Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1223399

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 #:

7/19/2014	7/21/2014	8/6/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-187-21283-00-00
Spot Description:
NE - NE - NE - NE Sec. 23 Twp. 27 S. R. 39 ☐ East ☑ West
148 Feet from ☑ North / ☐ South Line of Section
231 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: MATER Well #: C-4 ATU-267
Field Name: Hugoton - Panoma
Producing Formation: Chase & Council Grove
Elevation: Ground: 3147 Kelly Bushing: 3154
Total Vertical Depth: 3066 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 730 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: 09/30/2014
☑ **Confidential Release Date:** 09/29/2016
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 10/01/2014

[redacted] 1223399

Operator Name: Linn Operating, Inc. Lease Name: MATER Well #: C-4 ATU-267

Sec. 23 Twp. 27 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 ☐ Yes ☑ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Pulse Neutron Decay Log
PND-S Well Evaluation Log

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

Name: Attached Top: Attached Datum: 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	730	Premium Class C	455	
PRODUCTION	7.875	5.50	15.50	3044	O-Tex LowDenses	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 - 2300 - 2521	Frac Chase & Council Grove w/N2	
2	Council Grove - 2594 - 2824	Foam 757,000 SCF & 300,001 lb	
		16/30 brown sand	

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

Date of First, Resumed Production, SWD or ENHR. 8/11/2014

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
		360			

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	MATER C-4 ATU-267
Doc ID	1223399

Tops

Name	Top	Datum
KRIDER	2316	KB
WINFIELD	2355	KB
TOWANDA	2417	KB
FT_RILEY	2469	KB
FUNSTON_LM	2592	KB
CROUSE	2642	KB
MORRILL	2741	KB
GRENOLA	2787	KB

Form	ACO1 - Well Completion
Operator	Linn Operating, Inc.
Well Name	MATER C-4 ATU-267
Doc ID	1223399

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	730	Premium Class C	455	
PRODUCTION	7.875	5.50	15.50	3044	O-Tex LowDenses	425	

JOB SUMMARY

COUNTY: Stanton	COMPANY: Linn Energy	PROJECT NUMBER: TN # 992	TICKET DATE: 7/19/2014
LEASE NAME: Mater	Well No.: C4 ATU 267	JOB TYPE: Surface	CUSTOMER REP: Orlando
			EMPLOYEE NAME: BEAU CLEM

EMP NAME

BEAU CLEM							
SHAWN COTTON							
DANIEL MUNIZ							

Form. Name: Chase-Council Grove Type:

Packer Type Set At

Bottom Hole Temp. Pressure

Retainer Depth Total Depth

	Called Out	On Location	Job Started	Job Completed
Date	7/19/14	07/19/14	07/19/14	07/19/14
Time	11:37am	6:00PM	7:32PM	8:37PM

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	730	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
07/19/14	3.5
Total	3.5

Operating Hours

Date	Hours
07/19/14	1.0
Total	1.0

Description of Job: Surface

Pressures: MAX 836 AVG. 60

Average Rates in BPM: MAX 3 AVG 3

Cement Left in Pipe: Feet 44 Reason: Shoe Joint

Cement Data

Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	455	Premium Class C	2% Calcium Chloride and .25 #/sk Cellofalke	6.34	1.35	14.8
2						
3						
4						

Summary

Preflush Type:

Breakdown MAXIMUM

Lost Returns-Y/N 0

Actual TOC

Average Frac. Gradient

ISIP 5 Min. 10 Min. 15 Min.

Preflush:	BBl	10.00	Type: H20
Load & Bkdn:	Gal - BBl		Pad:Bbl -Gal
Excess /Return	BBl	40	Calc Disp Bbl
Calc. TOC:		SURFACE	Actual Disp. 43.00
Treatment:	Gal - BBl		Disp:Bbl
Cement Slurry	BBl	109.0	
Total Volume	BBl	162.00	

CUSTOMER REPRESENTATIVE Willie Hugo

SIGNATURE

Thank You For Using
O - TEX Pumping

JOB SUMMARY

COUNTY: Stanton	COMPANY: Linn Energy	PROJECT NUMBER: TN # 996	TICKET DATE: 7/21/2014
LEASE NAME: Mater	Well No.: C4 ATU 267	JOB TYPE: Production	CUSTOMER REP: Weldon Higgins
			EMPLOYEE NAME: Steve Crocker

EMP NAME

Steve Crocker			
Tony Lewis			
Hendrick Newsome			
Larry Pickard			

Form. Name ____ Type: ____

Packer Type ____ Set At ____

Bottom Hole Temp. ____ Pressure ____

Retainer Depth ____ Total Depth ____

Date	Called Out	On Location	Job Started	Job Completed
		07/21/14	07/21/14	07/21/14
Time		300	1100	1300

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	J-55	0	3044	2500
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	dium Silic	BBL. 30		
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
07/21/14	10.0
Total	10.0

Operating Hours

Date	Hours
07/21/14	2.0
Total	2.0

Description of Job

Production

Pump Spacer 30bbls

Pump Lead CMT at 11.5

170bbls

Pump H2O Displacement

72bbls

CMT to Surface: 50bbls

125sks

62bbls into Displacement

pressure dropped and

we lost returns

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	2% Gyp, 2% Calcium Chloride, 2% C-45, 0.4% C-15, 0.4% C-41P, 0.2% C-51, 0.25 #/sk Celloflake	13.28	2.25	11.5
2	0	0	0	0	0	0
3						
4						

Summary

Preflush ____ Type: ____

Breakdown ____ MAXIMUM ____

____ Lost Returns-Y 10

____ Actual TOC ____

Average ____ Frac. Gradient ____

ISIP ____ 5 Min ____ 10 Min ____ 15 Min ____

Preflush:	BBl	30.00	Type: Sodium Silicate
Load & Bkdn:	Gal - BBl		Pad:Bbl -Gal
Excess /Return	BBl	50	Calc.Disp Bbl
Calc. TOC:		0	Actual Disp 72.00
Treatment:	Gal - BBl		Disp Bbl
Cement Slurry	BBl	170.0	
Total Volume	BBl	272.00	

CUSTOMER REPRESENTATIVE Weldon Higgins

SIGNATURE

Thank You For Using

O - TEX Pumping