

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1240236
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: _____

1240236



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

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 type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Linn Operating, Inc.
Well Name	HARKRADER 3 ATU-361
Doc ID	1240236

Tops

Name	Top	Datum
KRIDER	2385	KB
WINFIELD	2434	KB
TOWANDA	2485	KB
FT_RILEY	2538	KB
FUNSTON_LM	2668	KB
CROUSE	2720	KB
MORRILL	2797	KB
GRENOLA	2840	KB

JOB SUMMARY

PROJECT NUMBER TN # 1230	TICKET DATE 10/8/2014
COUNTY Stanton	COMPANY Linn Energy
LEASE NAME Harkrader	CUSTOMER REP HARMAN
Well No. 3 ATU 361	EMPLOYEE NAME JESUS JIMENEZ
JOB TYPE Surface	

EMP NAME	JESUS JIMENEZ		
LAMONT PATTERSON			
CHRISTOPHER LAYTON			
JOHNSON KESHAH			

Form. Name Chase-Council Grove Type: _____

Packer Type _____ Set At _____

Bottom Hole Temp. _____ Pressure _____

Retainer Depth _____ Total Depth _____

Date	Called Out	On Location	Job Started	Job Completed
	10-8-14	10/08/14	10/08/14	10/08/14
Time	8:00AM	5:00PM	9:00PM	10:00PM

Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Valve	0	IR
Centralizers	0	IR
Top Plug	0	IR
HEAD	0	IR
Limit clamp	0	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	0	IR
Cement Basket	0	IR

Well Data							
	New/Used	Weight	Size	Grade	From	To	Max. Allow
Casing	New	24	8.625	J-05	0	761	2000
Liner							
Liner							
Tubing							
Drill Pipe							
Open Hole							
Perforations							Shots/Ft.
Perforations							
Perforations							

Materials			
Mud Type	0	Density	0
Disp. Fluid	H2O	Density	8.33
Spacer type	H20 BBL.		10
Spacer type	BBL.		
Acid Type	Gal.		%
Acid Type	Gal.		%
Surfactant	Gal.		In
NE Agent	Gal.		In
Fluid Loss	Gal/Lb		In
Gelling Agent	Gal/Lb		In
Fric. Red.	Gal/Lb		In
MISC.	Gal/Lb		In

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
10/08/14	5.0	10/08/14	1.0	Surface
Total	5.0	Total	1.0	

Perfpac Balls _____ Qty. _____

Other _____

Other _____

Other _____

Other _____

MAX	900	AVG	50
MAX	3	AVG	3
Feet	43	Reason	Shoe Joint

Cement Data				W/Rq.	Yield	Lbs/Gal
Stage	Sacks	Cement	Additives			
1	480	Premium Class C	2% Calcium Chloride and .25 #/sk Celloflake	6.34	1.35	14.8
2						
3						
4						

Preflush Breakdown _____ Type: _____ _____ Type: _____ _____ Type: _____ Average _____ Type: _____ ISIP _____ 5 Min _____ 10 Min _____ 15 Min _____	Summary Preflush: BBI 10.00 Type: H20 Load & Bkdn: Gal - BBI _____ Excess /Return BBI 46 Calc. TOC: SURFACE Treatment: Gal - BBI _____ Cement Slurry BBI 115.0 Total Volume BBI 171.00
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CUSTOMER REPRESENTATIVE *Jesus Jimenez* SIGNATURE

Thank You For Using
O - TEX Pumping

JOB SUMMARY

PROJECT NUMBER TN # 1234	TICKET DATE 10/10/2014
COUNTY 0	COMPANY Linn Energy
LEASE NAME Harkrader	WELL No. 3 ATU 361
JOB TYPE Production	EMPLOYEE NAME Chris Lewis

EMP NAME	Chris Lewis		
	Tim Burke		
	Adam Morris		

Form. Name _____ Type: _____

Packer Type _____ Set At _____

Bottom Hole Temp. _____ Pressure _____

Retainer Depth _____ Total Depth _____

Date	Called Out	On Location	Job Started	Job Completed
		10/10/14	10/10/14	10/10/14
Time	500			

Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Valve	0	IR
Centralizers	0	IR
Top Plug	0	IR
HEAD	0	IR
Limit clamp	0	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	0	IR
Cement Basket	0	IR

Well Data							
	New/Used	Weight	Size	Grade	From	To	Max. Allow
Casing	New	15.5	5.5	J-55	KB	3062	2000
Liner							
Liner							
Tubing							
Drill Pipe							
Open Hole							
Perforations							Shots/Ft.
Perforations							
Perforations							

Materials			
Mud Type	0	Density	0 Lb/Gal
Disp. Fluid	H2O	Density	8.33 Lb/Gal
Spacer type	Flow Stop BBL.		20
Spacer type	BBL.		
Acid Type	Gal.	%	
Acid Type	Gal.	%	
Surfactant	Gal.	In	
NE Agent	Gal.	In	
Fluid Loss	Gal/Lb	In	
Gelling Agent	Gal/Lb	In	
Fric. Red.	Gal/Lb	In	
MISC.	Gal/Lb	In	
Perfpac Balls	Qty.		
Other			
Other			
Other			
Other			
Other			

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
10/10/14	8.0	10/10/14	1.5	Production
Total	8.0	Total	1.5	

Pressures	
MAX 2000	AVG 500
Average Rates in BPM	
MAX 3	AVG 3
Cement Left in Pipe	
Feet 42	Reason Shoe Joint

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	425	O-Tex LowDense Cement	2% Gyp, 2% Calcium Chloride, 2% C-45, 0.4% C-15, 0.4% C-41P, 0.2% C-51, 0.25 lb/sk Cellotflake	13.29	2.25	11.5
2	0	0	0	0	0	0
3	0	0	0	0	0	0
4						

Summary			
Preflush Breakdown	Type: MAXIMUM	Preflush: BBI	20.00
	Lost Returns: 0	Load & Bkdn: Gal - BBI	
	Actual TOC	Excess /Return BBI	45
Average	Frac. Gradient	Calc. TOC:	0
ISIP: 5 Min	10 Min	Treatment: Gal - BBI	
	15 Min	Cement Slurry BBI	170.0
		Total Volume BBI	262.00

CUSTOMER REPRESENTATIVE SIGNATURE

Thank You For Using
O - TEX Pumping