



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1162848
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: _____



1162848

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	SCHULZ A-4 ATU-19
Doc ID	1162848

All Electric Logs Run

Compact Photo Density/Compensated Neutron/Microresistivity Log
Microresistivity Log
Array Induction/Shallow Focused/Electric Log
Spectral Gamma Ray
Repeat Log

Form	ACO1 - Well Completion
Operator	Linn Operating, Inc.
Well Name	SCHULZ A-4 ATU-19
Doc ID	1162848

Tops

Name	Top	Datum
Krider	2283	KB
Winfield	2361	KB
Towanda	2404	KB
Fort Riley	2463	KB
Funston	2576	KB
Middleborg	2669	KB
Cottonwood	2728	KB
Grenola	2773	KB

JOB SUMMARY		PROJECT NUMBER TN # 132	TICKET DATE 6/14/2013
COUNTY Stanton	COMPANY Linn Energy	CUSTOMER REP Weldon Higgins	
LEASE NAME Schulz	Well No. A-4 ATU 19	EMPLOYEE NAME Jessie McClain	
JOB TYPE Surface			

EMP NAME					
Jessie McClain					
Jason Jones					
Mario Abrego					
Lamont Patterson					

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	6/14/13	06/14/13	06/14/13	06/14/13
Time	1200	1700	2145	1115

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	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	24#	8.625"	J45	KB	730	1600
Liner							
Liner							
Tubing							
Drill Pipe							
Open Hole							Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials

	WBM	Density	Lb/Gal
Mud Type	H2O	8.9	
Disp. Fluid	H2O	8.33	
Spacer type	H2O	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	
06/14/13	6.5	06/14/13	1.5	Surface
				Final pump pressure 230 psi
				28 bbls cmt to pit
Total	6.5	Total	1.5	

Perfpac Balls _____ Qty. _____
Other _____
Other _____
Other _____
Other _____

Pressures
MAX 1000 **AVG 50**
Average Rates in BPM
MAX 4 **AVG 3**
Cement Left in Pipe
Feet 44 **Reason** **Shoe Joint**

Cement Data

Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	450	Class C	2% C.C. + 0.25#/SK. CelloBake	6.30	1.32	14.8
2						
3						
4						

Summary

Preflush	MAXIMUM	0	Preflush:	BBI	10.00	Type:	H2O
Breakdown	Actual TOC	Surface	Load & Bkdn:	Gal - BBI	28	Pad:Bbl -Gal	44
Average	Frac. Gradient	10 Min	Excess /Return	BBI	Surface	Calc Disp Bbl	43.60
ISIP	5 Min	15 Min	Calc. TOC:			Actual Disp.	
			Treatment:	Gal - BBI	105.0	Disp:Bbl	
			Cement Slurry:	BBI	159.60		
			Total Volume	BBI			

CUSTOMER REPRESENTATIVE Weldon Higgins SIGNATURE

Thank You For Using
O - TEX Pumping

JOB SUMMARY			PROJECT NUMBER TN # 133	TICKET DATE 6/17/2013
COUNTY Stanton	COMPANY Linn Energy		CUSTOMER REP Weldon Higgins	
LEASE NAME Schulz	Well No. A-4 ATU 19	JOB TYPE Production	EMPLOYEE NAME Jessie McClain	

Jessie McClain					
Jason Jones					
Lamont Patterson					

Form Name Council - Grove Type: _____

Packer Type _____ Set At _____

Bottom Hole Temp. _____ Pressure _____

Retainer Depth _____ Total Depth _____

Date	Called Out	On Location	Job Started	Job Completed
	6/16/13	06/17/13	06/17/13	06/17/13
Time	2200	230	1000	1200

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
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-40	KB	3113	2000
Liner							
Liner							
Tubing							
Drill Pipe							
Open Hole							Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials			
Mud Type	WBM	Density	8.9 Lb/Gal
Disp. Fluid	H2O	Density	8.33 Lb/Gal
Spacer type	H2O	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	
06/17/13	10.0	06/17/13	2.0	Production
				Final Pump psi 900 #
				38 bbls cmt to surface
				58.5 sks back
Total	10.0	Total	2.0	

Perfpac Balls _____ Qty. _____

Other _____

Other _____

Other _____

Other _____

Other _____

Pressures		
MAX	50	AVG 1300
Average Rates in BPM		
MAX	4	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 Cellotake	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 P.M. WATCH FOR CIRC. WHILE PUMPING JOB!			
4						

Summary					
Preflush Breakdown	Type: _____	MAXIMUM _____	Lost Returns-h _____	Actual TOC _____	Frac. Gradient _____
Average ISIP	5 Min.	10 Min.	15 Min.		
Preflush:	BBI	10.00	Type: H2O		
Load & Bkdn:	Gal - BBI		Pad: Bbl - Gal		
Excess /Return	BBI	38	Calc. Disp Bbl		73
Calc. TOC:			Actual Disp.		73.00
Treatment:	Gal - BBI		Disp: Bbl		
Cement Slurry:	BBI	165.0			
Total Volume	BBI	248.00			

CUSTOMER REPRESENTATIVE Weldon Higgins SIGNATURE

**Thank You For Using
O - TEX Pumping**

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

October 14, 2013

Shawn Hildreth
Linn Operating, Inc.
600 TRAVIS STE 5100
HOUSTON, TX 77002-3018

Re: ACO1
API 15-187-21230-00-00
SCHULZ A-4 ATU-19
NE/4 Sec.21-27S-39W
Stanton County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Shawn Hildreth