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ORIGINAL

8/29/10

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
September 1999
Form Must Be Typed

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 33365
Name: Layne Energy Operating, LLC
Address: 1900 Shawnee Mission Parkway
City/State/Zip: Mission Woods, KS 66205
Purchaser: _____
Operator Contact Person: Timothy H. Wright
Phone: (913) 748-3960
Contractor: Name: Thornton Air Rotary
License: 33606

Wellsite Geologist: _____
Designate Type of Completion: **CONFIDENTIAL**
____ New Well ____ Re-Entry ____ Workover
____ Oil ____ SWD ____ SLOW ____ Temp. Abd.
 Gas ____ ENHR ____ SIGW
____ Dry ____ Other (Core, WSW, Expl., Cathodic, 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./SWD
____ Plug Back ____ Plug Back Total Depth
____ Commingled Docket No. _____
____ Dual Completion Docket No. _____
____ Other (SWD or Enhr.?) Docket No. _____

6/5/2008 6/9/2008 10/15/2008
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 125-31647-00-00 AMENDED
County: Montgomery
____ - ____ - ____ NW - NW Sec. 16 Twp. 31 S. R. 17 East West
730 feet from S / **(N)** (circle one) Line of Section
711 feet from E / **(W)** (circle one) Line of Section
Footages Calculated from Nearest Outside Section Corner:
____ (circle one) NE SE **(NW)** SW
Lease Name: Duke Well #: 4-16
Field Name: Cherokee Basin Coal Area
Producing Formation: Cherokee Coals
Elevation: Ground: 859' Kelly Bushing: _____
Total Depth: 1036' Plug Back Total Depth: 1034'
Amount of Surface Pipe Set and Cemented at 22 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set _____ Feet
If Alternate II completion, cement circulated from 1034
feet depth to Surface w/ 100 sx cmf.

Drilling Fluid Management Plan SH # NY 41609
(Data must be collected from the Reserve Pit)
Chloride content N/A ppm Fluid volume _____ bbls
Dewatering method used N/A - Air Drilled
Location of fluid disposal if hauled offsite: _____
Operator Name: _____
Lease Name: _____ License No.: _____
Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West
County: _____ Docket No.: _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.

Signature: [Signature]
Title: Project Engineer Date: 1/29/09
Subscribed and sworn to before me this 29 day of January,
2009.
Notary Public: MacLaughlin Darling
Date Commission Expires: 1-4-2013

KCC Office Use ONLY
 Letter of Confidentiality Attached
If Denied, Yes Date: _____
 Wireline Log Received
 Geologist Report Received
RECEIVED
KANSAS CORPORATION COMMISSION
JAN 30 2009

MacLAUGHLIN DARLING
Notary Public - State of Kansas
My Appt. Expires 1-4-2013

CONSERVATION DIVISION
WICHITA, KS

Operator Name: Layne Energy Operating, LLC Lease Name: Duke Well #: 4-16
 Sec. 16 Twp. 31 S. R. 17 East West County: Montgomery

INSTRUCTIONS: Show important tops and base 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. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pawnee Lime	483 GL	376
Electric Log Run <i>(Submit Copy)</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Excello Shale	599 GL	261
List All E. Logs Run: <i>(orig. logs)</i>		Mississippian	1035 GL	-176
Compensated Density Neutron Dual Induction				

*km
7/25/09*

CASING RECORD <input checked="" 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	# Sacjs Used	Type and Percent Additives
Surface	11"	8.625"	24	22'	Class A	4	Type 1 cement
Casing	6.75"	4.5"	10.5	1034'	Thick Set	100	50/50 posmix w/2% gel

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				

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
	See Attached Page		

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WICHITA, KS

TUBING RECORD	Size <u>2-3/8"</u>	Set At <u>1023'</u>	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumerd Production, SWD or Enhr.	Producing Method			
<u>10/24/2008</u>	<input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
Estimated Production Per 24 Hours	Oil Bbls. <u>0</u>	Gas Mcf <u>70</u>	Water Bbls. <u>0</u>	Gas-Oil Ratio Gravity

Disposition of Gas	METHOD OF COMPLETION	Production Interval
<input type="checkbox"/> Vented <input checked="" type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input checked="" type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify) _____	_____

Operator Name:	Layne Energy Operating, LLC.		
Lease Name:	Duke 4-16		
	Sec. 16 Twp. 31S Rng. 17E, Montgomery County		
API:	15-125-31647-00-00		
Shots per Foot	Perforation Record	Acid, Fracture, Shot, Cement Squeeze Record	Depth
Initial Perforations (October 2008)			
4	Riverton 1010.5' - 1012'	2400 lbs 20/40 sand 215 bbls water 300 gals 15% HCl acid	1010.5' - 1012'
4	Weir 801' - 802.5'	2400 lbs 20/40 sand 180 bbls water 300 gals 15% HCl acid	801' - 802.5'
4	Mulky 599' - 603.5'	6000 lbs 20/40 sand 360 bbls water 200 gals 15% HCl acid	599' - 603.5'
4	Lexington 520' - 521.5'	2300 lbs 20/40 sand 288 bbls water 300 gals 15% HCl acid	520' - 521.5'

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