

CONFIDENTIAL

ORIGINAL

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

8/29/10

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:
 New Well Re-Entry Workover
 Oil SWD SIOW 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. _____

<u>6/5/2008</u>	<u>6/9/2008</u>	<u>Pending</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 125-31647-00-00
County: Montgomery
____ - ____ - NW - NW Sec. 16 Twp. 31 S. R. 17 East West
730 feet from S / (circle one) Line of Section
711 feet from E / (circle one) Line of Section
Footages Calculated from Nearest Outside Section Corner:
(circle one) NE SE 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 cmt.

Drilling Fluid Management Plan At # NH 10-16-08
(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: _____
Title: Agent Date: 8/29/2008
Subscribed and sworn to before me this 29 day of August,
2008.
Notary Public: MacLaughlin Darling
Date Commission Expires: 1-4-2009

KCC Office Use ONLY
 Letter of Confidentiality Attached
If Denied, Yes Date: _____
 Wireline Log Received
 Geologist Report Received
IHC Distribution
RECEIVED
KANSAS CORPORATION COMMISSION
SEP 02 2008

MacLAUGHLIN DARLING
Notary Public - State of Kansas
My Appt. Expires 1-4-2009

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 Yes No
 (Attach Additional Sheets)

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run Yes No
 (Submit Copy)

List All E. Logs Run:

Compensated Density Neutron
 Dual Induction

Log Formation (Top), Depth and Datum Sample

Name	Top	Datum
Pawnee Lime	483 GL	376
Excello Shale	599 GL	261
Mississippian	1035 GL	-176

~~CONFIDENTIAL~~

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	# Sacs 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 (Amount and Kind of Material Used)	Depth

TUBING RECORD

Size	Set At	Packer At	Liner Run
			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Date of First, Resumerd Production, SWD or Enhr. **Shut - In** Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	0		0		

Disposition of Gas Vented Sold Used on Lease (If vented, Submit ACO-18.)

METHOD OF COMPLETION Open Hole Perf. Dually Comp. Commingled Other (Specify)

Production Interval

RECEIVED
 KANSAS CORPORATION COMMERCIAL

SEP 02 2008

GEOLOGIC REPORT

LAYNE ENERGY
Duke 4-16
NW NW, 730 FNL, 711 FWL
Section 16-T31S-R17E
Montgomery County, KS

Spud Date: 6/5/2008
Drilling Completed: 6/9/2008
Logged: 6/9/2008
A.P.I. #: 15125316470000
Ground Elevation: 859'
Depth Driller: 1036'
Depth Logger: 1036'
Surface Casing: 8.625 inches at 22'
Production Casing: 4.5 inches at 1034.1'
Cemented Job: Consolidated
Open Hole Logs: Dual Induction SFL/GR, Litho Density /
Neutron Logs

CONFIDENTIAL
KCC

Formation	Tops	
	(below ground)	(subsea)
	Surface	
Kansas City Group	(Cherryvale Shale)	859
Pawnee Limestone	483	376
Excello Shale	599	261
"V" Shale		
Mineral Coal		
Mississippian	1,035	-176

RECEIVED
KANSAS CORPORATION COMMISSION

SEP 02 2008

CONSERVATION DIVISION
WICHITA, KS

Daily Well Work Report

DUKE 4-16
6/9/2008

Well Location:
MONTGOMERY KS
31S-17E-16 NW NW
730FNL / 711FWL

Cost Center C01025900100
Lease Number C010259
Property Code KSCV31S17E1604
API Number 15-125-31647

Spud Date 6/5/2008 **RDMO Date** 6/9/2008 **First Compl** **First Prod** **EFM Install** **CygnnetID**

6/5/2008

6/9/2008

TD

PBTD

Sf Csg Depth

Pr Csg Depth

Tbg Size

Csg Size

1036

1034.1

22

1034.1

0

0

Reported By krd

Rig Number

Date

6/5/2008

Taken By krd

Down Time

Present Operation drill out surface

Contractor

thornton

Narrative

MIRU THORNTON DRILLING, DRILLED 11" HOLE, 22' DEEP, RIH W/ 1 JT 8 5/8" SURFACE CASING, MIXED 4 SX TYPE 1 CEMENT, DUMPED DOWN THE BACKSIDE. SDFN.
DWC:\$2880

Thursday, August 28, 2008

RECEIVED
KANSAS CORPORATION COMMISSION
Page 4 of 4

SEP 02 2008

CONSERVATION DIVISION
WICHITA, KS

CONSOLIDATED OIL WELL SERVICES,
P.O. BOX 884, CHANUTE, KS 66720
620-431-9210 OR 800-467-8676

ENTERED

TICKET NUMBER **14190**

LOCATION **EUREKA**

FOREMAN **RICK LEDFORD**

**TREATMENT REPORT & FIELD TICKET
CEMENT**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY	
6-10-08	4258	Duke 4-16				MC	
CUSTOMER Layne Energy		G-S Jobs 173		TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS P.O. Box 1100				463	Shannon		
CITY Syracuse				479	John		
STATE KS				436	Chris		
ZIP CODE							

JOB TYPE longstring HOLE SIZE 6 3/4" HOLE DEPTH 1030' CASING SIZE & WEIGHT 4 1/2" 125'
 CASING DEPTH 1035' DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 13.2" SLURRY VOL 34 Bbl WATER gal/sk 8.0" CEMENT LEFT in CASING 0'
 DISPLACEMENT 16.5 Bbl DISPLACEMENT PSI 500 Buy PSI 1000 RATE _____

REMARKS: Safety meeting. Rig up to 4 1/2" casing. Break circulation w/ 25 Bbl fresh water. Pump 40 Bbl fresh water to get air out. Pump 6 sacks gel-fish w/ hulls, 2 Bbl spacer. Mixed 100 sacks thickset cement w/ 8" Kol-seal, 1/2" F2-110 & 1/4" CAS-38 @ 13.2" yield 1.92. Washout pump & hoses, shut down, release plug. Displace w/ 16.5 Bbl fresh water. Final pump pressure 500 PSI. Bump plug to 1000 PSI. Wait 2 minutes, release pressure, float held. Good cement returns to surface = 2 Bbl slurry to pit. Job complete. Rig down.

"THANK YOU"

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	925.00	925.00
5406	40	MILEAGE	3.65	146.00
1126A	100 SACS	thickset cement	17.00	1700.00
1110A	800 "	Kol-seal 8" 1 1/2"	.42	336.00
1135	50 "	1/2" F2-110	7.50	375.00
1146	25 "	1/4" CAS-38	7.70	192.50
1118A	300 "	gel-fish	.17	51.00
1185	50 "	hulls	.39	19.50
5502C	3 hrs	80 Bbl VAR. TRX	100.00	300.00
1123	3000 gals	city water	17.00 ^{per 1000}	48.00
5407	5.5	con. mileage bulk trx	m/c	315.00
4404	1	4 1/2" top rubber plug	45.00	45.00
5605A	4 hrs	welder	85.00	340.00
4311	1	4 1/2" weld on collar	60.00	60.00
		subtotal		4847.00
		SRE DIV SALES TAX		149.52
		KANSAS CORPORATIO ESTIMATED TOTAL		4996.52

AUTHORIZATION [Signature] TITLE _____

000148

SEP 0 2 2008