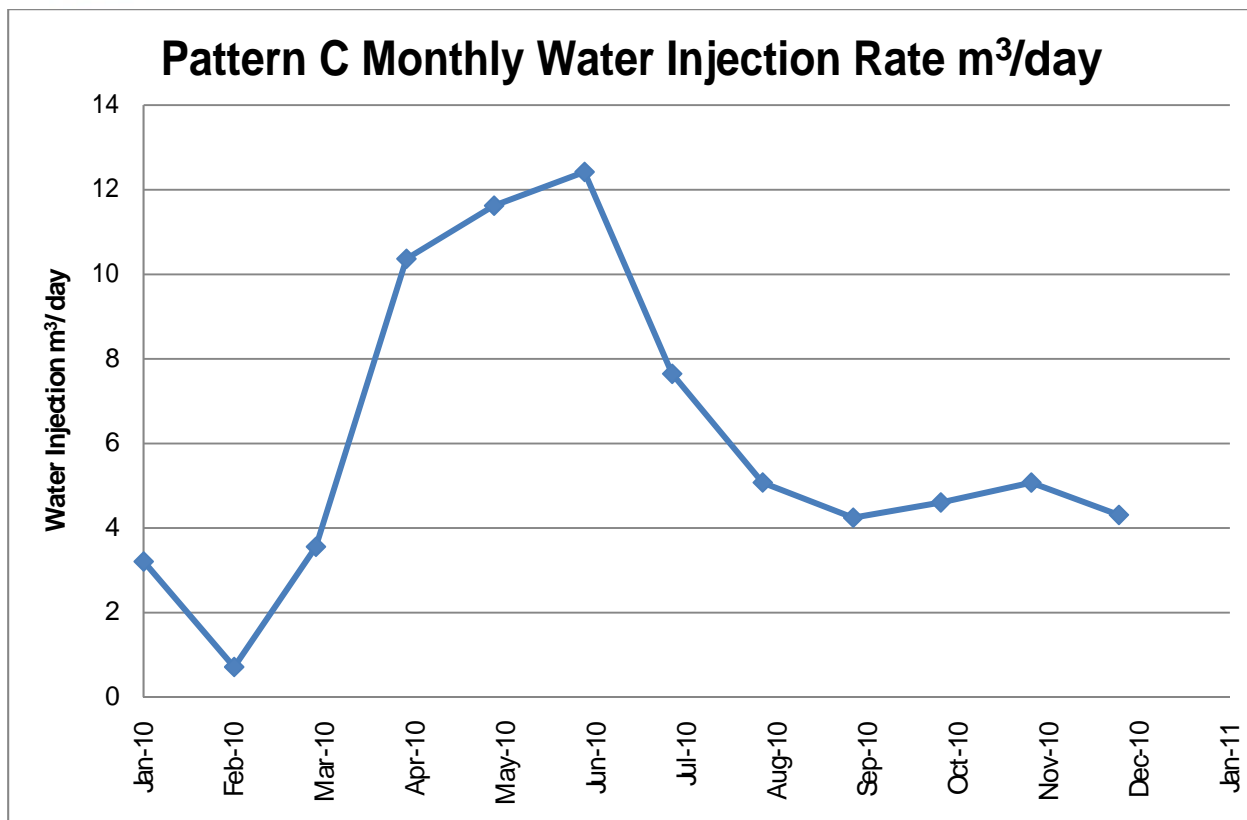


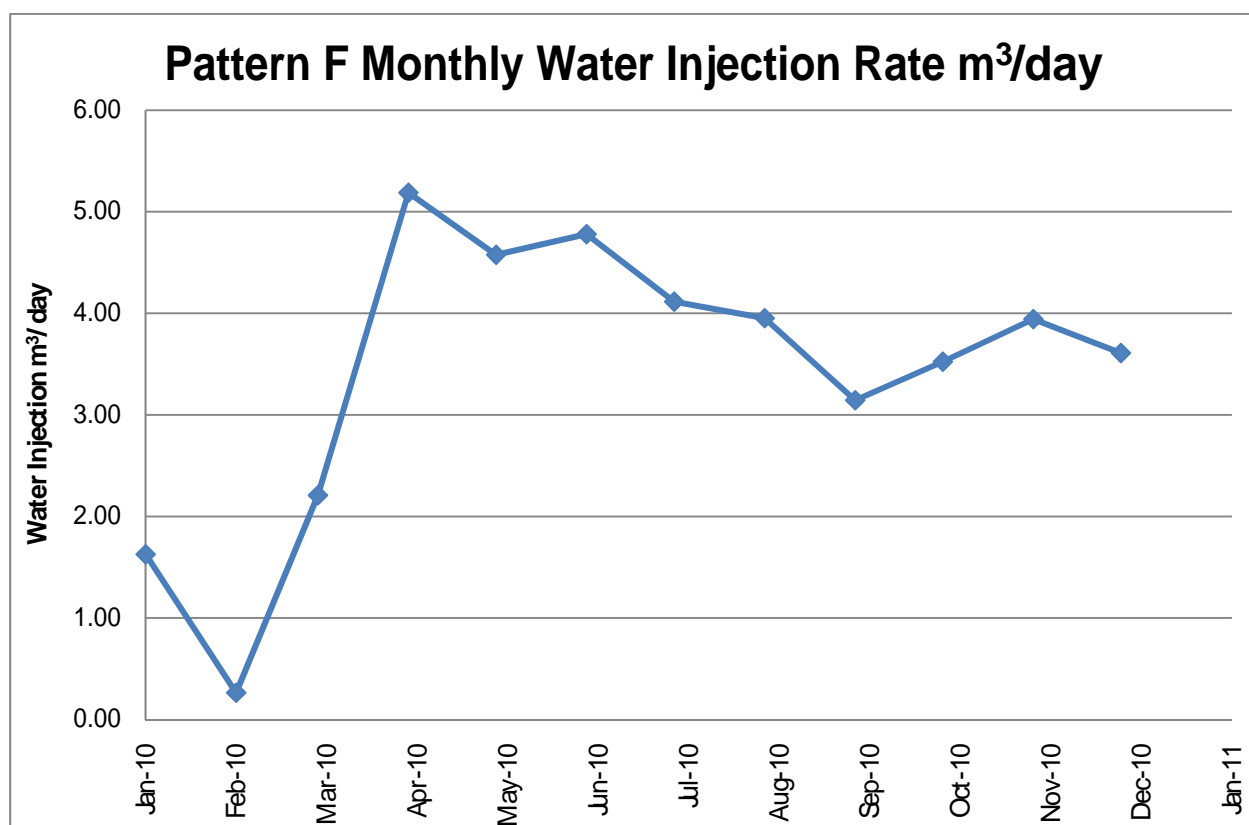
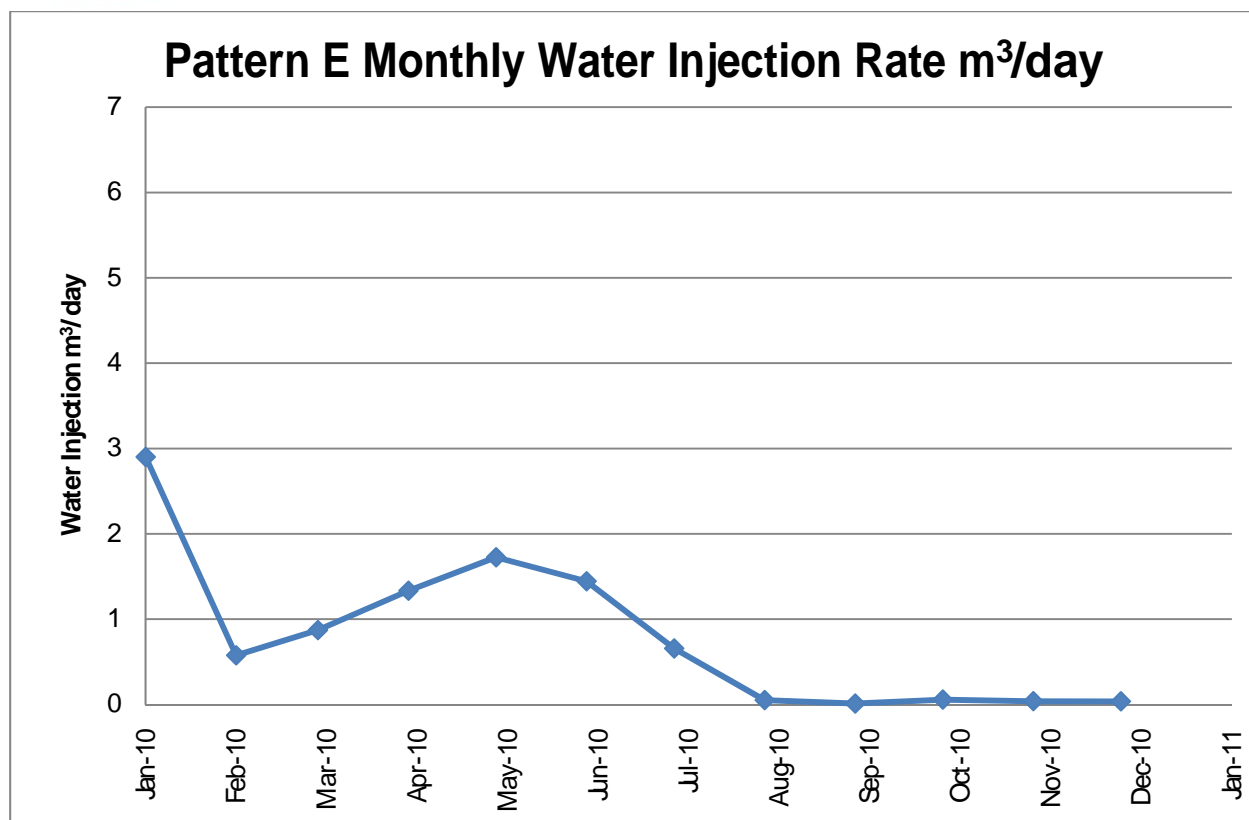
A(ii): Monthly Water Injection Rate

Monthly Water Injection Rate m ³ /day							
DATE	TOTAL	Pattern A	Pattern B	Pattern C	Pattern D	Pattern E	Pattern F
Jan-10	17.35	2.42	6.78	3.21	0.41	2.90	1.63
Feb-10	3.84	1.06	1.23	0.71	0.00	0.58	0.26
Mar-10	9.96	1.29	2.04	3.56	0.00	0.87	2.21
Apr-10	23.45	2.78	3.78	10.37	0.00	1.33	5.19
May-10	23.27	2.55	2.79	11.62	0.00	1.73	4.58
Jun-10	22.68	2.45	1.58	12.42	0.00	1.44	4.78
Jul-10	15.45	1.84	1.19	7.65	0.00	0.66	4.11
Aug-10	10.30	1.15	0.07	5.07	0.00	0.05	3.95
Sep-10	9.14	1.61	0.14	4.24	0.00	0.01	3.14
Oct-10	11.10	1.33	1.58	4.60	0.00	0.06	3.52
Nov-10	10.50	0.00	1.44	5.07	0.00	0.04	3.94
Dec-10	9.46	0.92	0.58	4.31	0.00	0.04	3.61



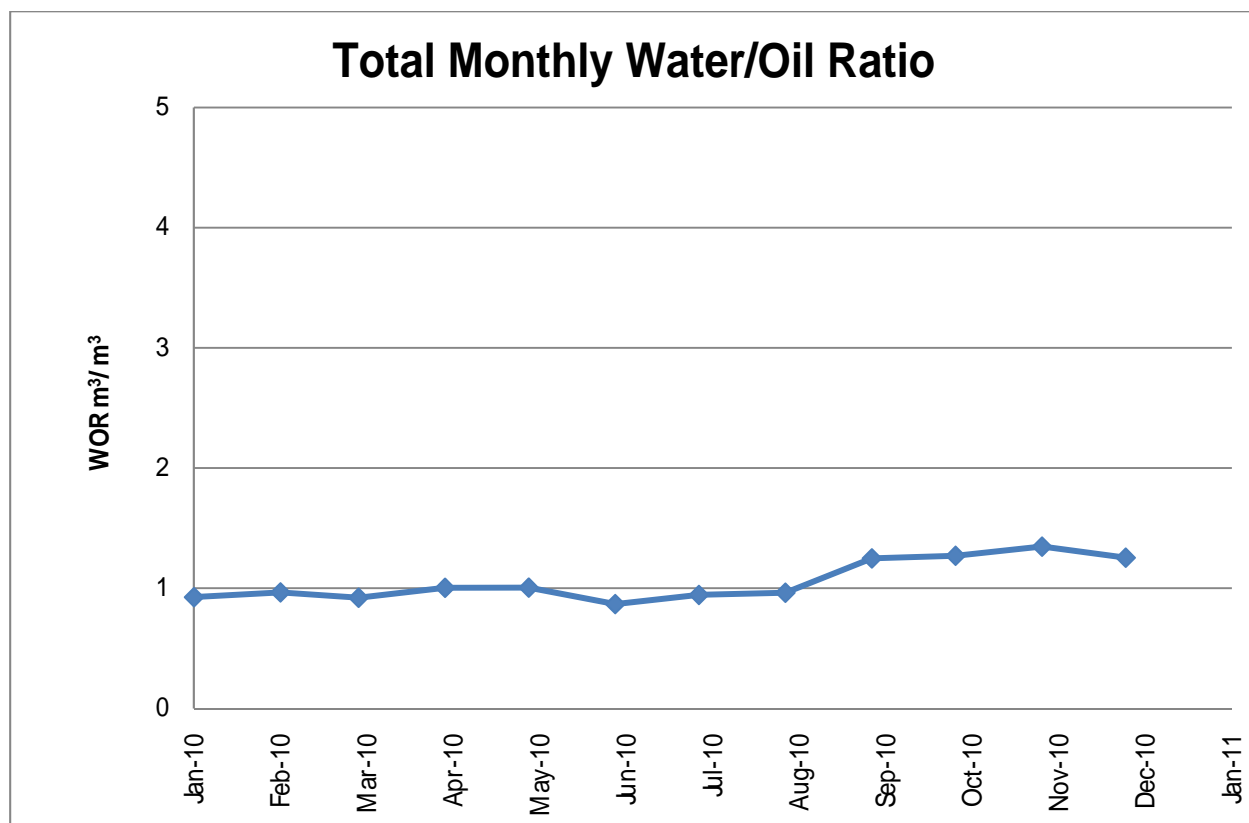


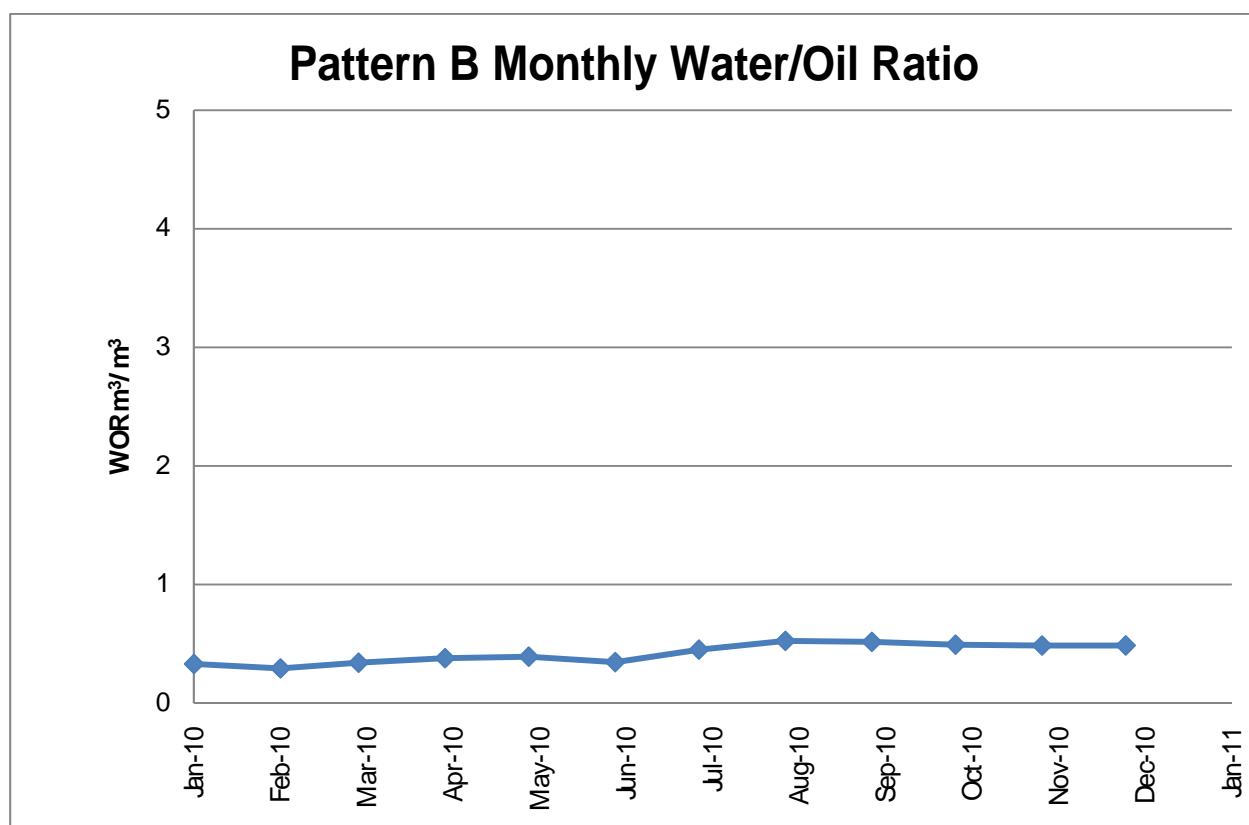
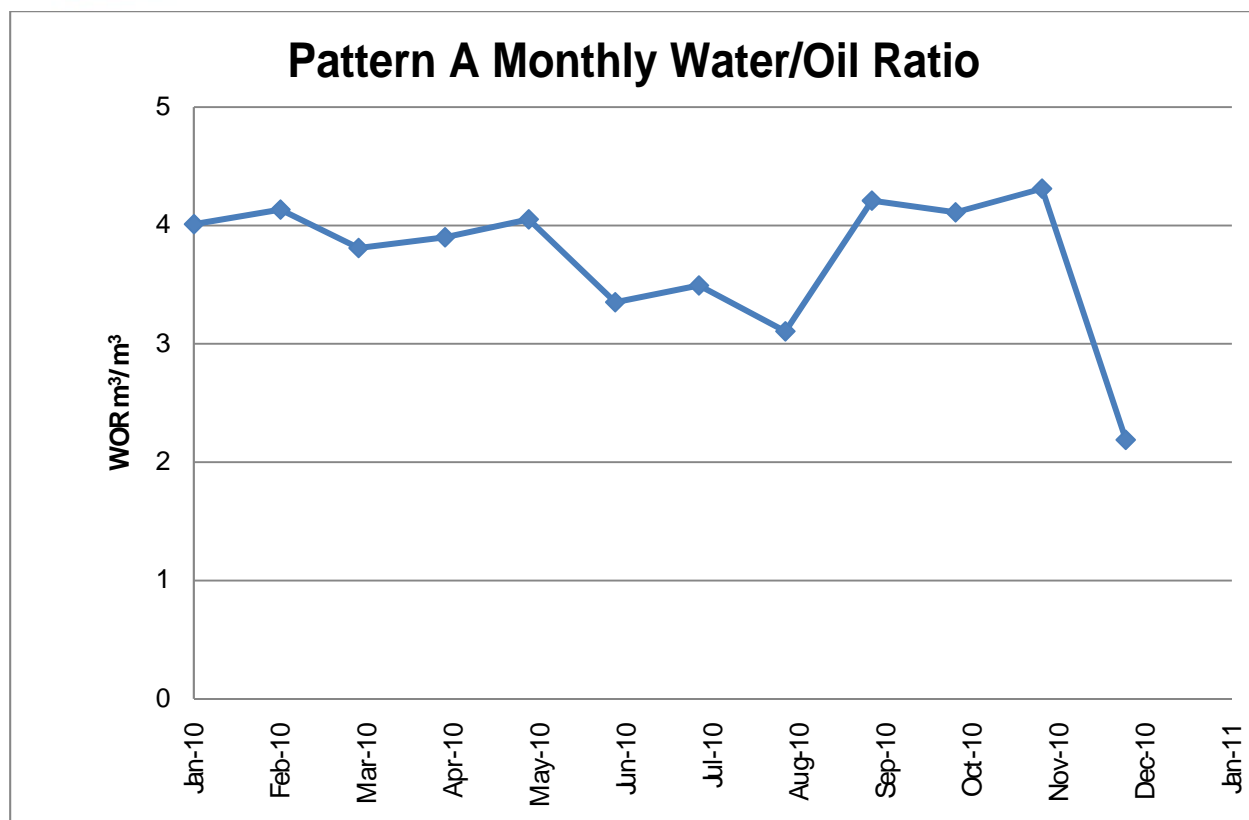




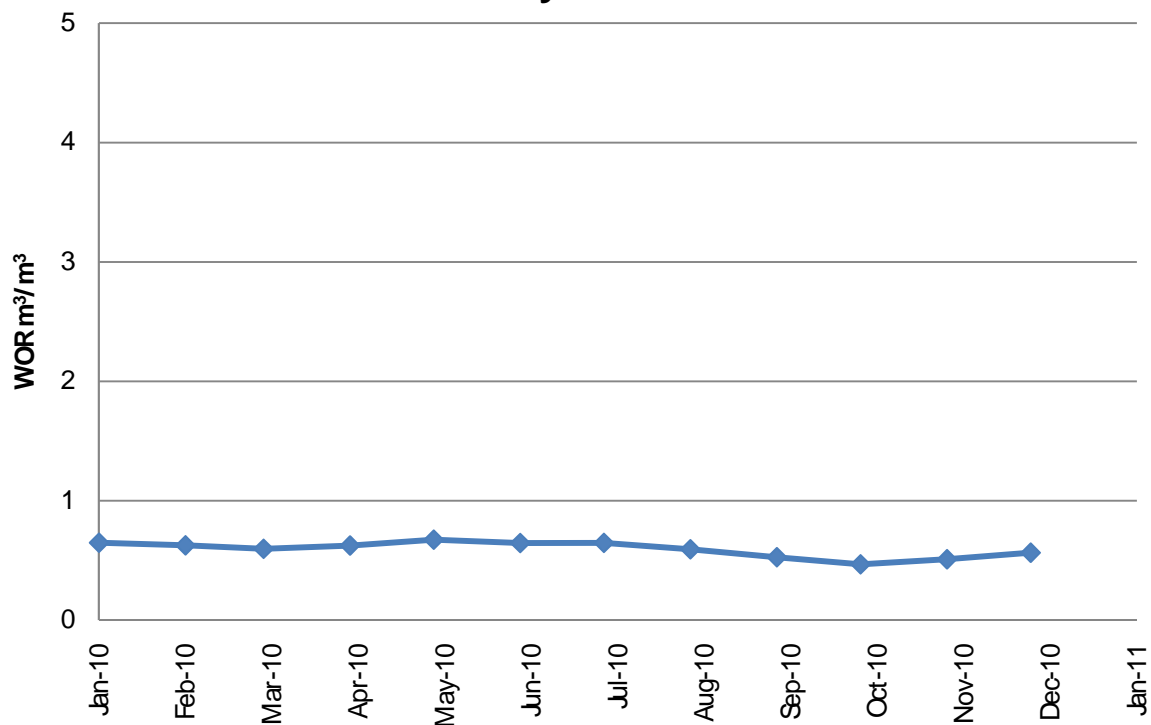
A(iii): Monthly WOR

Monthly WOR							
DATE	TOTAL	Pattern A	Pattern B	Pattern C	Pattern D	Pattern E	Pattern F
Jan-10	0.93	4.01	0.33	0.65	0.29	0.30	0.25
Feb-10	0.97	4.13	0.29	0.63	0.30	0.30	0.25
Mar-10	0.92	3.81	0.34	0.60	0.25	0.27	0.24
Apr-10	1.00	3.90	0.38	0.62	0.29	0.39	0.24
May-10	1.01	4.05	0.39	0.67	0.30	0.36	0.25
Jun-10	0.87	3.35	0.35	0.65	0.30	0.30	0.26
Jul-10	0.94	3.49	0.45	0.65	0.30	0.30	0.26
Aug-10	0.96	3.11	0.52	0.59	0.27	0.28	0.23
Sep-10	1.25	4.21	0.52	0.53	0.24	0.26	0.20
Oct-10	1.27	4.11	0.49	0.47	0.22	0.26	0.10
Nov-10	1.35	4.31	0.49	0.51	0.19	0.24	0.11
Dec-10	1.25	2.19	0.49	0.56	0.19	0.23	0.12

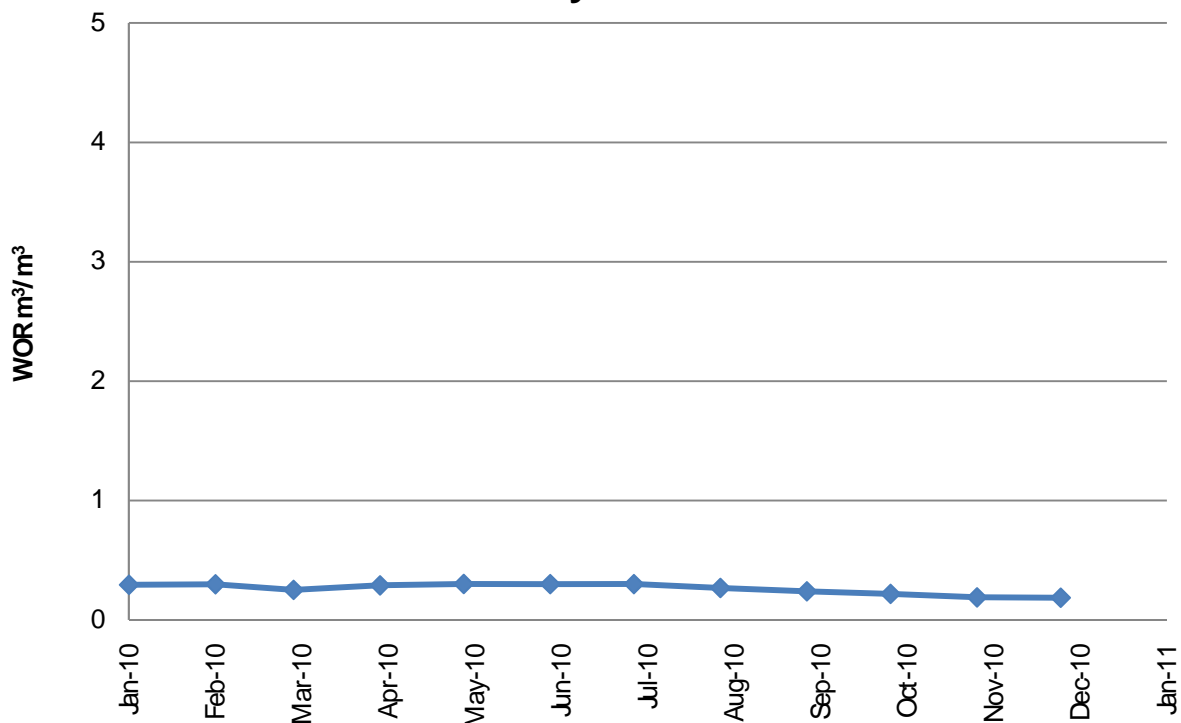




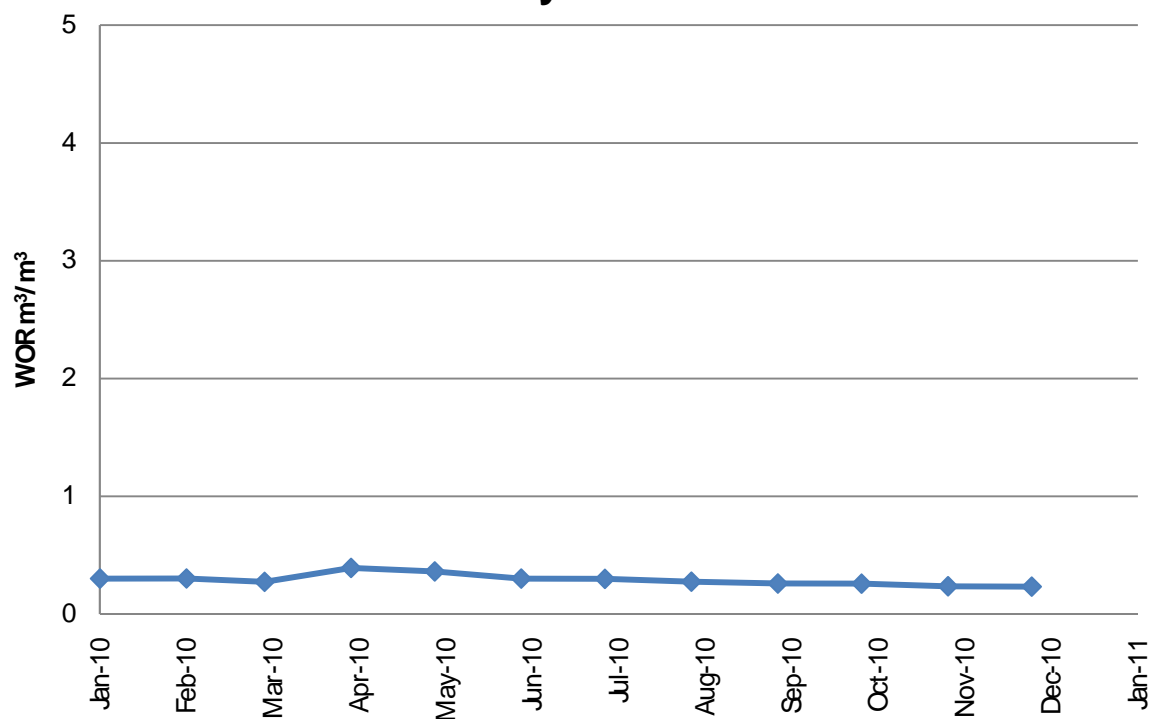
Pattern C Monthly Water/Oil Ratio



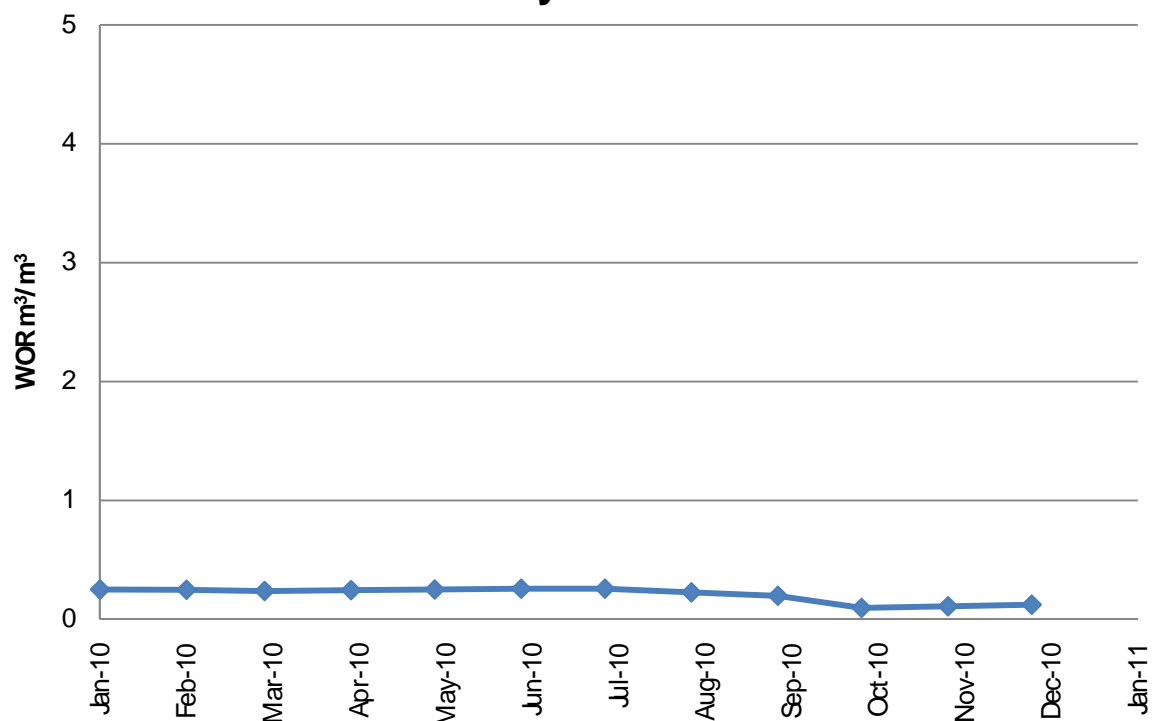
Pattern D Monthly Water/Oil Ratio



Pattern E Monthly Water/Oil Ratio



Pattern F Monthly Water/Oil Ratio



B: Cumulative Volume Summary

Cumulative Oil Production

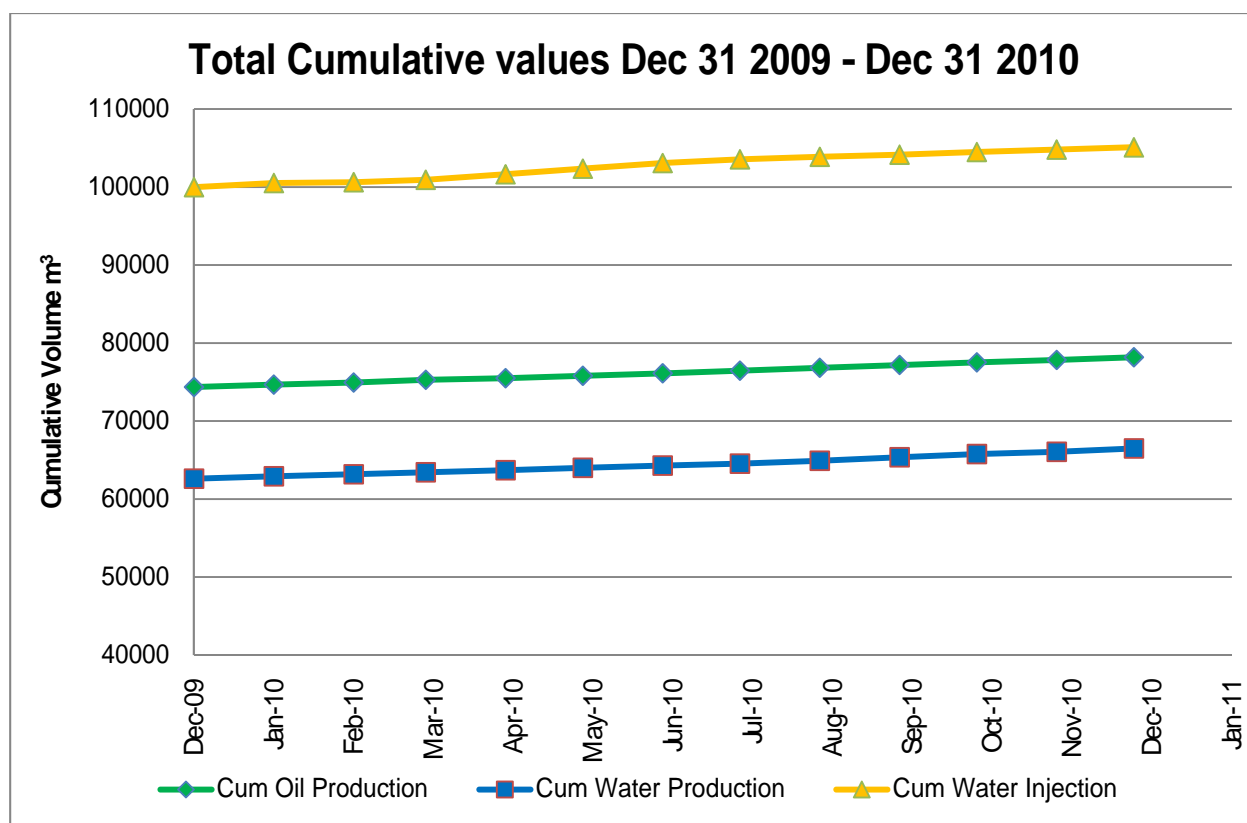
	TOTAL	Pattern A	Pattern B	Pattern C	Pattern D	Pattern E	Pattern F
Cum Oil	m ³	m ³	m ³	m ³	m ³	m ³	m ³
Dec-09	74,353	13,733	22,637	8,793	10,386	14,317	4,488
Jan-10	74,669	13,785	22,718	8,854	10,439	14,367	4,507
Feb-10	74,936	13,830	22,778	8,909	10,484	14,412	4,524
Mar-10	75,283	13,907	22,851	8,995	10,536	14,452	4,542
Apr-10	75,493	13,929	22,904	9,028	10,586	14,485	4,560
May-10	75,803	13,981	22,978	9,088	10,638	14,538	4,580
Jun-10	76,115	14,030	23,055	9,147	10,688	14,597	4,598
Jul-10	76,458	14,085	23,149	9,207	10,742	14,659	4,617
Aug-10	76,829	14,164	23,253	9,267	10,792	14,718	4,634
Sep-10	77,182	14,245	23,352	9,327	10,836	14,771	4,651
Oct-10	77,526	14,326	23,450	9,390	10,873	14,826	4,661
Nov-10	77,835	14,391	23,543	9,449	10,906	14,876	4,670
Dec-10	78,180	14,587	23,582	9,511	10,934	14,885	4,681

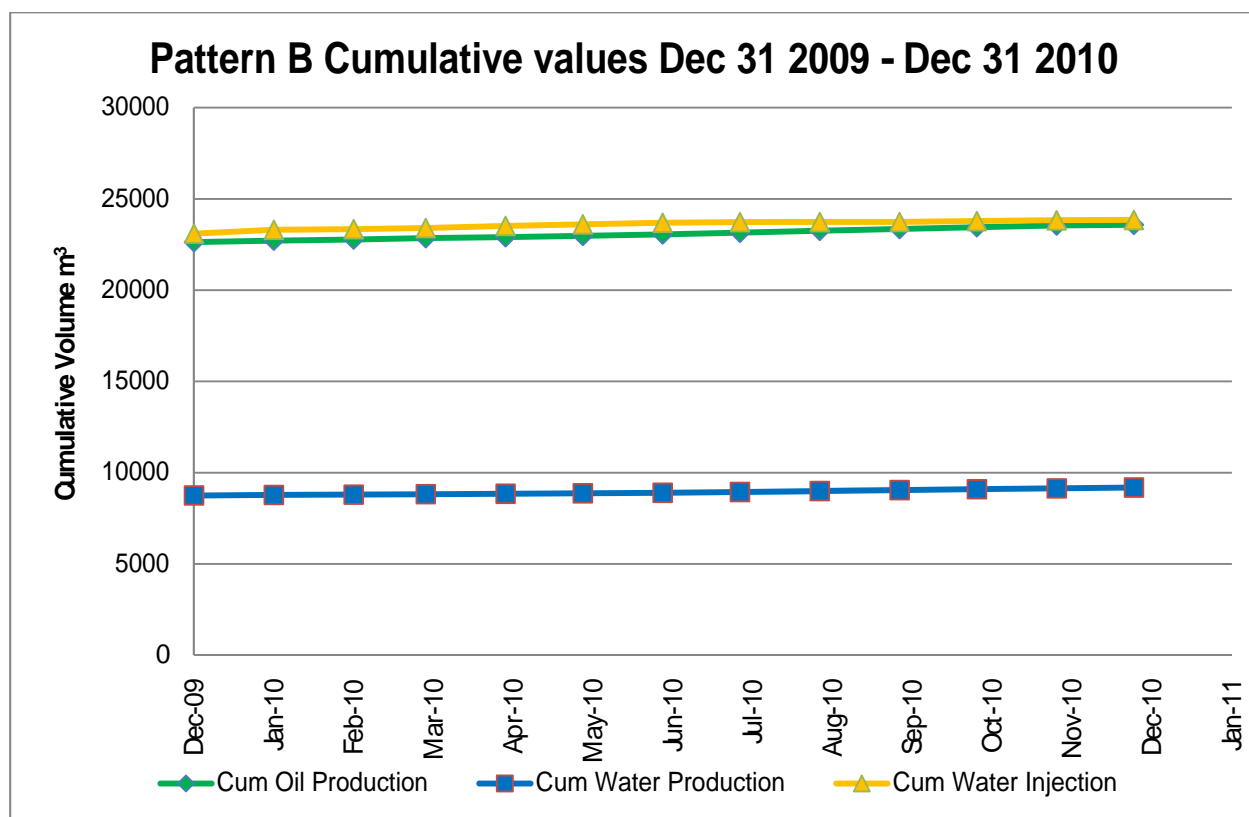
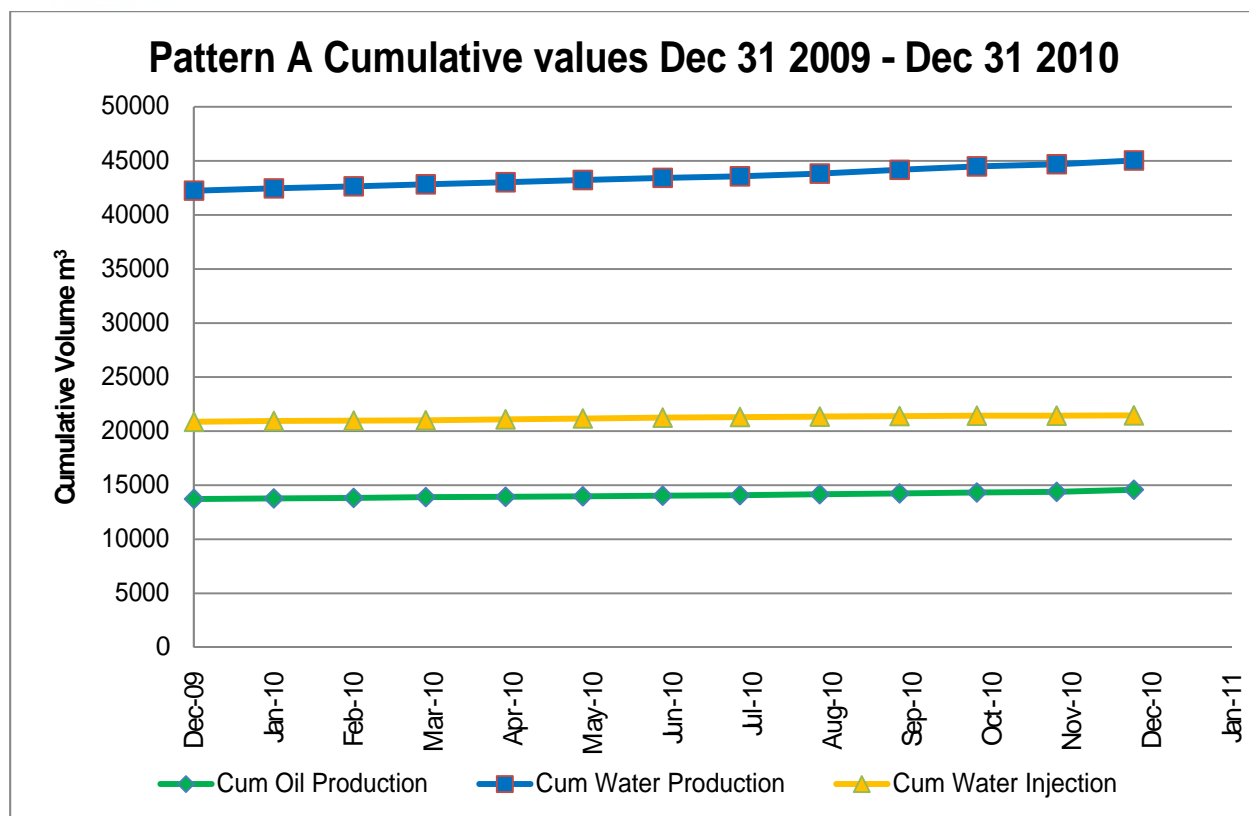
Cumulative Water Production

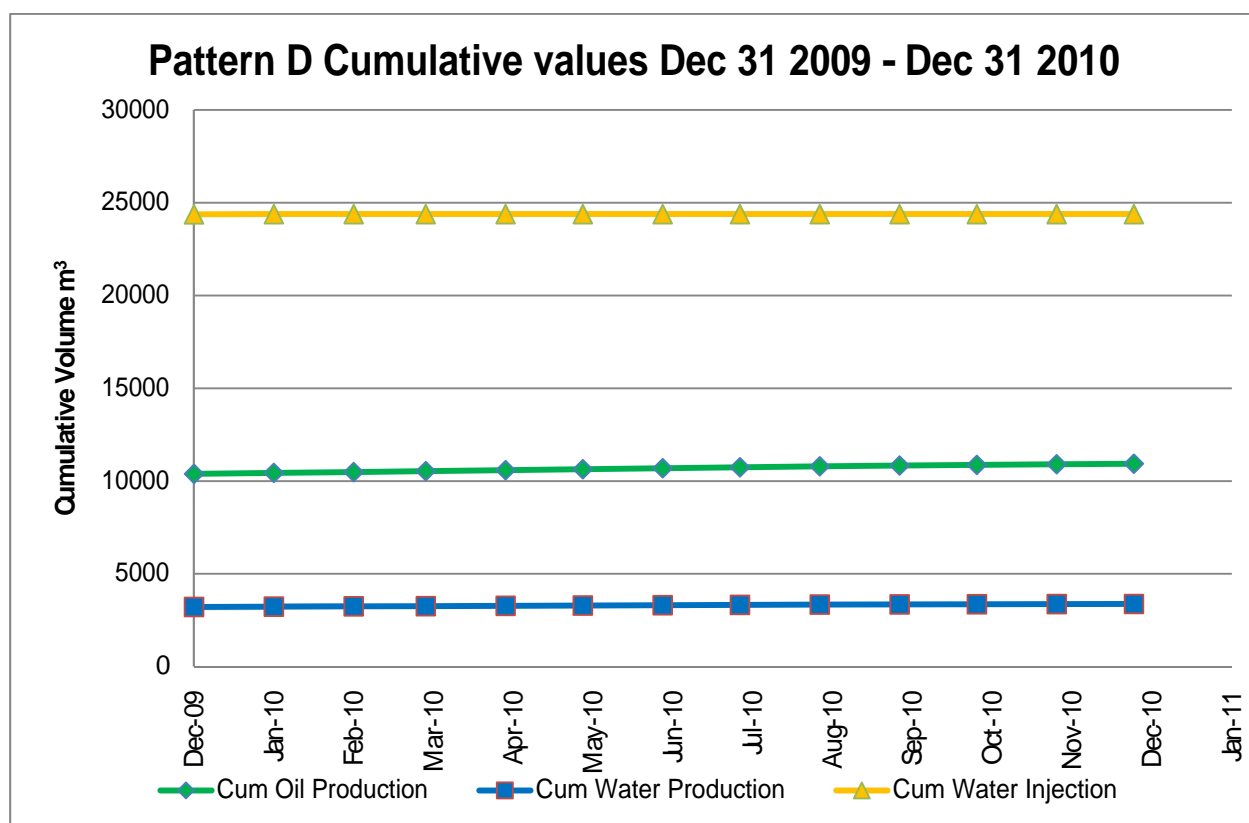
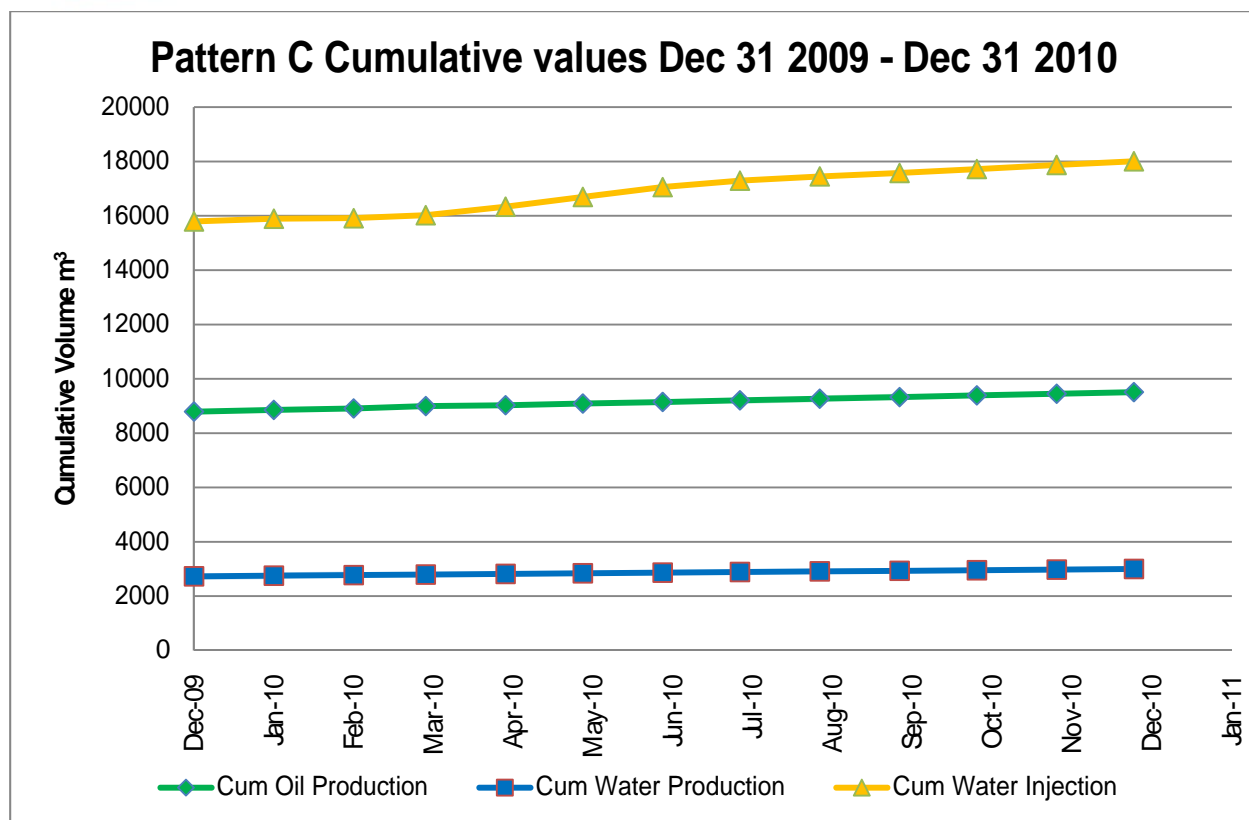
	TOTAL	Pattern A	Pattern B	Pattern C	Pattern D	Pattern E	Pattern F
Cum Wtr	m ³	m ³	m ³	m ³	m ³	m ³	m ³
Dec-09	62,615	42,242	8,752	2,730	3,215	4,408	1,269
Jan-10	62,910	42,450	8,780	2,753	3,232	4,423	1,273
Feb-10	63,173	42,641	8,797	2,774	3,246	4,438	1,278
Mar-10	63,429	42,824	8,821	2,796	3,259	4,448	1,282
Apr-10	63,700	43,019	8,842	2,817	3,275	4,461	1,286
May-10	64,002	43,231	8,869	2,841	3,292	4,477	1,291
Jun-10	64,288	43,425	8,897	2,865	3,309	4,497	1,296
Jul-10	64,540	43,567	8,939	2,890	3,327	4,516	1,302
Aug-10	64,900	43,816	8,994	2,912	3,341	4,532	1,305
Sep-10	65,355	44,168	9,048	2,932	3,352	4,547	1,309
Oct-10	65,763	44,482	9,095	2,954	3,361	4,561	1,310
Nov-10	66,048	44,682	9,138	2,977	3,368	4,572	1,311
Dec-10	66,489	45,034	9,184	3,002	3,374	4,583	1,312

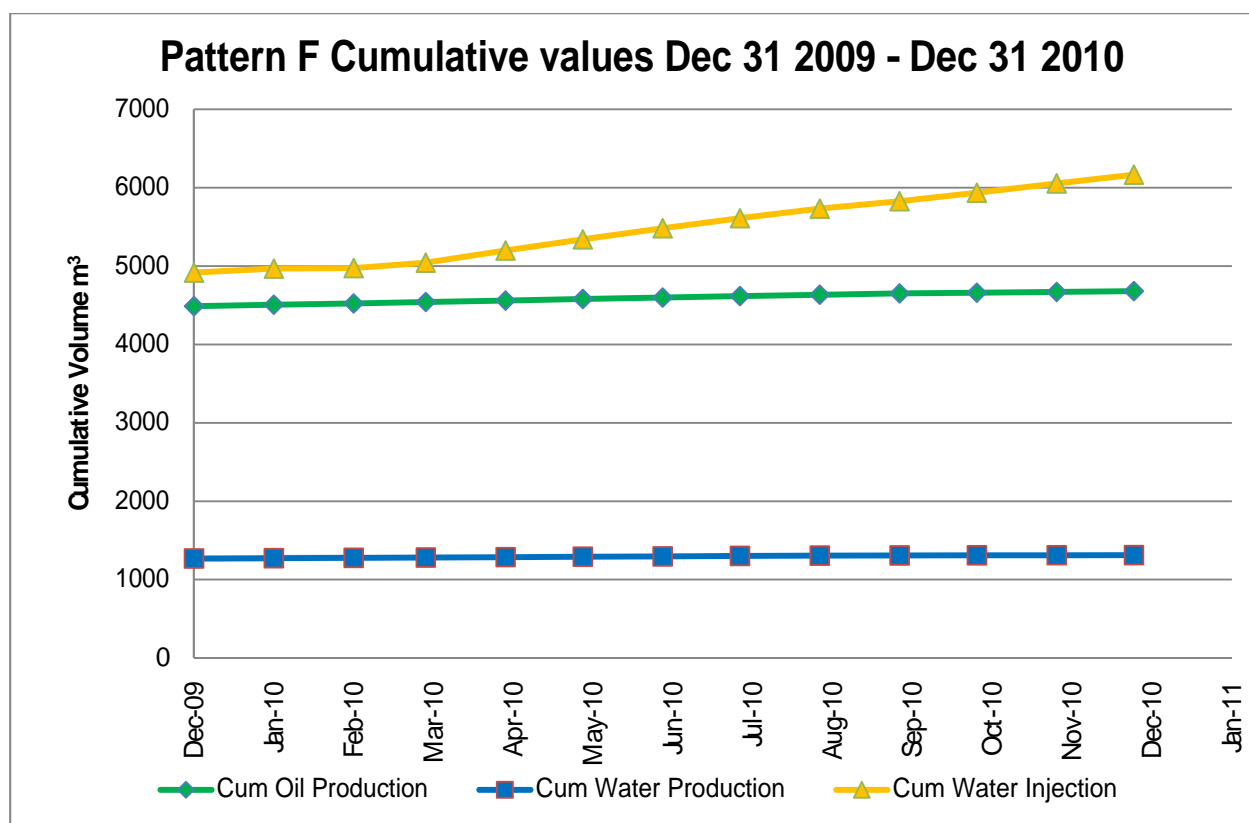
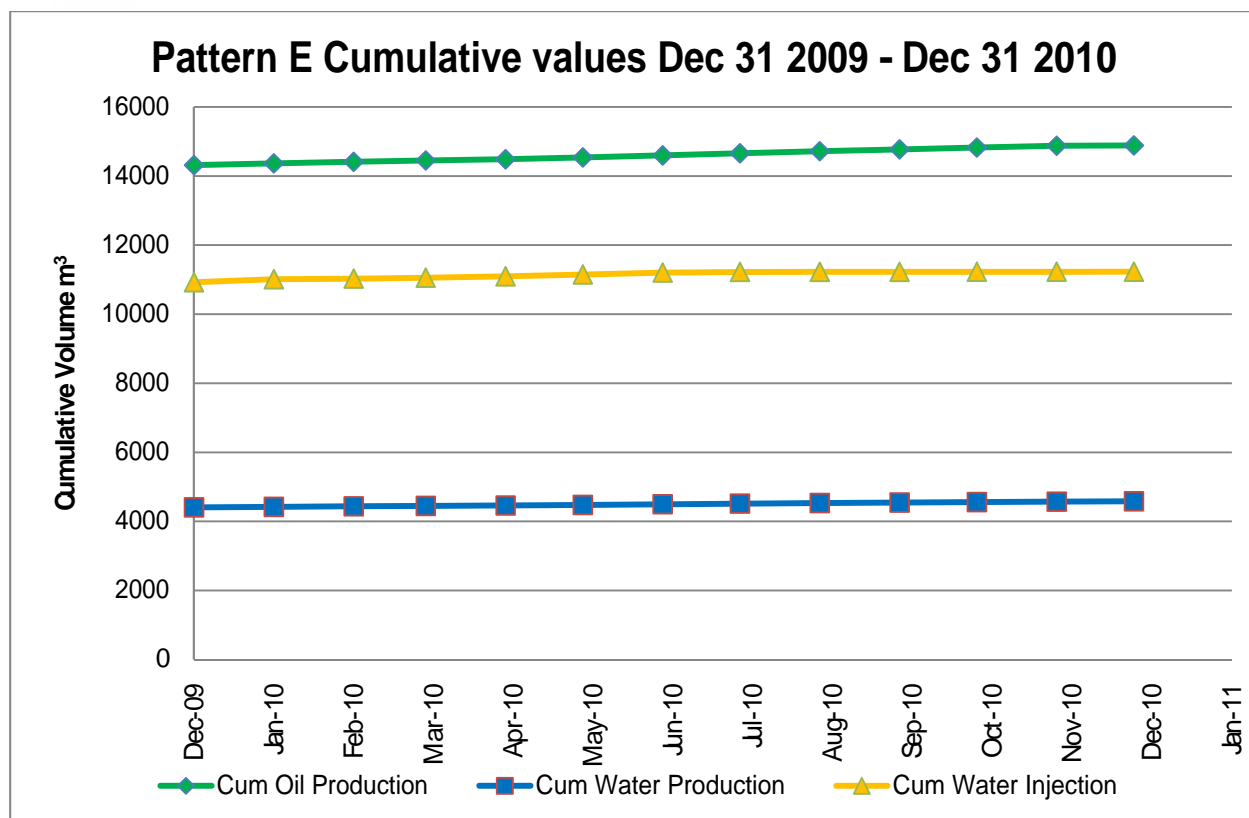
Cumulative Water Injection

	TOTAL	Pattern A	Pattern B	Pattern C	Pattern D	Pattern E	Pattern F
Cum Inj	m ³	m ³	m ³	m ³	m ³	m ³	m ³
Dec-09	99981	20865	23102	15795	24378	10923	4918
Jan-10	100519	20940	23312	15895	24390	11013	4969
Feb-10	100625	20969	23346	15915	24390	11029	4976
Mar-10	100934	21009	23410	16025	24390	11056	5044
Apr-10	101638	21093	23523	16336	24390	11096	5200
May-10	102359	21172	23610	16696	24390	11149	5342
Jun-10	103081	21251	23696	17057	24390	11203	5484
Jul-10	103559	21308	23733	17294	24390	11223	5611
Aug-10	103879	21343	23736	17451	24390	11225	5734
Sep-10	104153	21392	23740	17578	24390	11225	5828
Oct-10	104497	21433	23789	17721	24390	11227	5937
Nov-10	104812	21433	23832	17873	24390	11228	6055
Dec-10	105105	21462	23850	18007	24390	11229	6167









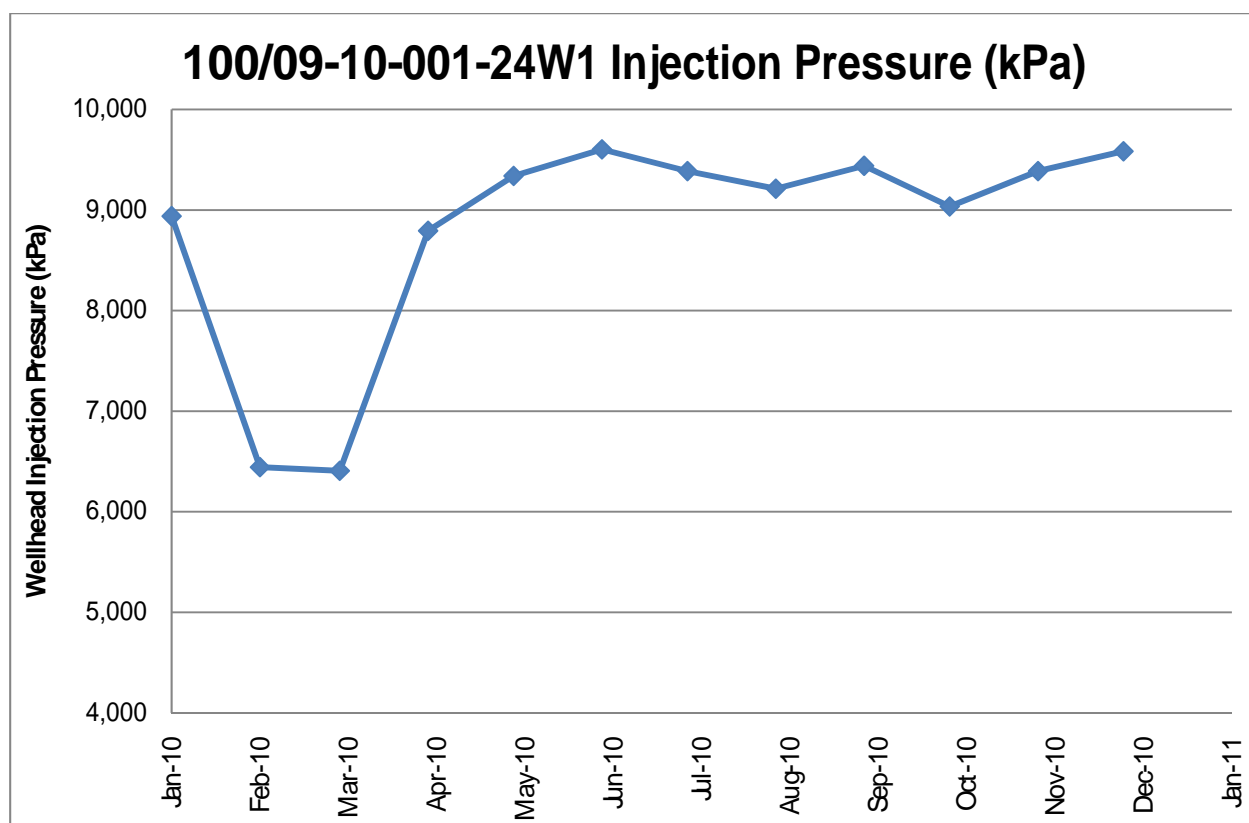
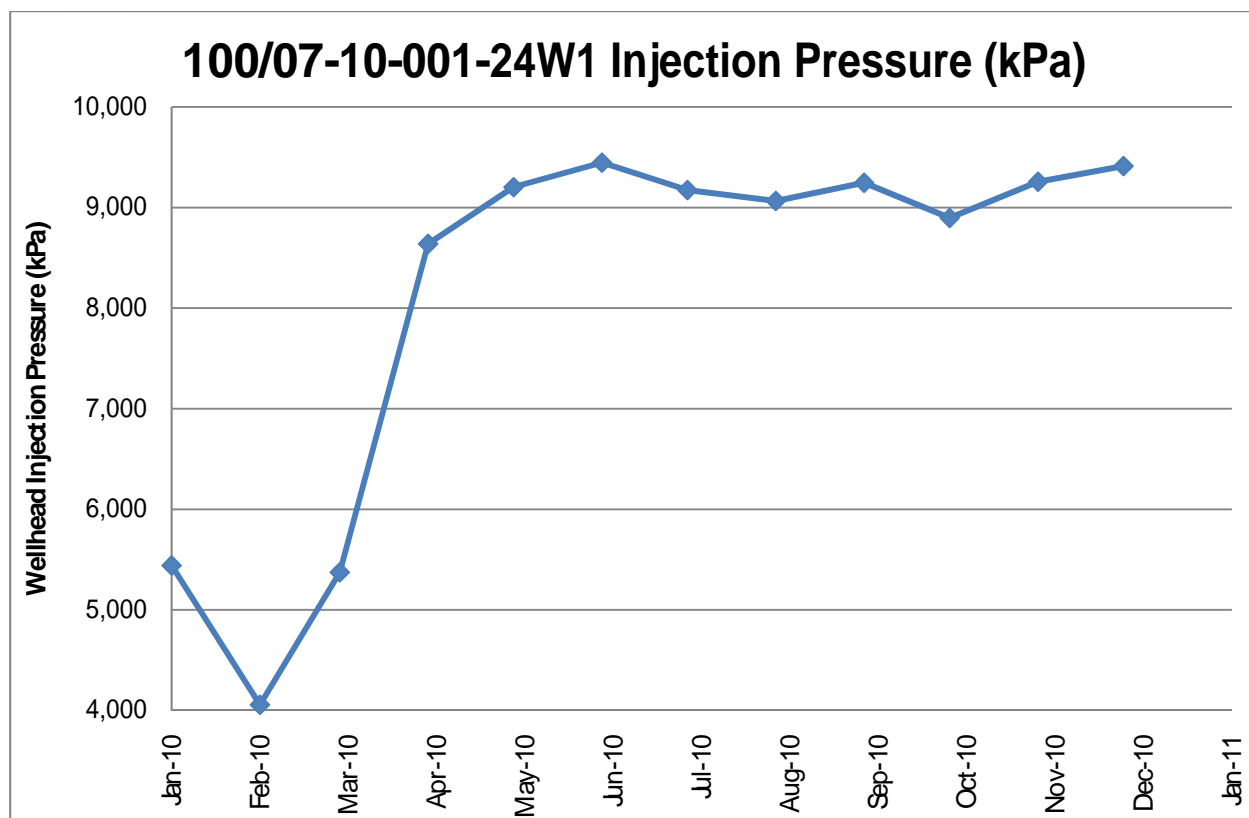
C: Injection Pressure Summary

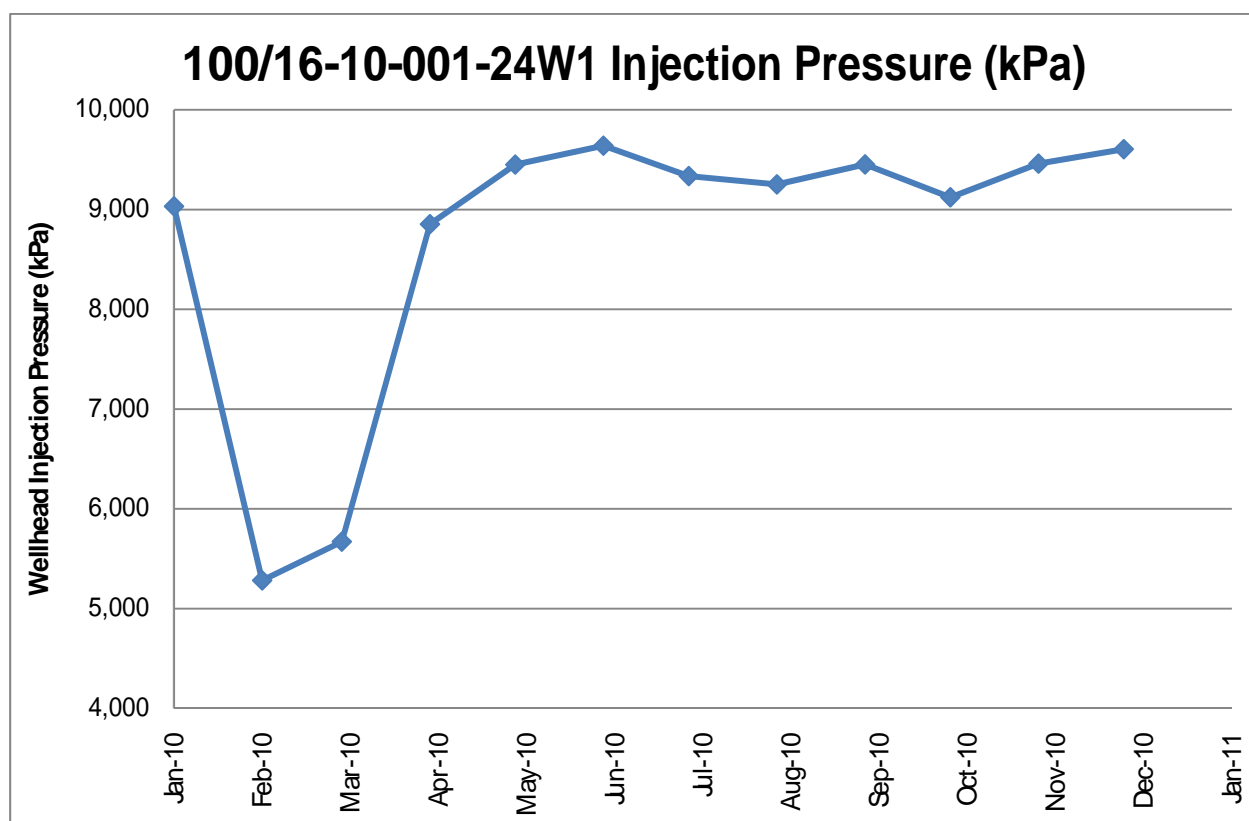
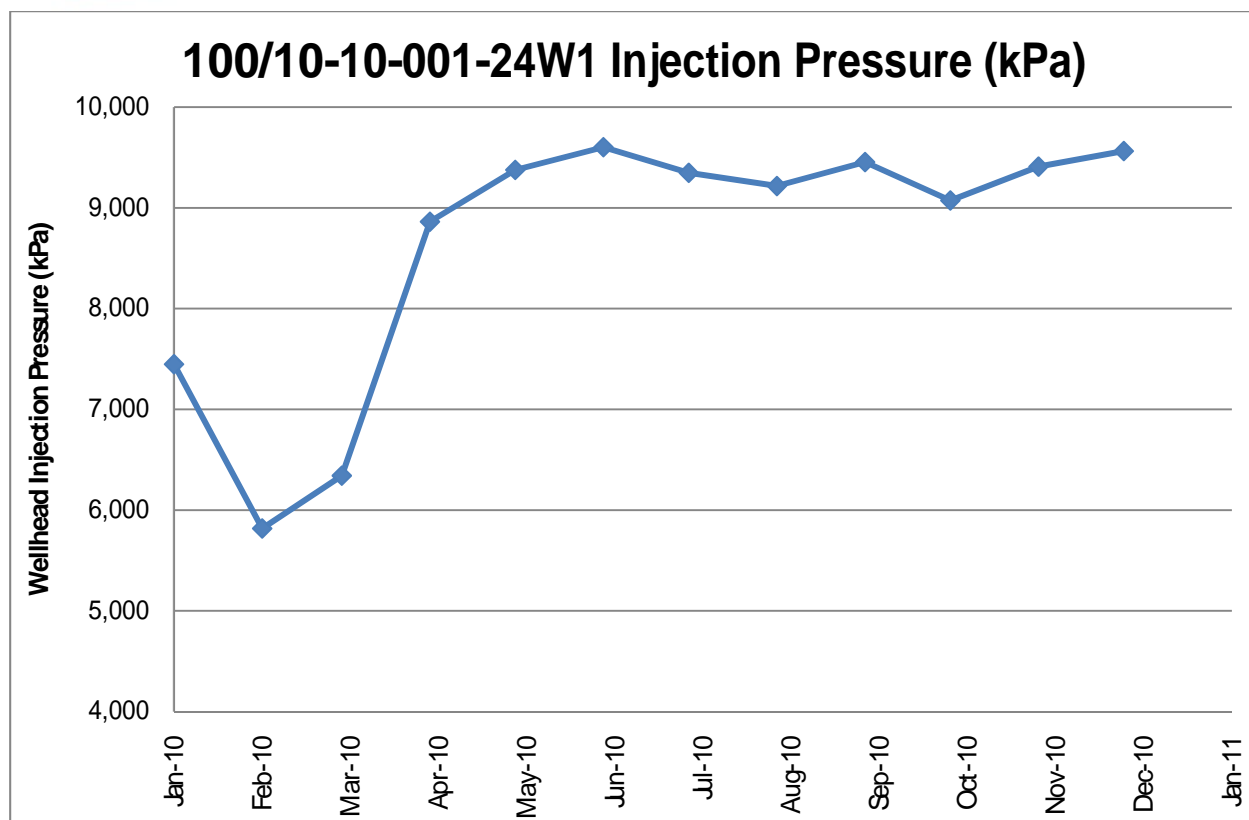
INJ PRES/D (kPa) Production Trend							
From January 1 To December 31, 2010							
	100/07-10	100/09-10	100/10-10	100/16-10	100/12-11	100/13-11	100/04-14
Jan-10	5,442	8,939	7,448	9,032	8,658	7,416	2,955
Feb-10	4,057	6,443	5,818	5,282	7,414	6,225	386
Mar-10	5,374	6,406	6,342	5,671	7,252	6,623	0
Apr-10	8,640	8,793	8,863	8,853	8,833	8,520	0
May-10	9,203	9,339	9,377	9,450	9,387	9,168	0
Jun-10	9,447	9,603	9,603	9,640	9,630	9,527	0
Jul-10	9,174	9,387	9,348	9,335	9,313	9,135	0
Aug-10	9,066	9,211	9,218	9,252	9,235	8,913	0
Sep-10	9,247	9,440	9,455	9,452	9,417	9,077	0
Oct-10	8,897	9,035	9,074	9,123	8,971	8,756	49
Nov-10	9,257	9,387	9,410	9,460	9,413	9,060	50
Dec-10	9,413	9,584	9,565	9,605	9,548	9,274	134

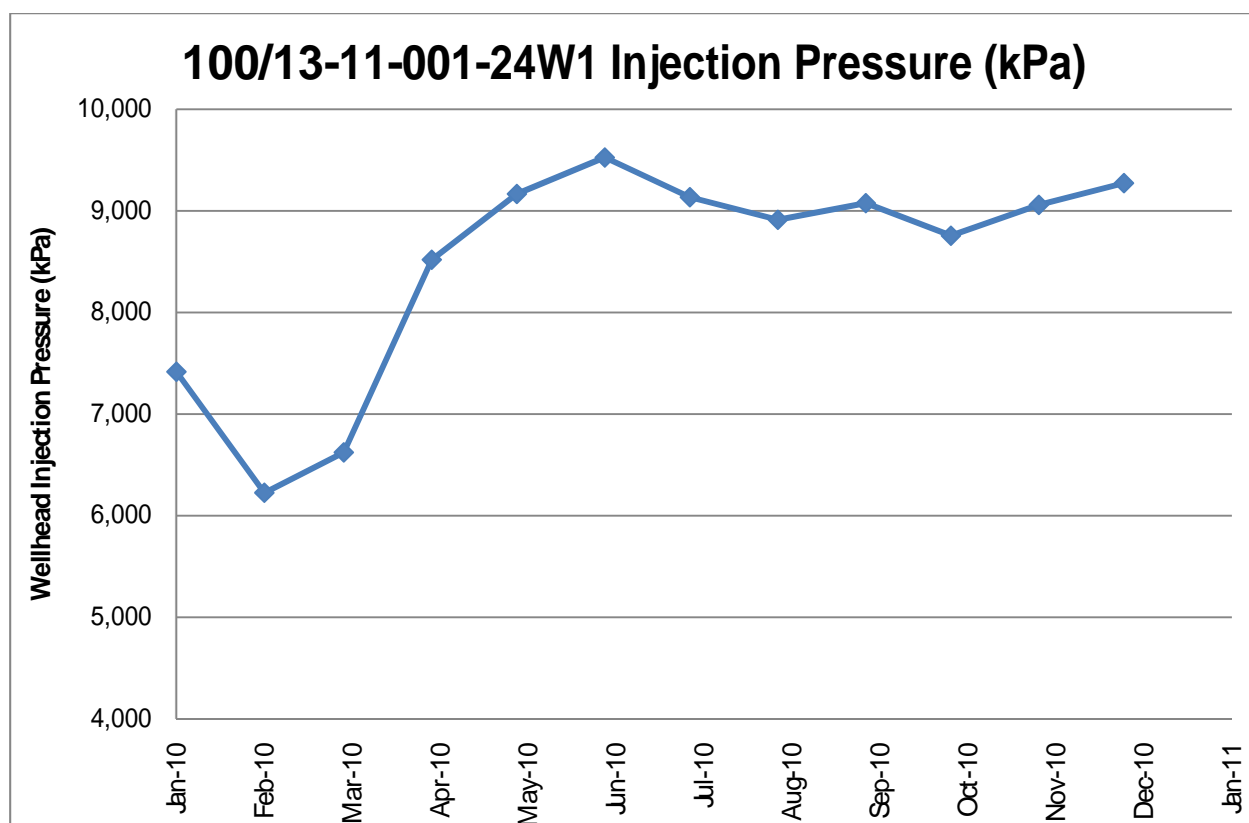
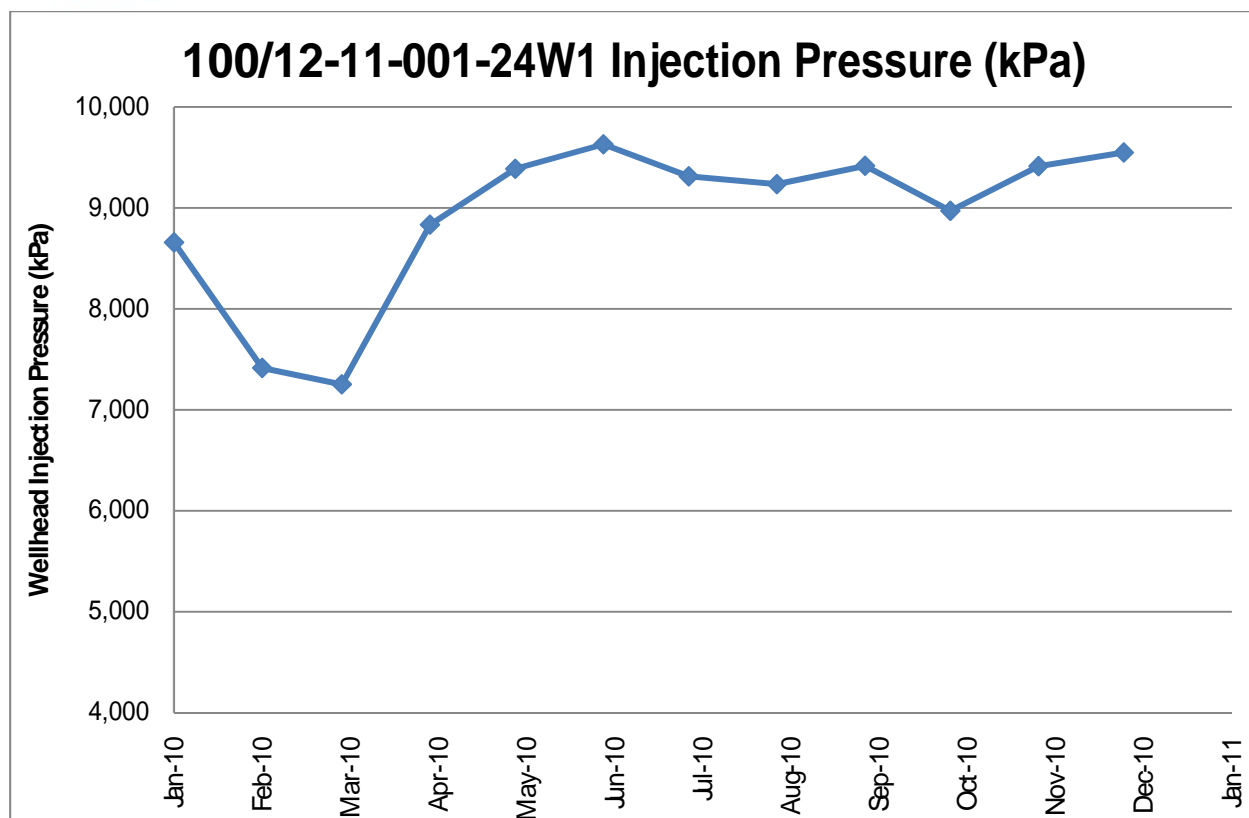
NOTE: 100/04-14 well has been converted into a Mission Canyon disposal well.

The Goodlands facility was shut down during the early part of 2010 for a major battery upgrade. The battery was down longer than planned due to equipment problems. This explains the Injection pressure drop on all the wells for February and March 2010.

The consistent pressure drops between all the wells, is due to the entire injection system being shut down to let the high pressures bleed down. This is done to avoid exceeding an injection pressure of 10,000 kPa and risk fracturing the formation. These system shutdowns have been progressively increasing in frequency and duration in order to deal with the high injection pressures.







D: 2010 Reservoir Pressure's

There were no reservoir pressures taken within the scope of this review for the year.

E: 2010 Well Servicing Summary

Date	UWI	Description
2/8/2010	00/04-14	Re-Completion. Cement squeezed Amaranth perms. Tested.
3/13/2010	00/04-14	Re-Completion. Perfed Mission Canyon for Water Disposal.
4/21/2010	00/11-11	Glaucwash / Acid Stimulation 2m3 Glaucwash + 4m3 Oil.
4/23/2010	00/11-11	Glaucwash / Acid Stimulation 2m3 Dirty Sandstone Acid. 5m3 Oil.
5/14/2010	C0/13-11	Reactivation. Wax and seized BHP.
5/16/2010	A0/13-11	BHP Change.
5/20/2010	00/11-11	Acid job sample.
7/20/2010	C0/13-11	Glaucwash / Acid Stimulation 2m3 Glaucwash + 3m3 Oil. 2m3 DSA + 3m3 Oil. NOTE: Low porosity and/or poor perm indicated. 2m3 DSA + 3m3 Oil.
8/9/2010	C0/13-11	Water Analysis

F: Voidage Replacement Ratio Calculations

Date	Total	Pattern A	Pattern B	Pattern C	Pattern D	Pattern E	Pattern F
01/01/2010	0.83	0.28	1.79	0.92	0.17	1.26	1.93
02/01/2010	0.19	0.12	0.40	0.21	0.00	0.25	0.33
03/01/2010	0.54	0.16	0.63	1.10	0.00	0.53	2.78
04/01/2010	1.23	0.33	1.37	2.98	0.00	0.77	6.13
05/01/2010	1.14	0.29	0.85	3.35	0.00	0.77	5.37
06/01/2010	1.07	0.29	0.41	3.61	0.00	0.52	5.73
07/01/2010	0.66	0.19	0.25	2.23	0.00	0.24	5.02
08/01/2010	0.41	0.10	0.01	1.53	0.00	0.02	5.17
09/01/2010	0.33	0.11	0.03	1.31	0.00	0.00	4.39
10/01/2010	0.42	0.10	0.32	1.44	0.00	0.02	9.66
11/01/2010	0.40	0.00	0.30	1.60	0.00	0.02	10.29
12/01/2010	0.26	0.04	0.12	1.30	0.00	0.02	8.62
Cumulative	0.69	0.35	0.68	1.33	1.58	0.53	0.95

G: Quality Control and Treatment of the Injected Fluid

The current quality and treatment control for the injection water at Goodlands begins with a two phase filtering process. Each filter lasts over 1 month.

Phase 1: Fluid is filtered down to 10 micons.

Phase 2: Fluid is further filtered to 5 microns.

The operators monitor the water tanks to ensure there is no oil carryover. In the event that oil is noticed on top of the water, the tanks will be skimmed to ensure that the oil is not re-injected through the water injection wells.

Please see the attached Schematic for further details and specifications on the Injection system in place.

H: Unusual Performance Problems and Remedial Measures

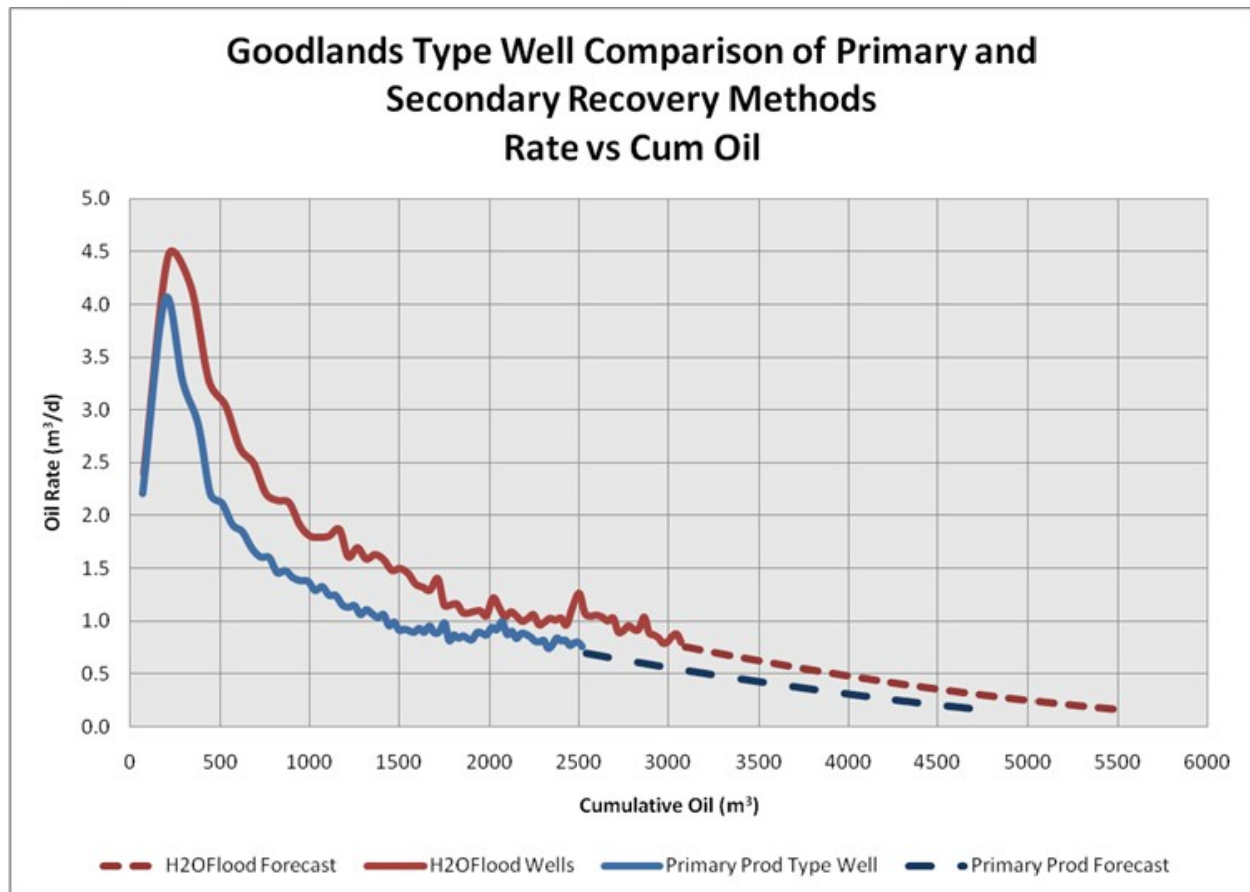
Due to the injection pressure constraints, the existing injection pump is now oversized. Currently the pump cycles on and off to avoid injection pressures over 10,000 kPa. The pump cycling allows the high pressures to bleed off and decrease injection pressures. These systematic shut downs have increased in frequency to every few days and remains shut down for progressively longer periods of time.

The water injection rates for each of the patterns are declining. Consistent injection rates cannot be maintained because of high injection pressures. Until a way to decrease the pressures is found, there is no way to increase or even maintain injection.

By the end of Q3 2011, a well stimulation will be performed on one of the injection wells. Based on the results of this stimulation, the determining factors contributing to the increasing pressure issues may be identified. Once there is a better understanding of what is causing the problems, an action plan will be put together to address the issues and produce the reserves as economically and efficiently as possible.

I: Original Project Expectations

Before implementing the waterflood, Tundra Oil and Gas did a reservoir simulation study to estimate the effect of secondary recovery in the Amaranth. It was estimated that vertical wells under waterflood would have 1.5-2.0x the recovery of primary operated vertical wells. It has been determined that this, in fact, has not occurred. A graph comparing the average producing verticals with and without pressure support is shown below.



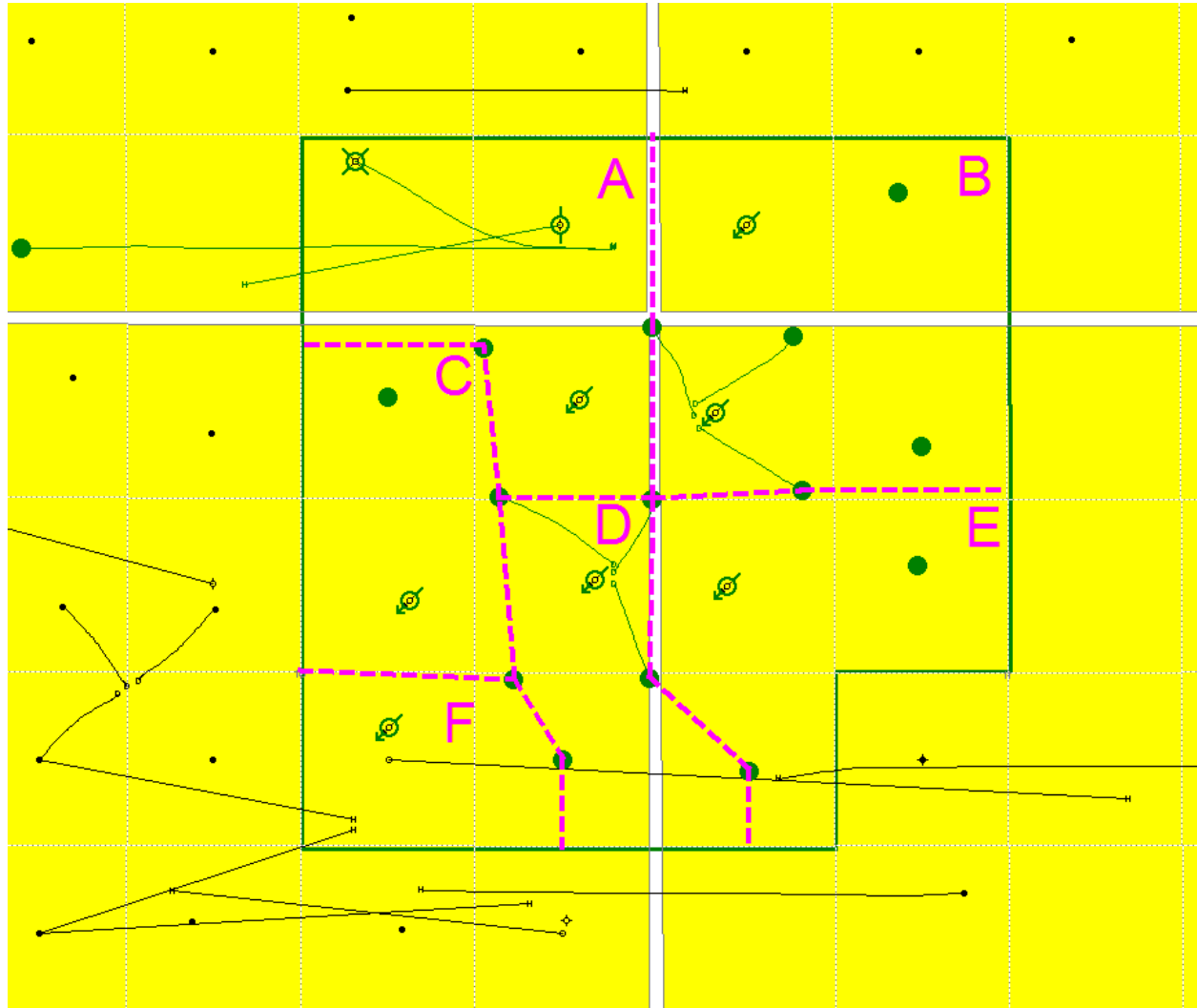
This graph shows the ratio of Secondary to Primary production for ultimate recovery is only 1.2. This result does not meet the original forecast for the recovery of the Unit under waterflood. It is believed that the two main contributing variables to this outcome are the heterogeneity and low permeability nature of the reservoir. Additionally, using vertical injectors to push water through a low permeability reservoir results in low throughput and ineffective sweep patterns. This is observed with the lower than expected recovery within the waterflood area. Had the permeability been an order of magnitude higher, it is believed that vertical injection would have been sufficient.

In order to increase the efficiency of secondary recovery in the Goodlands area, it is believed that the throughput of water must be increased. This may be achieved by increasing the access of the injectors to the reservoir which can be done with horizontal, multi-fractured well paths. This strategy may also improve access to the more permeable, productive sandstone lenses of the reservoir which could also help achieve a more efficient sweep pattern. ARC intends to look further into other methods of secondary pressure support beyond the existing vertical injectors which are believed to have underperformed expectations. Concurrently, ARC will endeavour to determine whether optimization of the existing waterflood is achievable with stimulations in an attempt to increase throughput of water in vertical injectors.



ATTACHMENT 1: Schematic of the Injection Facilities

ATTACHMENT 2: Map of the Water Flood including Patterns



ATTACHMENT 3: Allocation factors for Waterflood Patterns

Well	Allocation Factors					
	Pattern A	Pattern B	Pattern C	Pattern D	Pattern E	Pattern F
00/7-10						0.5
00/8-10				0.5		0.5
C0/8-10			0.33	0.33		0.34
D0/8-10				0.5	0.5	
00/9-10				1		
00/10-10			1			
00/15-10			1			
00/16-10	1					
A0/16-10	0.25	0.25		0.25	0.25	
B0/16-10	0.33		0.33	0.34		
C0/16-10	0.5		0.5			
00/5-11				0.5	0.5	
00/11-11					1	
00/12-11					1	
00/13-11		1				
A0/13-11		0.5			0.5	
C0/13-11	0.5	0.5				
D0/13-11		1				
00/14-11		1				
00/3-14		1				
00/4-14		0				
00/1-15	1					
00/4-15	1					

Black text wells = Producers

Blue text wells = Injectors

NOTE: 00/04-15 producer has an allocation factor of **1** associated to the production that is included as part of the waterflood. The portion of production of this well that is included in the unit and waterflood is **55.0774%**.

NOTE: 00/4-14 Injector has an allocation factor of **0** because the current injection is into the Mission Canyon Formation. Up until January 31, 2008, the fluid was entering the Lower Amaranth.

NOTE: 00/07-10 Injector has an allocation factor of **0.5** to account for the water losses outside the unit.