

Kansas Corporation Commission Oil & Gas Conservation Division

1100317

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 #	API No. 15
Name:	Spot Description:
Address 1:	SecTwpS. R
Address 2:	Feet from North / South Line of Section
City:	Feet from _ East / _ West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	County:
Name:	Lease Name: Well #:
Wellsite Geologist:	Field Name:
Purchaser:	Producing Formation:
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:
New Well Re-Entry Workover	Total Depth: Plug Back Total Depth:
Oil WSW SWD SIOW Gas D&A ENHR SIGW OG GSW Temp. Abd. CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.):	Amount of Surface Pipe Set and Cemented at: Feet Multiple Stage Cementing Collar Used?
Operator:	
Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SWD Conv. to GSW	Chloride content: ppm Fluid volume: bbls Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #:	Operator Name:
Dual Completion Permit #:	Lease Name: License #:
SWD Permit #:	Quarter Sec Twp S. R
☐ ENHR Permit #: ☐ GSW Permit #:	County: Permit #:
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date	

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: Date:						

Side Two



Operator Name: _ Lease Name: _ _ Well #: _ County: _ 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** Yes No Log Formation (Top), Depth and Datum Sample (Attach Additional Sheets) Name Top Datum Samples Sent to Geological Survey ☐ Yes □ No Cores Taken Yes No Electric Log Run Electric Log Submitted Electronically Yes No (If no, Submit Copy) List All E. Logs Run: CASING RECORD Used New Report all strings set-conductor, surface, intermediate, production, etc. Size Hole Size Casing Weight # Sacks Type and Percent Type of Purpose of String Drilled Set (In O.D.) Lbs. / Ft. Additives Depth Cement Used ADDITIONAL CEMENTING / SQUEEZE RECORD Purpose: Depth Type of Cement # Sacks Used Type and Percent Additives Top Bottom Perforate **Protect Casing** Plug Back TD Plug Off Zone PERFORATION RECORD - Bridge Plugs Set/Type Acid, Fracture, Shot, Cement Squeeze Record Shots Per Foot Specify Footage of Each Interval Perforated (Amount and Kind of Material Used) Depth TUBING RECORD: Size: Set At: Packer At: Liner Run: No Yes Producing Method: Date of First, Resumed Production, SWD or ENHR. Pumping Gas Lift Other (Explain) Flowing **Estimated Production** Bbls. Water Bbls. Gas-Oil Ratio Oil Gas Mcf Gravity Per 24 Hours **DISPOSITION OF GAS:** METHOD OF COMPLETION: PRODUCTION INTERVAL: Open Hole Dually Comp. Perf. Commingled Vented Sold Used on Lease (Submit ACO-5) (Submit ACO-4) (If vented, Submit ACO-18.) Other (Specify)



Petro River Operating, Ilc

4925 Greenville Suite 900 Dallas, Texas 75206

Scully 2-3

East Kansas Marion, KS United States of America Massive Reactive Fracture

Mississippi Lime Petro River Spec. - Reactive Water Frac

POST JOB REPORT Ticket #1-0 August 12, 2012

Prepared for: Ruben Alba - Co-CEO

Main - (303) 416-0012

Ruben.Alba@PetroRiverUSA.com

Submitted by: Lee Larson

Josh Rastatter / Yacob Zergaw - Engineers

(701) 651-6646

Service Point: Williston

15046 49th St NW Williston ND 58801 Phone: (701) 651-6646

Thank you for using TOPS Well Services! Created on: 8/13/2012 3:11 PM

SUMMARY POST JOB

Executive Summary

Petro River Operating, Ilc

Petro River Spec. - Reactive Water Frac

Ticket #1-0 August 12, 2012 Scully 2-3

Mississippi Lime, East Kansas

Marion, KS

Massive Reactive Fracture

Callout Pump time:

Actual Start Pump time: 11:00 AM
Max Well Pressure: 3400 psi
Base Fluid: Fresh Water
Base Fluid Density: 8.33 lb/gal
Perf Mid Point (TVD) 2450 ft

Delay Due to:

Vol to load:
Well Pres. @ Start:

30 psi

72 Bbl

I	Final	
ISIP (psi)	583	550
FG	0.671	0.657
5 min		407
10 min		313
15 min		218

Friction Summary

Wellbore Fric.: 484 psi Tortuosity: 200 psi Perf Friction: 1233 psi Total Friction: 1917 psi @ 74 BPM 48 Perfs Shot - 0.42 in. Dia, Est Cd = 0.85 33.3 Eff. Perfs Open - 69% Eff. Perfs Open

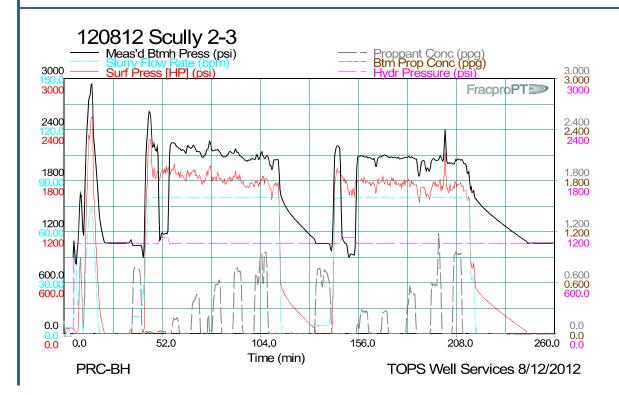
Treatment Summary

Average Maximum

Pressure:	1750	2500	psi
Rate:	80	80	Bpm
Proppant Conc:	0.62	1	рра
Viscosity:	1	1	cP 511/

15% HCl Acid 4,500 Gal Treatement Fluic 486,318 Gal Total (LTR): 490,818 Gal

Proppant Vol Pumped - 103020 Lbs 51,920 Lbs - 100 Mesh 51,100 Lbs - 40/70 White



Wellbore Summary

Max Pressure: 3400 psi
Treatment Via: Casing - Liner

Tubular Description	Top MD	Bot. MD	Burst	80% Burst	Cap. Gal/ft	Capacity Gal
Casing 5.5", J-55, 15.5#	2438	2462	4810	3848	1	4
					Total Capacity:	4

Perforation / Notch information

Perforated Interval Name	Top MD (ft)	Bot. MD (ft)	Top TVD (ft)	Bot TVD (ft)	spf	size (in)	Deg Phase	Charge Type
Mississippi Chat	2438	2442			2	0.42		
Mississippi Chat	2452	2462			4	0.42		

Planned vs Actual Pump Schedule

Rate	Treatment Vol	Stage Type	Fluid Description	Proppant Type	Prop Conc	Ave. Rate	Actual Treament Vol	Act Prop Conc.
(bpm)	Gal				(ppa)	(bpm)	Gal	(ppa)
80	15000	Pre PAD	LPh FR		-	40.0	9240	
		Shut in - 5 min			=			
80	2000	Acid	15% HCI - Treated		-	10.0	2352	
80	40000	PAD	LPh FR		-		50400	
80	15000	0.25 PPA	LPh FR	100 Mesh	0.25 -	80.0	13734	0.18
80	22500	Sweep	LPh FR		-	80.0	21588	
80	15000	0.25 PPA	LPh FR	100 Mesh	0.5 -	80.0	14658	0.43
80	22500	Sweep	LPh FR		-	80.0	23814	
80	15000	0.5 PPA	LPh FR	100 Mesh	0.75 -	80.0	15288	0.6
80	22500	Sweep	LPh FR		-	80.0	22134	
80	15000	0.75 PPA	LPh FR	100 Mesh	1 -	80.0	13902	0.75
80	22500	Sweep	LPh FR		-	80.0	22092	
80	15000	1 PPA	LPh FR	100 Mesh	1 -	80.0	23520	1
80	22500	Sweep	LPh FR		-		22554	
80	2000	Acid	15% HCI - Treated		-	5.0		
80	40000	Pad	LPh FR		-	80.0	1806	
80	15000	0.25 PPA	LPh FR	40/70 White	0.25 -	80.0	40614	0.25
80	22500	Sweep	LPh FR		-	80.0	23016	
80	15000	0.25 PPA	LPh FR	40/70 White	0.25 -	80.0	20832	0.28
80	22500	Sweep	LPh FR		-	80.0	13944	
80	15000	0.5 PPA	LPh FR	40/70 White	0.5 -	80.0	31080	0.5
80	22500	Sweep	LPh FR		-	80.0	18606	
80	15000	0.75 PPA	LPh FR	40/70 White	0.75 -	80.0	24318	0.6
80	22500	Sweep	LPh FR		-	80.0	18564	
80	15000	1 PPA	LPh FR	40/70 White	1 -	80.0	20832	0.95
80	50000	Sweep	LPh FR		-	80.0	17430	
	<u> </u>	Shut-in 15 min			-			

Original Treatment Design Summary

 Percent Pad
 71%

 Acid/Chem. Vol
 4000 Gal

 Pad + SLF (Clean Fluid Vol.)
 442500 Gal

 Flush (Clean Fluid Vol.)
 55000 Gal

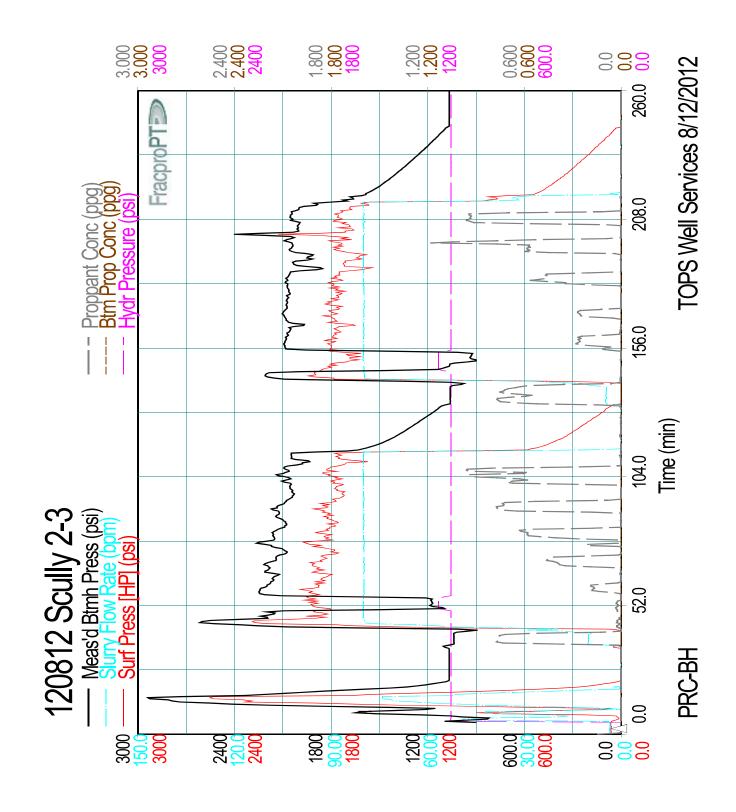
 Total Inj. (Clean Fluid Vol.)
 501500 Gal

Mass Balance

Material Name	Act. Amount on Loc.	Vol After Primeup	Vol Req. for Design	Vol Req. per actual Treatment	Job Used	% Variance per Design	% Variance per actual Treatment
Additives	units	units	units	units	units		
FR-Clear	734	731	90	74	79	-12%	7%
HCI Acid (12.5%-18.0%)	4500	4500	603	493	500	-17%	1%
Surf MicroEco	500	487	301	246	297	-1%	21%
BioClear 1000	122	122	7	6	17	143%	183%
Proppant							
100 Mesh	51920		52500		51920	1%	
40/70 White	51100		51250		51100	0%	
Fluids							
Fresh Water	763686	763686	501500		486318	3%	

Treatment Charts

Petro River Operating, IIc Petro River Spec. - Reactive Water Frac Ticket #1-0 August 12, 2012 Scully 2-3 Mississippi Lime, East Kansas Marion, KS Massive Reactive Fracture



Treatment Charts

Petro River Operating, Ilc Petro River Spec. - Reactive Water Frac Ticket #1-0 August 12, 2012 Scully 2-3 Mississippi Lime, East Kansas Marion, KS Massive Reactive Fracture

