

**CONFIDENTIAL**

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

**ORIGINAL**

Form ACO-1  
June 2009  
Form Must Be Typed  
Form must be Signed  
All blanks must be Filled

**WELL COMPLETION FORM**  
**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

11/2/12

OPERATOR: License # 33365  
Name: Layne Energy Operating, LLC  
Address 1: 1900 Shawnee Mission Parkway  
Address 2: \_\_\_\_\_  
City: Mission Woods State: KS Zip: 66205 + 2001  
Contact Person: Victor H. Dyal  
Phone: ( 913 ) 748-3960  
CONTRACTOR: License # 33606  
Name: Thornton Air Rotary, LLC  
Wellsite Geologist: \_\_\_\_\_  
Purchaser: \_\_\_\_\_

**KCC**  
**NOV 02 2010**  
**CONFIDENTIAL**

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SLOW
- 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  
 Conv. to GSW  
 Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
 Commingled      Permit #: \_\_\_\_\_  
 Dual Completion    Permit #: \_\_\_\_\_  
 SWD      Permit #: \_\_\_\_\_  
 ENHR      Permit #: \_\_\_\_\_  
 GSW      Permit #: \_\_\_\_\_

<u>7/23/2010</u>	<u>7/27/2010</u>	<u>8/20/2010</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 205-27857-00-00

Spot Description: \_\_\_\_\_  
NE SE SW SE Sec. 34 Twp. 30 S. R. 14  East  West  
650 Feet from  North /  South Line of Section  
1,627 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:  
 NE     NW     SE     SW

County: Wilson  
Lease Name: Metzger Well #: 15J-34

Field Name: Cherokee Basin Coal Area  
Producing Formation: Cattleman Sands

Elevation: Ground: 914' Kelly Bushing: N/A

Total Depth: 1262' Plug Back Total Depth: 1257'

Amount of Surface Pipe Set and Cemented at: 42 Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: N/A Feet

If Alternate II completion, cement circulated from: 1257  
feet depth to: Surface w/ 135 sx cmt.

**Drilling Fluid Management Plan**

(Data must be collected from the Reserve Pit)

Chloride content: N/A ppm Fluid volume: N/A bbls

Dewatering method used: N/A -- Air Drilled

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: N/A

Lease Name: N/A License #: N/A

Quarter N/A Sec. N/A Twp. N/A S. R. N/A  East  West

County: N/A Permit #: N/A

**RECEIVED**

**NOV 03 2010**

**KCC WICHITA**

**INSTRUCTIONS:** An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2025, 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.

**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.

Signature: [Signature]  
Title: Manager of Engineering Date: 11/2/2010

**KCC Office Use ONLY**

- Letter of Confidentiality Received  
Date: 11/2/10 - 11/2/12
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: MS Date: 11-2-10

Operator Name: Layne Energy Operating, LLC Lease Name: Metzger Well #: 15J-34  
 Sec. 34 Twp. 30 S. R. 14  East  West County: Wilson

**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 complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run: <b>Compensated Density Neutron</b> <b>Dual Induction</b>	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name _____ Top _____ Datum _____ See Driller's Log          <div style="text-align: center;"> <b>KCC</b>  <b>NOV 02 2010</b>  <b>CONFIDENTIAL</b> </div>
---	---

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
Surface	11"	8.625"	24	42'	Class A	16	Type 1 Cement
Production	6.75"	4.5"	10.5	1257'	Thick Set	135	

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		

TUBING RECORD: Size: <u>2-3/8"</u> Set At: <u>1205'</u> Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR. <u>8/20/2010</u>		Producing Method: <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>1</u>	Gas Mcf <u>2</u> Water Bbls. _____ Gas-Oil Ratio _____ Gravity _____

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input checked="" 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 checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: <u>Cattlemen Sands 1168'-1184'</u>
--	--	--

# Layne Energy Operating, LLC #33365



METZGER 15J-34

NE SE SW SE 34 - 30S - 14E WILSON COUNTY, KANSAS

15-205-27857-00-00

<i>Stage #</i>	<i>Perforation Record</i>	<i>Acid, Fracture, Shot, Cement Squeeze Record</i>
Stage 1 8/19/2010	Cattleman Sand 1168' - 1184'	10000 Sand (12/20) Brown 355 Water (bbbls) 400 HCl (15%) (gal) 7000 Sand (20/40) (lbs)

KCC  
NOV 02 2010  
CONFIDENTIAL

RECEIVED  
NOV 03 2010  
KCC WICHITA

Air Drilling Specialist  
Oil & Gas Wells

**THORNTON AIR ROTARY, LLC**  
Office Phone: 620-879-2073

PO Box 449  
Caney, KS 67333

Date Started	<b>7/23/2010</b>
Date Completed	<b>7/27/2010</b>

Well No.	Operator	Lease	A.P.I #	County	State
<b>15J-34</b>	<b>Layne Energy Operating</b>	<b>Metzger</b>	<b>205-27857-00-00</b>	<b>Wilson</b>	<b>Kansas</b>

1/4	1/4	1/4	Sec.	Twp.	Rge.
			<b>34</b>	<b>30</b>	<b>14E</b>

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
<b>Sean</b>	<b>Oil</b>	<b>8</b>	<b>41' 8 5/8</b>	<b>1262</b>	<b>6 3/4</b>

**Formation Record**

0-1	DIRT	937	GAS TEST -SAME		
1-14	CLAY	950-961	SANDY SHALE		
14-75	LIME	961-985	LIME (OSWEGO)		
75-188	SHALE	985-988	SHALE		
188-191	LIME	988-995	BLK SHALE (SUMMIT)		
191-295	LMY SHALE	995-1004	LIME		
295-381	SAND	1004-1009	BLK SHALE (EXCELLO)		
386	WENT TO WATER	1009-1010	COAL (MULKY)		
381-416	SANDY SHALE	1010-1015	LIME		
416-440	LMY SHALE	1012	GAS TEST-6#, 1/4", MCF-22.9		
440-533	LIME	1015-1024	SAND		
461	GAS TEST-3 1/2#, 1/4", MCF-17.1	1024-1056	SANDY SHALE		
533-544	SHALE	1056-1057	COAL (BEVEIR)		
544-557	LIME	1057-1073	SHALE		
557-581	SAND	1073-1075	LIME		
581-606	LIME	1075-1078	SHALE		
606-612	SHALE	1078-1079	COAL (CROWBERG)		
612-645	LIME	1079-1088	SAND		
645-702	SHALE	1087	GAS TEST -SAME		
702-726	LIME	1088-1166	SANDY SHALE		
726-741	SHALE	1166-1192	SAND		
741-755	LIME	1167-1189	CORED		
755-766	SHALE	1192-1195	SANDY SHALE		
766-779	SAND	1195-1196	COAL		
769	ODOR	1196-1225	SANDY SHALE		
779-880	SANDY SHALE	1225-1262	SHALE		
880-906	LIME (PAWNEE)	1262	TD		
906-913	BLK SHALE (LEXINGTON)				
913-930	SHALE				
930-950	SAND				

**KCC**

**NOV 02 2010**

**CONFIDENTIAL**

**RECEIVED**

**NOV 03 2010**

**KCC WICHITA**





**CONSOLIDATED**  
Oil Well Services, LLC



**ENTERED**

TICKET NUMBER 28992  
LOCATION Eureka  
FOREMAN Troy Strickle

PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676

**FIELD TICKET & TREATMENT REPORT**  
**CEMENT**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
7-28-10	4758	Metzger 15J-34				Wilson
CUSTOMER <u>Layne Energy</u>			TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS <u>P.O. Box 160</u>			<u>520</u>	<u>Cliff</u>	<u>NOV 02 2010</u>	
CITY <u>Sycamore</u>	STATE <u>Ks</u>	ZIP CODE	<u>479</u>	<u>Allen B.</u>		<u>CONFIDENTIAL</u>
			<u>452/163</u>	<u>Ron</u>		

JOB TYPE L/S 0 HOLE SIZE 6 3/4 HOLE DEPTH 1262' CASING SIZE & WEIGHT 4 1/2" 10.5"  
CASING DEPTH 1257' DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
SLURRY WEIGHT 13.2" SLURRY VOL 420bl WATER gal/sk 8" CEMENT LEFT in CASING 0'  
DISPLACEMENT 200bl DISPLACEMENT PSI 600 MIX PSI 1100 8-pp 14 RATE \_\_\_\_\_

REMARKS: Safety Meeting; Rig up to 4 1/2" casing. Break circulation w/ 250bl water.  
Pump KWK Gel Flush w/ Halls. 50bl water spacer, 100bl Caustic soda Ac-Flush.  
100bl Dye water. Mixed 1300lb Thick Set Cement w/ 8" Kol-Seal Pk/pc @  
13.2"/gal. wash out Pump + lines. Release Plug. Displacer w/ 200bl Fresh water.  
Final Pump Pressure 600 PSI. Pump Plug to 1100 PSI. wait 2mins. Release  
Pressure. Float Hold Good Cement to surface = 86bl slurry to pit.  
Job Complete

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	1350lb	Thick Set Cement	17.00	2295.00
1110A	1080"	8" Kol-Seal Pk/pc	.42	453.60
1107A	17"	1/2" Phenoseal	1.15	19.55
1135	68"	1/2" CAF-110	7.50	510.00
1146	34"	1/2" CAF-38	7.70	261.80
RECEIVED				
1118A	500"	Gel-Flush	.20	100.00
1105	50"	Halls	.39	19.50
1103	100"	Caustic Soda	1.45	145.00
1123	300gal	City water	14.90/1000	447.00
5407A	7.43/Ton	Ton-mileage	1.20	891.60
4404	1	4 1/2" Top Rubber Plug	45.00	45.00
5502C	4hrs	Water Transport	112.00	448.00
			526.70	5769.19
		6.5%	SALES TAX	245.35
			ESTIMATED TOTAL	6015.14

Ravin 3737

AUTHORIZATION Sandy Meade TITLE 235562 DATE \_\_\_\_\_

\*knowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's unit records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.