

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1059848

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:	
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	County:
Name:	Lease Name: Well #:
Wellsite Geologist:	Field Name:
U	
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	Amount of Surface Pipe Set and Cemented at: Feet
Gas D&A ENHR SIGW	Multiple Stage Cementing Collar Used? Yes No
OG GSW Temp. Abd.	If yes, show depth set: Feet
CM (Coal Bed Methane)	If Alternate II completion, cement circulated from:
Cathodic Other (Core, Expl., etc.):	feet depth to:w/sx cmt.
If Workover/Re-entry: Old Well Info as follows:	
Operator:	Drilling Fluid Management Disp
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	Chloride content: ppm Fluid volume: bbls
Conv. to GSW	Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #:	Operator Name:
Dual Completion Permit #:	
SWD Permit #:	Lease Name: License #:
ENHR Permit #:	Quarter Sec TwpS. R East West
GSW Permit #:	County: Permit #:
Spud Date or Recompletion Date Date Reached TD Completion Date or 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 Approved by: Date:

	Side Two	1
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East _ West	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 Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken (Attach Additional She	eets)	Yes	No		og Formatio	n (Top), Depth an	d Datum	Sample	
Samples Sent to Geolog	gical Survey	Yes	No	Nam	e		Тор	Datum	
Cores Taken Electric Log Run Electric Log Submitted E (If no, Submit Copy)	Electronically	☐ Yes ☐ Yes ☐ Yes	□ No □ No □ No						
List All E. Logs Run:									
		Report all		RECORD No	ew Used ermediate, product	ion, etc.			
Purpose of String	Size Hole Drilled	Size Ca Set (In C	sing	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives	

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
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)				
TUBING RECORD:	Si	ze:	Set At:		Packer	r At:	Liner R	un:	No			
Date of First, Resumed F	Product	ion, SWD or ENHF	ξ .	Producing N		ping	Gas Lift	Other (Explain)				
Estimated Production Oil Bl Per 24 Hours			ls.	Gas	Mcf	Wate	er	Bbls.	Gas-Oil Ratio	Gravity		
DISPOSITION OF GAS:					METHOD	OF COMPLE	TION:		PRODUCTION INTER	RVAL:		
Vented Sold		Open Hole Perf. Dually Comp. Commingled (Submit ACO-5) (Submit ACO-4)										
(If vented, Sub	mit ACC)-18.)		Other (Specify))							

Form	ACO1 - Well Completion
Operator	Pioneer Natural Resources USA, Inc.
Well Name	THUROW-TATE ATU 1
Doc ID	1059848

Tops

Name	Тор	Datum
Glorietta	1220	КВ
Wellington	2133	КВ
Hollenberg	2467	КВ
Herington	2494	КВ
Krider	2514	КВ
Towanda	2618	КВ
Ft. Riley	2673	КВ
A1 Lime	2805	КВ
B1 Lime	2859	КВ
B2 Lime	2878	КВ

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Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
3	Chase	Shot & Fractured	2609 - 2650
3	Chase	Shot & Fractured	2661 - 2694
3	Council Grove	Shot & Fractured	2748 - 2752
3	Council Grove	Shot & Fractured	2758 - 2772
3	Council Grove	Shot & Fractured	2792 - 2796
3	Council Grove	Shot & Fractured	2847 - 2861
3	Council Grove	Shot & Fractured	2871 - 2884

CEMENTING TRI	FREATMENT REPORT				PIC	DNEE	R					TREATMENT NU	MBER SO2011006		DATE			4/21/2011					
					-	AL RESOUR				STAGE 1					JOB TYPE Surface								
WELL NAME ANI					ELL NAME AND NO.				LOCATION (LEGAL)				RIG NAME:							T PUMPER	:		
FIELD	Th	urow-Tate AT	U		FORMAT	Sec. 33 T3	0S R36W		Trinic WELL DATA			nidad Drilling	BOTTOM			FT	ТОР	2304	FT				
		Hugoton				Chase/Cou	ncil Grove		BIT SIZE		12 1/4	CSG/Liner Size	8 5/8										
COUNTY		Ť			STATE		AFE		TOTAL DEPTH	H	610	WEIGHT	24										
		Grant				Kansas		20196	MUD TYPE			FOOTAGE	606										
									ВНSТ G	GRADE	J-55												
RIG FOREMAN					Phillip Gibson				ВНСТ			THREAD	LT&C										
									MUD DENSITY	Y		LESS FOOTAGE SHOE JOINT(S)	42						TOTAL:				
CEMENT SUPERV	ISOR				Stan Owens	3			MUD VISC			Disp. Capacity	35.8						35.8				
										From Ground	Level To Head In				-								
CEMENT EMPI	LOYEES			Warren	Martin and J	.R. Ortiz			TYPE DEPTH					TYPE DEPTH									
									g TYPE				Toc	TYPE									
SPECIAL INSTRUC	CTIONS								DEPTH				Stage Tool	DEPTH									
									Head & Plugs			TBG	D.P.										
									┠╼┥───			SIZE		TOOL	TYPE								
									Double Bo	ox 6	WEIGHT				DEPTH								
									Single		GRADE			TAIL PIPE			SIZE	<u>г</u>	DEPTH				
											THREADS	✓ Used		TUBING V					BBLs				
			220	<u> </u>	1				Knockout		DEPTH			CSG VOL	SELOW TO	JOL		<u> </u>	BBLs				
LIFT PRESSURE PRESSURE LIMIT		1	230 1000	psi	BUMP PL	UC TO	1	1300	CEMENT TEM	IPFRATURE			68	ANNULAR	VOLUME				BBLs BBLs				
. RESSURE LIMIT	1	ļ ,	1000	psi	NO. of Cer		ļ	5	WATER QUAL		D.		8 pH	AINICLAR 32		SG			TEMP				
TIME PRES		SSURE	VOLUME	E PUMPED		CHEDULED FOR		5	ARRIVE ON LO			1	RIG UP	1 3.		50	LEFT L	OCATION					
0001 to 2400	TBG	CSG	INCR	CUM	TIME:	20:00	DATE:	4/21/2011	TIME:	17:00	DATE:	4/21/2011	TIME:	21:00	DATE:	4/21/2011			DATE 4/22/20				
21:00													Pre job	safety m	eeting.								
22:17		500	2		0.5	H2	0	8.3					Test Pu	umps and	Lines.								
22:19		40	3		3	H2	0	8.3				Pu	1mp H20 till	circulatio	on establ	ished.							
22:22		90	100		3	СМ	Т	15					Mix and pu	mp CMT	@ 15 pj	pg.							
22:54													Slow down	n and drop	o top plu	g.							
22:56		230	30		3	H2	0	8.3					Pump	displace	nent.								
23:09		1300	5.8		2	H2	0	8.3				Bum	p plug and c	heck floa	s (Hel								

23:09		1300	5.8		2	H20	8.3		Bumj	p plug and cl	heck floats.	(He	ld O.K.)		
								Call Oats	10 D11. /70D.	$20 \text{ D} \text{L} 1_{2}/1$	20 D.:	20 ח	11. / 220 D.:	E') _:
								Call Outs	10 Bbls/70Psi.	20 Bbls/1	30 PS1	30 B	bls./ 220 Psi.	Final 1300 F	·S1.
									Pur	nped 35 bbls	s good ceme	ent to	the pit.		
													-		
23:55										Post ich	safety mee	atina			
	No.of	Yield						COMPOSITION OF SYSTEM		1 051 J00	safety filee	ting.	I	SLURR	Y MIXED
System Used	Sacks	ft ³ /sk												BBLS	DENSITY
Surface Set	460	1.23						Surface Set						100	15 ppg.
															- 118
				1									<u> </u>		
CIRCULATION		res	No	WASHED CA	SING DOW		No		BREAKDOWN		I	PSI	FINAL	1300	PSI
DISPLACEMENT	VOL.		35	BBLS			TURNED TO 5 Bbls.	SURFACE	BEFORE PLUG BUI PRESSURE		20 I	PSI	RATE	2	2 BPM
									-						

CEMENTING TR	EATMENT	REPORT (P	PAGE 2)		DIC	NICE	D				TREATMENT NUM	IBER	DATE			
						NEE					STAGE	1	JOB TYPE Surface			
WELL NAME AN	D NO.				LOCATIO				RIG NAME:			Surface CEMENT PUMP:				
FIELD	IL	goton-Panor			FORMATION				RIG FOREMAN:	Pioneer Natur	al Resources Rig # 3		2305 CEMENT SUPERVISOR:			
COUNTY	Hu	Stevens	la		STATE	Kansas	API NO		ARRIVE ON LOCATION TIME:	DATE:		RIG UP TIME:	DATE:	LEFT LOCA TIME:	n Owens TION	DATE:
TIME 0001 to 2400	PRES TBG	SSURE CSG	VOLUME PU INC	MPED CUM		DULED FOR	DATE:					COMMENT				
					RATE	FLUID T	YPE	DENSITY								
	i	l	1	1	1	i		İ	1							

JOB SUMARY:

CEMENTING TREATMENT REPORT PIONEER NATURAL RESOURCES										TREATMENT NUMBER DATE SO2011007				DE	4/24/2011			
					1221214 231/23	The star and the back	ES			STAGE	1		JOB TY		Long String			
ELL NAME AND		arow-Tate AT	J		LOCATION	Sec. 33 T30S,	R36W	RIG NAME:	Tri	nidad Drilling	BORRAT		CEMEN	T PUMPER:	2304	17/2		
ELD		Hugoton			FORMATIO	ON Chase/Council	Grove	WELL DATA BIT SIZE	7 7/8	CSG/Liner Size	BOTTOM 5 1/2	1		FT TO	2	FT		
DUNTY					STATE		AFE	TOTAL DEPTH	3095	WEIGHT	17							
		Grant			k	Kansas	20196	MUD TYPE		FOOTAGE GRADE	3089 J-55							
G FOREMAN]	Phillip Gibson			ВНСТ		THREAD	LT&C							
								MUD DENSITY	_	LESS FOOTAGE SHOE JOINT(S)	42					TOTAL:		
EMENT SUPERVI	ISOR				Stan Owens			MUD VISC Include Footage From Ground	Level To Head I	Disp. Capacity n Disp. Capacity	70.6					70.6		
CEMENT EMPL	LOYEES			Nick Ricchuiti	Bruce Green	and J.R. Ortiz		TYPE DEPTH			Tool	TYPE DEPTH						
PECIAL INSTRUC	TIONS							TYPE DEPTH			Stage To	TYPE DEPTH						
ECIAL INSTRUC	TIONS							Head & Plugs		TBG	D.P.	DEPTH						
								Double Box 6	WEIGHT	SIZE			TYPE DEPTH					
								Single	GRADE			TAIL PIPE:		SIZ	3	DEPTH		
								Swage	THREADS	Used		TUBING VO CSG VOL BI		OOL		BBLs BBLs		
FT PRESSURE		1	200	psi					DEPTH			TOTAL		501		BBLs		
RESSURE LIMIT	ſ	1	400	psi	BUMP PLU NO. of Cent		2000 12	CEMENT TEMPERATUR WATER QUALITY:	E:	<u> </u>	70 8 pH	ANNULAR V 325		SG		BBLs TEMP		
TIME		SURE			JOB SCHE	DULED FOR		ARRIVE ON LOCATION		<u> </u>	RIG UP	•		LEI	T LOCATION	•		
0001 to 2400	TBG	CSG	INCR	CUM	TIME: RATE	20:00 FLUID TYF	DATE: 4/23/2011 PE DENSITY	TIME: 18:00	DATE:	4/23/2011	TIME:	23:00	DATE:	4/23/2011 TI	ME: 1:30	DATE 4/2		
23:00											Pre job	safety me	eting.					
22.21		2000	2		0.5	1120	0.2				T (D.		•					
23:31		2000	2		0.5	H20	8.3				Test Pi	umps and L	lines.					
								1										
23:33		120	5		3	H20	8.3			Pu	mp H20 till	circulation	ı establ	lished.				
22.27		220	110		2	CMT	12.5	12.5 Mix and pump lead cement @ 12.5 ppg.										
23:37		220	110		3	CIVIT	12.5			IVIIX		leau cemer	11 @ 12	2.3 ppg.				
0:15		340	46		3	CMT	15	-		М	ix and pump	tail cemer	nt @ 15	5 ppg.				
0:28										Sh	ut down and	l wash pur	nos and	lines.				
												I	1					
0:29											Dr	op top plug	5.					
								1										
0:30		1200	60		4	KCl	8.3			P	ump displac	ement with	<u>K</u> Cl w	vater.				
0:45		1400	10.6		2	H20	8.3				Slow ra	te to bump	plug.					
								+										
0:48		3000								Bum	p plug and c	heck floats	. (Held	d O.K.)				
												***		· /				
									Circulated	l cement @ 65	bbls displac	ement pum	ped. (2 bbls good	cement to pit.)		
								-										
1.00											Doct :-1	anfot	otin -					
1:00 Water	No.of	Yield		<u> </u>	<u> </u>	<u> </u>	I	COMPOSITION OF SYS	STEM		Post jol	o safety me	æung.			JRRY MIXED		
Requirement	Sacks	ft ³ /sk												—	BBLS	DENSIT		
10.21	300	2.06						SDC							110	12.5		
4.97	210	1.23						Surface Set							46	15		
I		/es	No	WASHED CA	SING DOW	n Г	Yes No	1		BREAKDOWN			PSI	FINAL	3000	PSI		
RCULATION	Y							O SURFACE		BEFORE PLUG BU			_	1				

CEMENTING TR	EATMENT	REPORT (P	PAGE 2)		DIC	NICE	D				TREATMENT NUM	IBER	DATE			
						NEE					STAGE	1	JOB TYPE Surface			
WELL NAME AN	D NO.				LOCATIO				RIG NAME:			Surface CEMENT PUMP:				
FIELD	IL	t D			FORMATION				RIG FOREMAN:	Pioneer Natur	al Resources Rig # 3		CEMENT SUPE	RVISOR:	2305	
COUNTY	Hu	goton-Panom Stevens	18		STATE API NO. Kansas				ARRIVE ON LOCATION TIME:	DATE:		RIG UP TIME:	DATE:	LEFT LOCA TIME:	n Owens TION	DATE:
TIME 0001 to 2400	PRES TBG	SURE CSG	VOLUME PU INC	MPED CUM		DULED FOR	DATE:					COMMENT				
					RATE	FLUID T	YPE	DENSITY								
	t		1		+	t										

JOB SUMARY: