

Kansas Corporation Commission Oil & Gas Conservation Division

1048200

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? Yes No If yes, show depth set: Feet If Alternate II completion, cement circulated from: sx cmt
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 III Approved by: Date:									

Side Two



Operator Name:				Lease N	lame:			Well #:			
Sec Twp	S. R	East] West	County:							
INSTRUCTIONS: Sh time tool open and clo recovery, and flow rat line Logs surveyed. A	osed, flowing and shu es if gas to surface te	t-in pressures st, along with	s, whether s final chart(s	hut-in press	ure reach	ed static level,	hydrostatic pres	ssures, bottom h	nole temp	erature, fluid	
Drill Stem Tests Taker (Attach Additional		Yes	☐ No		Log	g Formation	n (Top), Depth a	nd Datum		Sample	
Samples Sent to Geo	logical Survey	Yes	No		Name			Тор		Datum	
Cores Taken Electric Log Run Electric Log Submitte (If no, Submit Cop)	d Electronically	☐ Yes ☐ Yes ☐ Yes	No No No								
List All E. Logs Run:											
		Report a		RECORD	New	Used	on, etc.				
Purpose of String	Size Hole Drilled	Size C Set (In	asing	Weig Lbs. /	ht	Setting Depth	Type of Cement	# Sacks Used	, ,,	and Percent additives	
		<u> </u> 	DDITIONAL	CEMENTIN	IG / SQUE	EZE RECORD					
Purpose: Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Type of 0	Cement	# Sacks	Used		Type and	Percent Additives			
Shots Per Foot	PERFORATI Specify	ON RECORD - Footage of Each	Bridge Plug n Interval Per	s Set/Type forated			cture, Shot, Ceme mount and Kind of N	nt Squeeze Record Material Used)	Depth		
TUBING RECORD:	Size:	Set At:		Packer At:		Liner Run:					
							Yes N	0			
Date of First, Resumed	Production, SWD or EN	IHR. Pr	oducing Meth	nod:	g 🗌 G	as Lift C	Other (Explain)				
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Water	BI	ols.	Gas-Oil Ratio Gravity			
DISPOSITI	ON OF GAS:		N	METHOD OF	COMPLET	TION:		PRODUCTIO	ON INTER	VAL:	
Vented Solo	Used on Lease		n Hole	Perf.	Dually (nmingled mit ACO-4)				
(11 verneu, 3u	10./	Othe	r (Specify)				I —				

Form	ACO1 - Well Completion
Operator	Pioneer Natural Resources USA, Inc.
Well Name	Lucas 4-16
Doc ID	1048200

Tops

Name	Тор	Datum
Glorieta	1179	KB
Hollenberg	2328	KB
Herington	2351	KB
Krider	2377	KB
Towanda	2493	KB
Ft. Riley	2548	KB
A1 Lime	2682	KB
B1 Lime	2739	KB
B2 Lime	2763	KB
Base B2 Lime	2776	KB

Form	ACO1 - Well Completion
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Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
3	Chase	Shot & Fractured	2515-2524
3	Chase	Shot & Fractured	2526-2530
3	Chase	Shot & Fractured	2556-2588
3	Chase	Shot & Fractured	2612-2624
3	Chase	Shot & Fractured	2646-2650
3	Chase	Shot & Fractured	2656-2666
3	Council Grove	Shot & Fractured	2746-2760
3	Council Grove	Shot & Fractured	2770-2780

CEMENTING TREATMENT REPORT					PIC	NEER					TREATMENT NUMI	BER 02010017		DATE		7/13/2	2010					
						AL RESOURCES					STAGE 1			JOB TYI	PE	Long String						
WELL NAME ANI		Lucas 4-16			LOCATION	N (LEGAL) Sec.16, T31S, R38V	V	RIG NAME:			CEMEN'	T PUMPER:	230									
FIELD					FORMATI	ON Sec.10, 1313, K38V	v	WELL DATA		1	ral Resources Rig # 3	воттом	1		FT	TOP)3	FT				
COUNTY	Hu	igoton-Panom	na		STATE	API N	<u> </u>	BIT SIZE TOTAL DEP	rii	7 7/8 2950	CSG/Liner Size	5 1/2						_				
COUNTY		Stevens			1		5. 1518922743	MUD TYPE	I H	2950	WEIGHT 15.5 FOOTAGE 2930											
								BHST			GRADE	J-55										
RIG FOREMAN				Derrick	Berry/Tom B	eardsley		ВНСТ			THREAD LESS FOOTAGE	LT&C	<u> </u>									
CEMENT SUPERV	ICOD				Stan Owens			MUD DENSIT	ry 	+	SHOE JOINT(S) Disp. Capacity	42 68.7	+					TOTAL: 68.7				
CEMENT SOLEKY	IJOK		Stair Owers					Include Footage	e From Ground	Level To Head In		08.7	1		<u> </u>	l ————————————————————————————————————		06.7				
								TYPE DEPTH				Tool	TYPE DEPTH									
apparts prompte	TET CA TO											Stage To	ТҮРЕ									
SPECIAL INSTRUC	TIONS							DEPTH Head & Plugs	<u> </u>	<u> </u>	□TBG	<u>∞</u> D.P.	DEPTH									
								 			SIZE		TOOL	TYPE								
								Double E	30X 6	WEIGHT GRADE			TAIL PIPE:	DEPTH		SIZE		DEPTH				
								Swage		THREADS			TUBING VO					BBLs				
		1		T	.1			☐ Knockou	t	New	Used		CSG VOL B	ELOW TO	OOL			BBLs				
PRESSURE LIMIT	Γ	•	800 1500	ps ps	i BUMP PLU	UG TO	2000	CEMENT TE	MPERATUR	DEPTH E:	80		TOTAL ANNULAR	VOLUME				BBLs BBLs				
					NO. of Cent		12	WATER QUA			8.5	pН	320)	SG	•		ТЕМР	86			
TIME 0001 to 2400	PRES TBG	SSURE CSG	VOLUME INCR	E PUMPED CUM	JOB SCHE TIME:	DULED FOR 20:00 DATI	E: 7/12/2010	ARRIVE ON TIME:	LOCATION 18:00	DATE:	7/12/2010	RIG UP TIME:	8:30	DATE:	7/13/2010	LEFT LOCATION TIME:	ON	DATE: 7	7/13/2010			
		1		1	RATE	FLUID TYPE	DENSITY	I														
12:00												Pre job	safety me	eting.								
12:27		2000	0.5		0.5	H20	8.3					Test Pu	Test Pumps and Lines.									
12.20		50	20			1120	0.2					Door	- 1120 aha	ا م								
12:30		50	20		3	H20	8.3					Pum	p H20 ahe	ad.								
12:37			110		3	CMT	12.5				Miv	and numn	lead ceme	nt @ 12	5 ppg							
12.57			110		3	CIVIT	12.3				IVIIX 2	ina pump	ieau cemei	n @ 12	ppg.							
13:13		50	45		3	CMT	15				Mix	and pumr	tail ceme	nt @ 15	5 nng.							
												т РР			118							
13:28											Shut	down and	l wash pun	nps and	lines.							
13:30												Dr	op top plu	g.								
13:35			68.7		3	KCL	8.3	Pump displacement.														
13:56		1500			2	KCL	8.3				Bump p	lug and ch	eck floats	. (Did 1	not hold.)							
14.00		2000				W.C.	0.2				ъ	• .	1 6	/ TT 1	1011							
14:00		2000			2	KCL	8.3				Pump	again to c	lose floats	. (Held	1 O.K.)							
			ļ				1															
			<u> </u>	-			+	-														
									0-11-0	uta 20 D11	200 Det - 70 Dt	la 540 D '	(O. F) L1	1 000 P		1 @ 1	500 '				
			1				1		Call Ou	us 20 Bbls 2	200 Psi. 50 Bb	IS 340 PS1	68 E	DIS FII	nal 800 Psi	ı. Bump	oed @ 1:	500 ps1.				
											Well circulated	coment of	+ 10 bble k	CL die	nlacamant	owow						
							1				vi on cheulateu	comont a	L TU UUIS N	CL UIS	Piacement	uway.						
											Pıımr	ed 25 hbl	s good cen	nent to	the nit							
			<u> </u>				1				ı unı	001	. 000 0 00 11		p.100							
14:30			<u>L</u> _	<u>L</u> _			1	<u>L</u> _				Post job	safety me	eeting.								
System Used	No.of Sacks	Yield ft ³ /sk					-	COMPOSI	TION OF SYS	STEM		<u> </u>	•		-	BBLS	SLURRY	MIXED DENS	SITY			
	300	2.06							SDC							110		DENS 12.				
	200	1.25						SDC Surface Cement								45		12.				
	200	1.43						Sui	race Cuitefil							43		13				
			†																			
			†																			
CIRCULATION	✓ Y	· /es Г] No	WASHED CA	ASING DOW	n ☐ Yes	□ No	No BREAKDOWN PSI FINAL 2000							2000	PSI						
'							RETURNED TO	SURFACE			BEFORE PLUG BUMI PRESSURE		200									
DISPLACEMENT	٧UL.		68.7	BBLS	1		25 Bbls.				I VESSAKE		800	PSI	RATE		2	BPM				

CEMENTING TREATMENT REPORT					PIC	NEER					TREATMENT NUMI	BER 02010016		DATE			7/8/2010				
						AL RESOURCES					STAGE			JOB TYI	PE	Surface					
WELL NAME ANI						N (LEGAL)		RIG NAME:			<u> </u>	1		CEMENT PUMPER:							
FIELD		Lucas 4-16			FORMATI	Sec.16, T31S, R38W		WELL DATA		Pioneer Natu	ral Resources Rig # 3	воттом	T		FT	TOP	2305	FT			
	Hu	ıgoton-Panon	na					BIT SIZE		12 1/4	CSG/Liner Size	8 5/8									
COUNTY					STATE	API NO		TOTAL DEP	ГН	615	WEIGHT	24	ļ								
		Grant			I	Kansas 150	06-7217-13	MUD TYPE			FOOTAGE	587.36	1					_			
DIC FOREMAN				ъ : 1	D /T D			☐ BHST ☐ BHCT			GRADE THREAD	J-55 LT&C	+					$\overline{}$			
RIG FOREMAN				Derrick	Berry/Tom B	eardsley		MUD DENSIT	rv		LESS FOOTAGE SHOE JOINT(S)	42	1					TOTAL:			
CEMENT SUPERVI	ISOR	OR Stan Owens						MUD VISC			Disp. Capacity	34.7	†					34.7			
								Include Footage	e From Ground	Level To Head In		· ·	Image		1						
								TYPE DEPTH				Tool	TYPE DEPTH								
								TYPE				Stage To	TYPE								
SPECIAL INSTRUC	TIONS							DEPTH Head & Plugs		<u> </u>	TBG	D.P.	DEPTH								
											SIZE	D.11.	TOOL	TYPE							
								Double E	Box 6	WEIGHT			ļ	DEPTH							
-								☐ Single ☐ Swage		GRADE			TAIL PIPE:			SIZE		DEPTH			
								☐ Swage ☐ Knockou	t	THREADS New	Used		TUBING VO		OOL			BBLs BBLs			
LIFT PRESSURE			210	ps	i					DEPTH			TOTAL					BBLs			
PRESSURE LIMIT	Γ		1000	ps	i BUMP PLU		900	CEMENT TE		E:	80		ANNULAR					BBLs			
TIME	PRES	SSURE	VOLUME	E PUMPED	NO. of Cent	tralizers DULED FOR	4	WATER QUA			1 8	pH RIG UP	320)	SG	IFFTIC	OCATION	TEMP	76		
0001 to 2400	TBG	CSG	INCR	CUM	TIME:	12:30 DATE:	7/8/2010	TIME:	15:00	DATE:	6/30/2010	TIME:	18:00	DATE:	6/30/2010		23:00	DATE:	7/1/2010		
		1			RATE	FLUID TYPE	DENSITY	1													
20:30												Pre job	safety me	eting.							
							_				Tr. (D 11 '										
20:45					0.5	H20	8.3				Test Pumps and Lines.										
		_					_					_		_							
20:55		80	20		4	H20	8.3					Pum	p H20 ahe	ad.							
21:01		60	86		4	CMT	12.5				Mix and pump lead cement @ 12.5 ppg.										
											Mix and pump tail cement @ 15 ppg.										
21:32		60	33		4	CMT	15				Mix	and pump	tail ceme	nt @ 15	5 ppg.						
21:45												Shut down	and drop	top plu	g.						
21:46		220	14.6		4	H20	8.3	Pump displacement.													
21:55		900			2	H20		Bump plug and check floats. (Held OK)													
									_							_					
			1	-			1		Ca	11 Outs 10 1	Bbls 60 Psi. 20	Bbls 120	PS1	Final 2	220 Psi.	Bum	ped @ 900 p	DS1.			
											*** 11 · ·	, ,	, . =	, .							
			 	<u> </u>			1	-			Well circul	ated ceme	nt at 5 bbl	s lead c	ement awa	ay.					
											-	1 45 ***			.1						
			1				1	Pumped 45 bbls good cement to the pit.													
			1																		
22																					
22:30	No.of	Yield	<u> </u>	<u> </u>		<u> </u>	<u> </u>	Post job safety meeting. COMPOSITION OF SYSTEM SLURRY MIXED													
System Used	No.or Sacks	ft ³ /sk						COMPOSITION OF SYSTEM SLURRY MIXED BBLS DENSITY													
	220	2.06						SDC 86 12.5													
	150	1.25	5					Surface Cement 33 15										5			
																					
CIRCULATION	√ Y	res [] No	WASHED CA	ASING DOW	n ☐ Yes	☐ No				BREAKDOWN			PSI	FINAL		900	PSI			
'						R	ETURNED TO	SURFACE			BEFORE PLUG BUMI										
DISPLACEMENT	VUL.		34.7	BBLS	1		45 Bbls.				PRESSURE	2	220	PSI	RATE		2	BPM			