Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1240553

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 # 33999
Name: Linn Operating, Inc.
Address 1: 600 TRAVIS STE 5100
Address 2:
City: HOUSTON State: TX Zip: 77002 + 3018
Contact Person: Shawn Hildreth
Phone: (281) 840-4234
CONTRACTOR: License # 32721
Name: Eldredge Well Service LLC
Wellsite Geologist: Bill Coppedge
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 #:

10/20/2014	10/22/2014	10/30/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-187-21296-00-00
Spot Description:
SE - SW - SW - SW Sec. 1 Twp. 30 S. R. 39 ☐ East ☑ West
210 Feet from ☐ North / ☑ South Line of Section
426 Feet from ☐ East / ☑ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*

Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84

County: Stanton
Lease Name: O'KEEFE Well #: 4 ATU-60
Field Name: Hugoton-Panaoma
Producing Formation: Chase
Elevation: Ground: 3161 Kelly Bushing: 3168
Total Vertical Depth: 3065 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 726 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: 0 ppm Fluid volume: 0 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

☑ **Confidentiality Requested**
Date: 01/26/2015
☑ **Confidential Release Date:** 01/25/2017
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 01/26/2015

[redacted]

1240553

Operator Name: Linn Operating, Inc. Lease Name: O'KEEFE Well #: 4 ATU-60

Sec. 1 Twp. 30 S. R. 39 ☐ East ☑ West County: Stanton

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 (Attach Additional Sheets)	☐ Yes	☑ No	
Samples Sent to Geological Survey	☐ Yes	☑ No	
Cores Taken	☐ Yes	☑ No	
Electric Log Run	☑ Yes	☐ No	

List All E. Logs Run:

Pulse Nuetron Decay Log
PND-S Well Evaluation Log

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ 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	726	Premium Plus Class C	450	
PURCHASE	7.875	5.50	15.50	3065	O-Tex LowDense	425	

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate ___ Protect Casing ___ Plug Back TD ___ 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 *(Amount and Kind of Material Used)*	Depth
4	Chase Perfs - 2346 - 2557	Frac Chase w/N2 Foam 759,000 SCF	
		& 300,092 lb 16/30 brown sand	

TUBING RECORD: Size: Set At: Packer At: Liner Run: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 11/3/2014

Producing Method: ☑ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
		286			

DISPOSITION OF GAS: ☐ Vented ☑ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*

METHOD OF COMPLETION: ☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* ☐ Other *(Specify)* _____

PRODUCTION INTERVAL:

Form	ACO1 - Well Completion
Operator	Linn Operating, Inc.
Well Name	O'KEEFE 4 ATU-60
Doc ID	1240553

Tops

Name	Top	Datum
KRIDER	2364	KB
WINFIELD	2403	KB
TOWANDA	2471	KB
FT_RILEY	2524	KB
FUNSTON_LM	2652	KB
CROUSE	2708	KB
MORRILL	2793	KB
GRENOLA	2825	KB

Form	ACO1 - Well Completion
Operator	Linn Operating, Inc.
Well Name	O'KEEFE 4 ATU-60
Doc ID	1240553

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
SURFACE	12.25	8.625	24	726	Premium Plus Class C	450	
PURCHASE	7.875	5.50	15.50	3065	O-Tex LowDense	425	

JOB SUMMARY

PROJECT NUMBER: TN # 1260	TICKET DATE: 10/20/2014		
COUNTY: Stanton	COMPANY: Linn Energy	CUSTOMER REP: 0	
LEASE NAME: O'Keefe	Well No.: 4 ATU 60	JOB TYPE: Surface	EMPLOYEE NAME: MARIO ABREGO

EMP NAME
MARIO ABREGO
SHAWN COTTON
DANIEL MUNIZ
JOHNNY BLACKWOOD

Form. Name: 0 Type:

Packer Type: Set At:
Bottom Hole Temp.: Pressure:
Retainer Depth: Total Depth:

	Called Out	On Location	Job Started	Job Completed
Date	10/20/2014	10/20/14	10/20/14	10/20/14
Time	1:00PM	7:00PM	8:10PM	10:00PM

Tools and Accessories

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-55	0	726	2000
Liner							
Liner							
Tubing							
Drill Pipe							
Open Hole							Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials

Mud Type	0	Density	0	Lb/Gal
Disp. Fluid	H20	Density	8.33	Lb/Gal
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	
Perfpac Balls		Qty.		
Other				
Other				
Other				
Other				
Other				

Hours On Location

Date	Hours
10/20/14	3.0
Total	3.0

Operating Hours

Date	Hours
10/20/14	1.5
Total	1.5

Description of Job: Surface

Pressures
MAX 1025 AVG 200

Average Rates in BPM
MAX 3.5 AVG 3

Cement Left in Pipe
Feet 43 Reason: Shoe Joint

Cement Data

Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	450	Premium Plus Class C	2% Calcium Chloride, 0.25 lb/sk Cellofalate	6.34	1.32	14.8
2	0	0	0	0	0	0
3	0	0	0	0	0	0
4						

Summary

Preflush: Type:
Breakdown: MAXIMUM
Lost Returns: 0
Actual TOC:
Average: Frac. Gradient:
ISIP: 5 Min: 10 Min: 15 Min:

Preflush:	BBl	10.00
Load & Bkdn:	Gal - BBl	
Excess /Return	BBl	35
Calc. TOC:		SURFACE
Treatment:	Gal - BBl	
Cement Slurry	BBl	105.8
Total Volume	BBl	158.79

Type: H20
Pad: Bbl -Gal
Calc Disp Bbl
Actual Disp: 43.00
Disp:Bbl

CUSTOMER REPRESENTATIVE: Mario Abrego SIGNATURE:

Thank You For Using
O - TEX Pumping

JOB SUMMARY

COUNTY: Stanton	COMPANY: Linn Energy	PROJECT NUMBER: TN # 1263	TICKET DATE: 10/22/2014
LEASE NAME: O'Keefe	Well No.: 4 ATU 60	JOB TYPE: Production	CUSTOMER REP: 0
			EMPLOYEE NAME: Steve Crocker

EMP NAME							
Steve Crocker							
Chris Lewis							
Santiago Calixto							

Form. Name: 0 Type:
Packer Type: Set At:
Bottom Hole Temp.: Pressure:
Retainer Depth: Total Depth:

	Called Out	On Location	Job Started	Job Completed
Date		10/22/14	10/22/14	10/22/14
Time		800		

Tools and Accessories

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		0	3065	2500
Liner							
Liner							
Tubing							
Drill Pipe							Shots/Ft.
Open Hole							
Perforations							
Perforations							
Perforations							

Materials

Mud Type	0	Density	0	Lb/Gal
Disp. Fluid	H2o	Density	8.33	Lb/Gal
Spacer type	dium Silic	BBL.	35	
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

Date	Hours
10/22/14	
Total	0.0

Operating Hours

Date	Hours
10/22/14	
Total	0.0

Description of Job

Production

pump 35bbls spacer
pump 170bbls lead cmt
at 11.5 ppg
pump 72 bbls displacement
445bls/110sks

Pressures

MAX: AVG:

Average Rates in BPM

MAX: 3.5 AVG: 3

Cement Left in Pipe

Feet: 44 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 lbs/sk Cellaflake	13.29	2.25	11.5
2	0	0	0	0	0	0
3	0	0	0	0	0	0
4						

Summary

Preflush: BBl 35.00 Type: Sodium Silicate
Breakdown: MAXIMUM Load & Bkdn: Gal - BBl Pad: Bbl - Gal
Lost Returns: 0 Excess / Return BBl 0 Calc Disp Bbl
Actual TOC Calc TOC Actual Disp 72.00
Average Frac. Gradient Treatment: Gal - BBl Disp Bbl
5 Min 10 Min 15 Min Cement Slurry BBl 170.0
Total Volume BBl 277.00

CUSTOMER REPRESENTATIVE: Wilbur Hughes SIGNATURE

Thank You For Using
O - TEX Pumping