



KANSAS CORPORATION COMMISSION 1101852  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
June 2009  
Form Must Be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 3553  
Name: Citation Oil & Gas Corp.  
Address 1: 14077 Cutten Rd  
Address 2: PO BOX 690688  
City: HOUSTON State: TX Zip: 77269 + 0688  
Contact Person: Sandra Ochoa  
Phone: ( 281 ) 891-1000  
CONTRACTOR: License # 5929  
Name: Duke Drilling Co., Inc.  
Wellsite Geologist: unknown  
Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well     Re-Entry     Workover
- Oil     WSW     SWD     SLOW
- Gas     D&A     ENHR     SIGW
- OG     GSW     Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic     Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: Noble Energy, Inc.  
Well Name: Barry LKC #6-36  
Original Comp. Date: 9/14/1947 Original Total Depth: 3434  
 Deepening     Re-perf.     Conv. to ENHR     Conv. to SWD  
 Conv. to GSW

Plug Back: 3403 Plug Back Total Depth  
 Commingled    Permit #: \_\_\_\_\_  
 Dual Completion    Permit #: \_\_\_\_\_  
 SWD    Permit #: \_\_\_\_\_  
 ENHR    Permit #: \_\_\_\_\_  
 GSW    Permit #: \_\_\_\_\_

10/23/2012    11/13/2012  
Spud Date or    Date Reached TD    Completion Date or  
Recompletion Date    Recompletion Date

API No. 15 - 15-163-03502-00-01  
Spot Description: \_\_\_\_\_  
SW NE SW Sec. 2 Twp. 9 S. R. 19  East  West  
1650 Feet from  North /  South Line of Section  
1650 Feet from  East /  West Line of Section  
Footages Calculated from Nearest Outside Section Corner:  
 NE     NW     SE     SW  
County: Rooks  
Lease Name: BARRY LKC UNIT Well #: 6-36  
Field Name: \_\_\_\_\_  
Producing Formation: Arbuckle, Lansing-Kansas City (LKC), A, B, D, F, G, H, I, J, K  
Elevation: Ground: 2010 Kelly Bushing: 2013  
Total Depth: 3434 Plug Back Total Depth: 3403  
Amount of Surface Pipe Set and Cemented at: 0 Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set: \_\_\_\_\_ Feet  
If Alternate II completion, cement circulated from: \_\_\_\_\_  
feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls  
Dewatering method used: \_\_\_\_\_  
Location of fluid disposal if hauled offsite:  
Operator Name: \_\_\_\_\_  
Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_  
Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West  
County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received  
Date: \_\_\_\_\_  
 Confidential Release Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
 UIC Distribution  
ALT  I  II  III Approved by: Deanna Garrisor Date: 11/21/2012



1101852

Operator Name: Citation Oil & Gas Corp. Lease Name: BARRY LKC UNIT Well #: 6-36  
 Sec. 2 Twp. 9 S. R. 19  East  West County: Rooks

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">Name</td> <td style="width:20%;">Top</td> <td style="width:20%;">Datum</td> </tr> <tr> <td>Arbuckle</td> <td>3427</td> <td></td> </tr> <tr> <td>Lansing-Kansas City (LKC)</td> <td>3174</td> <td></td> </tr> </table>	Name	Top	Datum	Arbuckle	3427		Lansing-Kansas City (LKC)	3174	
Name	Top	Datum								
Arbuckle	3427									
Lansing-Kansas City (LKC)	3174									

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface Casing	13.75	10.75	40	207	c	240	
Production Casing	8.75	6	17	3427	c	300	

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate				
___ Protect Casing	-			
___ Plug Back TD				
___ Plug Off Zone	-			

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth
3	Arbuckle	500 gal 15% HCL acid w/ 3% solvent-loaded with 11 bris pumped w/ pressure @ 300#	3427-3434

TUBING RECORD: Size: <u>2 3/8</u> Set At: <u>3416</u> Packer At: <u>3396</u> Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Date of First, Resumed Production, SWD or ENHR. <u>11/13/2012</u>	Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
Estimated Production Per 24 Hours	Oil Bbls. <u>25.6</u> Gas Mcf _____ Water Bbls. <u>109.4</u> Gas-Oil Ratio _____ Gravity <u>30</u>

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input checked="" type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: <u>Arbuckle</u> <u>LKC</u>
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**CROSS-LINKED POLYMER GEL  
WATER REDUCTION TREATMENT  
JOB LOG AND SUMMARY PREPARED FOR:**




**BARRY LKC 6-36  
BARRY FIELD  
ROOKS COUNTY, KANSAS**

**November 2, 2012**

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Eclipse IOR Services, LLC  
d.b.a. Eclipse Oil & Gas Associates ("eoga")  
PO Box 2230 • Keller, Texas 76244-2230

817.431.6336 (off)  
817-431.6337 (fax)  
[www.getmoreoil.com](http://www.getmoreoil.com)

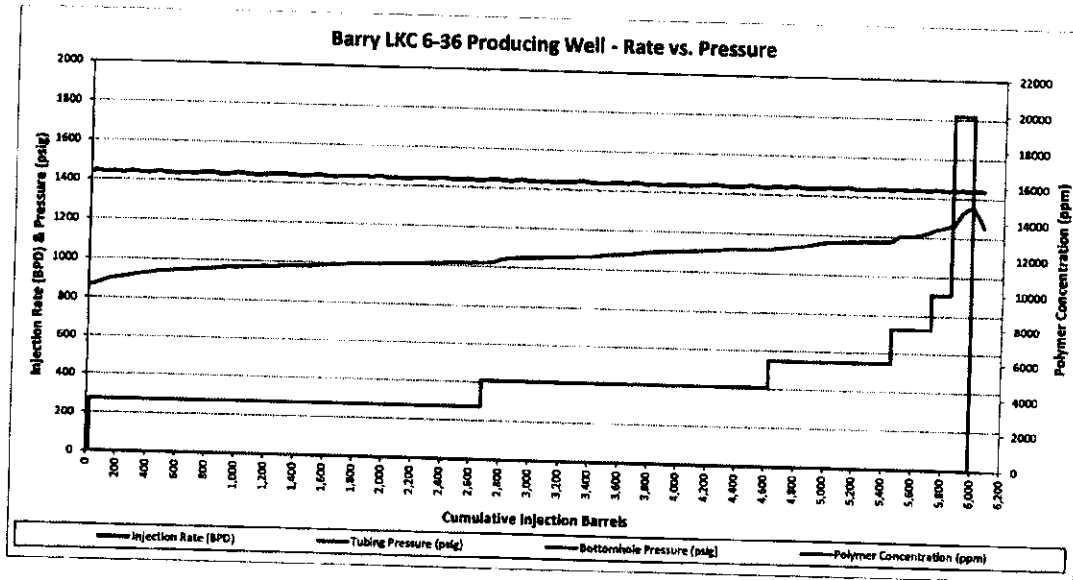
  
 improved oil & gas recovery  
**BULK POLYMER GEL TREATMENT**  
 Morning Progress Report

Company Name: Citation Oil & Gas Corp.  
 Field Name: Barry  
 Well Name: Barry LKC 6-36

Location: Rooks Co., KS  
 Date: 11/2/2012  
 Est. Cum. Cost: \$53,300

The following is the most recent information available for the bulk polymer gel treatment that is in progress at the above captioned well.

Stage No.	Begin Date	Begin Time	End Date	End Time	BG-100 Polymer		XL-100 Cross-linker		Gel Bbls.	WHP (psi)		BHP (psi)		Rate (BPM)		Comments
					Ppm	Lbs.	Ratio	Lbs.		Begin	End	Begin	End	Begin	End	
1	10/29/2012	10:25 AM	10/29/2012	10:45 AM	0	0			0	0	0	864	869	1.00	1.00	20 barrels water
2	10/29/2012	10:45 AM	10/31/2012	6:55 AM	3000	2780	40	604	2650	0	0	869	1019	1.00	1.00	
3	10/31/2012	6:55 AM	11/1/2012	3:25 PM	4500	3068	40	667	1950	0	0	1019	1123	1.00	1.00	
4	11/1/2012	3:25 PM	11/2/2012	5:15 AM	6000	1741	40	379	830	0	0	1123	1180	1.00	1.00	
5	11/2/2012	5:15 AM	11/2/2012	9:40 AM	8000	741	40	161	265	0	0	1180	1233	1.00	1.00	
6	11/2/2012	9:40 AM	11/2/2012	11:53 AM	10000	465	40	101	133	0	0	1233	1260	1.00	1.00	
7	11/2/2012	11:53 AM	11/2/2012	2:06 PM	20000	930	40	202	133	0	0	1260	1357	1.00	1.00	
8	11/2/2012	2:06 PM	11/2/2012	3:26 PM	0	0			0	0	0	1357	1252	1.00	1.00	80 barrels water
Totals						9726		2114	5961							





Project Engineer - Jay Portwood  
 P.O. Box 2280 Keller, TX 76244-2280  
 817-481-4336 (cell) 817-481-4337 (fax)  
 817-312-1039 (cell)

Company Name: Citation Oil & Gas Corp.  
 Field Name: Barry  
 Well Name: Barry LXC 6-36  
 Injector or Producer: Producer  
 Operator/State: Rooks/KS  
 Polymer Unit No.: 5  
 Polymer Unit Operators: Todd Schneider (day) 785-885-8177 / Rocky Hamblett (night) 785-845-8179  
 Generator Used (Yes/No): Yes  
 Customer Contact: Jay Harden 261-891-1488 (cell) 832-627-3967 (cell)

PROJECT INFORMATION

Depth to Top Perforation or OH (ft.): 3427  
 Depth to Bottom Perforation or OH (ft.): 3434  
 Depth to Mid-Perf (ft.): 3431  
 BHP Tool Depth (ft.): 3431  
 Type Misc Water Used: Fresh  
 Misc Water Specific Gravity: 1.02  
 Misc Water Pressure Gradient (psi per ft.): 0.442  
 Expected Positive Surface Pressure @ BHP wt.: 1515  
 Estimated Static BHP (psig): 864

BOI (ft.): 3396  
 Packer (ft.): 3396  
 Top Seal (ft.): 2.975  
 Thick. Cap. (Inch./ft.): 0.00387  
 Thick. Vol. (bbls./ft.): 13.14  
 Cap. Size: 61.179  
 Cap. Cap. (bbls./ft.): 0.0286  
 Cap. Vol. (bbls. (Pfr. to Btm. Perf.): 1.0944  
 Total Well Vol. (bbls.): 14.24

Date	Time	Elapsed Time Between Readings (mins.)	Injection Rate		Total Cum. Injection (bbls.)	Stage Cum. Injection (bbls.)	Tubing Pressure (psig)	PSIG per (bbl) Injected	PSIG per Hour Injected	Bottomhole Conditions				Injectivity Index BHP/(Calc. BHP-Static BHP) (BPD per psi)	Pressure Gradient (psi per ft.)	Polymer Concentration (ppm)	Cross-Linker Ratio (R:1)	Total Cum. Polymer (lbs.)	Stage Cum. Polymer (lbs.)	Total Cum. X-Linker (lbs.)	Stage Cum. X-Linker (lbs.)	Casing Pressure (psig)	Comments	
			BPD	BPM						Actual Reading	Calculated to Mid-Perf	Hall Pot. Cum. per-Time	Injectivity Ratio (Psi + Rate)											
28-Oct-12	10:25 AM	1:00	1440	1.00	0.0	0.0	0	0	924	924	0	0.60												
28-Oct-12	10:45 AM	0:20	1440	1.00	20.0	20.0	0	0.25	15.00	859	859	5	17380	0.60										
28-Oct-12	10:45 AM	0:00	1440	1.00	20.0	0.0	0	0.25	15.00	859	859	5	17380	0.60										
28-Oct-12	11:00 AM	0:15	1445	1.00	35.1	15.1	0	0.00	0.00	869	869	5	17380	0.60										
28-Oct-12	11:00 AM	0:00	1445	1.00	35.1	0.0	0	0.00	0.00	869	869	5	17380	0.60										
28-Oct-12	11:00 AM	0:00	1445	1.00	35.1	15.1	0	0.00	0.00	869	869	5	17380	0.60										
28-Oct-12	12:00 PM	1:00	1439	1.00	95.0	75.0	0	0.28	17.00	886	886	22	23732	0.62										
28-Oct-12	12:00 PM	0:00	1439	1.00	95.0	0.0	0	0.28	17.00	886	886	22	23732	0.62										
28-Oct-12	12:00 PM	0:00	1439	1.00	95.0	75.0	0	0.28	17.00	886	886	22	23732	0.62										
28-Oct-12	1:00 PM	1:00	1438	1.00	155.1	135.1	0	0.21	14.00	900	900	36	117572	0.62										
28-Oct-12	1:00 PM	0:00	1438	1.00	155.1	0.0	0	0.21	14.00	900	900	36	117572	0.62										
28-Oct-12	1:00 PM	0:00	1438	1.00	155.1	135.1	0	0.21	14.00	900	900	36	117572	0.62										
28-Oct-12	2:00 PM	1:00	1440	1.00	215.0	195.0	0	0.13	8.00	908	908	44	19205	0.63										
28-Oct-12	2:00 PM	0:00	1440	1.00	215.0	0.0	0	0.13	8.00	908	908	44	19205	0.63										
28-Oct-12	2:00 PM	0:00	1440	1.00	215.0	195.0	0	0.13	8.00	908	908	44	19205	0.63										
28-Oct-12	3:00 PM	1:00	1445	1.00	335.2	315.2	0	0.13	8.00	924	924	60	302455	0.63										
28-Oct-12	3:00 PM	0:00	1445	1.00	335.2	0.0	0	0.13	8.00	924	924	60	302455	0.63										
28-Oct-12	3:00 PM	0:00	1445	1.00	335.2	315.2	0	0.13	8.00	924	924	60	302455	0.63										
28-Oct-12	4:00 PM	1:00	1440	1.00	399.1	379.1	0	0.10	6.00	930	930	66	358255	0.65										
28-Oct-12	4:00 PM	0:00	1440	1.00	399.1	0.0	0	0.10	6.00	930	930	66	358255	0.65										
28-Oct-12	4:00 PM	0:00	1440	1.00	399.1	379.1	0	0.10	6.00	930	930	66	358255	0.65										
28-Oct-12	5:00 PM	1:00	1438	1.00	453.1	433.1	0	0.10	6.00	936	936	72	414415	0.65										
28-Oct-12	5:00 PM	0:00	1438	1.00	453.1	0.0	0	0.10	6.00	936	936	72	414415	0.65										
28-Oct-12	5:00 PM	0:00	1438	1.00	453.1	433.1	0	0.10	6.00	936	936	72	414415	0.65										
28-Oct-12	6:00 PM	1:00	1445	1.00	517.0	497.0	0	0.05	3.00	939	939	78	470755	0.65										
28-Oct-12	6:00 PM	0:00	1445	1.00	517.0	0.0	0	0.05	3.00	939	939	78	470755	0.65										
28-Oct-12	6:00 PM	0:00	1445	1.00	517.0	497.0	0	0.05	3.00	939	939	78	470755	0.65										
28-Oct-12	7:00 PM	1:00	1438	1.00	575.0	555.0	0	0.08	3.00	944	944	80	527395	0.66										
28-Oct-12	7:00 PM	0:00	1438	1.00	575.0	0.0	0	0.08	3.00	944	944	80	527395	0.66										
28-Oct-12	7:00 PM	0:00	1438	1.00	575.0	555.0	0	0.08	3.00	944	944	80	527395	0.66										
28-Oct-12	8:00 PM	1:00	1435	1.00	638.0	618.0	0	0.05	3.00	949	949	85	584335	0.66										
28-Oct-12	8:00 PM	0:00	1435	1.00	638.0	0.0	0	0.05	3.00	949	949	85	584335	0.66										
28-Oct-12	8:00 PM	0:00	1435	1.00	638.0	618.0	0	0.05	3.00	949	949	85	584335	0.66										
28-Oct-12	9:00 PM	1:00	1440	1.00	755.0	735.0	0	0.05	3.00	952	952	88	641455	0.66										
28-Oct-12	9:00 PM	0:00	1440	1.00	755.0	0.0	0	0.05	3.00	952	952	88	641455	0.66										
28-Oct-12	9:00 PM	0:00	1440	1.00	755.0	735.0	0	0.05	3.00	952	952	88	641455	0.66										
28-Oct-12	10:00 PM	1:00	1438	1.00	819.0	799.0	0	0.05	3.00	958	958	91	698735	0.66										
28-Oct-12	10:00 PM	0:00	1438	1.00	819.0	0.0	0	0.05	3.00	958	958	91	698735	0.66										
28-Oct-12	10:00 PM	0:00	1438	1.00	819.0	799.0	0	0.05	3.00	958	958	91	698735	0.66										
28-Oct-12	11:00 PM	1:00	1442	1.00	875.0	855.0	0	0.07	4.00	962	962	94	756235	0.66										
28-Oct-12	11:00 PM	0:00	1442	1.00	875.0	0.0	0	0.07	4.00	962	962	94	756235	0.66										
28-Oct-12	11:00 PM	0:00	1442	1.00	875.0	855.0	0	0.07	4.00	962	962	94	756235	0.66										
28-Oct-12	12:00 AM	1:00	1445	1.00	935.0	915.0	0	0.07	4.00	968	968	98	813955	0.67										
28-Oct-12	12:00 AM	0:00	1445	1.00	935.0	0.0	0	0.07	4.00	968	968	98	813955	0.67										
28-Oct-12	12:00 AM	0:00	1445	1.00	935.0	915.0	0	0.07	4.00	968	968	98	813955	0.67										
28-Oct-12	1:00 AM	1:00	1445	1.00	995.0	975.0	0	0.02	1.00	967	967	103	871915	0.67										
28-Oct-12	1:00 AM	0:00	1445	1.00	995.0	0.0	0	0.02	1.00	967	967	103	871915	0.67										
28-Oct-12	1:00 AM	0:00	1445	1.00	995.0	975.0	0	0.02	1.00	967	967	103	871915	0.67										
28-Oct-12	2:00 AM	1:00	1440	1.00	1059.0	1039.0	0	0.05	3.00	970	970	105	929935	0.67										
28-Oct-12	2:00 AM	0:00	1440	1.00	1059.0	0.0	0	0.05	3.00	970	970	105	929935	0.67										
28-Oct-12	2:00 AM	0:00	1440	1.00	1059.0	1039.0	0	0.05	3.00	970	970	105	929935	0.67										
28-Oct-12	3:00 AM	1:00	1440	1.00	1115.0	1095.0	0	0.00	0.00	970	970	105	1046335	0.68										
28-Oct-12	3:00 AM	0:00	1440	1.00	1115.0	0.0	0	0.00	0.00	970	970	105	1046335	0.68										
28-Oct-12	3:00 AM	0:00	1440	1.00	1115.0	1095.0	0	0.00	0.00	970	970	105	1046335	0.68										
28-Oct-12	4:00 AM	1:00	1447	1.00	1285.1	1265.1	0	0.08	2.00	972	972	108	1104655	0.68										
28-Oct-12	4:00 AM	0:00	1447	1.00	1285.1	0.0	0	0.08	2.00	972	972	108	1104655	0.68										
28-Oct-12	4:00 AM	0:00	1447	1.00	1285.1	1265.1	0	0.08	2.00	972	972	108	1104655	0.68										
28-Oct-12	5:00 AM	1:00	1445	1.00	1385.1	1365.1	0	0.06	5.00	972	972	108	1162875	0.67										
28-Oct-12	5:00 AM	0:00	1445	1.00	1385.1	0.0	0	0.06	5.00	972	972	108	1162875	0.67										
28-Oct-12	5:00 AM	0:00	1445	1.00	1385.1	1365.1	0	0.06	5.00	972	972	108	1162875	0.67										
28-Oct-12	6:00 AM	1:00	1440	1.00	1435.0	1415.0	0	0.05	3.00	980	980	116	1221595	0.68										
28-Oct-12	6:00 AM	0:00	1440	1.00	1435.0	0.0	0	0.05	3.00	980	980	116	1221595	0.68										
28-Oct-12	6:00 AM	0:00	1440																					



Project Engineer - Jay Portwood  
 P.O. Box 12386 Dallas, TX 75244-2386  
 817-431-6388 (cell) 817-481-9337 (fax)  
 817-313-1833 (cell)

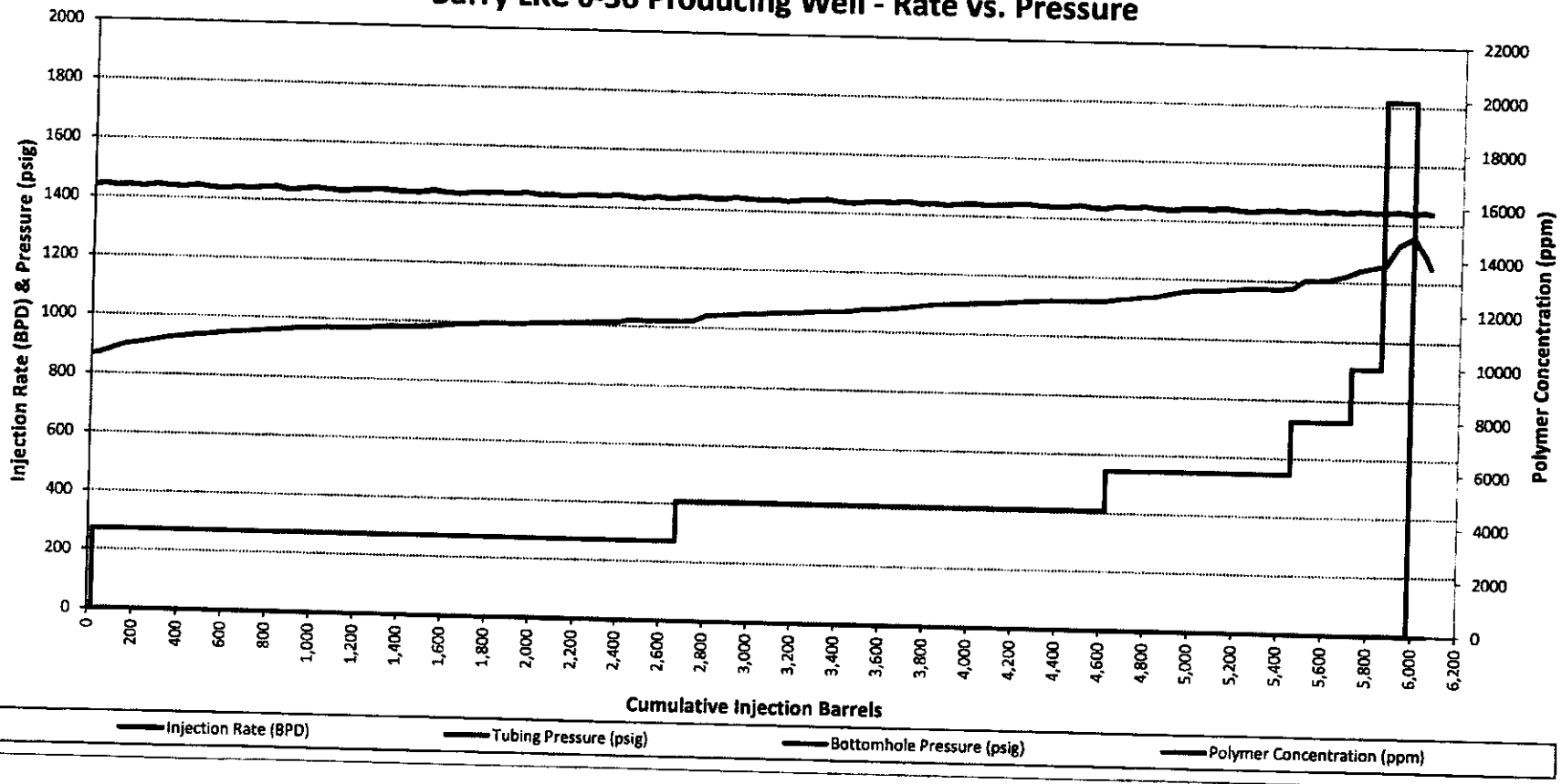
Company Name: Clifton Oil & Gas Corp.  
 Field Name: Barry  
 Well Name: Barry LK6 G-36  
 Injector or Producer: Producer  
 County/State: Rooks/KS  
 Polymer Unit No.: 5  
 Polymer Unit Operators: Todd Schneider (day) 785-895-6177 / Rocky Hamblett (night) 785-865-6179  
 Generator Used (Yes/No): Yes  
 Customer Contact: Jay Marden 281-891-1488 (cell) 852-627-3987 (cell)

PROJECT INFORMATION

Depth to Top Perforation or CH (ft.): 3477  
 Depth to Bottom Perforation or CH (ft.): 3434  
 Depth to Mid-Perf (ft.): 3431  
 BHP Tool Depth (ft.): 3431  
 Type Mils Water Used: Fresh  
 Mils Water Specific Gravity: 1.02  
 Mils Water Pressure Gradient (psi per ft.): 0.442  
 Impact Positive Surface Pressure @ BHP of: 1513  
 Estimated Static BHP (psig): 364  
 Est. (ft.): 3396  
 Reflux (ft.): 3396  
 The Gap (ft.): 2.875"  
 The Gap (Inch./ft.): 0.00087  
 The Vol. (bbl./ft.): 67.178  
 The Vol. (bbl.): 0.0288  
 Csg. Cap. (Inch./ft.): 1.0984  
 Csg. Vol. (bbl. ft. to Btm. Perf.): 14.24  
 Total Well Vol. (bbl.): 14.24

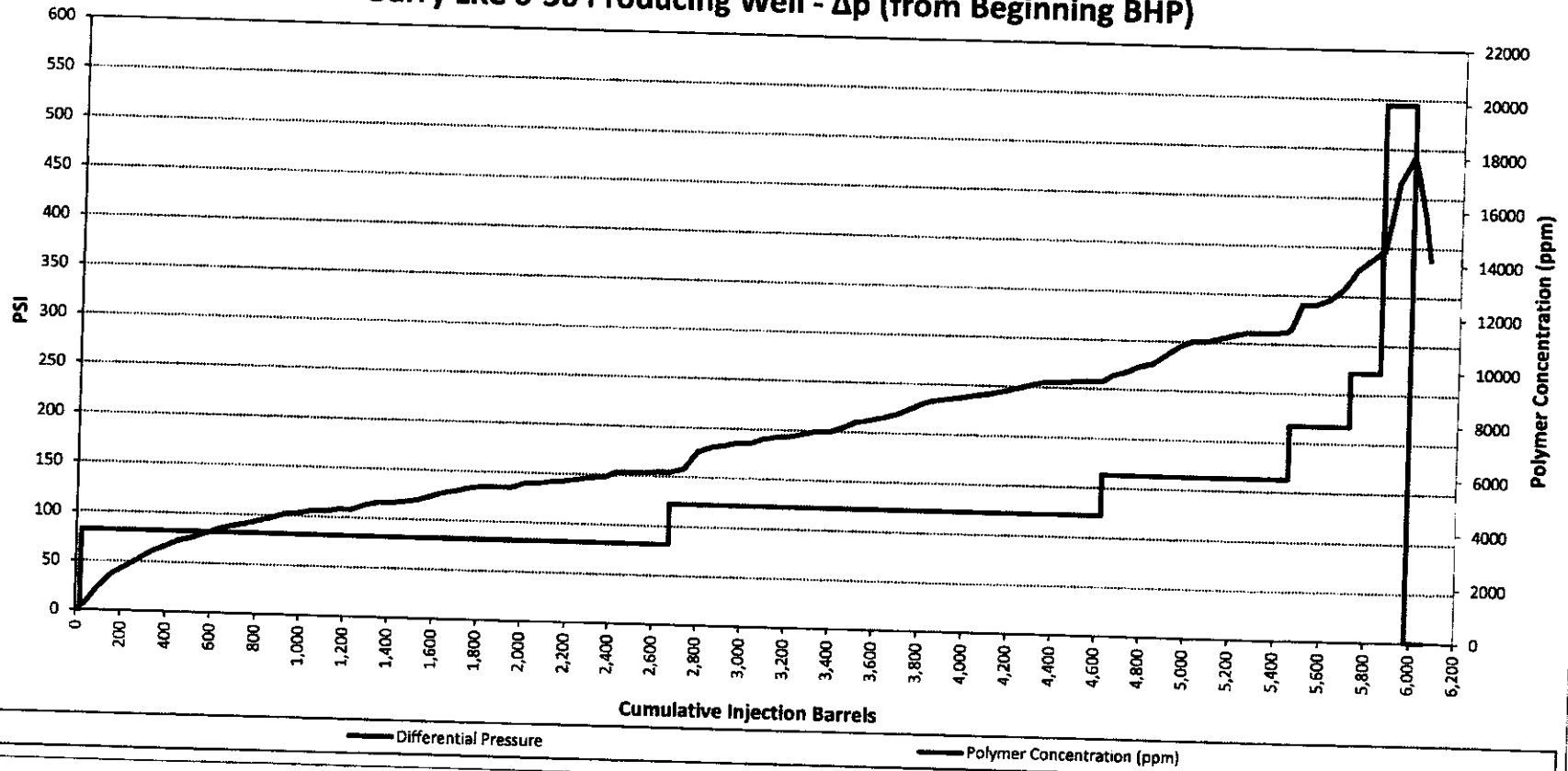
Date	Time	Elapsed Time Between Readings (Mins.)	Injection Rate		Total Cum. Injection (bbl.)	Stage Cum. Injection (bbl.)	Tubing Pressure (psig)	PSIG per Injctd	PSIG per Hour	Bottomhole Conditions				Injectivity Index (D/D Calc. BHP-Static BHP) (BPD per Field)	Pressure Gradient (psi per ft.)	Polymer Concentration (ppm)	Cross-Linker (wt%)	Total Cum. Polymer (lbs.)	Stage Cum. Polymer (lbs.)	Total Cum. K-Inker (lbs.)	Stage Cum. K-Inker (lbs.)	Casing Pressure (psig)	Comments	
			BPD	SPM						Actual Reading (psig)	Calculated to Mid-Perf (psig)	Surf. Pressure (psig)	Mid-Perf (psig)											Well Plot Cum. (gal. bbl.)
1-Nov-12	4:00 AM	1:00	1440	1.00	3885.0	1265.0	0	0.03	2.00	1101	1101	287	3847035	0.76	6.08	0.32	4500	40	4770	1990	1087	433	0	
1-Nov-12	5:00 AM	1:00	1442	1.00	3995.1	1375.1	0	0.03	2.00	1103	1103	239	4013215	0.76	6.04	0.32	4500	40	4865	2085	1078	474	0	
1-Nov-12	6:00 AM	1:00	1438	1.00	4055.0	1385.0	0	0.03	2.00	1105	1105	241	4079515	0.77	5.97	0.32	4500	40	4959	2179	1069	495	0	
1-Nov-12	7:00 AM	1:00	1440	1.00	4115.0	1445.0	0	0.03	2.00	1107	1107	243	4145915	0.77	5.99	0.32	4500	40	5053	2272	1059	518	0	
1-Nov-12	8:00 AM	1:00	1442	1.00	4175.1	1505.1	0	0.03	2.00	1110	1110	246	4212315	0.77	5.86	0.32	4500	40	5148	2368	1119	495	0	
1-Nov-12	9:00 AM	1:00	1445	1.00	4235.3	1565.3	0	0.03	3.00	1113	1113	249	4278715	0.77	5.80	0.32	4500	40	5243	2463	1140	536	0	
1-Nov-12	10:00 AM	1:00	1440	1.00	4295.3	1625.3	0	0.07	4.00	1117	1117	253	4345115	0.78	5.69	0.33	4500	40	5337	2557	1160	556	0	
1-Nov-12	11:00 AM	1:00	1439	1.00	4355.2	1685.2	0	0.05	3.00	1120	1120	256	4411515	0.78	5.62	0.33	4500	40	5431	2651	1181	577	0	
1-Nov-12	12:00 PM	1:00	1438	1.00	4415.1	1745.1	0	0.00	0.00	1120	1120	259	4477915	0.78	5.62	0.33	4500	40	5526	2746	1201	597	0	
1-Nov-12	1:00 PM	1:00	1438	1.00	4475.3	1805.3	0	0.02	1.00	1121	1121	257	4544315	0.78	5.62	0.33	4500	40	5620	2840	1222	618	0	
1-Nov-12	2:00 PM	1:00	1435	1.00	4535.2	1865.2	0	0.00	1.00	1122	1122	258	4610715	0.79	5.57	0.33	4500	40	5714	2934	1242	638	0	
1-Nov-12	3:00 PM	1:00	1440	1.00	4595.0	1925.0	0	0.00	0.00	1122	1122	258	4677115	0.78	5.56	0.33	4500	40	5809	3029	1263	659	0	
1-Nov-12	3:25 PM	0:25	1440	1.00	4620.0	1950.0	0	0.04	2.40	1123	1123	259	4710710	0.78	5.56	0.33	4500	40	5848	3068	1271	667	0	
1-Nov-12	4:00 PM	0:35	1444	1.00	4655.1	1995.1	0	0.14	8.57	1128	1128	264	4750190	0.78	5.47	0.33	6000	40	5922	3107	1287	683	0	Increase polymer concentration to 6,000 ppm
1-Nov-12	5:00 PM	1:00	1440	1.00	4715.1	2055.1	0	0.07	4.00	1132	1132	268	4818110	0.79	5.37	0.33	6000	40	6047	3199	1315	711	0	
1-Nov-12	6:00 PM	1:00	1445	1.00	4775.3	2115.3	0	0.05	3.00	1138	1138	274	4886390	0.79	5.27	0.33	6000	40	6174	3286	1342	731	0	
1-Nov-12	7:00 PM	1:00	1438	1.00	4835.2	2175.2	0	0.00	0.00	1141	1141	277	4954850	0.79	5.19	0.33	6000	40	6299	3375	1367	751	0	
1-Nov-12	8:00 PM	1:00	1435	1.00	4895.0	2235.0	0	0.15	9.00	1150	1150	286	5023850	0.80	5.02	0.34	6000	40	6425	3461	1393	771	0	
1-Nov-12	9:00 PM	1:00	1440	1.00	4955.0	2295.0	0	0.10	6.00	1159	1159	295	5093390	0.80	4.88	0.34	6000	40	6551	3549	1419	791	0	
1-Nov-12	10:00 PM	1:00	1442	1.00	5015.1	2355.1	0	0.00	0.00	1165	1165	301	5163790	0.81	4.78	0.34	6000	40	6677	3639	1445	811	0	
1-Nov-12	11:00 PM	1:00	1440	1.00	5075.1	2415.1	0	0.05	3.00	1168	1168	304	5233190	0.81	4.75	0.34	6000	40	6803	3729	1471	831	0	
1-Nov-12	12:00 AM	1:00	1438	1.00	5135.3	2475.3	0	0.07	4.00	1172	1172	308	5302790	0.82	4.67	0.34	6000	40	6929	3819	1506	851	0	
1-Nov-12	1:00 AM	1:00	1435	1.00	5195.2	2535.2	0	0.00	0.00	1175	1175	311	5372390	0.82	4.63	0.34	6000	40	7055	3909	1534	871	0	
1-Nov-12	2:00 AM	1:00	1440	1.00	5255.0	2595.0	0	0.00	0.00	1175	1175	311	5441990	0.82	4.63	0.34	6000	40	7180	4000	1561	891	0	
1-Nov-12	3:00 AM	1:00	1442	1.00	5315.0	2655.0	0	0.00	0.00	1175	1175	311	5511590	0.82	4.59	0.34	6000	40	7306	4090	1588	911	0	
1-Nov-12	4:00 AM	1:00	1438	1.00	5375.1	2715.1	0	0.03	2.00	1177	1177	313	5581190	0.82	4.59	0.34	6000	40	7432	4180	1614	931	0	
1-Nov-12	5:00 AM	0:15	1440	1.00	5435.0	2775.0	0	0.20	12.00	1180	1180	316	5650710	0.82	4.56	0.34	6000	40	7558	4270	1643	951	0	
1-Nov-12	6:00 AM	0:45	1443	1.00	5495.0	2835.0	0	0.20	12.00	1180	1180	316	5673410	0.82	4.56	0.34	6000	40	7589	4270	1650	959	0	
1-Nov-12	7:00 AM	1:00	1438	1.00	5555.0	2895.0	0	0.55	23.33	1205	1205	341	5727635	0.83	4.23	0.34	8000	40	7589	4270	1650	959	0	Increase polymer concentration to 8,000 ppm
1-Nov-12	8:00 AM	1:00	1442	1.00	5615.1	2955.1	0	0.00	0.00	1205	1205	341	5799935	0.84	4.22	0.35	8000	40	7715	4360	1677	979	0	
1-Nov-12	9:00 AM	1:00	1438	1.00	5675.0	3015.0	0	0.08	5.00	1210	1210	346	5872335	0.84	4.17	0.35	8000	40	7841	4450	1704	999	0	
1-Nov-12	9:40 AM	0:40	1440	1.00	5715.0	3055.0	0	0.18	11.00	1221	1221	357	5945735	0.85	4.08	0.36	8000	40	8051	4540	1731	1019	0	
1-Nov-12	10:00 AM	0:20	1440	1.00	5735.0	3075.0	0	0.30	18.00	1233	1233	369	5995115	0.86	3.90	0.36	8000	40	8219	4630	1747	1037	0	
1-Nov-12	10:00 AM	0:20	1444	1.00	5795.1	3135.1	0	0.35	21.00	1240	1240	369	6051515	0.86	3.90	0.36	10000	40	8330	0	1811	161	0	Increase polymer concentration to 10,000 ppm
1-Nov-12	11:00 AM	1:00	1439	1.00	5795.0	3135.0	0	0.18	11.00	1251	1251	376	6019915	0.86	3.84	0.36	10000	40	8401	71	1826	15	0	
1-Nov-12	11:53 AM	0:53	1440	1.00	5848.0	3188.0	0	0.17	10.19	1260	1260	387	6094975	0.87	3.72	0.36	10000	40	8510	780	1872	61	0	
1-Nov-12	12:00 PM	0:00	1440	1.00	5848.0	3188.0	0	0.17	10.19	1260	1260	387	6161755	0.88	3.64	0.37	10000	40	8795	465	1912	101	0	
1-Nov-12	1:00 PM	0:07	1440	1.00	5855.0	3195.0	0	0.00	0.00	1280	1280	396	6230575	0.88	3.64	0.37	20000	40	8795	0	1912	0	0	Increase polymer concentration to 20,000 ppm
1-Nov-12	2:00 PM	1:00	1442	1.00	5915.1	3255.1	0	1.15	69.00	1329	1329	465	6250515	0.92	3.10	0.39	20000	40	8844	49	1923	11	0	
1-Nov-12	2:06 PM	0:06	1440	1.00	5975.0	3275.0	0	0.43	26.00	1335	1335	491	6316115	0.94	2.99	0.39	20000	40	9265	470	2014	102	0	
1-Nov-12	2:06 PM	0:00	1440	1.00	5981.0	3281.0	0	0.33	20.00	1357	1357	493	6338757	0.94	2.99	0.39	20000	40	9684	889	2105	193	0	
1-Nov-12	3:00 PM	0:54	1441	1.00	6035.1	3341.1	0	0.33	20.00	1357	1357	499	6338757	0.94	2.99	0.40	20000	40	9726	931	2114	202	0	
1-Nov-12	3:36 PM	0:26	1437	1.00	6061.0	3367.0	0	-1.13	-67.78	1296	1296	432	6409741	0.90	3.34	0.40	0	0	9726	0	2114	0	0	Begin water post-flush
2-Nov-12										1252	1252	383	6442293	0.87	3.30	0.36	0	0	9726	0	2114	0	0	End job

### Barry LKC 6-36 Producing Well - Rate vs. Pressure

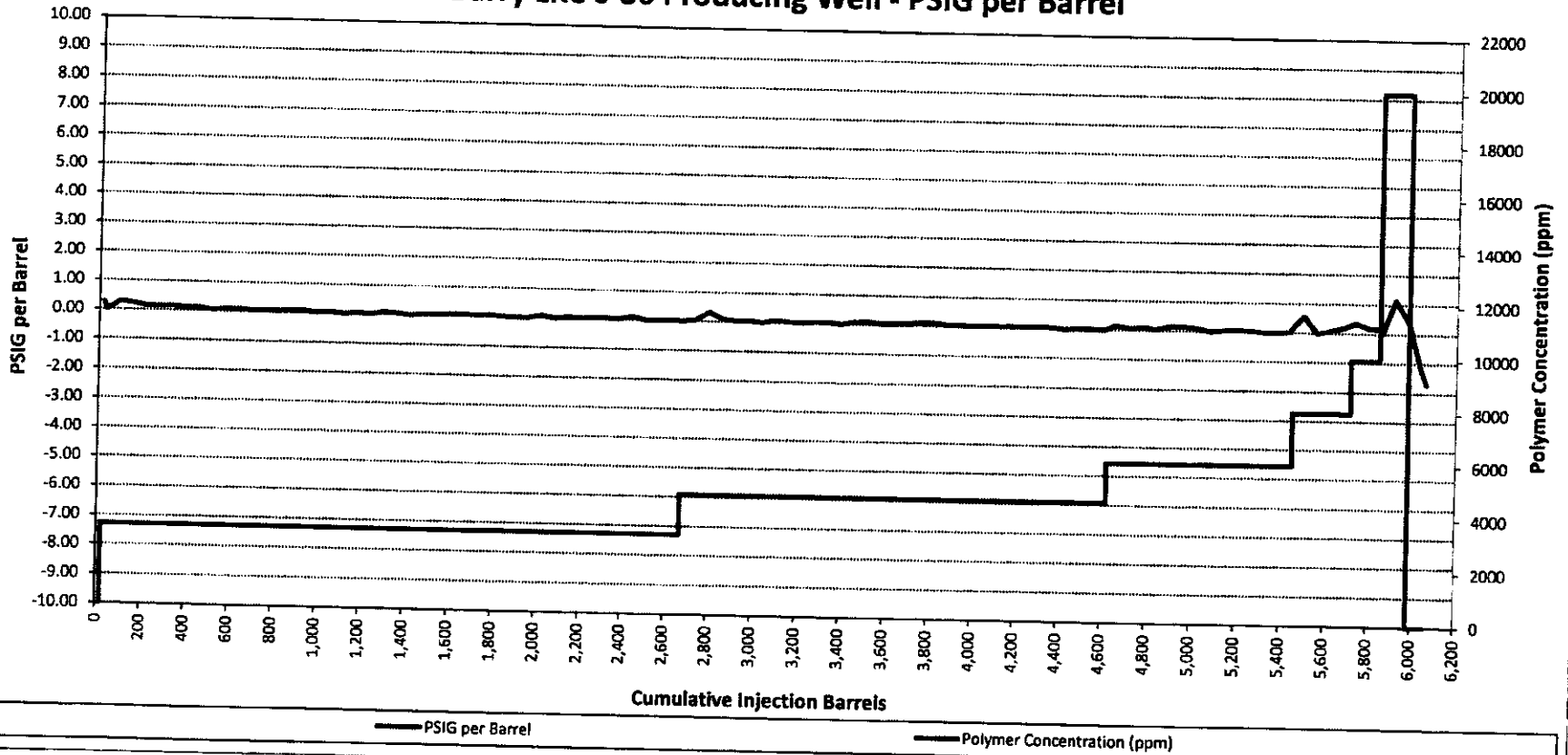




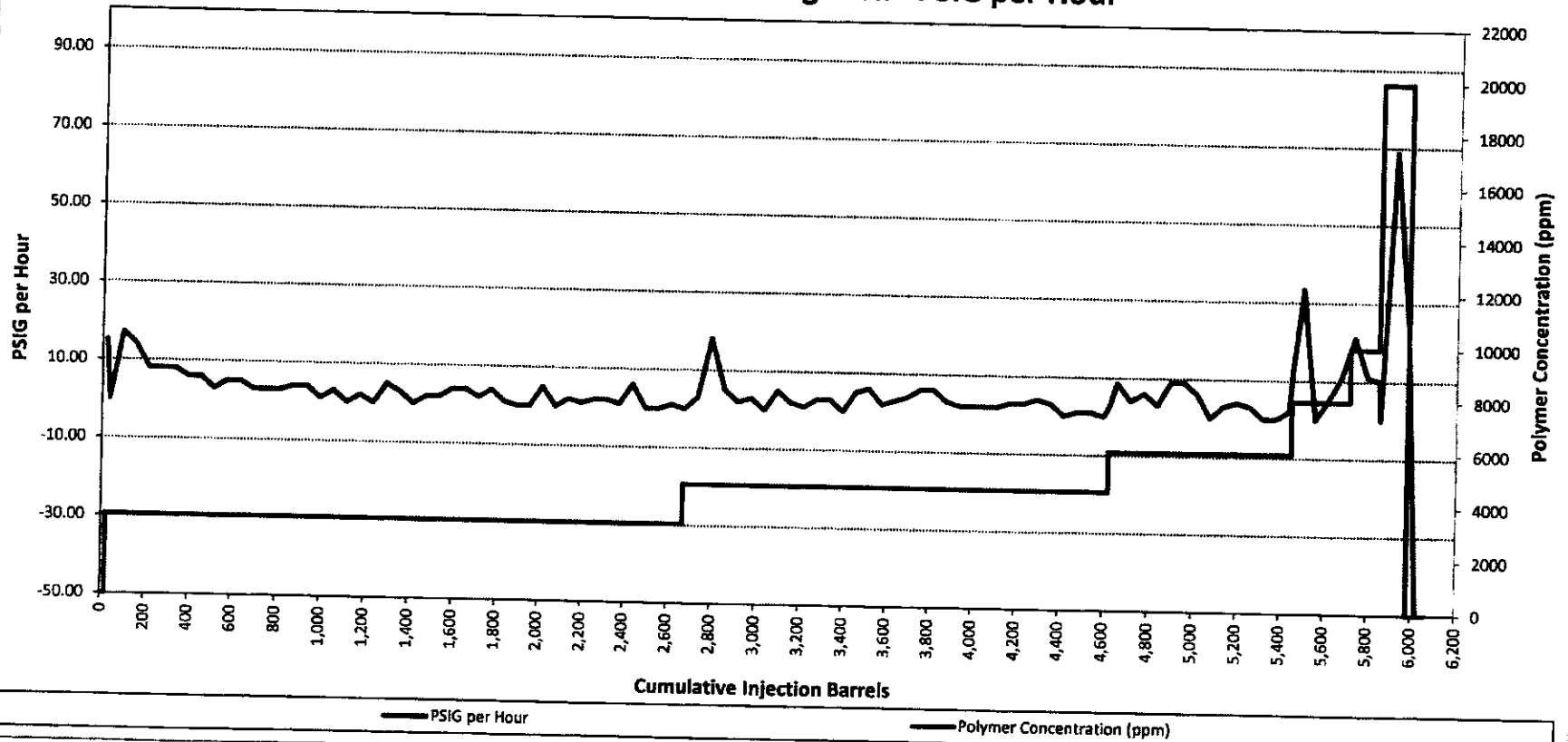
### Barry LKC 6-36 Producing Well - $\Delta p$ (from Beginning BHP)



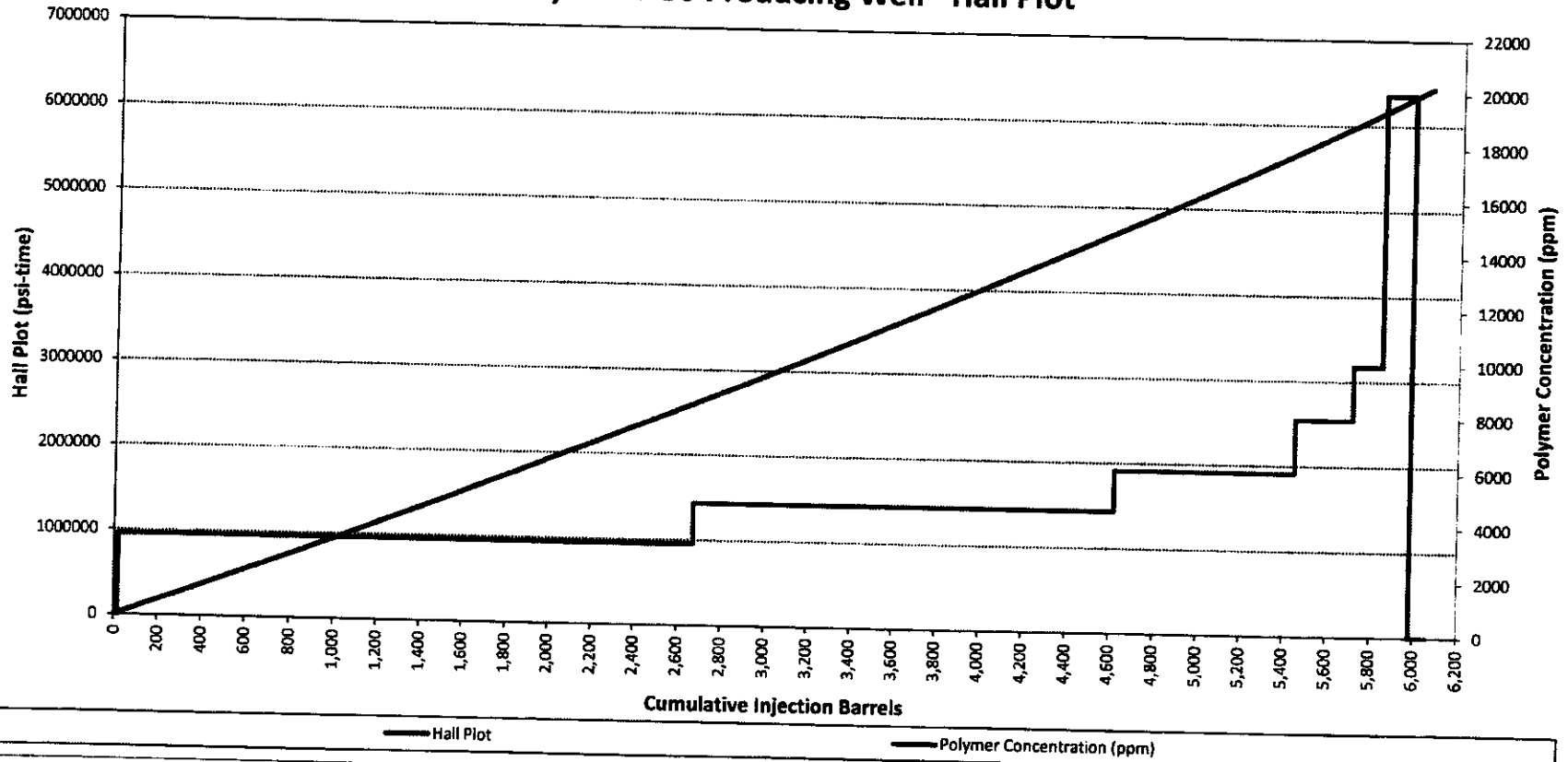
### Barry LKC 6-36 Producing Well - PSIG per Barrel



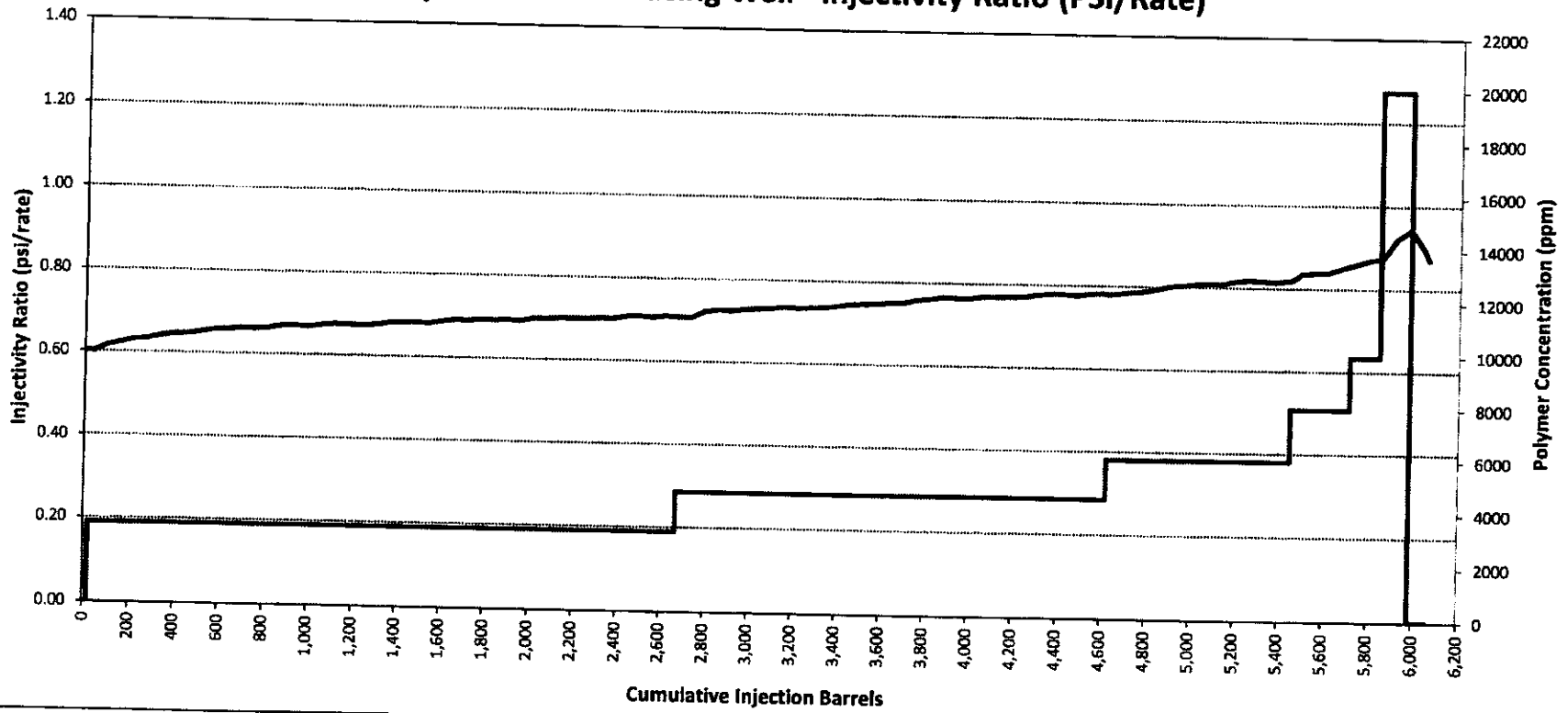
### Barry LKC 6-36 Producing Well - PSIG per Hour



### Barry LKC 6-36 Producing Well - Hall Plot



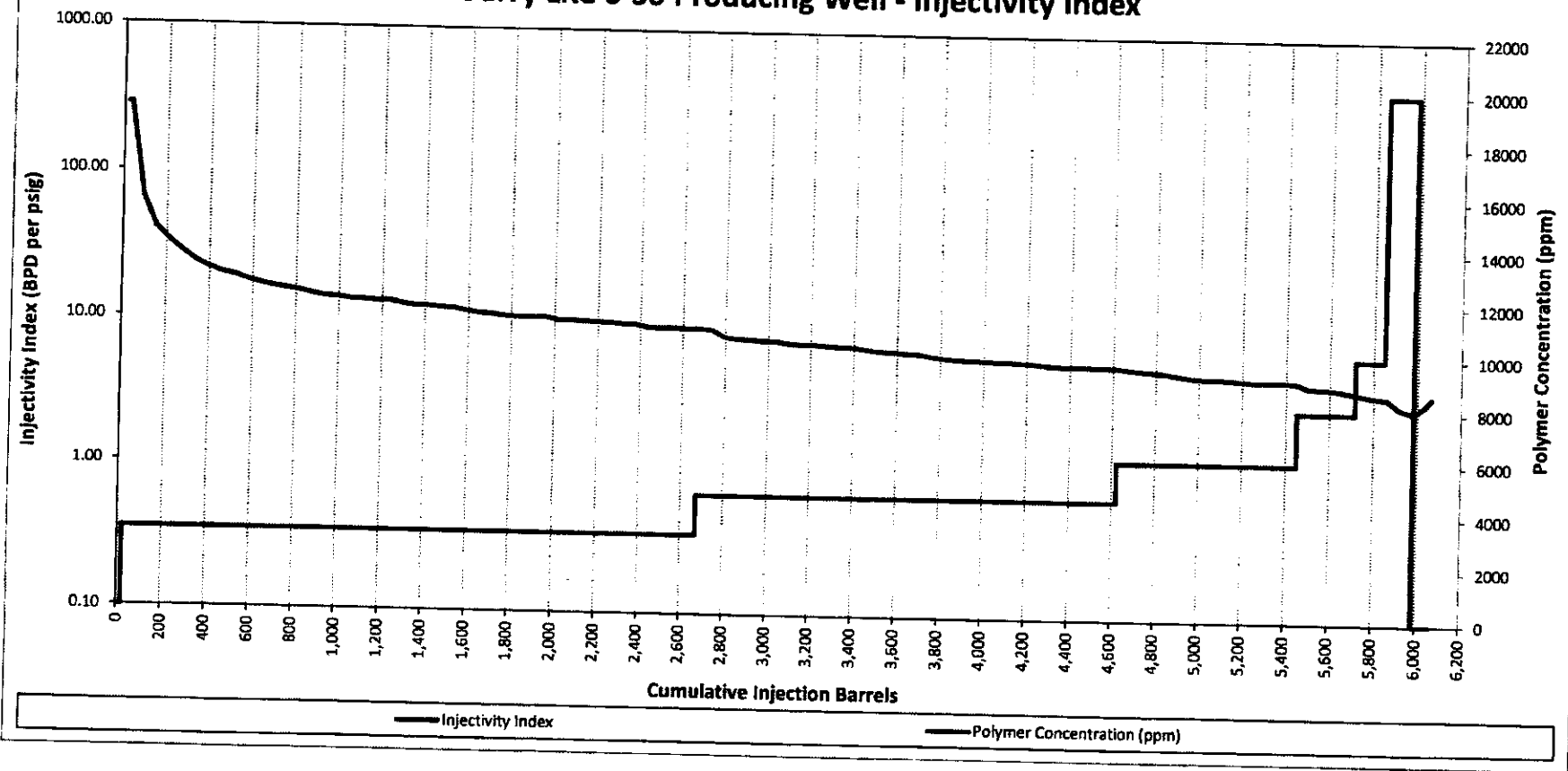
### Barry LKC 6-36 Producing Well - Injectivity Ratio (PSI/Rate)



— Injectivity Ratio (psi/rate)

— Polymer Concentration (ppm)

### Barry LKC 6-36 Producing Well - Injectivity Index



### Barry LKC 6-36 Producing Well - Pressure Gradient

