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February 29, 2012

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

Attention: Jennifer Abel
Chief Petroleum Engineer

Dear Ms. Abel:

Re: 2011 Annual Report – Daly Unit #4

Please find attached one copy of the 2011 Annual Report for Daly Unit #4.

If there are any further questions in respect to this Annual Report Summary please contact the undersigned at (403) 515-5695.

Yours Sincerely,



Pete Janjua
Manager Exploitation, Williston Basin

Attachments



As defined in the 2010 Annual Report, Daly Unit #4 is characterized by a thick and heterogeneous pay interval with significant discontinuities, both laterally and vertically. Low reservoir energies as well as low effective permeability during primary production have been seen. The expected recovery efficiencies may range from 8 to 12 percent on the current 40-acre well spacing.

In review of the production performance in the area horizontal inter-well drilling is recommended. Horizontal infill drilling will increase oil recoveries from primary production but also to enhance sweep efficiencies and hopefully improve recovery from our secondary enhanced oil recovery project. The reduced well spacing is recommended as we currently observe low oil recoveries and poor sweep efficiencies which are indicative of the significant reservoir discontinuity.

Daly Unit #4 area was discovered in 1962 of which three wells were initially drilled and abandoned in 1970 due to poor productivity. The area was not further delineated until 1983 where an aggressive drilling program was initiated. From 1980 – 1983, 51 wells were drilled. Prior to being unitized in April 1988 the area was developed on 40-acre spacing of which cumulative oil production before field unitization was ~562 MSTB from wells completed in the Lodgepole reservoir. Following unitization of the field in 1988, a pilot waterflood pattern was initiated in section 27, pattern 1 and 2 in 1991 and pattern 3 and 4 in 2000. These pilot areas and well pattern allocation are identified in Figure 1. The existing waterflood program in the unit have been developed with four patterns of which three are 40-acre inverted five-spot and one 160-acre inverted nine-spot patterns.

The cumulative oil produced as of December 2011 is approximately 1,639 Mbbl. Figure 2 exhibits the historical oil, water, and water injection rates for Daly Unit #4. The monthly producing rate for each of the water injection patterns are summarized in Table 1 and the cumulative producing rate for each of the water injection patterns and Unit area are summarized in Table 2. Table 3 summarizes the voidage on a monthly and cumulative basis since the start of injection excluding primary production. Figures 3-11 graphically displays the tabulated data.

The Lodgepole carbonates in the Daly Unit are characterized by thick, very heterogeneous pay intervals. Gross interval thickness in the potential reservoir ranges from 30-40 m.

The average effective porosities vary from 6% to 13%, and the in-situ connate water saturations surmised range from 35% to 45%. Core and log information indicate the Daly Lodgepole Unit contains shallow water carbonate cycles. The targeted gross reservoir within the Lodgepole member is 15-20 m. The mapped volumetric OOIP for this potential reservoir for this interval ranges from 22 - 28 MMbbl of which 6 - 7.5% has been recovered to date. Previous submitted interpretation analyzed by Chevron of the entire column equates an approximate OOIP of 32 MMbbl.

The average effective oil permeability in the area of interest is typically 1-3 md but can be less than 1 md in some intervals. The Lodgepole carbonates in the area are also characterized by significant discontinuities in both lateral and areal directions.

Diagenetic processes in the area have either destroyed or have enhanced porosity, but the lack of connectivity is caused by low effective oil permeability's. In the Daly area these diagenetic processes tend to destroy any original permeability-porosity relationships. On this basis neither pore-throat size nor distribution is an accurate predictor of reservoir quality.

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In Daly Unit #4 the Lodgepole member is observed that good porosity development is present however the immediate area exhibits low permeability trends due to poor connectivity between pores. The poor performance in the area is largely due to this poor permeability matrix, limited well drainage areas during primary depletion.

Chevron Canada Resources, the previous operator of the subject unit, had requested an exemption from the requirement of conducting annual reservoir pressure surveys in September 1990 due to poor permeability matrix. This is not surprising with the large column of discontinuous lenses where the time required for pressure build-up to achieve a stabilized pressure would be uneconomical and not very representative due to the complexity of cross flow from a number of unknown pressure contribution from different lenses that may not be laterally extensive.

Initial fluid properties were obtained from analysis of fluid samples taken in September 1953 from the 06-10-010-28W1 (06-10) of which the parameters have been matched and summarized as follows. The 06-10 well is located one and half miles directly north of Daly Unit #4 and is a reasonable analogy to the producing reservoir.

Approximate Initial Reservoir Fluid Properties for Daly Unit #4

Pi (kPaa)	7450
Pb (kPaa)	3000
Boi (m3/m3)	1.067
Rsi (m3/m3)	21.62
Sw (%)	35%

The Monthly wellhead Injection pressures for each of the water injection wells are summarized as follows:

Wellhead Injection Pressures (kPa) for Daly Unit #4

2011	Injection Well Pressures			
	00/07-35-009-28W1/0	02/14-35-009-28W1/0	02/15-27-009-28W1/0	02/16-35-009-28W1/0
January	-	-	-	-
February	-	-	-	-
March	-	-	-	-
April	7950	7295	7681	7219
May	7991	6736	7736	6729
June	8067	6771	7612	6722
July	8012	6405	7329	6247
August	7812	6433	7377	2661
September	7819	5164	7384	1999
October	7867	6454	7467	6061
November	7881	7046	7474	7074
December	7881	6998	7453	7109

Note: WH Press Missing from Jan-Mar In-house database



There were no workovers recorded for 2011 for the Daly Unit #4 area.

The injected water in the area is currently treated with corrosion inhibitor to ensure the integrity of the field equipment is maintained.

Currently two horizontal infill wells are in the licensing process for 2012-2013 drilling program to further evaluate reservoir strategies for future development and optimization.

Figure 1
Well Allocation – Pattern Scheme

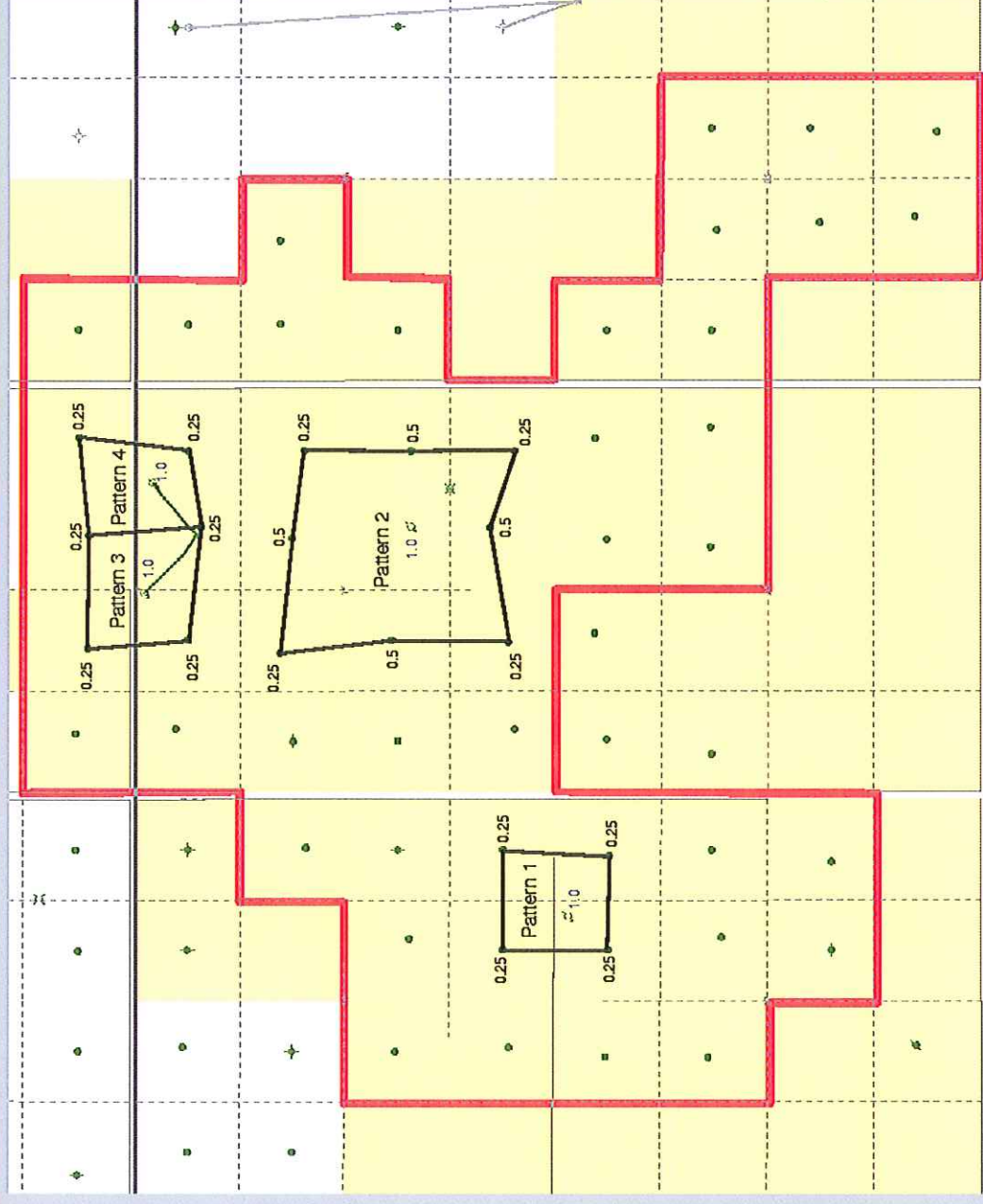


Figure 2
Production Performance – Project Scheme Area

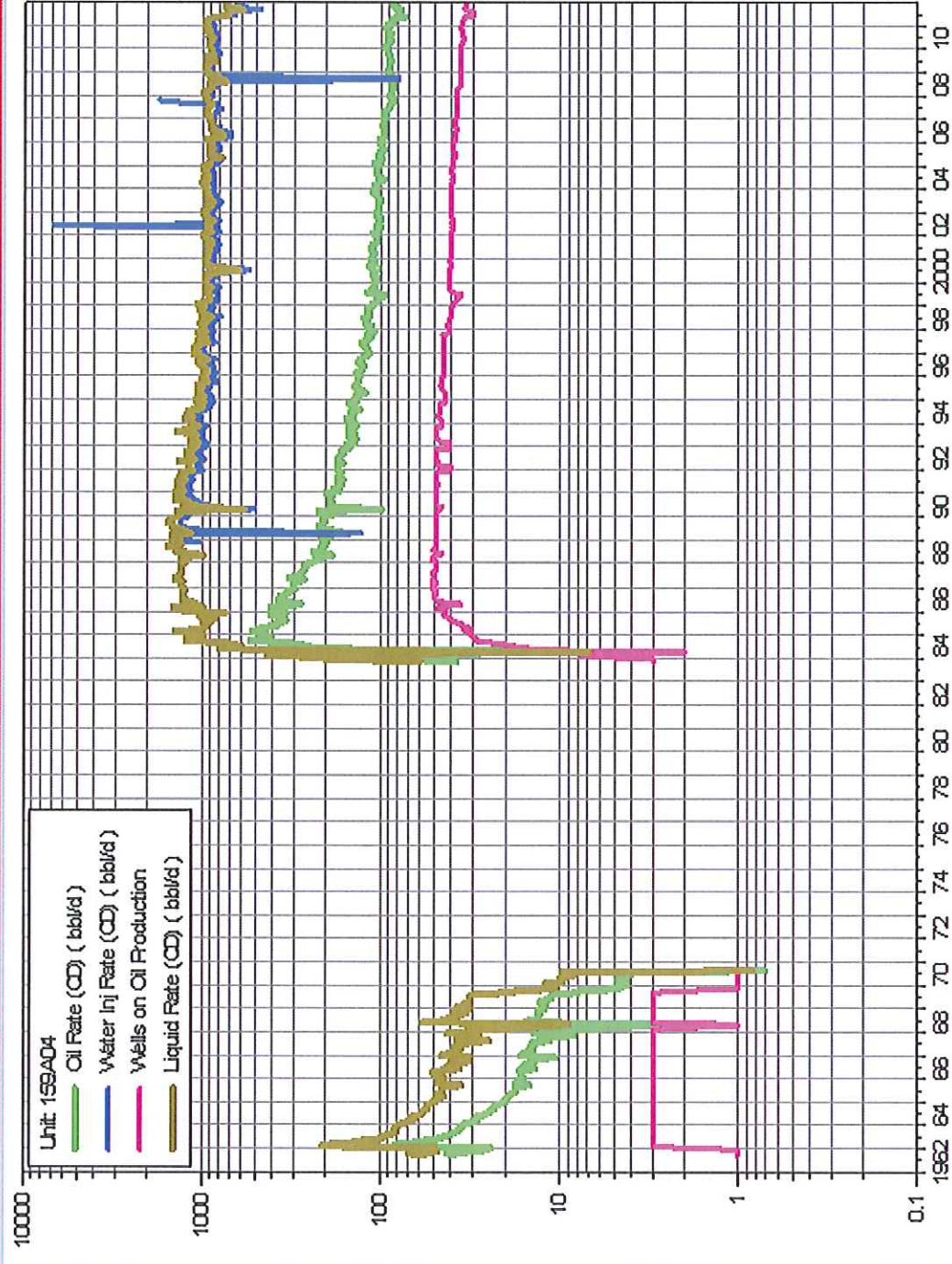


Figure 3
Pattern #1 Production Performance

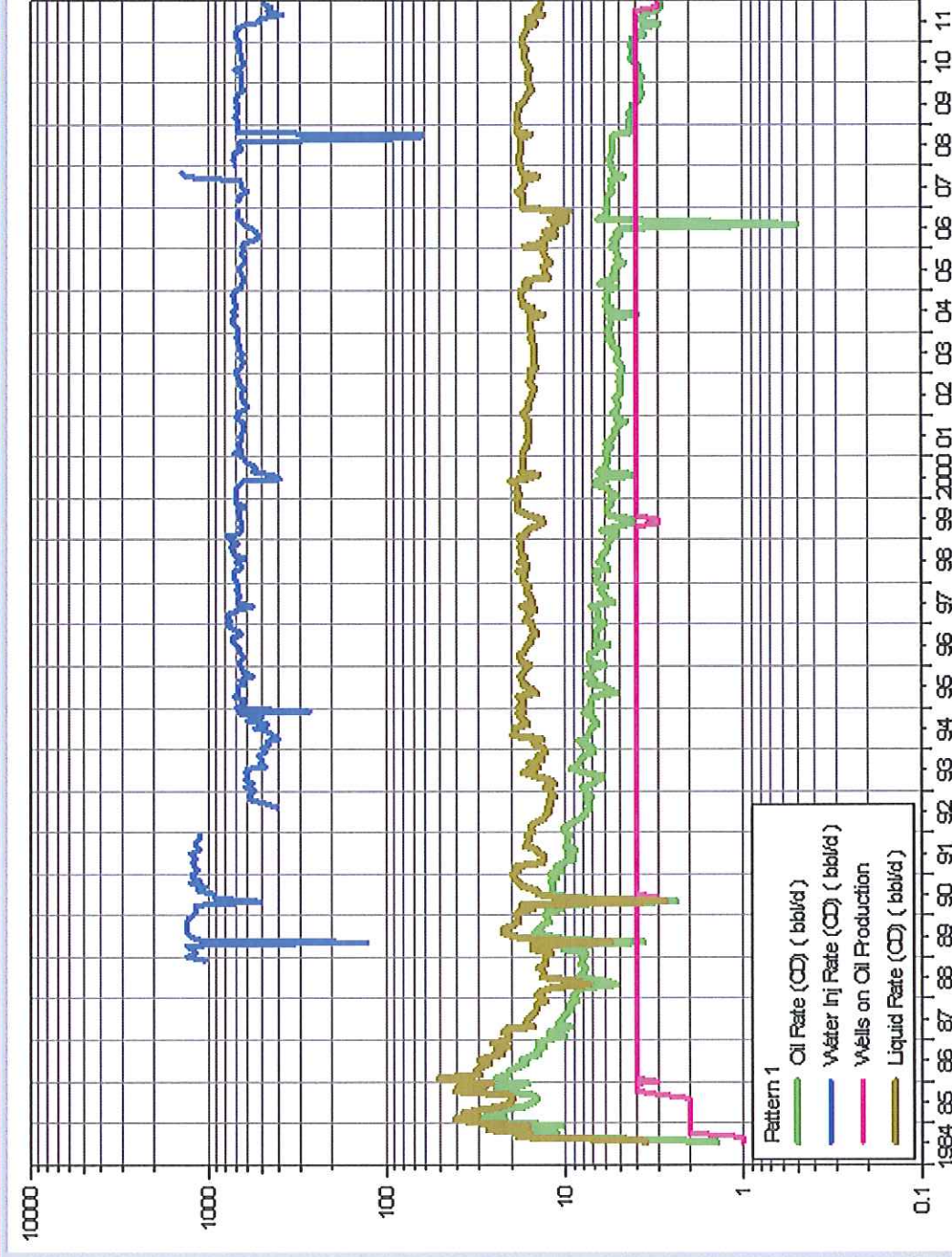


Figure 4
Pattern #2 Production Performance

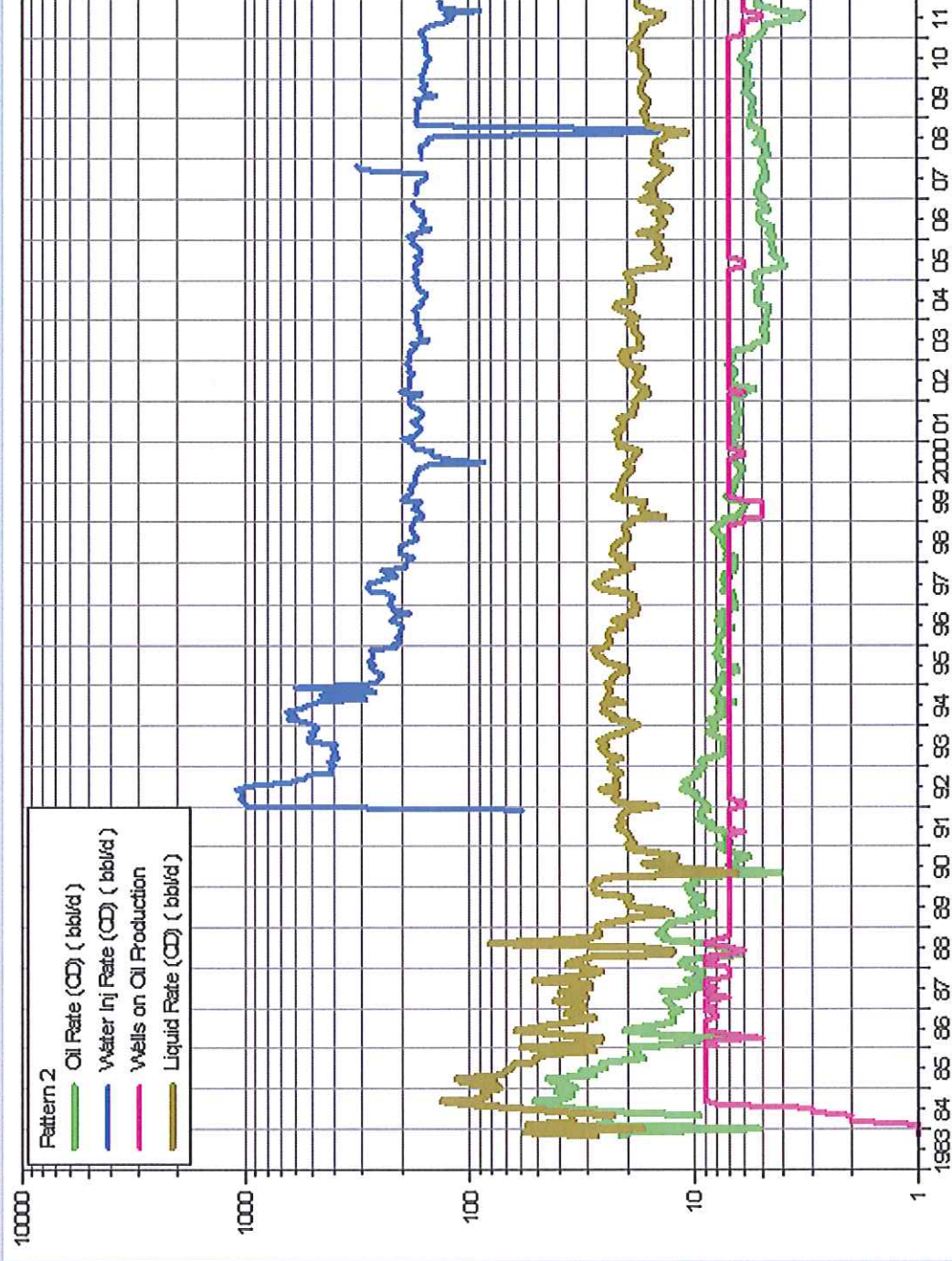


Figure 5
Pattern #3 Production Performance

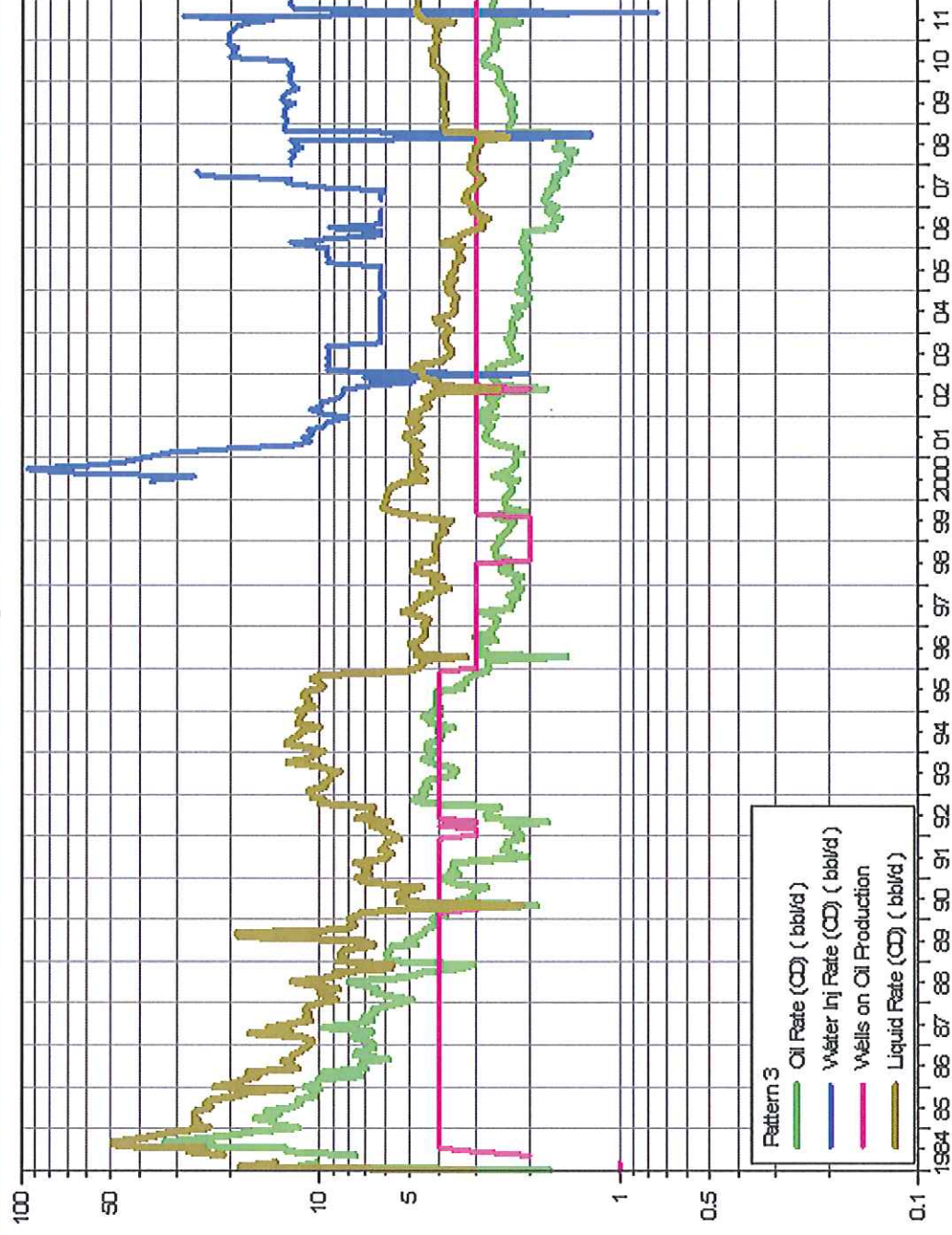


Figure 6
Pattern #4 Production Performance

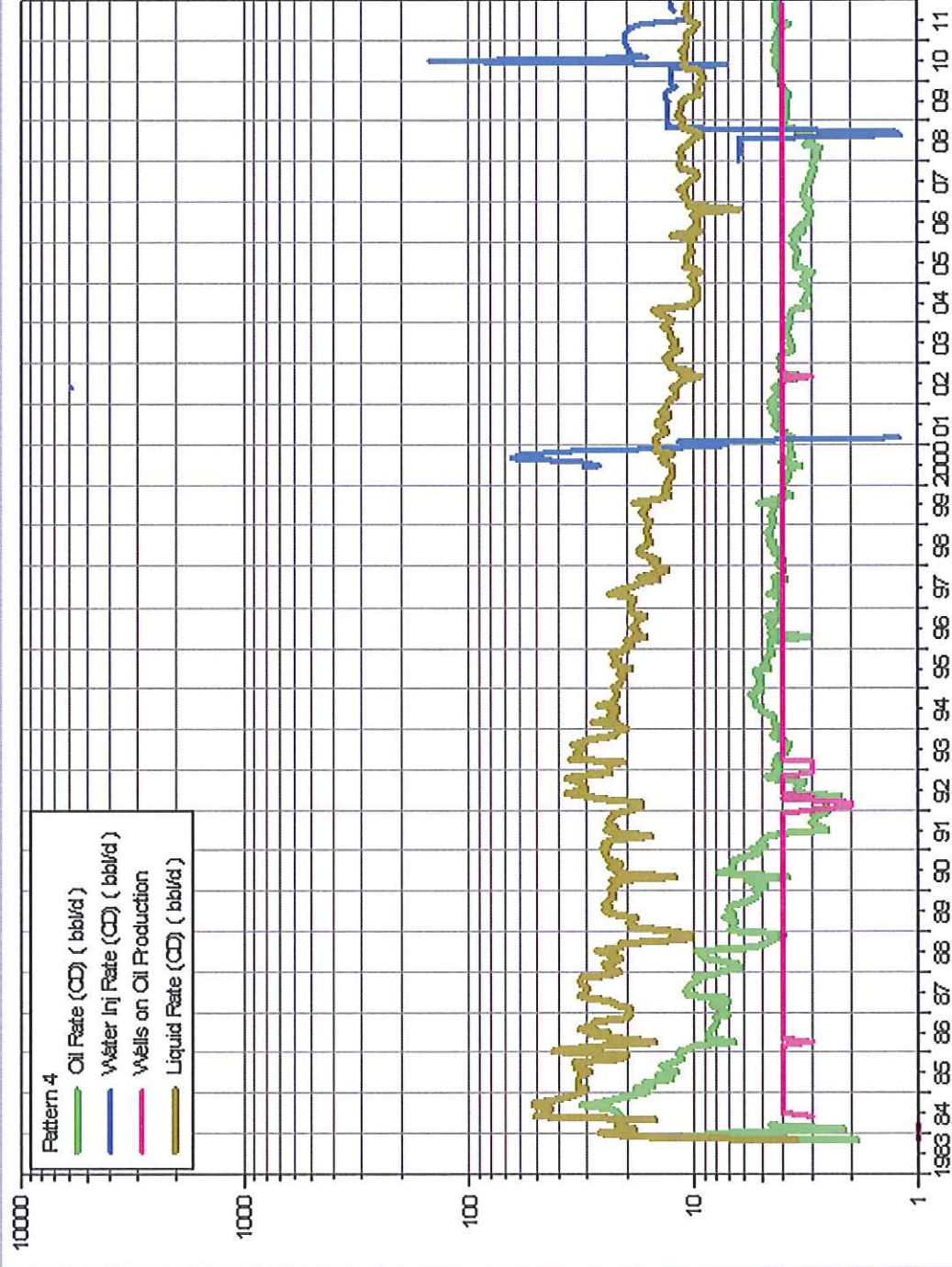


Figure 7
Voidage Pattern #1

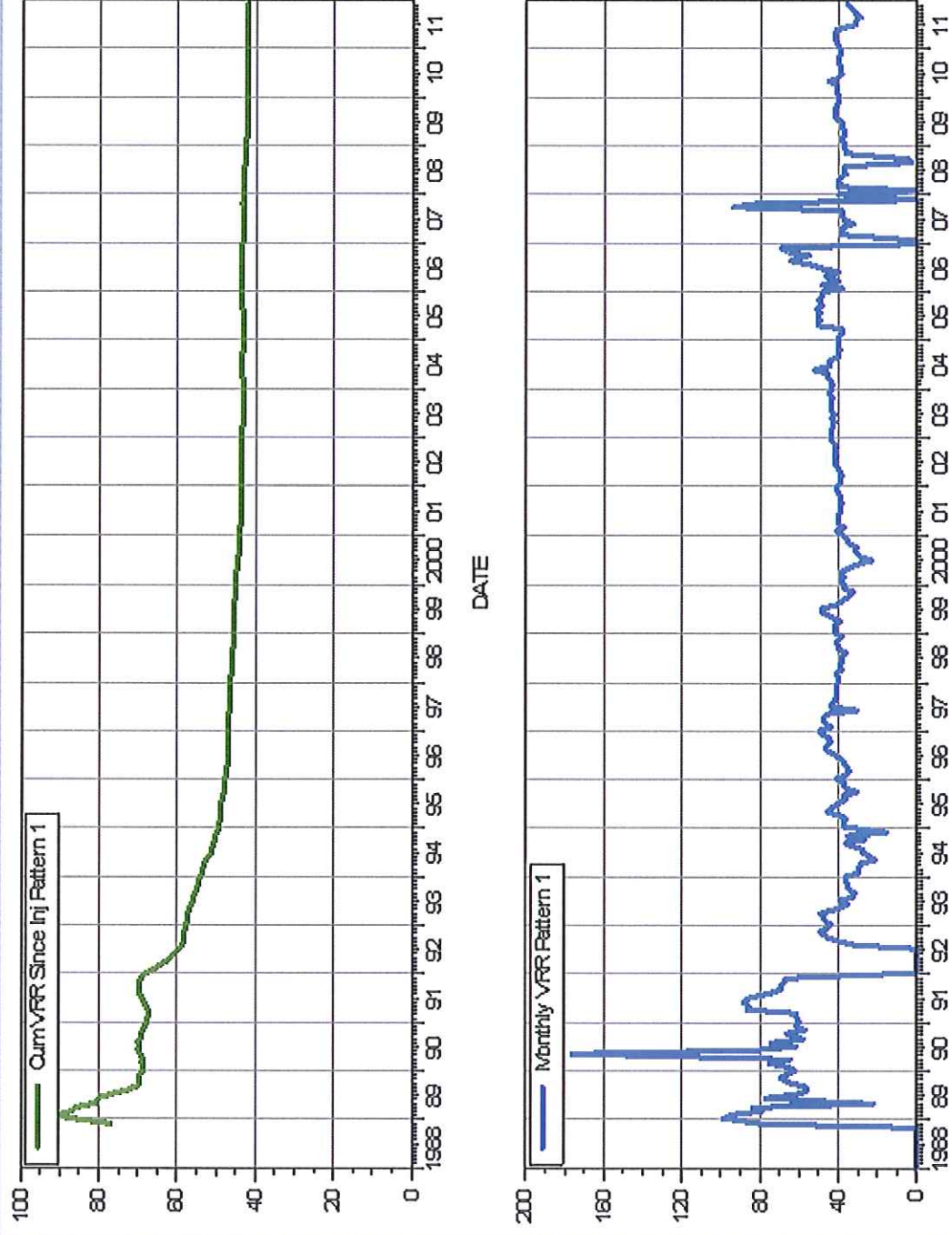


Figure 8
Voidage Pattern #2

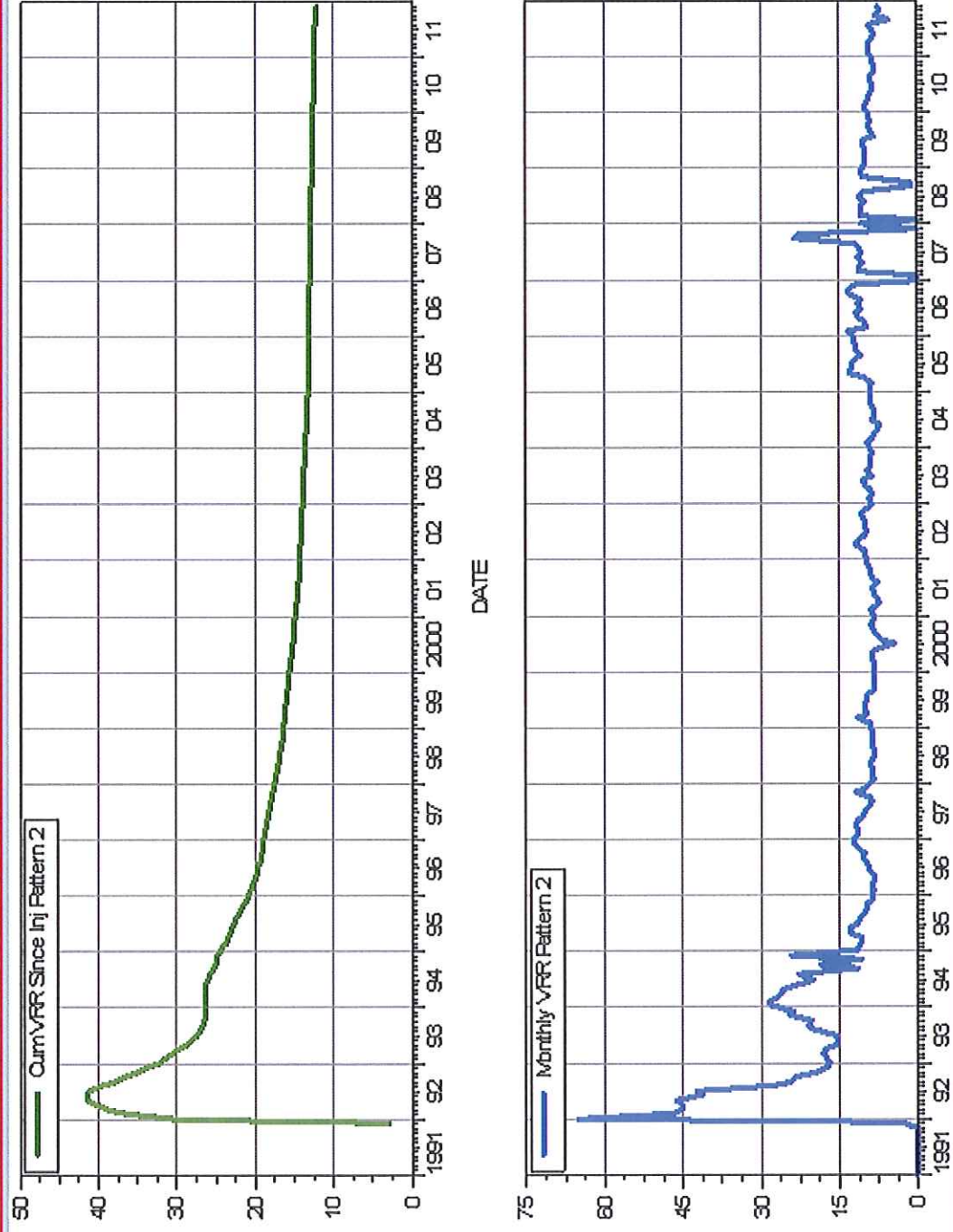


Figure 9
Voidage Pattern #3

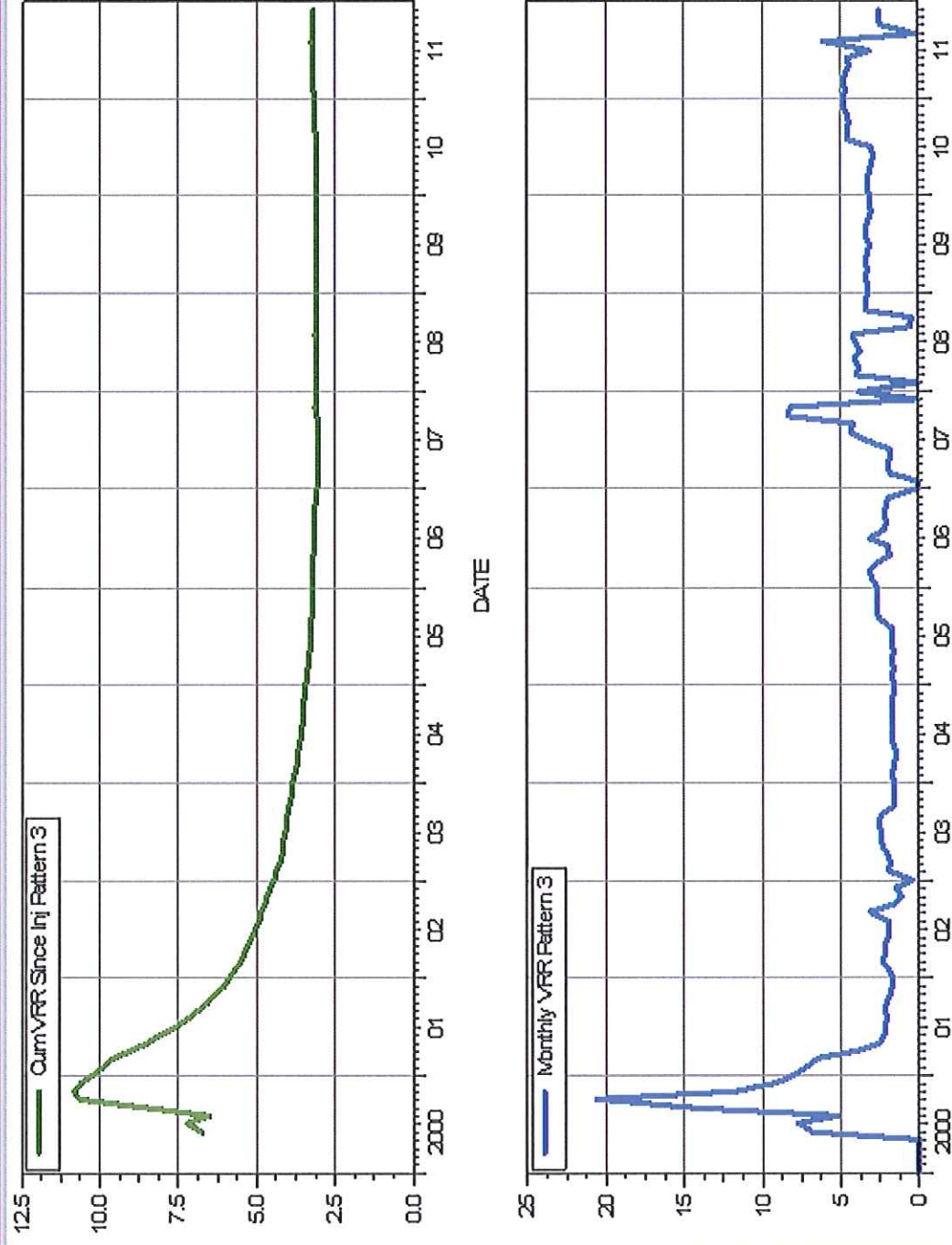


Figure 10
Voidage Pattern #4

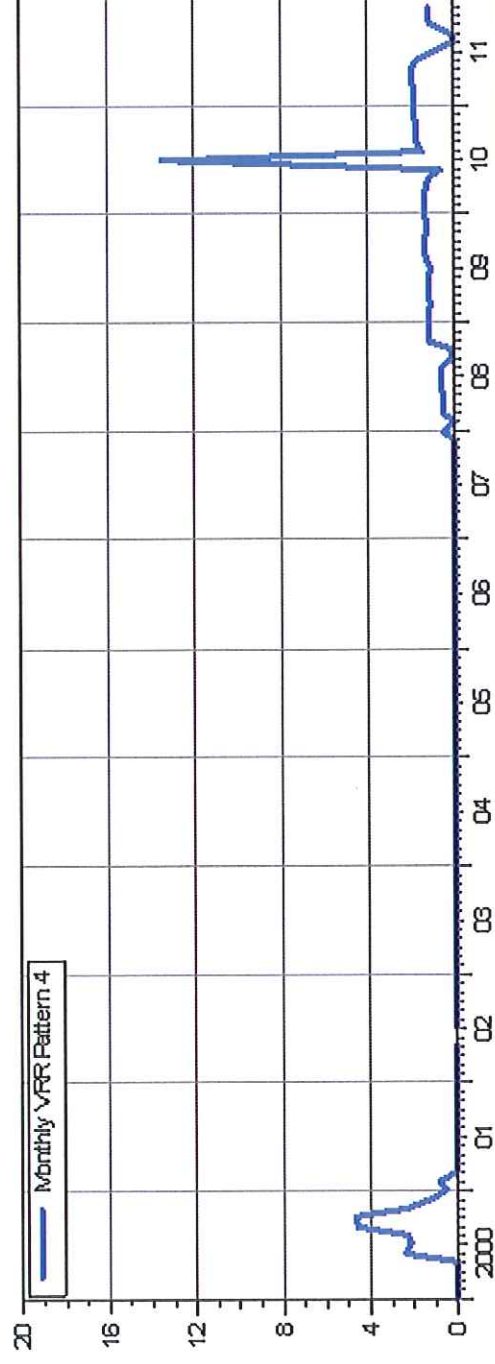
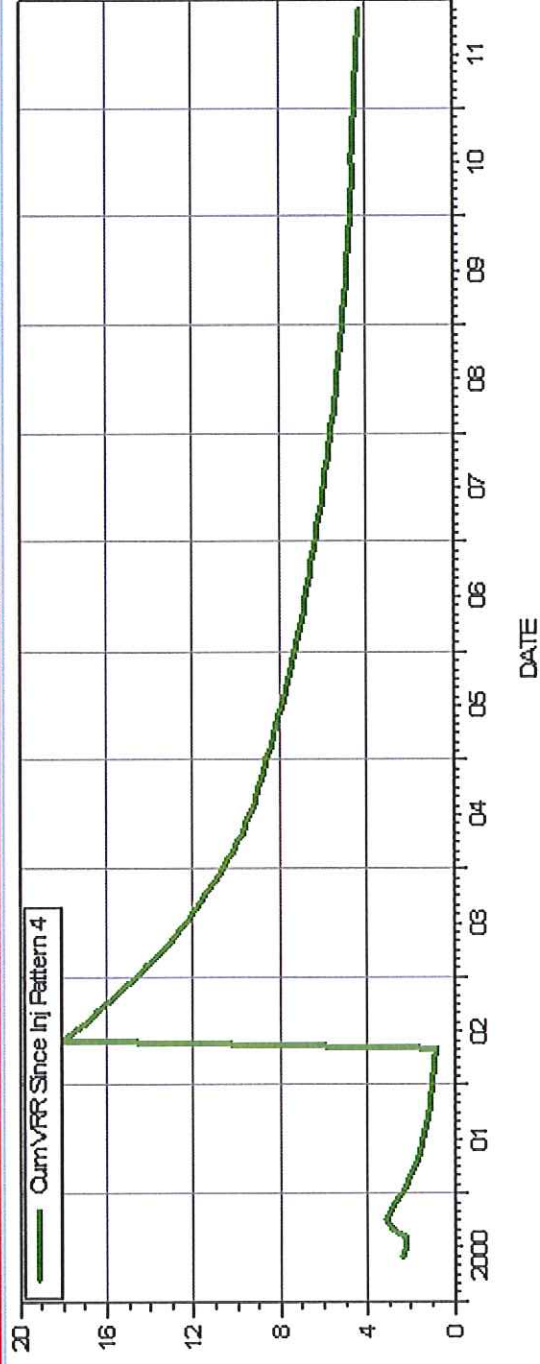
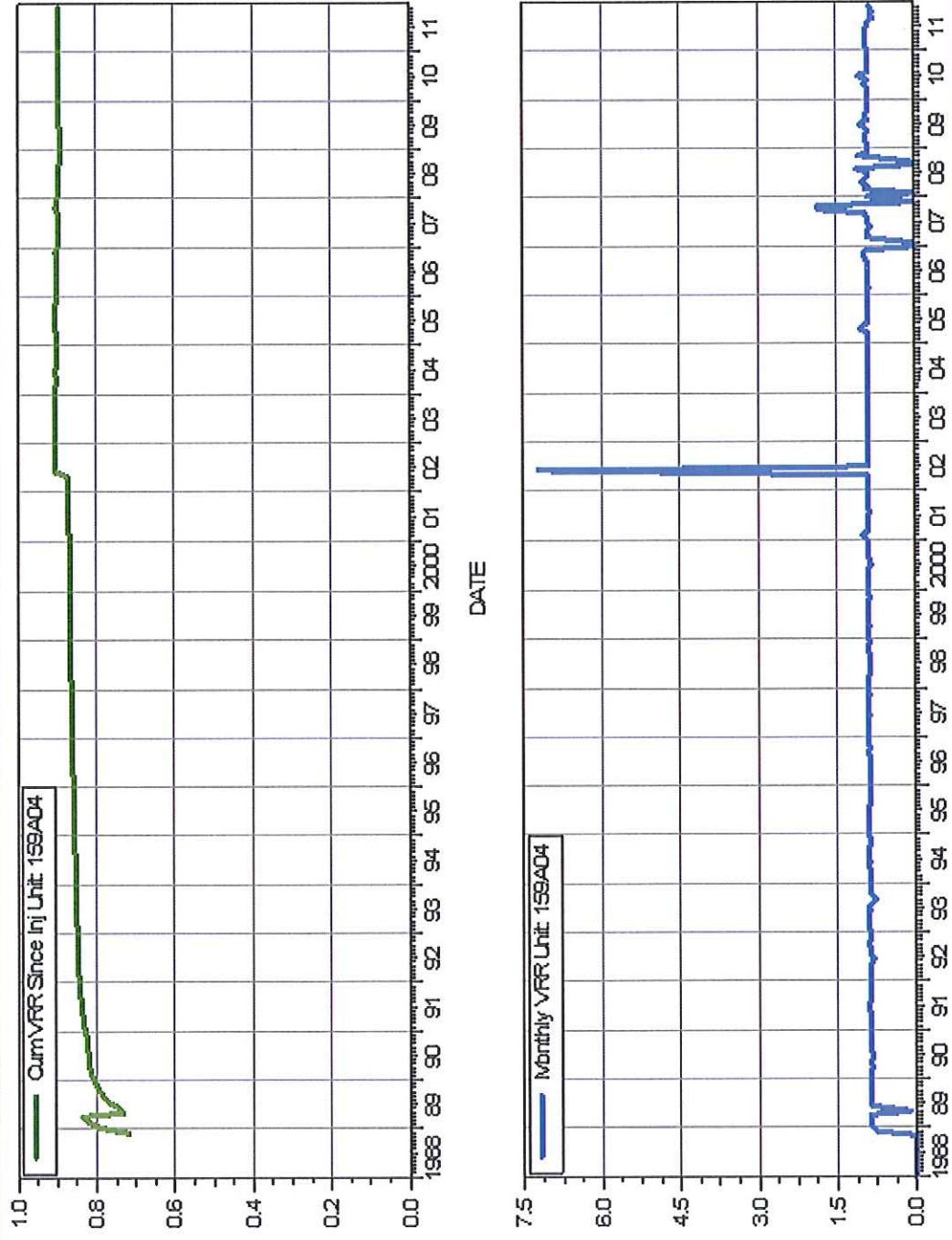


Figure 11
Voidage Daly Unit #4 – Project Scheme Area



Tables

Table 1 Production Rates for Patterns 1-4 and Daily Unit #4 Summary

Date	Pattern #1			Pattern #2			Pattern #3			Pattern #4			Sum Of Patterns 1-4			Daily Unit #4 Total		
	Oil Rate (CD) bbl/d	Water Inj Rate (CD) bbl/d	Water Oil Ratio bbl/bbl	Oil Rate (CD) bbl/d	Water Inj Rate (CD) bbl/d	Water Oil Ratio bbl/bbl	Oil Rate (CD) bbl/d	Water Inj Rate (CD) bbl/d	Water Oil Ratio bbl/bbl	Oil Rate (CD) bbl/d	Water Inj Rate (CD) bbl/d	Water Oil Ratio bbl/bbl	Oil Rate (CD) bbl/d	Water Inj Rate (CD) bbl/d	Water Oil Ratio bbl/bbl	Oil Rate (CD) bbl/d	Water Inj Rate (CD) bbl/d	Water Oil Ratio bbl/bbl
01/01/2011	4.1	688.3	3.1	5.3	156.5	2.4	2.6	20.1	0.6	4.1	20.1	1.6	16.0	865.0	1.7	90.0	865.0	9.6
02/01/2011	4.1	693.8	3.1	5.0	163.7	2.4	2.7	20.1	0.6	4.3	20.1	1.5	16.0	897.6	1.7	91.7	897.7	9.6
03/01/2011	3.6	700.2	3.7	4.9	162.5	2.5	2.6	20.0	0.6	4.2	20.0	1.5	15.2	902.7	1.8	86.1	902.7	10.2
04/01/2011	3.6	699.7	3.5	4.8	158.1	2.4	2.6	19.7	0.6	4.2	19.7	1.4	15.2	887.1	1.7	88.1	887.1	9.8
05/01/2011	3.6	670.4	3.5	4.8	148.6	2.5	2.6	19.1	0.6	4.1	19.1	1.4	15.0	857.2	1.8	86.0	857.2	9.8
06/01/2011	2.9	596.8	4.0	4.0	125.3	2.8	2.2	17.0	0.7	3.7	17.2	1.5	12.8	756.2	1.9	75.1	756.2	9.8
07/01/2011	3.6	510.0	3.4	3.3	119.6	3.2	2.6	14.6	0.8	4.2	10.9	1.5	13.6	655.0	1.9	77.6	655.0	8.3
08/01/2011	3.8	506.5	3.3	3.2	126.9	3.2	2.6	28.9	0.8	4.3	0.0	1.5	13.9	662.3	1.8	79.6	662.3	8.2
09/01/2011	3.5	392.7	2.8	4.2	88.9	2.8	2.7	0.8	0.8	4.3	0.0	1.5	14.6	472.4	1.8	78.4	472.4	6.6
10/01/2011	3.1	460.0	3.7	4.5	139.9	2.7	2.7	12.2	0.8	4.3	12.2	1.5	14.5	618.3	1.9	84.4	618.3	7.9
11/01/2011	2.9	444.1	3.8	5.2	132.3	2.5	2.7	12.6	0.8	4.3	12.6	1.5	14.9	601.6	1.8	85.5	601.6	7.8
12/01/2011	2.9	479.9	3.8	5.2	136.4	2.4	2.6	12.6	0.8	4.3	12.6	1.5	14.9	641.4	1.8	85.6	641.4	7.8

Table 2 Cumulative Production Rates for Patterns 1-4 and Daily Unit #4 Summary

Date	Pattern #1			Pattern #2			Pattern #3			Pattern #4			Sum Of Patterns 1-4			Daily Unit #4 Total		
	Cum Oil Mbbl	Cum Wat Mbbl	Cum Winj Mbbl	Cum Oil Mbbl	Cum Wat Mbbl	Cum Winj Mbbl	Cum Oil Mbbl	Cum Wat Mbbl	Cum Winj Mbbl	Cum Oil Mbbl	Cum Wat Mbbl	Cum Winj Mbbl	Cum Oil Mbbl	Cum Wat Mbbl	Cum Winj Mbbl	Cum Oil Mbbl	Cum Wat Mbbl	Cum Winj Mbbl
12/01/2011	75.1	92.7	5742.0	90.4	157.5	1741.2	40.6	36.6	54.8	54.2	131.4	207.9	260.3	418.2	7745.9	1638.7	9077.6	7745.9

Table 3 Instantaneous/Cumulative Voldage Replacement Ratio for Patterns 1-4 and Daily Unit #4 Summary

Date	Pattern #1			Pattern #2			Pattern #3			Pattern #4			Daily Unit #4 Total		
	Monthly VRR	Cum VRR Since Inj	Monthly VRR	Cum VRR Since Inj	Monthly VRR	Cum VRR Since Inj	Monthly VRR	Cum VRR Since Inj	Monthly VRR	Cum VRR Since Inj	Monthly VRR	Cum VRR Since Inj	Monthly VRR	Cum VRR Since Inj	Monthly VRR
01/01/2011	38.9	42.3	8.7	12.4	4.8	3.2	1.9	4.5	0.904	0.894	0.904	0.894	0.904	0.894	0.904
02/01/2011	40.1	42.3	9.4	12.4	4.7	3.2	1.8	4.5	0.923	0.894	0.923	0.894	0.923	0.894	0.923
03/01/2011	41.2	42.3	9.5	12.4	4.7	3.2	1.9	4.5	0.930	0.894	0.930	0.894	0.930	0.894	0.930
04/01/2011	41.6	42.3	9.4	12.4	4.7	3.2	1.9	4.5	0.925	0.894	0.925	0.894	0.925	0.894	0.925
05/01/2011	41.5	42.3	8.7	12.3	4.4	3.2	1.9	4.5	0.918	0.894	0.918	0.894	0.918	0.894	0.918
06/01/2011	40.7	42.3	8.2	12.3	4.6	3.2	1.8	4.4	0.929	0.894	0.929	0.894	0.929	0.894	0.929
07/01/2011	31.8	42.2	8.5	12.3	3.1	3.2	1.0	4.4	0.905	0.894	0.905	0.894	0.905	0.894	0.905
08/01/2011	31.1	42.2	9.3	12.3	6.0	3.3	0.0	4.4	0.902	0.894	0.902	0.894	0.902	0.894	0.902
09/01/2011	28.6	42.2	5.4	12.3	0.2	3.2	0.0	4.4	0.783	0.894	0.783	0.894	0.783	0.894	0.783
10/01/2011	31.1	42.1	8.0	12.3	2.5	3.2	1.1	4.3	0.818	0.894	0.818	0.894	0.818	0.894	0.818
11/01/2011	32.0	42.1	7.3	12.3	2.6	3.2	1.2	4.3	0.795	0.894	0.795	0.894	0.795	0.894	0.795
12/01/2011	34.8	42.1	7.5	12.2	2.6	3.2	1.2	4.3	0.847	0.894	0.847	0.894	0.847	0.894	0.847

*So assumed 1.0632 mbbl, Rr = 122 scf/bbl