

2-26-09

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KANSAS CORPORATION COMMISSION

FEB 27 2007

Form ACO-1  
September 1999  
Form Must Be Typed

ORIGINAL

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

WELL COMPLETION FORM

CONSERVATION DIVISION  
WICHITA, KS

WELL HISTORY - DESCRIPTION OF WELL & LEASE

CONFIDENTIAL

Operator: License # 33365  
Name: Layne Energy Operating, LLC  
Address: 1900 Shawnee Mission Parkway  
City/State/Zip: Mission Woods, KS 66205  
Purchaser: \_\_\_\_\_  
Operator Contact Person: M. B. Natrass  
Phone: (913) 748-3960  
Contractor: Name: Thornton Air Rotary  
License: 33606  
Wellsite Geologist: \_\_\_\_\_

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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. \_\_\_\_\_

10/30/2006	10/31/2006	11/30/2006
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 019-26762 - 00-00  
County: Chautauqua  
NE SW NW Sec. 4 Twp. 32 S. R. 13  East  West  
1904 feet from S /  (circle one) Line of Section  
806 feet from E /  (circle one) Line of Section  
Footages Calculated from Nearest Outside Section Corner:  
(circle one) NE SE NW SW  
Lease Name: Vaughn Well #: 5-4  
Field Name: Cherokee Basin Coal Area  
Producing Formation: Cherokee Coals  
Elevation: Ground: 929 Kelly Bushing: \_\_\_\_\_  
Total Depth: 1650 Plug Back Total Depth: 1645  
Amount of Surface Pipe Set and Cemented at 45 Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set \_\_\_\_\_ Feet  
If Alternate II completion, cement circulated from 1645  
feet depth to Surface w/ 165 sx cmt.

Drilling Fluid Management Plan AIT IINH9-25-08  
(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: MB Natrass  
Title: Agent Date: 2/23/07  
Subscribed and sworn to before me this 23 day of February  
20 07  
Notary Public: Brooke C. Maxfield  
Date Commission Expires: 12/28/09

NOTARY PUBLIC - State of Kansas  
BROOKE C. MAXFIELD  
My Appt. Exp. 12/28/09

**KCC Office Use ONLY**  
Y Letter of Confidentiality Attached  
If Denied, Yes  Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
 UIC Distribution

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CONSERVATION DIVISION  
WICHITA, KS

**Operator Name:** Layne Energy Operating, LLC.  
**Lease Name:** Vaughn 5-4  
Sec. 4 Twp. 32S Rng. 135E, Chautauqua County  
**API:** 15-019-26762

<b>Shots per Foot</b>	<b>Perforation Record</b>	<b>Acid, Fracture, Shot, Cement Squeeze Record</b>	<b>Depth</b>
4	1286-1290.5, 1267.5-1269	Croweburg, Bevier - 5000# 20/40 sand, 530 bbls wtr, 600 gal 15% HCl acid	1267.5-1290.5
4	1228.5-1233.5, 1212-1215.5	Mulky, Summit - 6300# 20/40 sand, 525 bbls wtr, 850 gal 15% HCl acid	1212-1233.5

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Operator Name: Layne Energy Operating, LLC Lease Name: Vaughn Well #: 5-4  
 Sec. 4 Twp. 32 S. R. 13  East  West County: Chautauqua

**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

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<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Name	Top	Datum
Pawnee Lime	1114 GL	-185
Excello Shale	1228 GL	-299
V Shale	1286 GL	-357
Mississippian	1554 GL	-625

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	# Sacs Used	Type and Percent Additives
Surface	11	8.65	24	45'	Class A	8	Type 1 cement
Casing	6.75	4.5	10.5	1645'	Thick Set	165	

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
	See Attached		

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TUBING RECORD		Size	Set At	Packer At	Liner Run
		2 3/8"	1321'		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumerd Production. SWD or Enhr.		Producing Method			
SI - waiting on pipeline		<input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

Disposition of Gas **METHOD OF COMPLETION** Production Interval

Vented  Sold  Used on Lease  Open Hole  Perf.  Dually Comp.  Commingled  
*(If vented, Submit ACO-13.)*  Other (Specify) \_\_\_\_\_

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CONSERVATION DIVISION  
WICHITA, KS

# Daily Well Work Report

VAUGHN 5-4  
10/31/2006

**Well Location:**  
CHAUTAUQUA KS  
32S-13E-4 NE SW NW  
1904FNL / 806FWL

**Cost Center** G01050400100  
**Lease Number** G010504  
**Property Code** KSSY32S13E0504  
**API Number** 15-019-26762

Spud Date	RDMO Date	First Compl	First Prod	EFM Install	CygnnetID
10/30/2006	10/31/2006	11/30/2006		12/18/2006	VAUGHN_5_4

TD	PBTD	Sf Csg Depth	Pr Csg Depth	Tbg Size	Csg Size
1650	1645	45	1645	0	0

<b>Reported By</b> KRD	<b>Rig Number</b>	<b>Date</b> 10/30/2006
<b>Taken By</b> KRD		<b>Down Time</b>
<b>Present Operation</b> DRILL OUT FROM UNDER SURFACE		<b>Contractor</b> THORNTON ROTARY

## Narrative

MIRU THORNTON DRILLING, DRILLED 11" HOLE, 45' DEEP, RIH W/2 JOINTS 8-5/8" SURFACE CASING. MIXED 8 SKS TYPE 1 CEMENT. DUMPED DOWN THE BACKSIDE. SDFN.

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

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TICKET NUMBER 16505  
 LOCATION EUREKA  
 FOREMAN KEVIN MCCOY

CONSERVATION DIVISION  
 WICHITA, KS  
 TREATMENT REPORT & FIELD TICKET  
 CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
11-1-06	4758	Vaughn 5-4				ELK
CUSTOMER <b>Layne Energy</b>						
MAILING ADDRESS P.O. Box 160			Gus Jones Rig 1	TRUCK #	DRIVER	TRUCK #
CITY Sycamore				445	Justin	KCC
STATE KS				439	Jerrid	FEB 26 2007
ZIP CODE			CONFIDENTIAL			

JOB TYPE Longstring HOLE SIZE 6 3/4 HOLE DEPTH \_\_\_\_\_ CASING SIZE & WEIGHT 4 1/2 10.5" New  
 CASING DEPTH 1645' DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 13.2 SLURRY VOL 51 BBL WATER gal/sk 8.0 CEMENT LEFT in CASING 0'  
 DISPLACEMENT 26.1 BBL DISPLACEMENT PSI 1000 PSI 1500 Bump Plug RATE \_\_\_\_\_

REMARKS: Safety Meeting: Rig up to 4 1/2 casing. Break Circulation w/ 30 BBL Fresh water. Pump 6 sks Gel Flush, 5 BBL Water Spacer, 10 BBL Metasilicate Pre Flush, 16 BBL Dye water. Mixed 165 sks THICK Set Cement w/ 10" Kol-Seal Per/sk @ 13.2" per/gal, yield 1.75, wash out Pump & Lines. Shut down. Release Plug. Displace w/ 26.1 BBL Fresh water. Final Pumping Pressure 1000 PSI. Bump Plug to 1500 PSI. wait 2 minutes. Release Pressure. Float Held. Shut casing in @ 0 PSI. Good Cement Returns to Surface = 10 BBL Slurry. Job Complete. Rig down.

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	800.00	800.00
5406	40	MILEAGE	3.15	126.00
1126 A	165 sks	Thick Set Cement	14.65	2417.25
1110 A	1650 *	Kol-Seal 10" per/sk	.36 *	594.00
1118 A	300 *	Gel Flush	.14 *	42.00
1111 A	50 *	Metasilicate Pre Flush	1.65 *	82.50
5407 A	9.07 TONS	40 miles BULK TRUCK	1.05	380.94
4404	1	4 1/2 Top Rubber Plug	40.00	40.00
			Sub Total	4482.69
			6.3% SALES TAX	200.08
			ESTIMATED TOTAL	4682.77

AUTHORIZATION Called by John Ed TITLE \_\_\_\_\_ DATE \_\_\_\_\_

THANK YOU  
 210331

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WICHITA, KS

## GEOLOGIC REPORT

LAYNE ENERGY  
Vaughn 5-4  
SW NW, 1904 FNL, 806 FWL  
Section 4-T32S-R13E  
Chautauqua County, KS

Spud Date:	10/30/2006
Drilling Completed:	10/31/2006
Logged:	10/31/2006
A.P.I. #:	1501926762
Ground Elevation:	929'
Depth Driller:	1650'
Depth Logger:	1649'
Surface Casing:	8.625 inches at 45'
Production Casing:	4.5 inches at 1645'
Cemented Job:	Consolidated
Open Hole Logs:	Dual Induction SFL/GR, High Resolution Compensated Density/Neutron

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### Formation

Douglas Group  
Pawnee Limestone  
Excello Shale  
"V" Shale  
Mississippian

### Tops (in feet below ground level)

Surface (Stranger Formation)  
1114  
1,228  
1,286  
1,554

*Layne Energy, Inc.*

2-26-09

1900 Shawnee Mission Parkway, Mission Woods, Kansas 66205 Phone: (913) 748-3987 Fax: (913) 748-3970

February 26, 2007

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Kansas Corporation Commission  
Oil & Gas Conservation Division  
130 S. Market, Room 2078  
Wichita, KS 67202

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Re: Well Completion Form

To Whom It May Concern:

I have enclosed the ACO-1 form and associated data for the following wells:

API # 15-019-26762  
Vaughn 5-4

We respectfully request that all information submitted be kept confidential and per provision E-4 of K.A. R. 82-3-107, we request that the term of the confidentiality be extended by one year.

If you need additional information or have any questions or comments, please contact me at (913) 748-3960.

Best regards,

  
Brooke C. Maxfield

Enclosures

Cc Well File  
Field Office

