



KANSAS CORPORATION COMMISSION 1055873  
OIL & GAS CONSERVATION DIVISION

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 # 4824  
Name: Pioneer Natural Resources USA, Inc.  
Address 1: 5205 N O CONNOR BLVD  
Address 2: \_\_\_\_\_  
City: IRVING State: TX Zip: 75039 + 3707  
Contact Person: Ron Hehmann  
Phone: ( 972 ) 969-5728  
CONTRACTOR: License # 4824  
Name: Pioneer Natural Resources USA, Inc.  
Wellsite Geologist: Larry Brooks  
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  
 Conv. to GSW  
 Plug Back: \_\_\_\_\_ Plug Back Total Depth  
 Commingled    Permit #: \_\_\_\_\_  
 Dual Completion    Permit #: \_\_\_\_\_  
 SWD    Permit #: \_\_\_\_\_  
 ENHR    Permit #: \_\_\_\_\_  
 GSW    Permit #: \_\_\_\_\_  
10/05/2010    10/09/2010    11/08/2010  
Spud Date or    Date Reached TD    Completion Date or  
Recompletion Date       Recompletion Date

API No. 15 - 15-081-21908-00-00  
Spot Description: \_\_\_\_\_  
SE SE NW SE Sec. 18 Twp. 29 S. R. 33  East  West  
1358 Feet from  North /  South Line of Section  
1347 Feet from  East /  West Line of Section  
Footages Calculated from Nearest Outside Section Corner:  
 NE     NW     SE     SW  
County: Haskell  
Lease Name: Unruh Well #: 5-18  
Field Name: \_\_\_\_\_  
Producing Formation: Chase, Council Grove  
Elevation: Ground: 2954 Kelly Bushing: 11  
Total Depth: 3189 Plug Back Total Depth: 3159  
Amount of Surface Pipe Set and Cemented at: 816 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: 10000 ppm Fluid volume: 4200 bbls  
Dewatering method used: Evaporated  
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**

Letter of Confidentiality Received  
Date: \_\_\_\_\_  
 Confidential Release Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
 UIC Distribution  
ALT  I  II  III Approved by: Deanna Gantzer Date: 06/08/2011



1055873

Operator Name: Pioneer Natural Resources USA, Inc. Lease Name: Unruh Well #: 5-18  
 Sec. 18 Twp. 29 S. R. 33  East  West County: Haskell

**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 <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run:  Cement Bond Log GR, Array Induction, Caliper PhotoDensity, Comp Neutron, PE, SP	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum Attached Attached Attached
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CASING RECORD <input checked="" 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
Surface	12.25	8.625	24	816.4	POZ/Class G	475	
Production	7.875	5.5	15.5	3198	POZ/Class G	630	

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	-			
	-			

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)	Depth
Attached	Attached	Attached	Attached

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Date of First, Resumed Production, SWD or ENHR. <u>02/24/2011</u>		Producing Method: <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> 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 checked="" type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: <u>2752'-2878'</u> <u>2900'-2976'</u>
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Form	ACO1 - Well Completion
Operator	Pioneer Natural Resources USA, Inc.
Well Name	Unruh 5-18
Doc ID	1055873

Tops

Glorieta	1324	KB
Hollenberg	2584	KB
Herington	2615	KB
Krider	2640	KB
Towanda	2749	KB
Ft. Riley	2804	KB
A1 Lime	2937	KB
B1 Lime	2984	KB
B2 Lime	3008	KB
Base B2 Lime	3021	KB

Form	ACO1 - Well Completion
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Perforations

3	Chase	Shot & Fractured	2512-2524
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

TREATMENT NUMBER S02010026	DATE 10/10/2010
STAGE 1	JOB TYPE Lead String

WELL NAME AND NO. 17463-9-11	LOCATION (LEGAL) Sec 1A, T25S, R31W
FIELD Hudson River	FORMATION Karnia
COUNTY Haskell	API NO. 15-067-21716-00-00

SUB NAME Henry Normal Resources Rig # 3	CEMENT PUMPER 2115	
WELL DATA	PT TOP	PT
BIT SIZE 2 7/8	CSG/Liner Size 5 1/2	
TOTAL DEPTH 3220	WEIGHT 17	
MUD TYPE	FOOTAGE 3200	
<input type="checkbox"/> BMS	GRADE 1-55	
<input type="checkbox"/> BCT	THREAD L7AC	
MUD DENSITY	41	TOTAL
MUD VISC.	Dep. Capacity 71	73

JOB FOREMAN: Ray Gonzalez/Tom Beardsley

CEMENT SUPERVISOR: Scott Owens

SPECIAL INSTRUCTIONS

<input type="checkbox"/> TYPH	DEPTH	TYPE
<input type="checkbox"/> DEPTH		DEPTH
<input type="checkbox"/> TYPH		TYPE
<input type="checkbox"/> DEPTH		DEPTH

Head & Plug

Double Box 6

Single

Swage

Threadout

New

Used

WEIGHT	GRADE	THREADS	DEPTH
TAIL PIPES	SIZE	DEPTH	
TUBING VOLUME		BBLs	
CSG VOL. BELOW TOOL		DBLs	
TOTAL		DBLs	
ANNULAR VOLUME		DBLs	

LIFT PRESSURE: 1000 psi

PRESSURE LIMIT: 1500 psi

NO. of Cement Bags: 14

CEMENT TEMPERATURE: 78

WATER QUALITY: 8 gal

ARRIVE ON LOCATION

TIME: 8:00 DATE: 10/10/2010

TIME: 12:00 DATE: 10/10/2010

TIME: 15:00 DATE: 10/10/2010

TIME	PRESSURE	VOLUME PUMPED	NO. of Cement Bags	JOB SCHEDULED FOR	ARRIVE ON LOCATION	LEFT LOCATION
00:01 to 24:00	TBD	DCR	CLM	TIME: 12:00 DATE: 10/10/2010	TIME: 12:00 DATE: 10/10/2010	TIME: 15:00 DATE: 10/10/2010
13:36						Pre job safety meeting.
13:54			0.5	H2O	8.3	Test Pumps and Lines.
13:55	100	20	4	H2O	8.3	Pump H2O ahead.
14:02	120	128	4	CMT	12.5	Mix and pump lead cement @ 12.5 ppg.
14:34	120	35	4	CMT	14.2	Mix and pump tail cement @ 14.2 ppg.
14:44						Shut down and drop top plug.
14:47	750	75	4	H2O	8.3	Pump displacement.
15:07	1500	0.5	0.5	H2O	8.3	Bump plug and check floats. (Held O.K.)
						Call Outs 25 Bbls/400 Psi. 50 Bbls/750 Psi 70 Bbls./1000 Psi. Bumped @ 1500 psi.
						Pumped 40 bbls good cement to the pit.
15:30						Post job safety meeting.

System Used	Need Racks	Yield (ft³)	COMPOSITION OF SYSTEM		MIXED	
			SDC	RFC	BBLs	DENSITY
SDC	260	2.06	SDC		121	12.1
RFC	121	1.25		RFC	73	14.2

CIRCULATION:  Yes  No

WASHED CASING DOWN:  Yes  No

BREAKDOWN BEFORE PLUG BUMP PRESSURE: 1000 PSI

FINAL: 1500 PSI

DISPLACEMENT VOL: 73 BBLs

RETURNED TO SLURRY: 40 BBLs

RATE: 2 BPM

CEMENTING TREATMENT REPORT

TREATMENT NUMBER S0210C21	DATE 6/1/2010
STAGE 1	JOB TYPE Surface

WELL NAME AND NO. Urrth 5-11	LOCATION (LEGAL) Sec.19, T29N, R31W
FIELD Hector-Panorama	FORMATION
COUNTY Hutchinson	STATE Kansas
	API NO. 15-087-21716-00-09

LOG NAME Pioneer Natural Resources Plg 1.3	CEMENT PUMPER 2305
WELL DATA	BOTTOM
BIT SIZE 12 1/4	CSG 1 Inner Size 8.5"
TOTAL DEPTH 823	WEIGHT 24
MUD TYPE	FOOTAGE 816
	GRADE 1-25
	THREAD LTRC
MUD DENSITY	42
MUD VISC	Disp. Capacity 49
TOTAL: 41	

JOB FOREMAN: Roy Greenaway

CEMENT SUPERVISOR: Stev Owens

TYPE	DEPTH	TYPE	DEPTH
TYPE	DEPTH	TYPE	DEPTH

SPECIAL INSTRUCTIONS

Head & Plug	SIZE	TYPE	DEPTH
Double Box 6	WEIGHT	TYPE	DEPTH
Single	GRADE	TAIL PIPE	SIZE
Sagoe	THREADS	TUBING VOLUME	DBLS
Knockout	New Used	CRG VOL BELOW TOOL	DBLS
DEPTH	DEPTH	TOTAL	DBLS
		ANNULAR VOLUME	DBLS

LIFT PRESSURE: 250 psi

PRESSURE LIMIT: 1000 psi

BUMP PLUG TO: 660

NO. of Centralizers: 4

CEMENT TEMPERATURE: 82

WATER QUALITY: pH 3.25 SG

TEMP 90

TIME	PRESSURE	VOLUME PUMPED	NO. OF CENTRALIZERS	ARRIVE ON LOCATION	LEFT LOCATION
0001 to 1400	TBO CSG	INCR CUM		TIME: 15:00 DATE: 10/6/2010	TIME: 5:00 DATE: 10/7/2010

TIME	PRESSURE	VOLUME PUMPED	NO. OF CENTRALIZERS	ARRIVE ON LOCATION	LEFT LOCATION
	TBO CSG	INCR CUM		TIME: 15:00 DATE: 10/6/2010	TIME: 5:00 DATE: 10/7/2010
RATE	FLUID TYPE	DENSITY			
7:15				Pre job safety meeting.	
7:26			0.5	H2O	8.3
				Test Pumps and Lines.	
7:30	80	20	4	H2O	8.3
				Pump H2O ahead.	
7:36	60	106	4	CMT	12.5
				Mix and pump lead cement @ 12.5 ppg.	
8:05	60	20	4	CMT	14.2
				Mix and pump tail cement @ 14.2 ppg.	
8:18				Shut down and drop top plug.	
8:20	220	49	4	H2O	8.3
				Pump displacement.	
8:33	660	0.5	0.5	H2O	8.3
				Bump plug and check floats. (Held O.K..)	
				Call Outs 15 Bbls/150 Psi. 30 Bbls/210 Psi 45 Bbls/220 Psi. Bumped @ 660 psi.	
				Pumped 40 bbls good cement to the pit.	
9:00				Post job safety meeting.	

System Used	Sand Sacks	Yield PPG	COMPOSITION OF SYSTEM		MIXED	
			SDC	RPC	DBLS	DENSITY
SDC	290	2.06	SDC		106	12.5
RPC	90	1.21	RPC		23	14.2

CIRCULATION:  Yes  No

WASHED CASING DOWN:  Yes  No

RETURNED TO SURFACE: 40 Bbls

BREAKDOWN BEFORE PLUG BUMP PRESSURE: 220 PSI

FINAL: 660 PSI

RATE: 2 BPM