

1217088

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
--	---

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
----------------	-------	---------	------------	---

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> _____
---	--

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: _____ _____
--	--	---

Form	ACO1 - Well Completion
Operator	Linn Operating, Inc.
Well Name	SULLIVAN A-4 ATU-59
Doc ID	1217088

Tops

Name	Top	Datum
KRIDER	2388	KB
WINFIELD	2434	KB
TOWANDA	2498	KB
FT_RILEY	2551	KB
FUNSTON	2679	KB
CROUSE	2734	KB
MORRILL	2813	KB
GRENOLA	2859	KB

JOB SUMMARY		PROJECT NUMBER TN # 770	TICKET DATE 5/20/2014
COUNTY Grant	COMPANY Linn Energy	CUSTOMER REP 0	
LEASE NAME Sullivan	Well No A4 ATU 58	JOB TYPE Production	EMPLOYEE NAME Steve Crocker

EMP NAME	Steve Crocker				
	Miguel Murgado				
	Miguel Garcia				

Form. Name _____ Type _____

Packer Type _____ Set At _____

Bottom Hole Temp. _____ Pressure _____

Retainer Depth _____ Total Depth _____

	Called Out	On Location	Job Started	Job Completed
Date	5-19-14	05/20/14	05/20/14	05/20/14
Time	1700	2300	510	642

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	44	0	3110	2500
Liner							
Liner							
Tubing							
Drill Pipe							
Open Hole							Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials			
		Density	Lb/Gal
Mud Type	0	0	
Disp. Fluid	H2O	8.33	
Spacer type	dium Silic. 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	

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
05/20/14	8.0	05/20/14	1.5	Production
				Lead Cement 11.5ppg, 174bbls 435sks
				Cement to Surface 42bbls/ 105
Total	8.0	Total	1.5	

Perfpac Balls _____ Qty. _____

Other _____

Other _____

Other _____


Other _____

Pressures		
MAX		AVG
1300		500
Average Rates in BPM		
MAX	4	AVG 3.3
Cement Left in Pipe		
Feet	44	Reason Shoe Joint

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	435	O-Tex LowDense Cemen	2% Gypsum, 2% Calcium Chloride, 2% C-45, 0.4% C-15, 0.4% C-11P, 0.2% C-31, 0.25 lb/sk Cellulose	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	Actual 10'	Frac. Gradient	10 Min
	Sodium Silicate	20.00	0		
	Pad Bbl -Gal	42			
	Calc Diso Bbl	0			
	Actual Diso	0.00			
	Disc Bbl	174.0			
	Total Volume	194.00			

CUSTOMER REPRESENTATIVE _____


SIGNATURE

Thank You For Using
O - TEX Pumping

JOB SUMMARY		PROJECT NUMBER TN # 767	TICKET DATE 5/18/2014
COUNTY Grant	COMPANY Linn Energy	CUSTOMER REP Orlando	
LEASE NAME Sullivan	Well No A4 ATU 59	EMPLOYEE NAME Bryon Hackett	
JOB TYPE Surface			

EMP NAME Bryon Hackett					
Miguel Murgado					
Miguel Garcia					

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

Date	Called Out 05/18/14	On Location 05/18/14	Job Started 05/18/14	Job Completed 05/18/14
Time	1200	1730	2002	2103

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
Casing	New	24	9.626	40	KB	727
Liner						
Liner						
Tubing						
Drill Pipe						
Open Hole						Shojs/Ft.
Perforations						
Perforations						
Perforations						

Materials			
	Qty	Density	Lb/Gal
Mud Type	0	0	
Disp. Fluid	H2o	Density 8.33	Lb/Gal
Spacer type	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	
05/18/14	4.0	05/18/14	1.0	Surface
Total	4.0	Total	1.0	

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

Pressures	
MAX	830
AVG	
Average Rates in BPM	
MAX	3
AVG	3
Cement Left in Pipe	
Feet	44
Reason	
Shoe Track	

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	455	Premium Plus Class C	2% Calcium Chloride, 0.25 lbs/sk Cellulose	6.34	1.32	14.8
2	0	0	0	0	0	0
3	0	0	0	0	0	0
4						

Summary					
Preflush Breakdown	Type: _____	MAXIMUM _____	Lost Returns _____	Actual TOC _____	Frac. Gradient _____
Average _____	5 Min _____	10 Min _____	15 Min _____	Preflush: BBI _____	Load & Bkdn: Gal - BBI _____
				Excess Return: BBI _____	Cak. TOC _____
				Treatment: Gal - BBI _____	Cement Slurry: BBI _____
				Total Volume: BBI _____	

CUSTOMER REPRESENTATIVE _____
 SIGNATURE _____

Thank You For Using
 O - TEX Pumping