



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1146882
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

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: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer

- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
-----------------------------------	-----------------	---

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ 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

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1146882

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
--	---

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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

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

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
-----------------------------------	-----------	---------	-------------	---------------	---------

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

June 24, 2013

Liana Ramirez
Citation Oil & Gas Corp.
14077 Cutten Rd
PO BOX 690688
HOUSTON, TX 77269-0688

Re: ACO1
API 15-163-01593-00-00
BARRY LKC UT 7-6
SW/4 Sec.01-09S-19W
Rooks County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Liana Ramirez



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



**GICK #6
BARRY FIELD
ROOKS COUNTY, KANSAS**

June 12, 2013



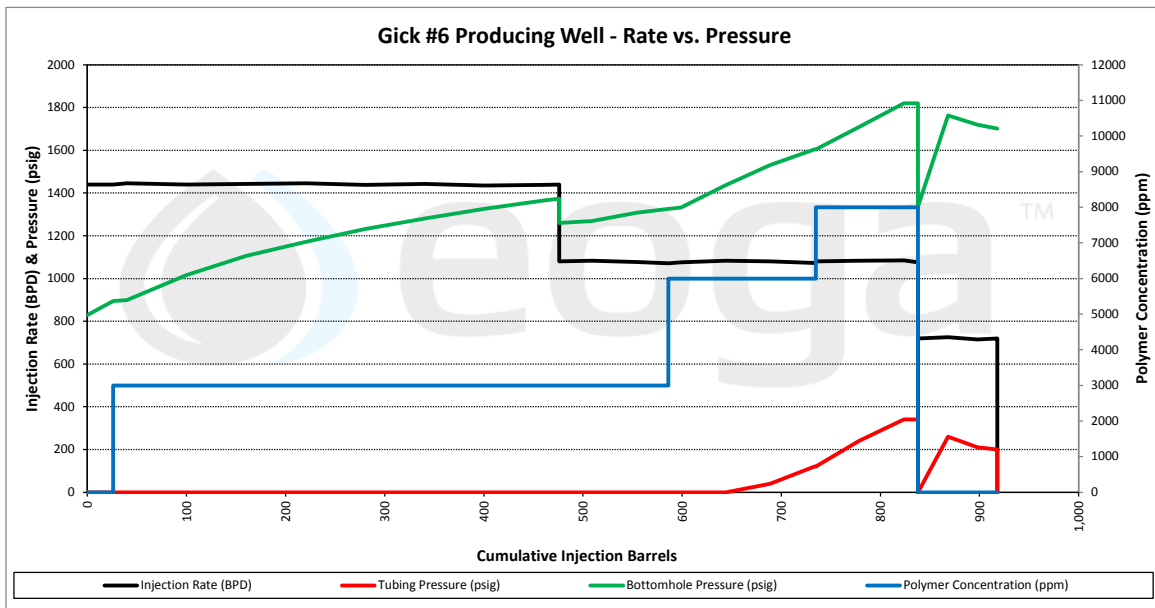
BULK POLYMER GEL TREATMENT Morning Progress Report

Company Name: Citation Oil & Gas Corp.
Field Name: Barry
Well Name: Gick #6

Location: Rooks Co., KS
Date: 6/12/2013
Est. Cum. Cost: \$9,900

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	6/11/2013	7:20 AM	6/11/2013	7:46 AM	0	0	0	0	0	0	0	829	894	1.00	1.00	26 Bbls water
2	6/11/2013	7:46 AM	6/11/2013	5:43 PM	3000	587	40	128	560	0	0	894	1325	1.00	0.75	
3	6/11/2013	5:43 PM	6/11/2013	9:02 PM	6000	313	40	68	149	0	120	1325	1604	0.75	0.75	
4	6/11/2013	9:02 PM	6/11/2013	11:19 PM	8000	288	40	63	103	120	340	1604	1820	0.75	0.75	
5	6/12/2013	12:00 AM	6/12/2013	2:40 AM	0	0	0	0	0	0	200	1336	1702	0.50	0.50	80 bbls water
Totals						1188		258	812							





eoga
improved oil & gas recovery

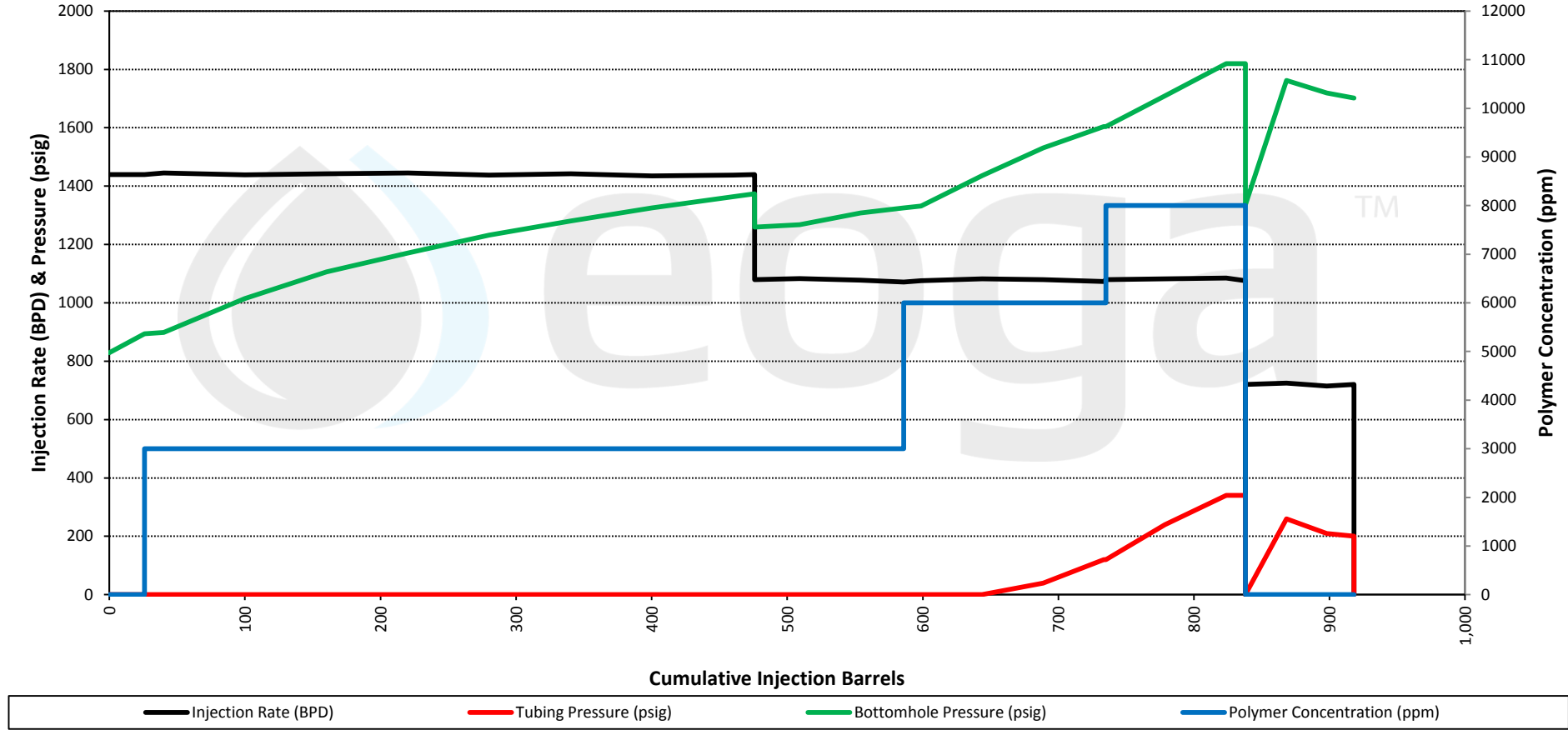
Project Engineer - Jay Portwood
P.O. Box 2230 Keller, TX 76244-2230
817-431-6336 (off) 817-431-6337 (fax)
817-312-1033 (cell)

PROJECT INFORMATION

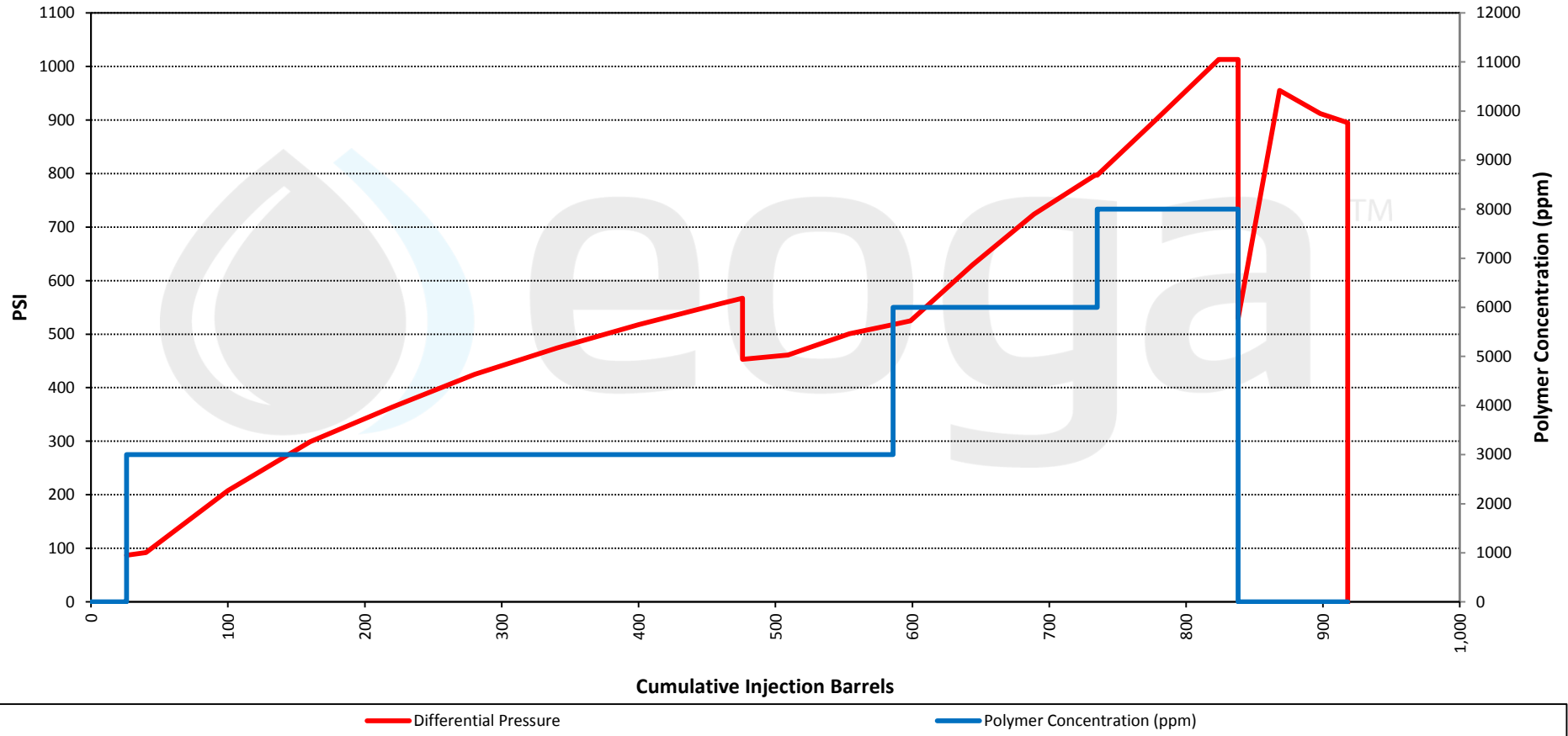
Company Name: Citation Oil & Gas Corp.	Depth to Top Perforation or OH (ft.): 3451	EOT (ft.): 3412
Field Name: Barry	Depth to Bottom Perforation or OH (ft.): 3457	Packer (ft.): 3412
Well Name: Glick 6	Depth to Mid-Perf (ft.): 3454	Tbg Size: 2.875"
Injector or Producer: Producer	BHP Tool Depth (ft.): 3420	Tbg. Cap. (bbbls./ft.): 0.00538
County/State: Rooks/KS	Type Mix Water Used: Produced	Tbg. Vol. (bbbls.): 18.36
Polymer Unit No.: 1	Mix Water Specific Gravity: 1.02	Csg Size: 6", 18#
Polymer Unit Operators: Scott Seaton (day) 785-885-8187 / Brad Gordon (night) 785-885-8206	Mix Water Pressure Gradient (psi per ft.): 0.442	Csg. Cap. (bbbls./ft.): 0.0285
Generator Used (Yes/No): Yes	Expect Positive Surface Pressure @ BHP of: 1510	Csg Vol. bbbls. (Pkr. to Btm. Perf.): 1.2825
Customer Contact: Daniel Hansberger 281-891-1484 (off) 405-605-9177 (cell)	Estimated Static BHP (psig): 807	Total Well Vol. (bbbls.): 19.64

Date	Time	Elapsed Time Between Readings (Mins.)	Injection Rate		Total Cum. Injection (Bbbls.)	Stage Cum. Injection (Bbbls.)	Tubing Pressure (psig)	PSIG per Bbl Injected	PSIG per Hour	Bottomhole Conditions			Injectivity Index BPD/(Calc. BHP-Static BHP) (BPD per psig)	Pressure Gradient (psig per ft.)	Polymer Concentration (ppm)	Cross-linker Ratio (x: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 (psig)	Calculated to Mid-Perf (psia)	Hall Plot Cum. psi-time											Injectivity Ratio (Psi + Rate)		
11-Jun-13	7:20 AM		1440	1.00	0.0	0.0	0	2.50	150.00	829	829	87	23244	0.62	16.55	0.26	0	0	0	0	0	0	0	Begin water pre-flush	
11-Jun-13	7:46 AM	0:26	1440	1.00	26.0	26.0	0	2.50	150.00	894	894	87	23244	0.62	16.55	0.26	0	0	0	0	0	0	0	0	Begin 3,000 ppm polymer
11-Jun-13	7:46 AM	0:00	1440	1.00	26.0	0.0	0	2.50	150.00	894	894	87	23244	0.62	16.55	0.26	3000	40	0	0	0	0	0	0	Begin 3,000 ppm polymer
11-Jun-13	8:00 AM	0:14	1445	1.00	40.1	14.1	0	0.36	21.43	899	899	92	35830	0.62	15.71	0.26	3000	40	15	15	3	3			
11-Jun-13	9:00 AM	1:00	1439	1.00	100.0	74.0	0	1.93	116.00	1015	1015	208	96730	0.71	6.92	0.29	3000	40	78	78	17	17			
11-Jun-13	10:00 AM	1:00	1442	1.00	160.1	134.1	0	1.51	91.00	1106	1106	299	163090	0.77	4.82	0.32	3000	40	141	141	31	31			
11-Jun-13	11:00 AM	1:00	1445	1.00	220.3	194.3	0	1.08	65.00	1171	1171	364	233350	0.81	3.97	0.34	3000	40	204	204	44	44			
11-Jun-13	12:00 PM	1:00	1438	1.00	280.2	254.2	0	1.02	61.00	1232	1232	425	307270	0.86	3.38	0.36	3000	40	267	267	58	58			
11-Jun-13	1:00 PM	1:00	1442	1.00	340.3	314.3	0	0.82	49.00	1281	1281	474	384130	0.89	3.04	0.37	3000	40	330	330	72	72			
11-Jun-13	2:00 PM	1:00	1435	1.00	400.1	374.1	0	0.74	44.00	1325	1325	518	463630	0.92	2.77	0.38	3000	40	392	392	85	85			
11-Jun-13	3:00 PM	1:00	1438	1.00	460.0	434.0	0	0.65	39.00	1364	1364	557	545470	0.95	2.58	0.39	3000	40	455	455	99	99			
11-Jun-13	3:16 PM	0:16	1440	1.00	476.0	450.0	0	0.63	37.50	1374	1374	567	567454	0.95	2.54	0.40	3000	40	472	472	103	103			
11-Jun-13	3:16 PM	0:00	1080	0.75	476.0	450.0	0	0.63	37.50	1260	1260	453	567454	1.17	2.38	0.36	3000	40	472	472	103	103			Reduce rate to 0.75 BPM (1,080 BPD)
11-Jun-13	4:00 PM	0:44	1083	0.75	509.1	483.1	0	0.24	10.91	1268	1268	461	623246	1.17	2.35	0.37	3000	40	507	507	110	110			
11-Jun-13	5:00 PM	1:00	1078	0.75	554.0	528.0	0	0.89	40.00	1308	1308	501	701726	1.21	2.15	0.38	3000	40	554	554	120	120			
11-Jun-13	5:43 PM	0:43	1072	0.74	586.0	560.0	0	0.53	23.72	1325	1325	518	758701	1.24	2.07	0.38	3000	40	587	587	128	128			
11-Jun-13	5:43 PM	0:00	1072	0.74	586.0	0.0	0	0.53	23.72	1325	1325	518	758701	1.24	2.07	0.38	6000	40	587	0	128	0			Increase polymer concentration to 6,000 ppm
11-Jun-13	6:00 PM	0:17	1076	0.75	598.7	12.7	0	0.55	24.71	1332	1332	525	781345	1.24	2.05	0.39	6000	40	614	27	133	5			
11-Jun-13	7:00 PM	1:00	1082	0.75	643.8	57.8	0	2.31	104.00	1436	1436	629	867505	1.33	1.72	0.42	6000	40	709	122	154	26			
11-Jun-13	8:00 PM	1:00	1080	0.75	688.8	102.8	40	2.11	95.00	1531	1531	724	959365	1.42	1.49	0.44	6000	40	803	216	175	47			
11-Jun-13	9:00 PM	1:00	1073	0.75	733.5	147.5	120	1.63	73.00	1604	1604	797	1055605	1.50	1.35	0.46	6000	40	897	310	195	67			
11-Jun-13	9:02 PM	0:02	1080	0.75	735.0	149.0	120	0.00	0.00	1604	1604	797	1058813	1.49	1.36	0.46	6000	40	900	313	196	68			
11-Jun-13	9:02 PM	0:00	1080	0.75	735.0	0.0	120	0.00	0.00	1604	1604	797	1058813	1.49	1.36	0.46	8000	40	900	0	196	0			Increase polymer concentration to 8,000 ppm
11-Jun-13	10:00 PM	0:58	1082	0.75	778.6	43.6	240	2.41	108.62	1709	1709	902	1157935	1.58	1.20	0.49	8000	40	1022	122	222	26			
11-Jun-13	11:00 PM	1:00	1085	0.75	823.8	88.8	340	2.46	111.00	1820	1820	1013	1267135	1.68	1.07	0.53	8000	40	1148	248	250	54			
11-Jun-13	11:19 PM	0:19	1076	0.75	838.0	103.0	340	0.00	0.00	1820	1820	1013	1301715	1.69	1.06	0.53	8000	40	1188	288	258	62			
11-Jun-13	11:19 PM	0:00	0	0.00	838.0	0.0	340			1820	1820	1013	1301715			0.53	0	0	1188	0	258	0			Shut down for repairs
12-Jun-13	12:00 AM	0:41	0	0.00	838.0	0.0	0			1336	1336	529	1301715			0.39	0	0	1188	0	258	0			
12-Jun-13	12:00 AM	0:00	720	0.50	838.0	0.0	0			1336	1336	529	1301715			0.39	0	0	1188	0	258	0			Begin water post-flush
12-Jun-13	1:00 AM	1:00	725	0.50	868.2	30.2	260	14.11	426.00	1762	1762	955	1407435	2.43	0.76	0.51	0	0	1188	0	258	0			
12-Jun-13	2:00 AM	1:00	715	0.50	898.0	60.0	210	-1.44	-43.00	1719	1719	912	1510575	2.40	0.78	0.50	0	0	1188	0	258	0			
12-Jun-13	2:40 AM	0:40	720	0.50	918.0	80.0	200	-0.85	-25.50	1702	1702	895	1578655	2.36	0.80	0.49	0	0	1188	0	258	0			End job and shut down injection pumps
12-Jun-13	2:40 AM	0:00	0	0.00	918.0	0.0	0			-807	1578655						0	0	1188	0	258	0			ISIP

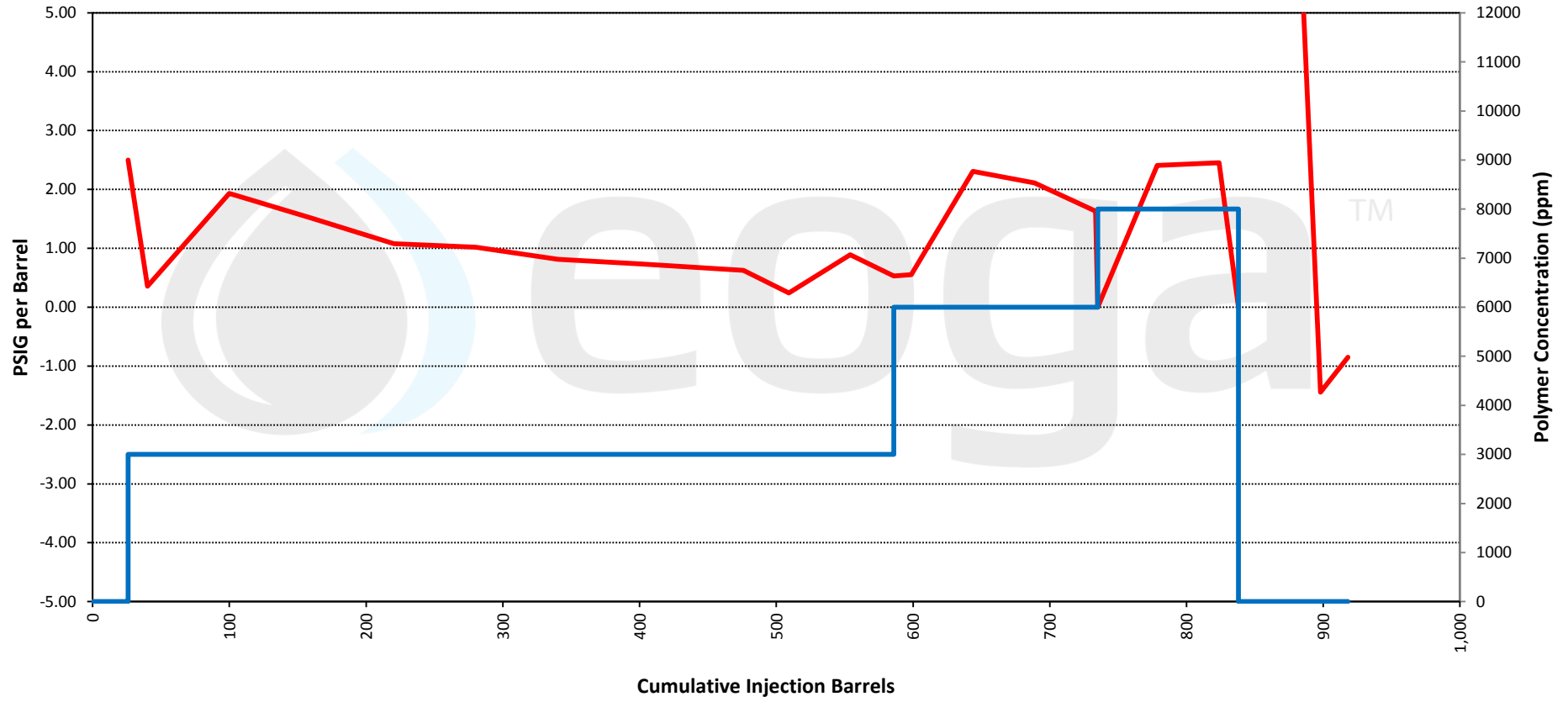
Gick #6 Producing Well - Rate vs. Pressure



Gick #6 Producing Well - Δp (from Beginning BHP)



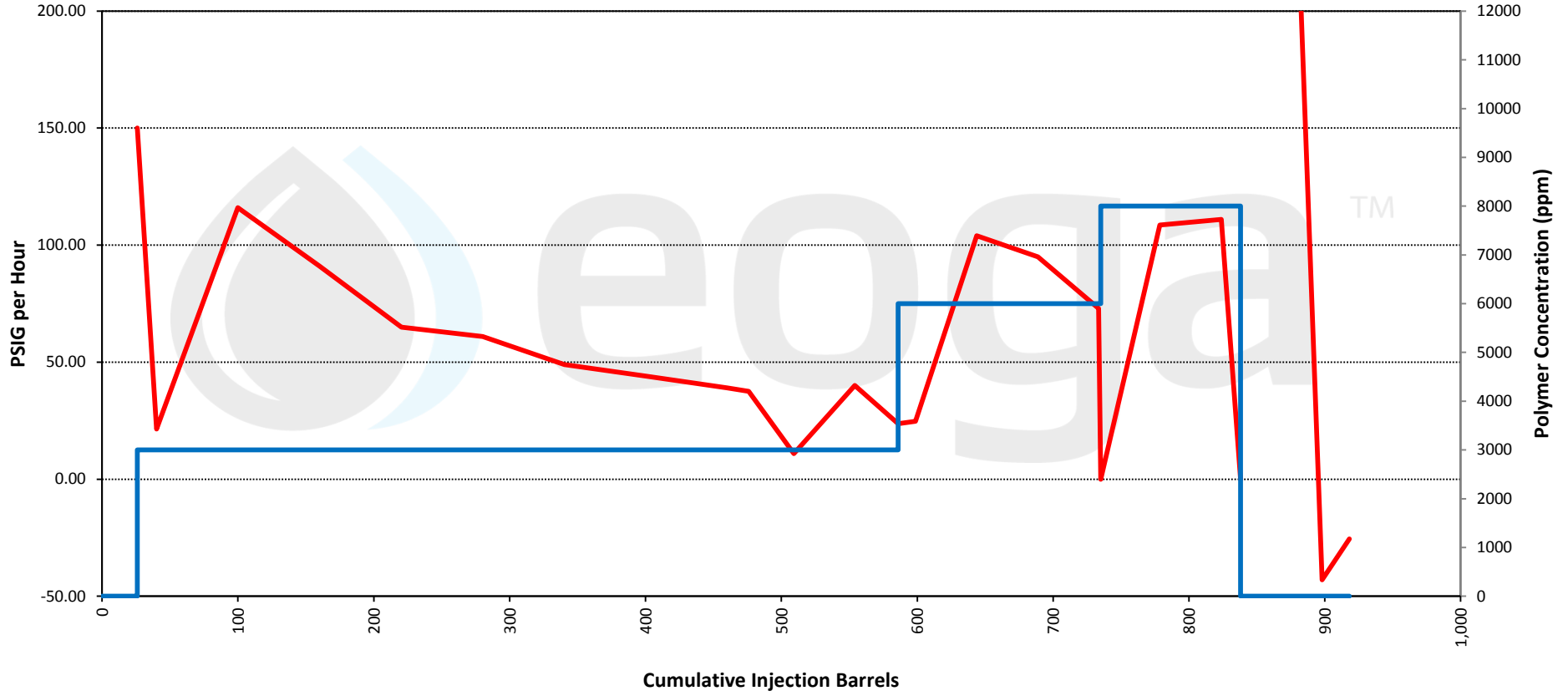
Gick #6 Producing Well - PSIG per Barrel



PSIG per Barrel

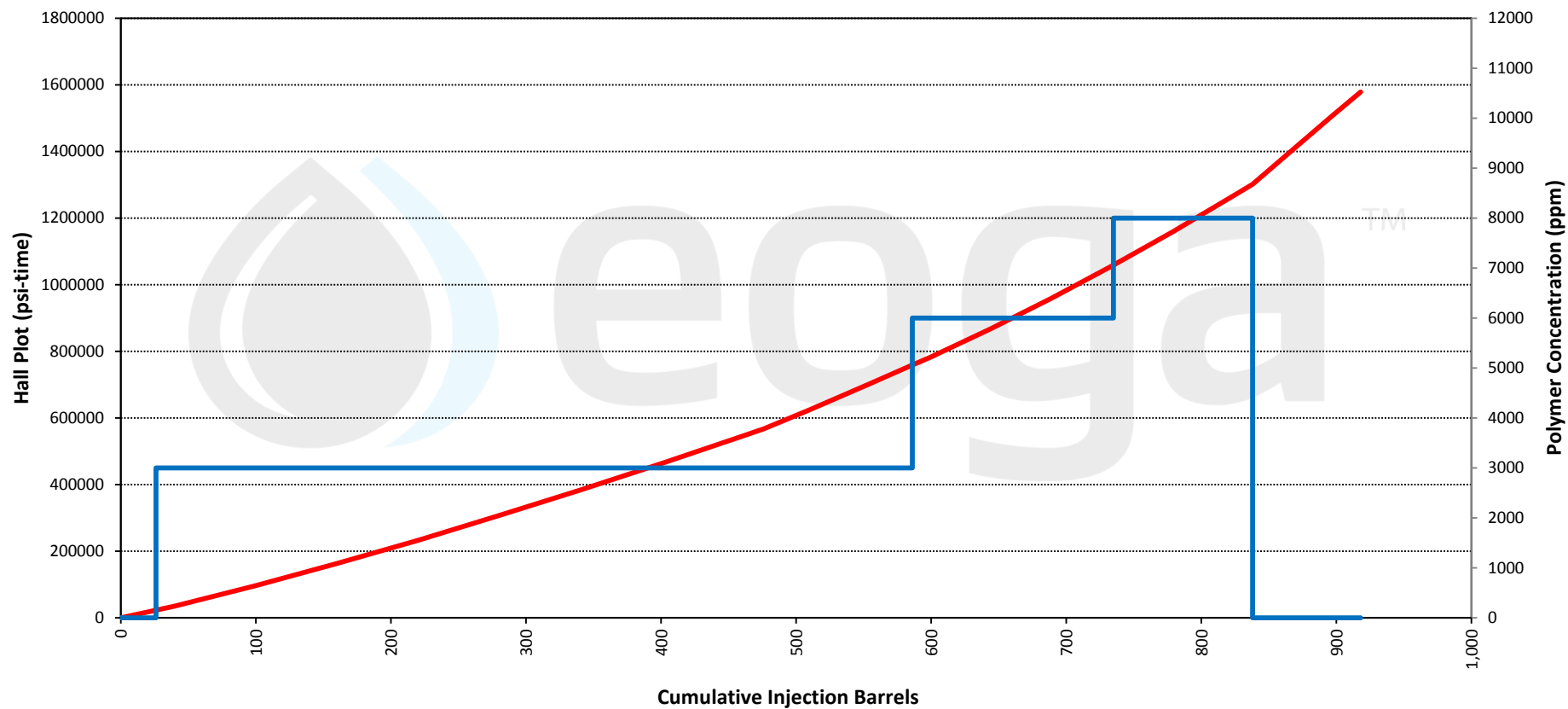
Polymer Concentration (ppm)

Gick #6 Producing Well - PSIG per Hour



Legend: PSIG per Hour (Red line), Polymer Concentration (ppm) (Blue line)

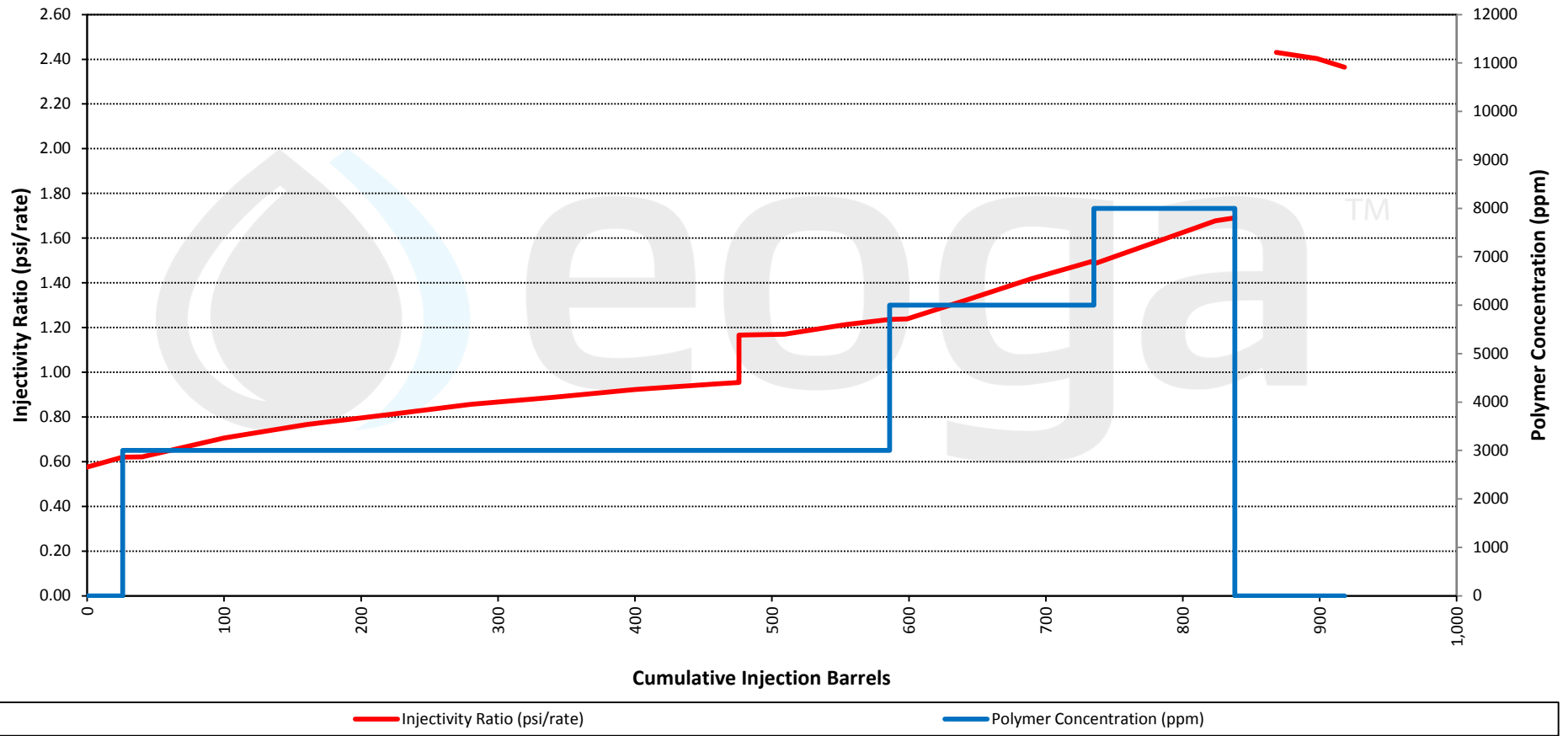
Gick #6 Producing Well - Hall Plot



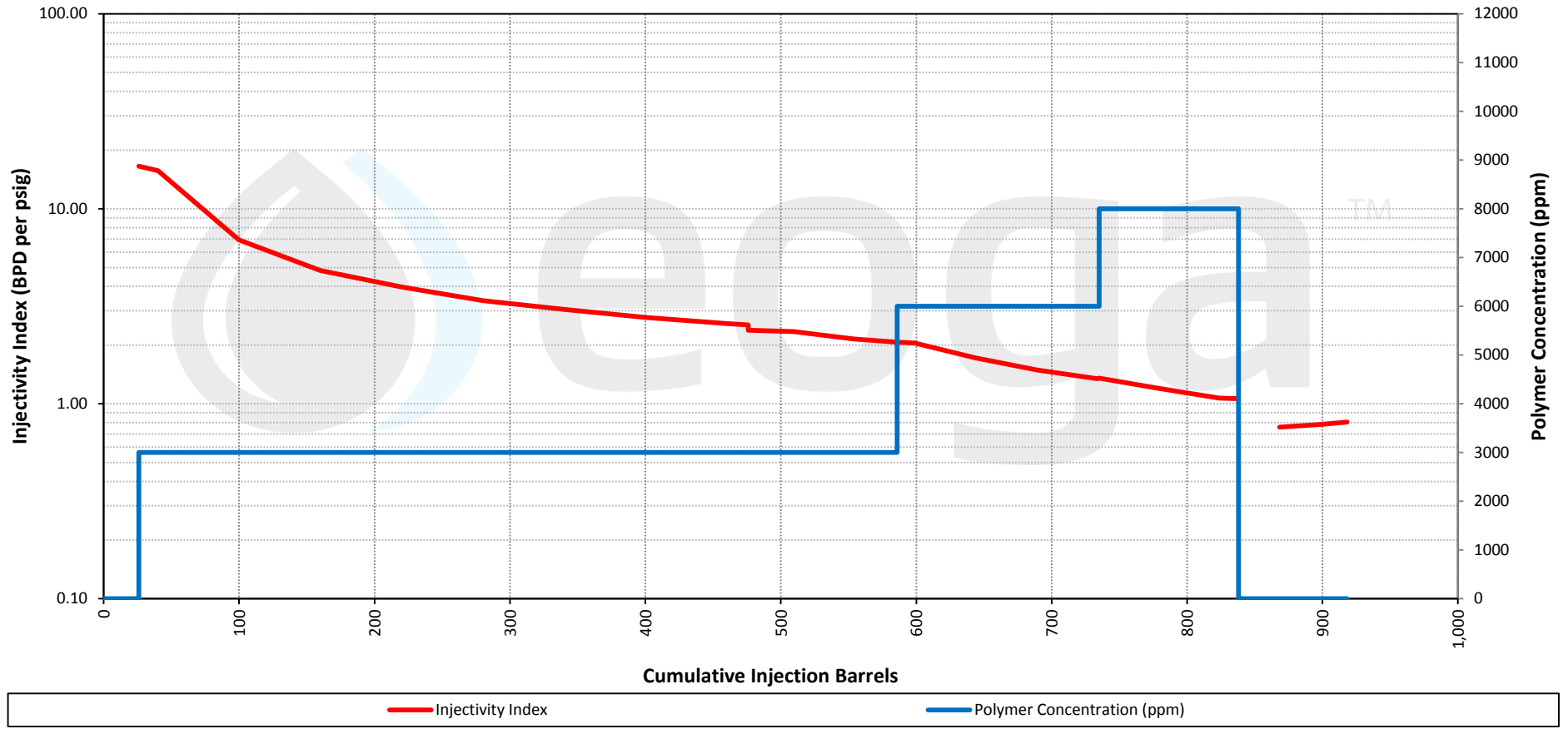
— Hall Plot

— Polymer Concentration (ppm)

Gick #6 Producing Well - Injectivity Ratio (PSI/Rate)



Gick #6 Producing Well - Injectivity Index



Gick #6 Producing Well - Pressure Gradient

