Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1190153

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 #:

10/25/2013	10/27/2013	11/14/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-093-21900-00-00
Spot Description:
SW SE SE SE Sec. 30 Twp. 23 S. R. 35 ☐ East ☑ West
216 Feet from ☐ North / ☑ South Line of Section
400 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: Kearny
Lease Name: MADDUX Well #: B-4 ATU-86
Field Name: HUGOTON-PANOMA
Producing Formation: CHASE
Elevation: Ground: 3045 Kelly Bushing: 3052
Total Vertical Depth: 3111 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 897 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: 02/19/2014
☑ **Confidential Release Date:** 02/19/2016
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 02/20/2014

[redacted] 1190153

Operator Name: Linn Operating, Inc. Lease Name: MADDUX Well #: B-4 ATU-86

Sec. 30 Twp. 23 S. R. 35 ☐ East ☑ West County: Kearny

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	Top	Datum
Krider	2522	KB
Winfield	2577	KB
Towanda	2636	KB
Fort Riley	2688	KB

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	897	Class C	560	
PRODUCTION	7.875	5.50	15.50	3111	Class C	300	

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- 2542-2547; 2578-2583; 2642-2652;	Frac Chase w/N2 Foam 784,000 SCF &	
	2690-2710	300,285 lb 16/30 brown sand	

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

Date of First, Resumed Production, SWD or ENHR. 11/18/2013

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
		392			

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:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Linn Operating, Inc.
Well Name	MADDUX B-4 ATU-86
Doc ID	1190153

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	897	Class C	560	
PRODUCTION	7.875	5.50	15.50	3111	Class C	300	

JOB SUMMARY

PROJECT NUMBER: TN # 316	TICKET DATE: 10/25/2013		
COUNTY: Kearny	COMPANY: Linn Energy	CUSTOMER REP: Orlando Lozano	
LEASE NAME: Maddux	Well No: B4 ATU 86	JOB TYPE: Surface	EMPLOYEE NAME: Jason Jones

EMP NAME							
Jason Jones							
Steve Crocker							
Lamont Patterson							
Mario Abrego							

Form. Name: Council Grove Type:

Packer Type: Set At:

Bottom Hole Temp.: Pressure:

Retainer Depth: Total Depth:

	Called Out	On Location	Job Started	Job Completed
Date	10/25/13	10/25/13	10/26/13	10/26/13
Time	14:00	2330	730	910

Tools and Accessories

Type and Size	Qty	Make
Auto Fill Tube	1	IR
Insert Float Valve	1	IR
Centralizers	5	IR
Top Plug	1	IR
HEAD	1	IR
Limit clamp	1	IR
Weld-A	2	IR
Texas Pattern Guide Shoe	1	IR
Cement Basket	0	IR

Well Data

	New/Used	Weight	Size	Grade	From	To	Max. Allow
Casing	New	24#	8.625"	J-55	KB	897	1500
Liner							
Liner							
Tubing							
Drill Pipe							
Open Hole							Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials

Mud Type	WBM	Density 8.9	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
10/25/13	
Total	0.0

Operating Hours

Date	Hours
10/26/13	
Total	0.0

Description of Job

Surface

Approx 60 BBls of Cmt.

To surface

Approx 225 sks.

good returns thru job

Floats held

Job was completed safely

Pressures

MAX 800 AVG 300

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	560	Class C	2% C.C. + 0.25#/SK. Celloflake	6.30	1.32	14.8
2						
3						
4						

Summary

Preflush		Type:		Preflush: BBl	10.00	Type: H20	
Breakdown		MAXIMUM		Load & Bkdn: Gal - BBl		Pad:Bbl -Gal	
		Lost Returns-I	N/A	Excess /Return BBl	60	Calc Disp Bbl	54
		Actual TOC	Surface	Calc TOC:	Surface	Actual Disp	54.00
Average		Frac. Gradient		Treatment: Gal - BBl		Disp:Bbl	
ISIP	5 Min	10 Min	15 Min	Cement Slurry BBl	#VALUE!		
				Total Volume BBl	#VALUE!		

CUSTOMER REPRESENTATIVE: _____ SIGNATURE: _____

Thank You For Using

O - TEX Pumping

JOB SUMMARY

PROJECT NUMBER	TICKET DATE
TN # 319	10/27/2013

COUNTY	COMPANY	CUSTOMER REP
Kearny	Linn Energy	Orlando Lozano

LEASE NAME	Well No.	JOB TYPE	EMPLOYEE NAME
Maddux	B4 ATU 86	Production	

EMP NAME					
Chris Fry					
Devin Londagin					

Form. Name: Council - Grove Type:

Packer Type: Set At:

Bottom Hole Temp.: Pressure:

Retainer Depth: Total Depth:

	Called Out	On Location	Job Started	Job Completed
Date	10/27/13	10/27/13	10/27/13	10/27/13
Time	04:00	1300	2053	2242

Tools and Accessories

Type and Size	Qty	Make
Auto Fill Tube	1	IR
Insert Float Valve	1	IR
Centralizers	26	IR
Top Plug	1	IR
HEAD	1	IR
Limit clamp	1	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	1	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	3111	2500
Liner							
Liner							
Tubing							
Drill Pipe							
Open Hole			7.875"		K.B.		Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials

Mud Type	WBM	Density	8.9	Lb/Gal
Disp. Fluid	H20	Density	8.33	Lb/Gal
Spacer type	Sodium Silicate	BBL	25	
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
10/27/13	10.5
Total	10.5

Operating Hours

Date	Hours
10/27/13	2.0
Total	2.0

Description of Job

Production

Pressures

MAX 1400 AVG 200

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	205	Class C	0.2% C-41P, + 5% GYP, + 0.25#/SK. Celloflake	23.49	3.65	10.8
2	95	Class C	2% GEL. + 0.2% C-16A, + 2% C.C.	10.4	1.90	13.0
3			DO NOT PUMP OVER 4 B.P.M. WATCH FOR CIRC. WHILE PUMPING JOB. 2 B.P.M. MIN. IF NO CIRC.			
4						

Summary

Preflush		Type:		Preflush: BBl	25.00
Breakdown		MAXIMUM		Load & Bkdn: Gal - BBl	
		Lost Returns-N	0	Excess /Return BBl	15
		Actual TOC		Calc. TOC:	0
Average		Frac. Gradient		Treatment: Gal - BBl	
ISIP	5 Min	10 Min	15 Min	Cement Slurry: BBl	165.0
				Total Volume BBl	263.00

Type: Sodium Silicate/H20

Pad:Bbl -Gal

Calc Disp Bbl

Actual Disp: 73.00

Disp Bbl

CUSTOMER REPRESENTATIVE SIGNATURE

Thank You For Using

O - TEX Pumping