



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1143896  
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
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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: \_\_\_\_\_



1143896

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
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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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <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> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Citation Oil & Gas Corp.
Well Name	Drumm Co 7
Doc ID	1143896

All Electric Logs Run

Micro Log
Dual Induction Log
Compensated Neutron Log
Geological Report

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 05, 2013

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

Re: ACO1  
API 15-065-23932-00-00  
Drumm Co 7  
NE/4 Sec.16-09S-21W  
Graham 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

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

Home Office P.O. Box 32 Russell, KS 67665

No. 8935

Cell 785-324-1041

Date	5-23-13	Sec.	16	Twp.	9	Range	21	County	Butler	State	KS	On Location		Finish	8:45 AM	
Location												Buko 5 to RDX SW 2 1/4 N				
Lease	P 100000		Well No.		7		Owner		Winto							
Contractor	D. H. 16						To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.									
Type Job	Surface						Charge To		Citation Oil Gas							
Hole Size	10 1/2		T.D.		16 1/2		Depth		1636							
Csg.	8500		Depth				Street									
Tbg. Size			Depth				City		State							
Tool			Depth				The above was done to satisfaction and supervision of owner agent or contractor.									
Cement Left in Csg.	52.05		Shoe Joint		82.05		Cement Amount Ordered		690 34000							
Meas Line			Displace		100 12134		99% gel									
<b>EQUIPMENT</b>												Common				
Pumptrk	5	No.	Cementer		Mott		Helper									
Bulktrk	8	No.	Driver		Drett		Driver		Gel.							
Bulktrk	14	No.	Driver		Lannick		Driver		Calcium							
<b>JOB SERVICES &amp; REMARKS</b>												Hulls				
Remarks:													Salt			
Rat Hole													Flowseal			
Mouse Hole													Kol-Seal			
Centralizers													Mud CLR 48			
Baskets													CFL-117 or CD110 CAF 38			
D/V or Port Collar													Sand			
Cement + did Circulate												Handling				
												Mileage				828
<b>FLOAT EQUIPMENT</b>																
												Guide Shoe				
												Centralizer 14				
												Baskets				
												AFU Inserts				
												Float Shoe				
												Latch Down				
												Pumptrk Charge				
												Mileage				
												Tax				
												Discount				
												Total Charge				
X	Signature <i>E. J. ...</i>															

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

Home Office P.O. Box 32 Russell, KS 67665

No. 6935

Cell 785-324-1041

Date	5-28-73	Sec.	16	Twp.	9	Range	21	County	Grattan	State	KS	On Location		Finish	12.30pm
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Location: 5 to XNW SW 26 N

Lease	Drumm-CO	Well No.	7	Owner	Wm 10
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Contractor: To Quality Oilwell Cementing, Inc.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Type Job	pipe job	Charge To	
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Hole Size	7 7/8	T.D.	3775	Street	Citation - oil gas
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Csg.	5 to	Depth	37722	City		State	
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Tbg. Size		Depth		The above was done to satisfaction and supervision of owner agent or contractor.		
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Tool	8	Depth		Cement Amount Ordered	255 class #
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Cement Left in Csg.	84.49	Shoe Joint	84.49	Used Plug	4 + low
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Meas Line	15.50	Displace	87.34	Common	
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**EQUIPMENT**

Pumptrk	5	No.	Cementer		Poz. Mix
			Helper		
Bulktrk	14	No.	Driver		Gel.
			Driver		
Bulktrk	04	No.	Driver		Calcium
			Driver		

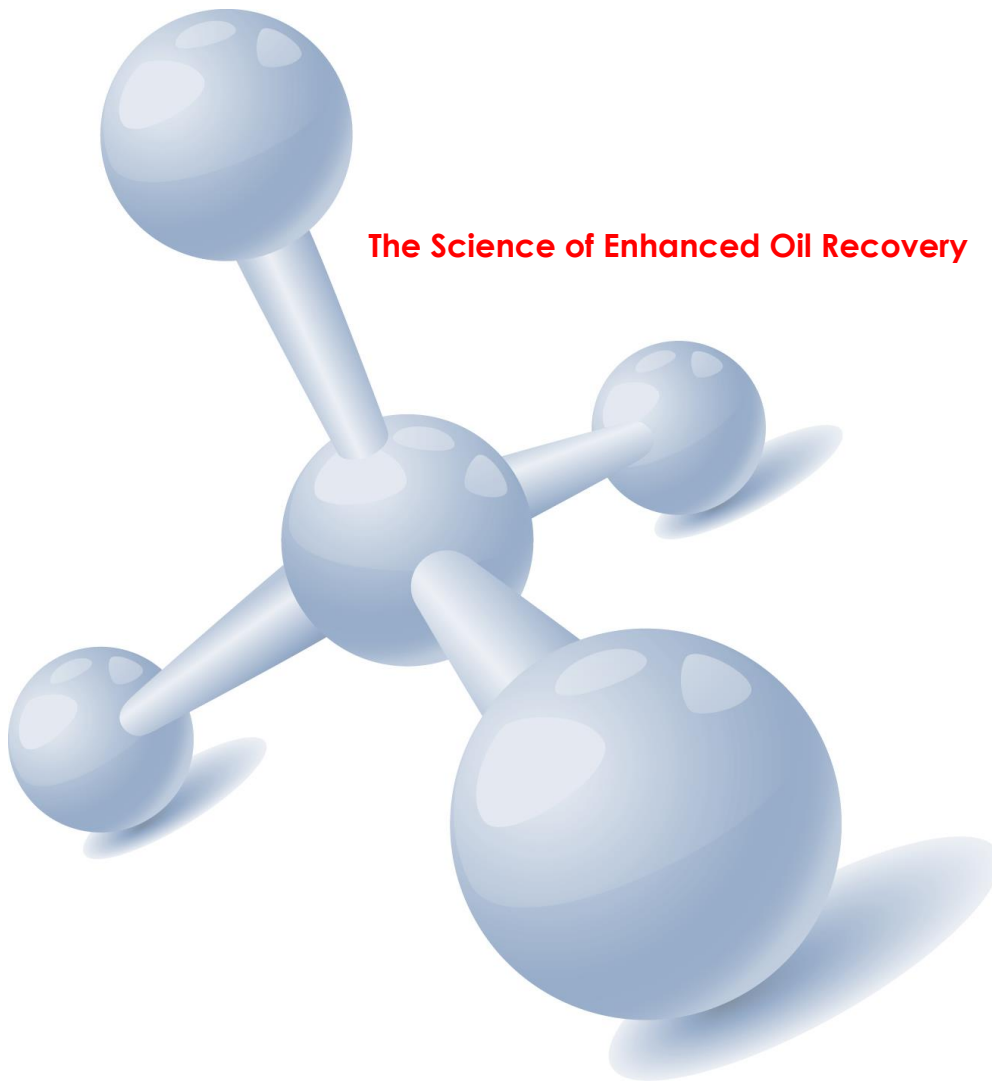
**JOB SERVICES & REMARKS**

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
	Sand
	Handling
	Mileage

**FLOAT EQUIPMENT**

dropped ball circulated 45 min	Guide Shoe
Back flush plugged bit and mouse hole	Centralizer
mouse hole inserted 195 down hole displaced 87.34/BW	Baskets
latch down hold rigged down	AFU Inserts
Lift 800 PSI	Float Shoe
Landed plug @ 1500 PSI	Latch Down

	Pumptrk Charge	Tax
	Mileage	Discount
		Total Charge
X Signature	[Signature]	



The Science of Enhanced Oil Recovery

Treatment Summary For

**Citation Oil & Gas Corp.**

**MARCIT<sup>sm</sup> Gel Conformance**

**Morel**

**Drumm Co #7**

**Graham County, Kansas**

June 11, 2013

**TIORCO**  
A NALCO & STEPAN COMPANY

## **TREATMENT SUMMARY**

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### **PURPOSE**

Use MARCIT<sup>sm</sup> polymer gel technology to 1) decrease water production, 2) lower producing fluid level, 3) improve draw-down on oil-saturated reservoir matrix rock, 4) improve oil recovery and well economics.

### **TREATMENT**

TIORCO equipment and personnel arrived on location on June 8, 2013. A tailgate safety meeting was held to discuss all potential hazards specific to the job. TIORCO's Portable Unit #17 was connected to frac tanks for treatment supply water and to the wellhead for polymer solution injection. The unit was then connected to an electrical source. The treatment consisted of 1,982 BBLS of gel. The treatment started on June 8, 2013 at 08:40 and ended on June 10, 2013 at 06:45. The gel was made-up of 3,025 lbs. of EOR204 (Medium molecular weight polymer) and 652 lbs. of EOR684 (crosslinker). Details for each stage of the treatment, job log, and injection charts are included.

### **MARCIT<sup>sm</sup> GEL QA/QC**

Representative samples of cross-linked polymer solution were collected during all treatment stages to ensure that the intended gels would ultimately form. Pre-gel samples were stored at a temperature of 120°F in an oven onboard the TIORCO portable polymer injection unit. All samples indicated that gels formed as intended.

TIORCO is very interested in monitoring and evaluating the results of this treatment with time. If you should have questions or comments regarding the job, please do not hesitate to contact Mike Lantz in our Denver office at (303) 923-6440. We greatly appreciate the opportunity to be of service to Citation Oil & Gas Corp. and look forward to working with you again in the future.





## TREATMENT STAGE LOG

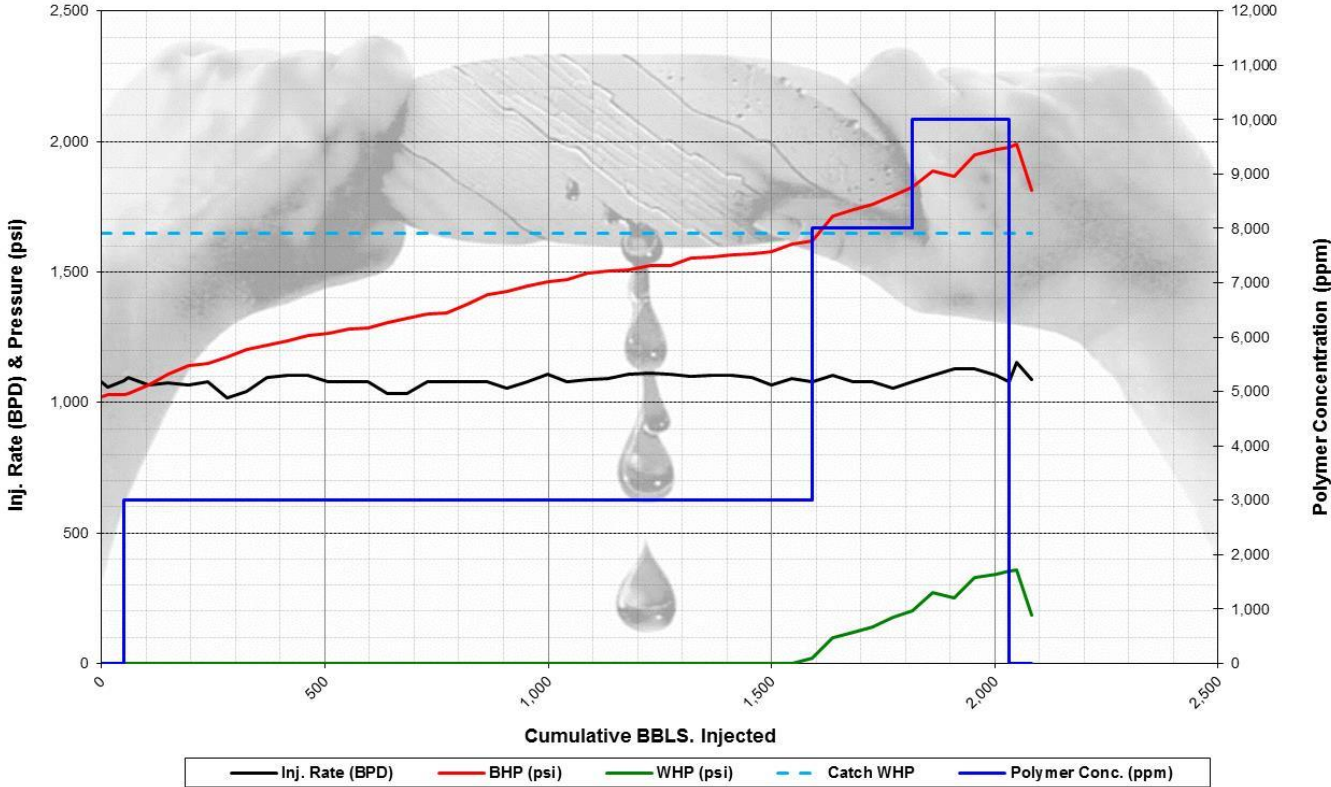
Stage	Date	Time	Date	Time	Polymer ppm	BBLs / Stage	WHP (psi)		BHP (psi)		Pump Rate (bpd)		Comments
	Begin	Begin	End	End			Begin	End	Begin	End	Begin	End	
1	6/8/13	8:40 AM	6/8/13	9:47 AM	0	50	0	0	1,020	1,031	1,080	1,080	Stage #1: Water Flush with CRO195 & X-Cide 102w
2	6/8/13	9:47 AM	6/9/13	8:00 PM	3,000	1,541	0	20	1,031	1,620	1,080	1,080	Stage #2: 3,000 ppm with X-Cide 102w
3	6/9/13	8:00 PM	6/10/13	1:00 AM	8,000	225	20	200	1,620	1,825	1,080	1,080	Stage #3: 8,000 ppm with X-Cide 102w
4	6/10/13	1:00 AM	6/10/13	5:40 AM	10,000	216	200	355	1,825	1,977	1,080	1,080	Stage #4: 10,000 ppm with X-Cide 102w
5	6/10/13	5:40 AM	6/10/13	6:45 AM	0	50	355	185	1,977	1,811	1,080	1,080	Stage #5: Water Flush with CRO195 & X-Cide 102w
<b>Totals</b>						<b>2,082</b>							

## MARCIT<sup>SM</sup> GEL QA/QC

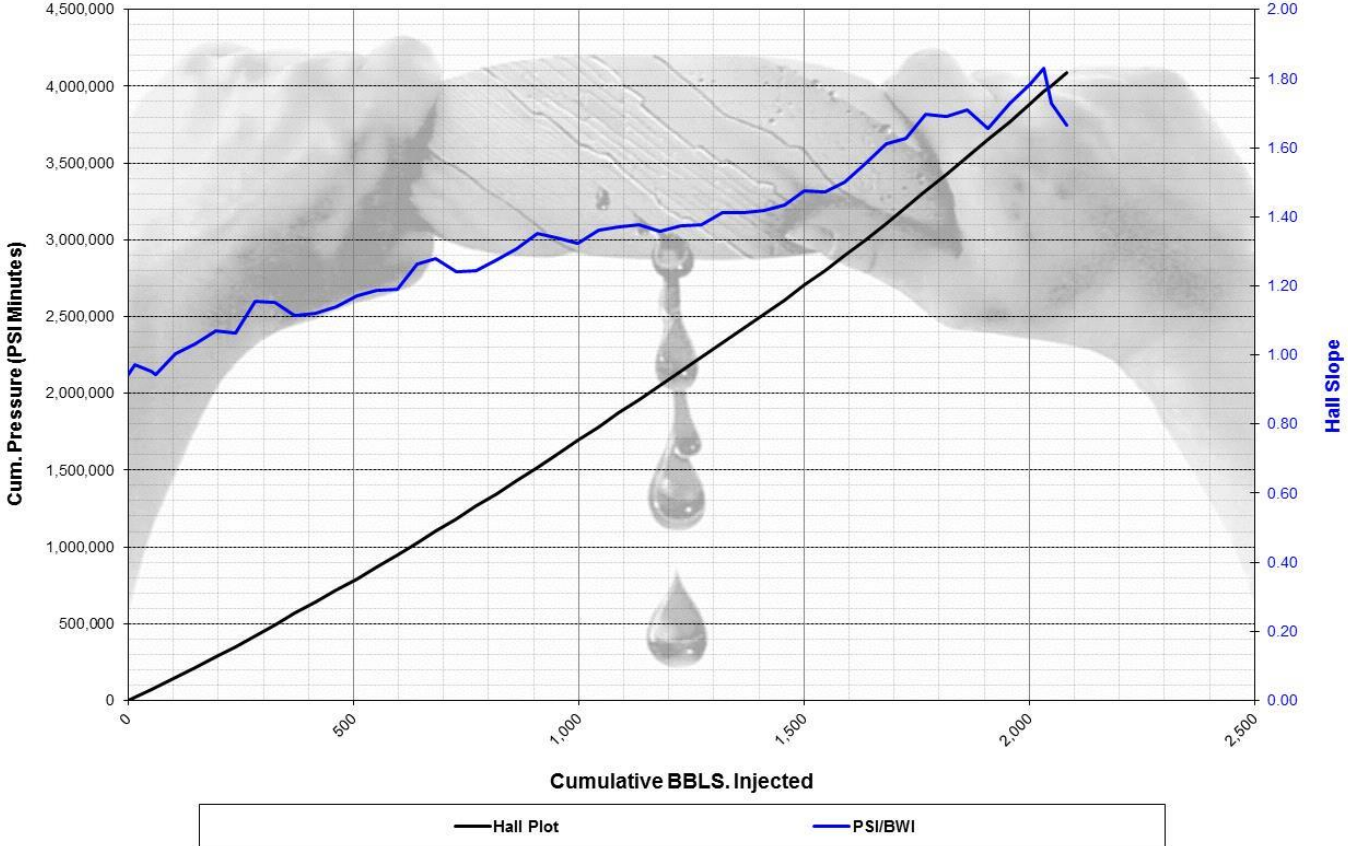
Sample No.	Treatment Stage	Sample Date	Sample Time	Cum. BBLs	Polymer PPM	Polymer X-Linker Ratio	Gel Grade
1	2	June 8, 2013	11:00 AM	104	3,000	40:1	3g
2	2	June 9, 2013	12:00 AM	683	3,000	40:1	2g
3	2	June 9, 2013	12:00 PM	1,227	3,000	40:1	3g
4	2	June 9, 2013	7:00 PM	1,546	3,000	40:1	2g
5	3	June 10, 2013	12:00 AM	1,771	8,000	40:1	8g
6	4	June 10, 2013	5:00 AM	2,002	10,000	40:1	9e



# RATE, PRESSURE, & CONCENTRATION



# HALL SLOPE



# TREATMENT JOB LOG

DATE	TIME	INJECTION RATE		CUM. INJ BBLs	WHP PSI	BHP PSI	HALL SLOPE	Polymer PPM	POLYMER LBS: (Estimate)	COMMENTS
		BPD	BPM							
8-Jun-13	8:40	1,080	0.75	0	0	1,020	0.94	0	0	Begin Stage #1: Water Flush with Baker CRO195 & X-Cide 102w
8-Jun-13	9:00	1,058	0.74	15	0	1,028	0.97	0	0	
8-Jun-13	9:47	1,082	0.75	50	0	1,031	0.95	0	0	End Stage #1
8-Jun-13	9:47	1,082	0.75	50	0	1,031	0.95	3,000	0	Begin Stage #2: 3,000 ppm with X-Cide 102w
8-Jun-13	10:00	1,097	0.76	60	0	1,036	0.94	3,000	10	
8-Jun-13	11:00	1,066	0.74	104	0	1,068	1.00	3,000	57	Took sample #1: Graded 3g
8-Jun-13	12:00	1,075	0.75	149	0	1,110	1.03	3,000	104	
8-Jun-13	13:00	1,068	0.74	194	0	1,143	1.07	3,000	151	
8-Jun-13	14:00	1,080	0.75	239	0	1,150	1.06	3,000	198	
8-Jun-13	15:00	1,018	0.71	281	0	1,175	1.15	3,000	242	
8-Jun-13	16:00	1,042	0.72	324	0	1,201	1.15	3,000	288	
8-Jun-13	17:00	1,094	0.76	370	0	1,220	1.11	3,000	336	
8-Jun-13	18:00	1,104	0.77	416	0	1,237	1.12	3,000	384	
8-Jun-13	19:00	1,104	0.77	462	0	1,258	1.14	3,000	432	
8-Jun-13	20:00	1,080	0.75	507	0	1,266	1.17	3,000	479	
8-Jun-13	21:00	1,080	0.75	552	0	1,282	1.19	3,000	527	
8-Jun-13	22:00	1,080	0.75	597	0	1,287	1.19	3,000	574	
8-Jun-13	23:00	1,032	0.72	640	0	1,305	1.26	3,000	619	
9-Jun-13	0:00	1,032	0.72	683	0	1,321	1.28	3,000	664	Took sample #2: Graded 2g
9-Jun-13	1:00	1,080	0.75	728	0	1,340	1.24	3,000	711	
9-Jun-13	2:00	1,080	0.75	773	0	1,345	1.25	3,000	758	
9-Jun-13	3:00	1,080	0.75	818	0	1,377	1.28	3,000	806	
9-Jun-13	4:00	1,080	0.75	863	0	1,413	1.31	3,000	853	
9-Jun-13	5:00	1,056	0.73	907	0	1,426	1.35	3,000	899	
9-Jun-13	6:00	1,080	0.75	952	0	1,447	1.34	3,000	946	
9-Jun-13	7:00	1,106	0.77	998	0	1,463	1.32	3,000	995	
9-Jun-13	8:00	1,080	0.75	1,043	0	1,471	1.36	3,000	1,042	
9-Jun-13	9:00	1,090	0.76	1,089	0	1,495	1.37	3,000	1,089	
9-Jun-13	10:00	1,092	0.76	1,134	0	1,505	1.38	3,000	1,137	
9-Jun-13	11:00	1,109	0.77	1,180	0	1,506	1.36	3,000	1,186	
9-Jun-13	12:00	1,111	0.77	1,227	0	1,526	1.37	3,000	1,234	Took Sample # 3: Graded 3g
9-Jun-13	13:00	1,106	0.77	1,273	0	1,523	1.38	3,000	1,282	
9-Jun-13	14:00	1,099	0.76	1,318	0	1,552	1.41	3,000	1,330	
9-Jun-13	15:00	1,104	0.77	1,364	0	1,557	1.41	3,000	1,379	
9-Jun-13	16:00	1,104	0.77	1,410	0	1,567	1.42	3,000	1,427	
9-Jun-13	17:00	1,094	0.76	1,456	0	1,569	1.43	3,000	1,475	
9-Jun-13	18:00	1,068	0.74	1,501	0	1,577	1.48	3,000	1,522	
9-Jun-13	19:00	1,092	0.76	1,546	0	1,608	1.47	3,000	1,569	Took Sample #4: Graded 2g
9-Jun-13	20:00	1,080	0.75	1,591	20	1,620	1.50	3,000	1,616	End Stage #2
9-Jun-13	20:00	1,080	0.75	1,591	20	1,620	1.50	8,000	1,616	Begin Stage #3: 8,000 ppm with X-Cide 102w
9-Jun-13	21:00	1,104	0.77	1,637	100	1,716	1.55	8,000	1,745	
9-Jun-13	22:00	1,080	0.75	1,682	120	1,739	1.61	8,000	1,871	
9-Jun-13	23:00	1,080	0.75	1,727	140	1,759	1.63	8,000	1,997	
10-Jun-13	0:00	1,056	0.73	1,771	175	1,792	1.70	8,000	2,120	Took Sample #5: Graded 8g
10-Jun-13	1:00	1,080	0.75	1,816	200	1,825	1.69	8,000	2,246	End Stage #3
10-Jun-13	1:00	1,080	0.75	1,816	200	1,825	1.69	10,000	2,246	Begin Stage #4: 10,000 ppm with X-Cide 102w
10-Jun-13	2:00	1,104	0.77	1,862	270	1,888	1.71	10,000	2,407	
10-Jun-13	3:00	1,128	0.78	1,909	250	1,868	1.66	10,000	2,571	
10-Jun-13	4:00	1,128	0.78	1,956	330	1,948	1.73	10,000	2,735	
10-Jun-13	5:00	1,104	0.77	2,002	340	1,971	1.79	10,000	2,896	Took Sample #6: Graded 9e
10-Jun-13	5:40	1,080	0.75	2,032	355	1,977	1.83	10,000	3,001	End Stage #4
10-Jun-13	5:40	1,080	0.75	2,032	355	1,977	1.83	0	3,001	Begin Stage #5: Water flush with CRO195 & X-Cide 102w
10-Jun-13	6:00	1,152	0.80	2,048	360	1,990	1.73	0	3,001	
10-Jun-13	6:45	1,088	0.76	2,082	185	1,811	1.66	0	3,001	End Stage #5. Treatment Completed



