



KANSAS CORPORATION COMMISSION 1102183
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 # 6426
Name: Express Well Service & Supply Inc
Wellsite Geologic: Unknown
Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
 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: McClellan 9
Original Comp. Date: 05/06/1989 Original Total Depth: 3900
 Deepening Re-perf. Conv. to ENHR Conv. to SWD
 Conv. to GSW
 Plug Back: _____ Plug Back Total Depth _____
 Commingled Permit #: _____
 Dual Completion Permit #: _____
 SWD Permit #: _____
 ENHR Permit #: _____
 GSW Permit #: _____

<u>11/02/2012</u>	<u>11/07/2012</u>
Spud Date or Recompletion Date	Completion Date or Recompletion Date

API No. 15 - 15-065-22515-00-02

Spot Description: _____
NE NW SE Sec. 2 Twp. 10 S. R. 21 East West
2310 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: Graham
Lease Name: MCCLELLAN Well #: 9
Field Name: Cooper

Producing Formation: LKC J, K, ARB
Elevation: Ground: 2282 Kelly Bushing: 2286
Total Depth: 3905 Plug Back Total Depth: 3876
Amount of Surface Pipe Set and Cemented at: 210 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 Garfola Date: 11/26/2012



1102183

Operator Name: Citation Oil & Gas Corp. Lease Name: MCCLELLAN Well #: 9
 Sec. 2 Twp. 10 S. R. 21 East West County: Graham

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 Wireline 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 checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample <table style="width:100%; border: none;"> <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>3806</td> <td></td> </tr> <tr> <td>LKC</td> <td>3688</td> <td></td> </tr> </table>	Name	Top	Datum	Arbuckle	3806		LKC	3688	
Name	Top	Datum								
Arbuckle	3806									
LKC	3688									

CASING RECORD <input 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	12.2500	8.6250	20	210	c	125	
Production	7.8750	5.5000	14	3902	c	150	

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 (Amount and Kind of Material Used)	Depth
4	CIBP @ 3836'; 3806'-3814'	500 gals. 15% HCL w/ 3% mutual solvent on bottom	3806-16, 3822-26
	3822'-3826'	100 gals. 15% HCL w/ 3% solvent and flushed w/ bfg volume of 26 bbls. of clean lease water.	

TUBING RECORD:	Size: 2.8750	Set At: 3806	Packer At: 3776.10	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR. 11/19/2012		Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____		
Estimated Production Per 24 Hours	Oil Bbls. 13.8	Gas Mcf	Water Bbls. 391.0	Gas-Oil Ratio 28

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)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: <u>Arbuckle, LKC</u>
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WELLBORE SCHEMATIC

Current

8-5/8" 20# 125 sxs
12-1/4" hole 210'

CSG Leak
X Sqzd @ 1318-98'
w/ 5 sxs (8/95)

Sqz perfs @ 2190'
400 sxs to surf

CSG Leak
X Sqzd @ 2468-2500'
w/ 150 sxs (8/03)

CSG Leak
X Sqzd @ 3010-40'
w/ 150 sxs (7/96)

CSG Leak
X Sqzd @ 3199-3231'
w/ 150 sxs (9/08)

TOC @ 3220' (CBL)

LKC Perfs
"J" 3688-90'
"K" 3704-06'

Arbuckle Perfs
3808-16' (4 spt) (10/02)
3822-26'

GIBP @ 3836'

3840-43'

Note 7-7/8" 5-1/2" 14# 150 sxs
PB @ 3876'
3902'
3,905' TD

Lease:	McClellan	Well No.	#9
API No.	15-065-22515	Status	PR
Location:	NESWSE, Sec. 2, T10S-R21W		
County:	Graham	State:	KS
Field:	Cooper		
TD	3905'	GL	2281'
Spud Date:	4/25/1989		
PBTD	3836'	KB	2286'
Comp Date:	5/6/1989		
Current Perfs/OH:	3688-90', 3704-06', 3806-16', 3822-26'	Current Zone:	LKC J, K, ARB

Surface Equipment	
Unit Make:	Lufkin
Unit Size:	228
Unit S/N:	
Unit Rotation:	
SPM:	11.8
Stroke Length:	79"
Unit Sheave:	
Prime Mover:	
Motor Sheave:	
Motor S/N:	25
Motor RPM:	

Casing Breakdown					
	Size	Grade / Wt	Depth	Hole Size	Cement
Surface	8-5/8"	20#	210'	12-1/4"	125 sxs
Production	5-1/2"	14#	3902'	7-7/8"	150 sxs
Production					
Production					
Liner					

Tubing Breakdown			
Qty	Description		Footage
120	2-7/8" tbg		3764.00'
1	5-1/2" x 2-7/8" TAC		3.00'
1	2-7/8" tbg		32.00'
1	2-7/8" SN		1.00'
1	2-7/8" x 6' MA		6.00'
TOTAL			3806.00'

Rod Breakdown			
Qty	Description		Footage
12	1" rods		300.00'
139	7/8" rods		3475.00'
TOTAL			3775.00'

Comments

PREPARED BY: JH UPDATED: 10/30/2012



**CROSS-LINKED POLYMER GEL
WATER REDUCTION TREATMENT
JOB LOG AND SUMMARY PREPARED FOR:**



**McCLELLAN #9
COOPER FIELD
GRAHAM COUNTY, KANSAS**

November 9, 2012

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



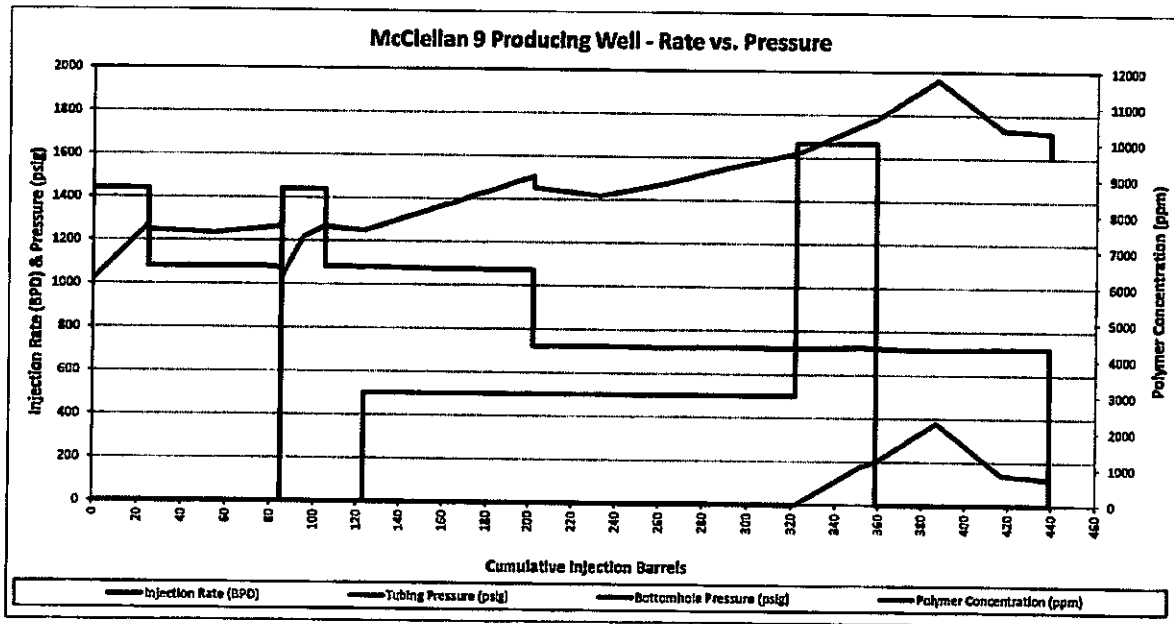
improved oil & gas recovery
BULK POLYMER GEL TREATMENT
 Morning Progress Report

Company Name: Citation Oil & Gas Corp.
 Field Name: Cooper
 Well Name: McClellan #9

Location: Graham Co., KS
 Date: 11/9/2012
 Est. Cum. Cost: \$10,500

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	0	1017	1266	1.00	0.75	85 barrels water
2	11/9/2012	3:30 PM	11/9/2012	4:14 PM	0	0		0	0	0	0	1033	1249	1.00	0.75	38 barrels water
3	11/9/2012	4:14 PM	11/9/2012	10:00 PM	3000	209	40	45	199	0	0	1249	1620	0.75	0.50	
4	11/9/2012	10:00 PM	11/9/2012	11:13 PM	10000	129	40	28	37	0	200	1620	1782	0.50	0.50	
5	11/9/2012	11:13 PM	11/10/2012	1:44 AM	0	0		0	0	200	120	1782	1716	0.50	0.50	80 barrels water
Totals						338		74	236							





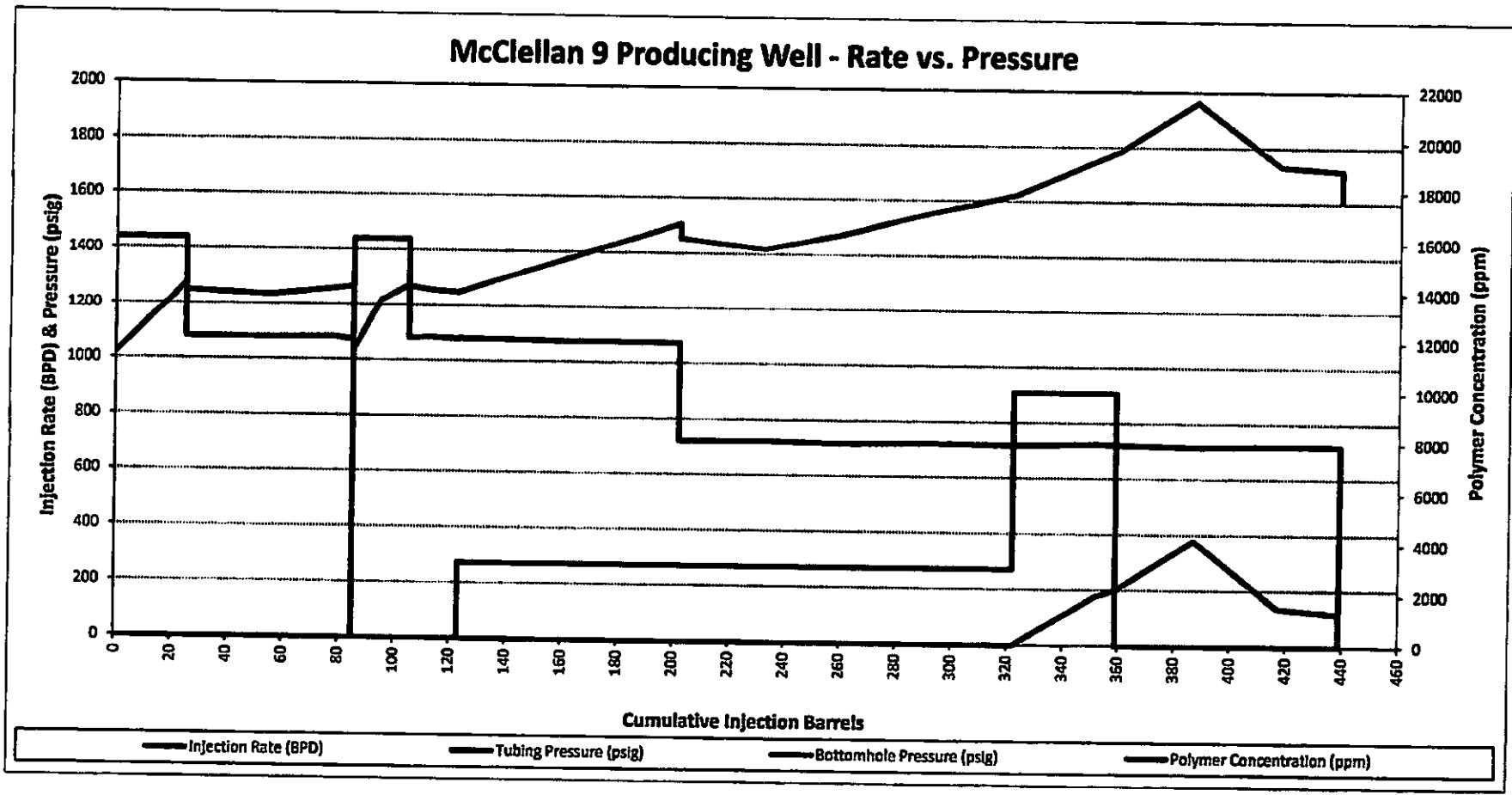
improved oil & gas recovery

Project Engineer - Jay Purwood
 P.O. Box 2230 Keller, TX 76246-0230
 817-432-4339 (off) 817-432-4337 (fax)
 817-432-3033 (cell)

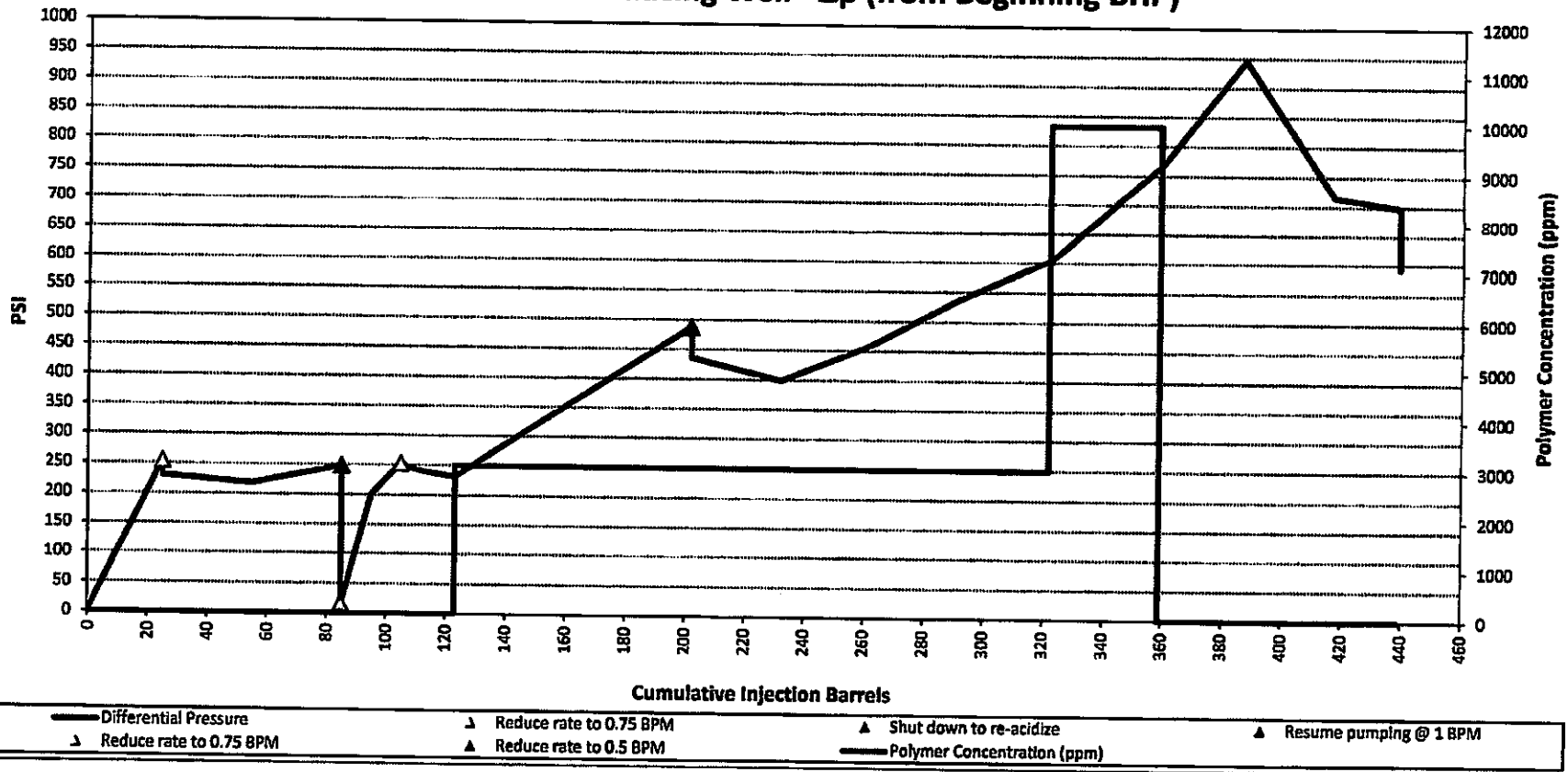
Company Name:		Citation Oil & Gas Corp.		PROJECT INFORMATION	
Field Name:	Coeper	Depth to Top Perforation or CM (ft.):	2806	ECI (ft.):	2776
Well Name:	McClellan #3	Depth to Bottom Perforation or CM (ft.):	2828	Fracture FV1:	2778
Injector or Producer:	Producer	Depth to Mid-Perf (ft.):	2818	Fracture FV2:	2875
Company/Service:	Grubman/RS	BHP Test Depth (ft.):	2816	Fracture FV3:	2875
Surface Well ID:	5	Type A/B Water Used:	Profound	Fracture FV4:	2875
Injection Well Operator:	Teddi Schneider (day) 785-835-8177 / Rocky Hamblit (night) 785-835-8179	Mix Water Specific Gravity:	1.02	Fracture FV5:	2875
Generator Used (Yes/No):	Yes	Mix Water Pressure Gradient (psi per ft.):	0.442	Fracture FV6:	2875
Customer Contact:	Jay Purwood 281-891-3488 (off) 832-627-9587 (cell)	Expected Positive Surface Pressure @ BHP of:	2.685	Fracture FV7:	2875
		Estimated Static BHP (psi):	1017	Fracture FV8:	2875

Date	Time	Classed Time Between Readings (Mins.)	Injection Rate		Total Cum. Injection (Bbls.)	Stage Cum. Inj. (Bbls.)	Tubing Pressure (psig)	PSIG per 100 ft	PSIG per Hour	Bottomhole Conditions			Injectivity Index (EIPD/Cum. Inj. @ Static BHP)	Pressure Gradient (psi per ft.)	Polymer Concentration (ppm)	Crack-Gel Ratio (wt:1)	Total Cum. Polymer (Bbls.)	Stage Cum. Polymer (Bbls.)	Total Cum. X-Gel (Lbs.)	Stage Cum. X-Gel (Lbs.)	Casing Pressure (psig)	Comments		
			EIPD	BPM						Actual Reading (psi)	Corrected to Mid-Perf (psi)	API											Flow Cor. (psi-Days)	Injectivity Ratio (psi-Days)
8-Nov-12	2:24 PM		1440	1.00	0.0	0.0	0	0.0	1017	1017	0	0	0.71											
8-Nov-12	2:50 PM	0:25	1440	1.00	25.0	25.0	0	10.18	609.80	1271	1271	254	21775	0.28										Begin water pre-flush
8-Nov-12	3:50 PM	0:50	1080	0.75	25.0	25.0	0	10.16	609.60	1248	1248	231	21775	1.16										
8-Nov-12	4:30 PM	0:40	1080	0.75	55.0	55.0	0	-0.43	-18.50	1235	1235	218	21775	1.24										Reduce rate to 3.000 BPD (0.75 BPM)
8-Nov-12	5:00 PM	0:30	1080	0.75	77.6	77.6	0	1.02	48.00	1258	1258	221	219915	1.25										
8-Nov-12	5:10 PM	0:10	1073	0.75	85.0	85.0	0	1.07	48.00	1268	1268	225	221575	1.18										
8-Nov-12	5:10 PM	0:00	0	0.00	85.0	0.0	0		1266	1266	229	221575												
8-Nov-12	5:30 PM	0:00	0	0.00	85.0	0.0	0		1033	1033	16	221575												Shut down waiting on acid
8-Nov-12	5:30 PM	0:00	1440	1.00	85.0	0.0	0		1033	1033	16	221575	0.72											
8-Nov-12	5:40 PM	0:10	1440	1.00	109.0	109.0	0	5.70	212.00	1220	1220	201	143755	0.95										Begin water pre-flush
8-Nov-12	5:50 PM	0:10	1440	1.00	109.0	109.0	0	5.20	212.00	1268	1268	251	156455	0.98										
8-Nov-12	6:00 PM	0:10	1080	0.75	109.0	109.0	0			1278	1278	251	156455	1.17										
8-Nov-12	6:00 PM	0:10	1080	0.75	112.5	112.5	0			1257	1257	240	156455	1.16										Reduce rate to 1.000 BPD (0.75 BPM)
8-Nov-12	6:14 PM	0:14	1078	0.78	129.0	129.0	0	-1.48	-68.00	1249	1249	231	146511	1.16										
8-Nov-12	6:14 PM	0:00	1080	0.75	129.0	0.0	0	-0.78	-34.25	1289	1289	231	146511	1.16										
8-Nov-12	6:00 PM	0:46	1074	0.78	157.8	157.8	0	8.28	144.78	1260	1260	243	148075	1.27										Begin 3.000 ppm polymer gel
8-Nov-12	6:00 PM	1:00	1073	0.75	202.0	202.0	0	3.22	144.00	1504	1504	487	139311	1.40										
8-Nov-12	6:00 PM	0:00	720	0.50	244.00	244.00	0	3.20	144.00	1452	1452	415	139311	2.02										
8-Nov-12	7:00 PM	1:00	720	0.50	287.1	108.1	0	-1.33	-37.00	1419	1419	358	142711	1.98										Reduce rate to 720 BPD (0.5 BPM)
8-Nov-12	8:00 PM	1:00	718	0.50	262.0	138.0	0	2.01	60.00	1475	1475	458	127211	2.06										
8-Nov-12	9:00 PM	1:00	720	0.50	292.4	168.3	0	2.62	78.00	1534	1534	517	605993	2.25										
8-Nov-12	10:00 PM	1:00	718	0.50	527.0	199.0	0	2.21	64.00	1670	1670	603	703151	2.28										
8-Nov-12	11:00 PM	1:00	718	0.50	372.0	0.0	0	2.21	64.00	1820	1820	603	703151	2.26										
8-Nov-12	11:13 PM	0:13	723	0.50	452.2	80.2	180	4.44	134.00	1754	1754	717	808391	2.42										Increase polymer concentration to 10.000 ppm
8-Nov-12	11:13 PM	0:00	721	0.50	359.0	37.0	200	4.12	129.23	1782	1782	785	831557	2.47										
8-Nov-12	11:13 PM	0:00	721	0.50	359.0	0.0	200	4.12	129.23	1782	1782	785	831557	2.47										
10-Nov-12	12:00 AM	0:54	719	0.50	387.0	74.0	280	6.44	19.59	1963	1963	848	841485	2.23										Begin water post-flush
10-Nov-12	1:00 AM	1:00	720	0.50	417.0	78.0	240	-7.70	-231.00	1732	1732	713	1049405	2.41										
10-Nov-12	1:46 AM	0:44	720	0.50	439.0	80.0	170	-0.79	-21.82	1718	1718	697	1120909	2.38										
10-Nov-12	1:46 AM	0:00	0	0.00	439.0	0.0	60			1691	1691	674	1120909											ISP
10-Nov-12	1:49 AM	0:03	0	0.00	439.0	0.0	0			1609	1609	592	1120909											Vacuum in 5 minutes

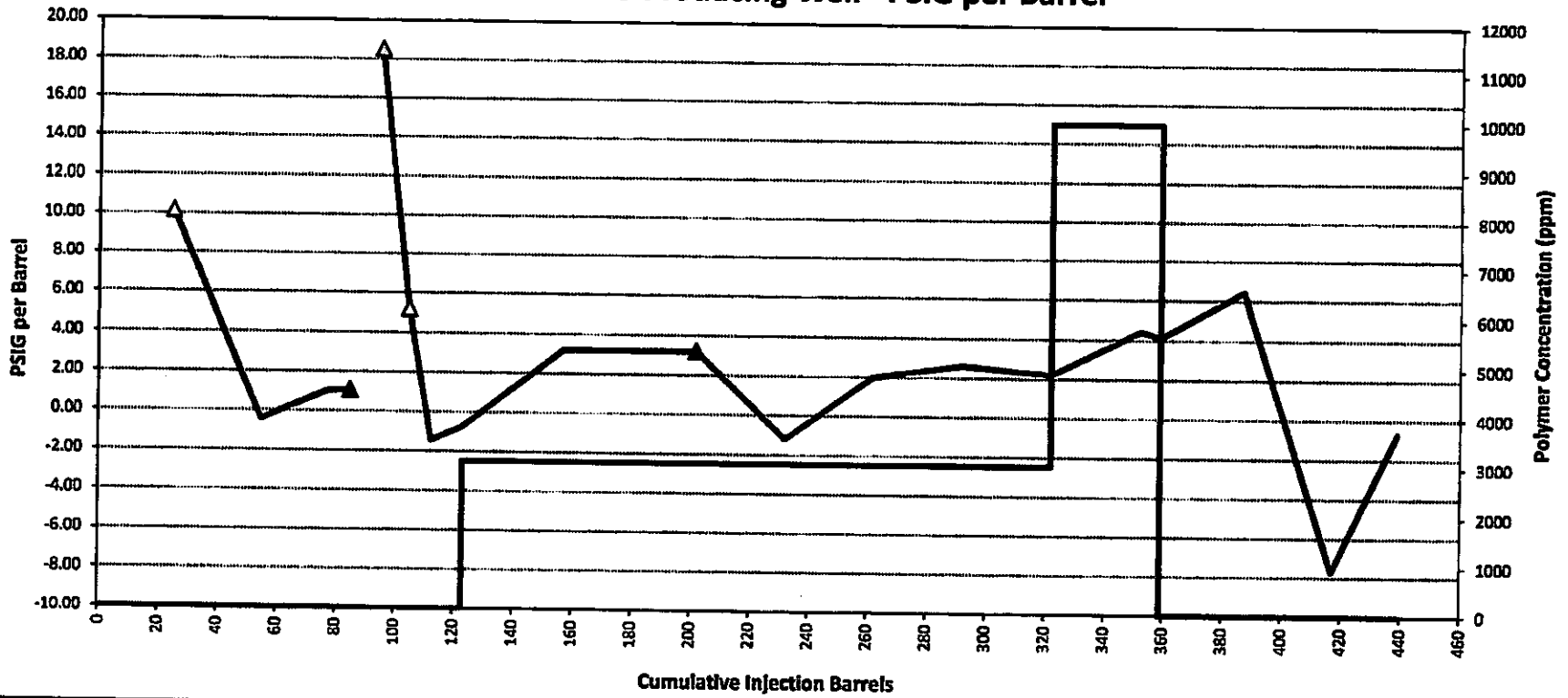
McClellan 9 Producing Well - Rate vs. Pressure



McClellan 9 Producing Well - Δp (from Beginning BHP)

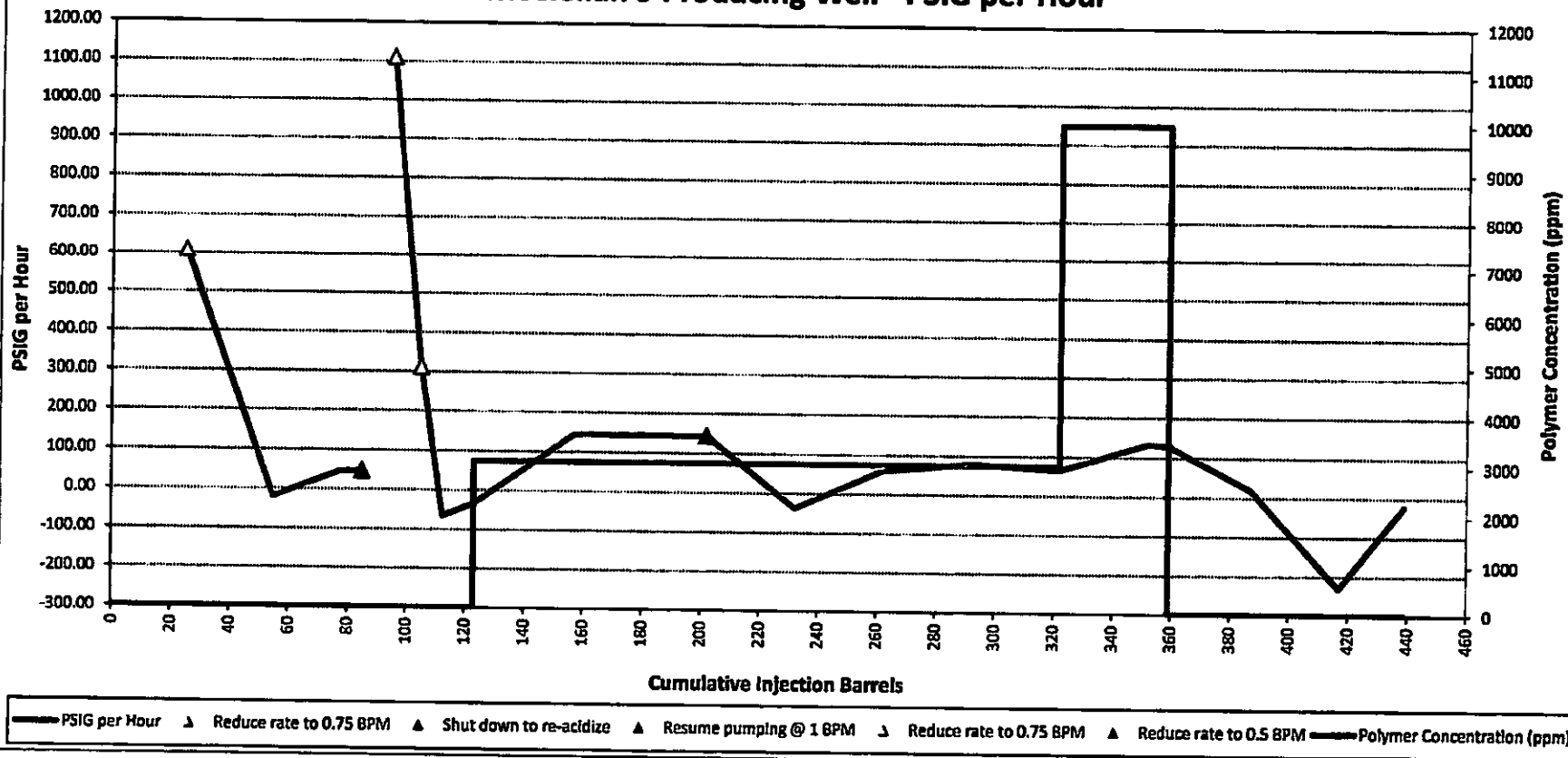


McClellan 9 Producing Well - PSIG per Barrel

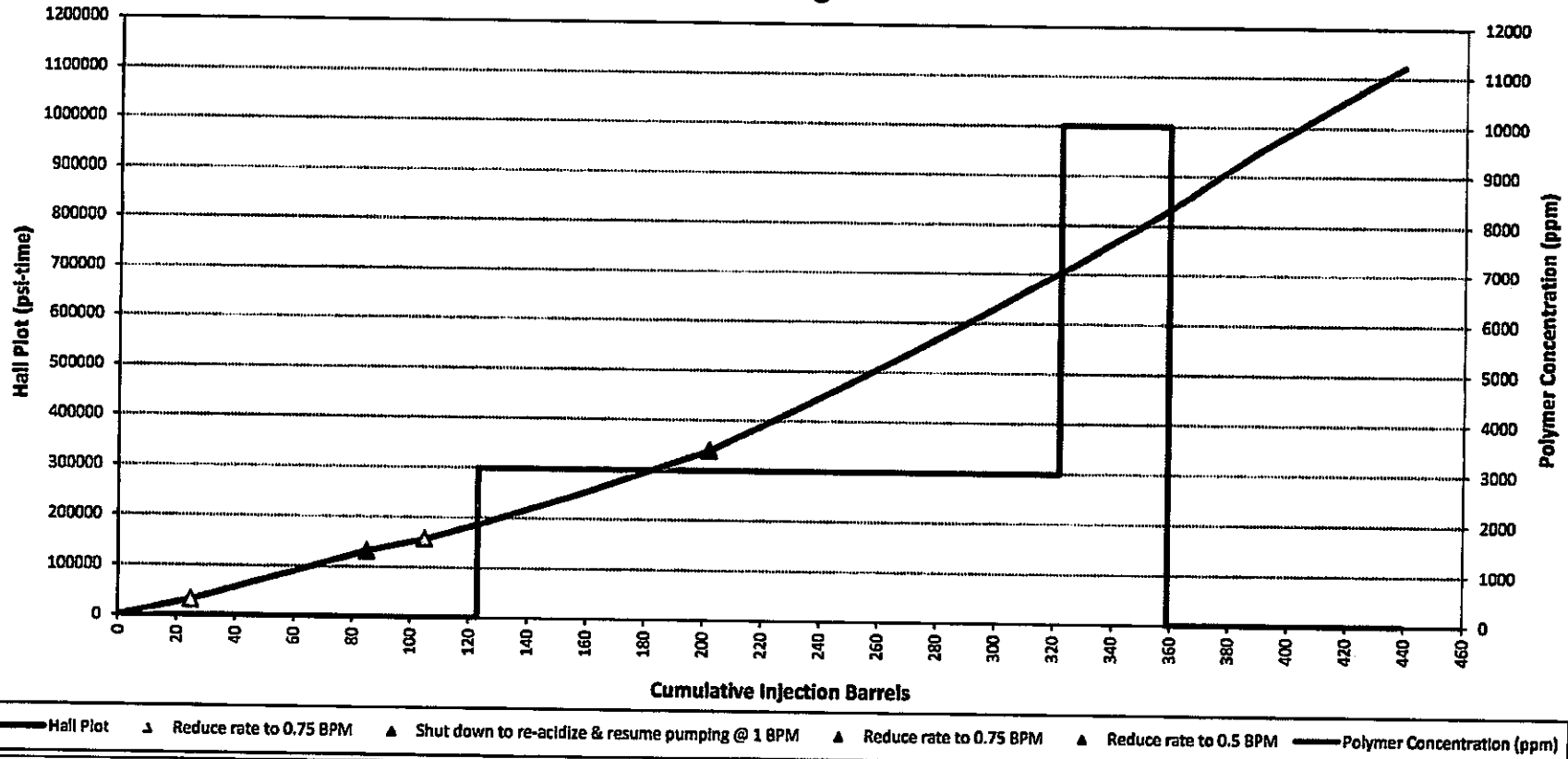


PSIG per Barrel
 ▲ Reduce rate to 0.75 BPM
 ▼ Shut down to re-acidize
 ▲ Resume pumping @ 1 BPM
 ▼ Reduce rate to 0.75 BPM
 ▲ Reduce rate to 0.5 BPM
 Polymer Concentration (ppm)

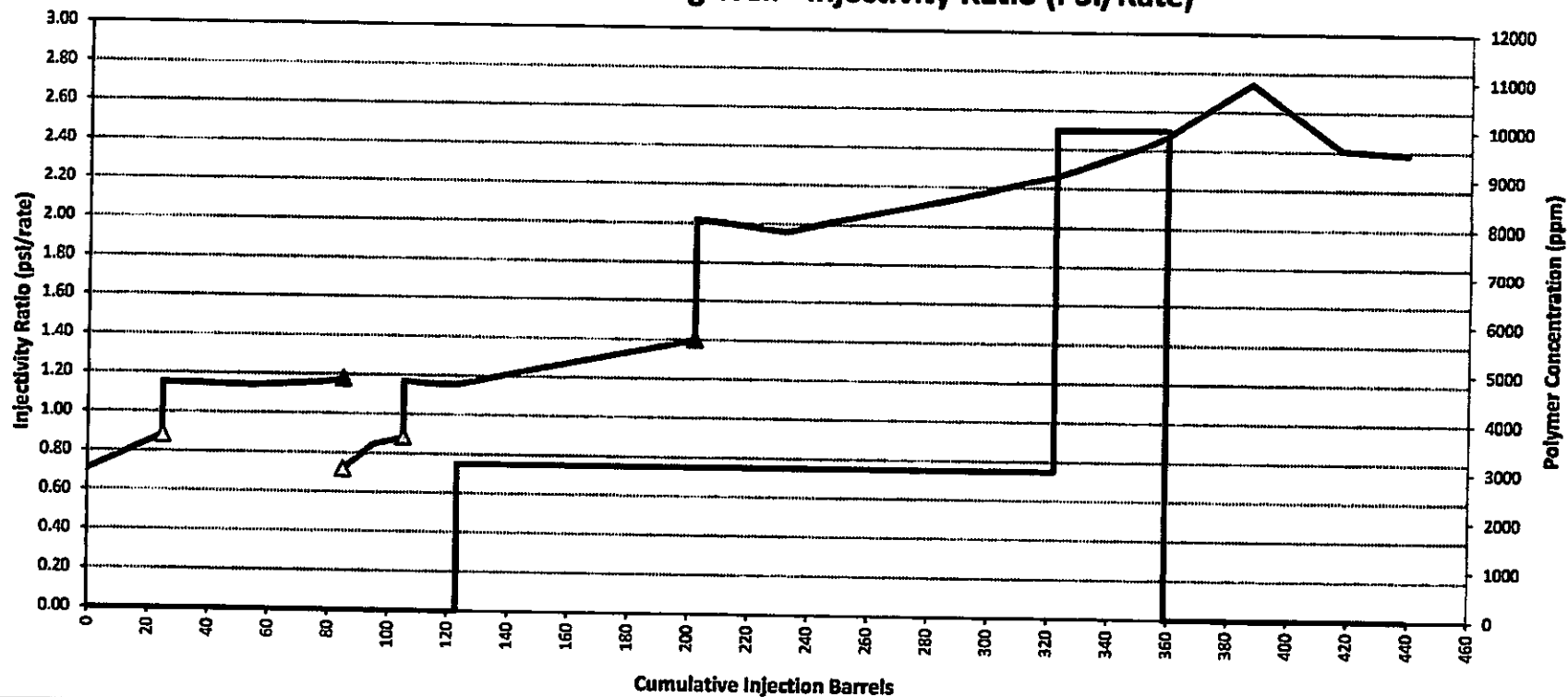
McClellan 9 Producing Well - PSIG per Hour



McClellan 9 Producing Well - Hall Plot

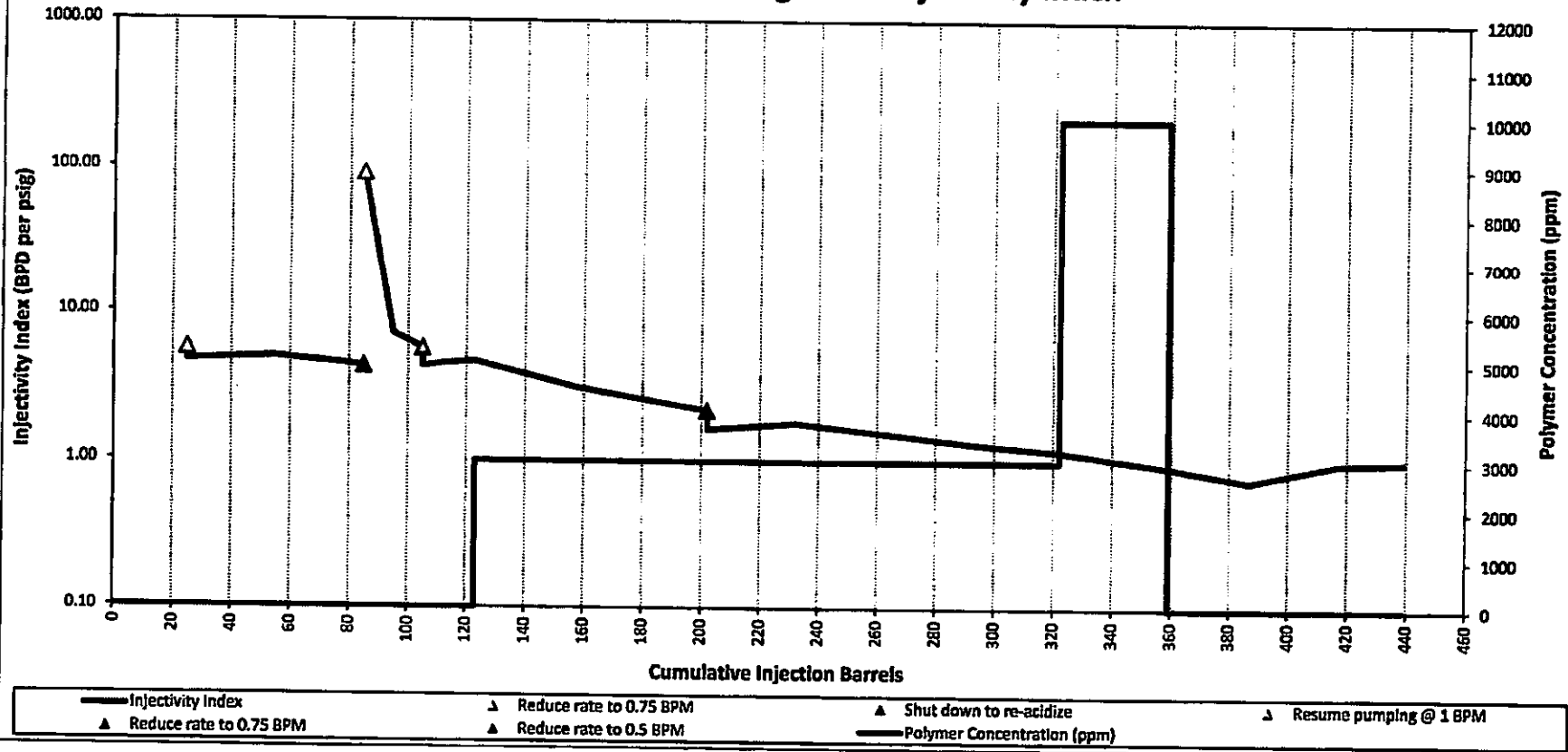


McClellan 9 Producing Well - Injectivity Ratio (PSI/Rate)



<p>— Injectivity Ratio (psi/rate)</p> <p>▲ Reduce rate to 0.75 BPM</p>	<p>▲ Reduce rate to 0.5 BPM</p> <p>▲ Shut down to re-acidize</p> <p>— Polymer Concentration (ppm)</p>	<p>▲ Reduce rate to 0.75 BPM</p> <p>▲ Reduce rate to 0.5 BPM</p> <p>▲ Shut down to re-acidize</p> <p>▲ Resume pumping @ 1 BPM</p>
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McClellan 9 Producing Well - Injectivity Index



McClellan 9 Producing Well - Pressure Gradient

