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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

9/8/12

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:

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Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- 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 #:
5/27/2010 6/2/2010 6/24/2010
Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - 205-27820-00-00
Spot Description:
SW NW SE SE Sec. 34 Twp. 30 S. R. 14 East West
926 Feet from North / South Line of Section
1,205 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Wilson
Lease Name: Metzger Well #: 16E-34
Field Name: Cherokee Basin Coal Area
Producing Formation: Cattleman Sands
Elevation: Ground: 920' Kelly Bushing: N/A
Total Depth: 1287' Plug Back Total Depth: 1280'
Amount of Surface Pipe Set and Cemented at: 40 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set: N/A Feet
If Alternate II completion, cement circulated from: 1280
feet depth to: Surface w/ 116 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

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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.

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: 9/8/2010

KCC Office Use ONLY

- Letter of Confidentiality Received Date: 9/8/10 - 9/8/12
- Confidential Release Date:
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: [Signature] Date: 9-27-10

Operator Name: Layne Energy Operating, LLC Lease Name: Metzger Well #: 16E-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 checked="" type="checkbox"/> Yes <input 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no. Submit Copy)</i> List All E. Logs Run: Compensated Density Neutron Dual Induction	<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;">  SEP 08 2010 CONFIDENTIAL </div>
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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	40'	Class A	116	Type 1 Cement
Production	6.75"	4.5"	10.5	1280'	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		

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TUBING RECORD: Size: <u>2-3/8"</u> Set At: <u>1227'</u> Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	KCC WICHITA
Date of First, Resumed Production, SWD or ENHR. <u>6/25/2010</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><1</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: _____ _____
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Layne Energy Operating, LLC #33365



METZGER 16E-34

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

15-205-27820-00-00

<i>Stage #</i>	<i>Perforation Record</i>	<i>Acid, Fracture, Shot, Cement Squeeze Record</i>
Stage 1 6/23/2010	Cattleman Sand 1177' - 1190'	10000 Sand (12/20) Brown 275 Water (bbls) 300 HCl (15%) (gal) 3000 Sand (20/40) (lbs)

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Air Drilling Specialist
Oil & Gas Wells

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

PO Box 449
Caney, KS 67333

Date Started	5/27/2010
Date Completed	6/1/2010

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Well No.	Operator	Lease	A.P.I.#	County	State
16E-34	Layne Energy Operating	Metzger	15-205-27820	Wilson	Kansas

1/4	1/4	1/4	Sec.	Twp.	Rge.
			34	30	14E

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
Sean	Oil	8	40' 8 5/8	1287	6 3/4

Formation Record

0-2	DIRT	786-814	SANDY SHALE	1121-1122	COAL
2-10	CLAY	814-820	SAND	1122-1169	SHALE
10-73	LIME	820-876	SANDY SHALE	1136	GAS TEST - SAME
73-170	SHALE	876-877	COAL (MULBERRY)	1169-1198	SAND
170-175	LIME	877-879	SHALE	1198-1200	COAL, LT ODOR@1199
175-184	LMY SHALE	879-906	LIME (PAWNEE)	1200-1207	SHALE
184-288	SHALE	886	GAS TEST-1#,1/4,MCF-8.95	1207-1213	SAND
288-292	LIME	906-909	SHALE	1213-1234	SANDY SHALE
292-301	SANDY SHALE	909-912	LIME	1234-1287	SHALE
301-417	SAND (WET)	912-918	BLK SHALE (LEXINGTON)	1287	TD
360	WENT TO WATER	918-926	SHALE		
417-424	SANDY SHALE	926-965	SANDY SHALE		
424-427	LMY SHALE	936	GAS TEST - SAME		
427-432	LIME	965-988	LIME (OSWEGO)		
432-442	SHALE	988-998	BLK SHALE (SUMMIT)		
442-459	LIME	998-1008	LIME		
459-466	SHALE	1008-1012	BLK SHALE (EXCELLO)		
466-476	LMY SHALE	1011	GAS TEST - SAME		
476-538	LIME	1012-1017	LIME		
538-548	BLACK SHALE	1017-1028	SANDY SHALE		
548-560	LIME	1028-1059	SHALE		
560-580	SAND	1059-1061	COAL (BEVEIR)		
580-607	LIME	1061-1076	SHALE		
607-614	SHALE	1061	GAS TEST-2#,1/4,MCF-12.7		
614-647	LIME	1076-1078	LIME (VERDIGRIS)		
647-707	SHALE	1078-1080	SHALE		
707-724	LIME	1080-1081	COAL (CROWBERG)		
724-750	SANDY SHALE	1081-1094	SHALE		
750-768	LIME	1086	GAS TEST - SAME		
768-786	SAND	1094-1121	SANDY SHALE		

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Daily Well Work Report

METZGER 16E-34
5/27/2010

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Well Location:
WILSON KS
30S-14E-34 SW NW SE SE
926FSL / 1205FEL

Cost Center G01027400300
Lease Number G010274
Property Code KSSY30S14E3416E
API Number 15-205-27820

Spud Date	RDMO Date	First Compl	First Prod	EFM Install	CygnnetID
5/27/2010	6/2/2010	6/24/2010	6/25/2010		

TD	PBTD	Sf Csg Depth	Pr Csg Depth	Tbg Size	Csg Size
1287	1280	40	1280	0	0

Reported By JM	Rig Number	Date	5/27/2010
Taken By KRD		Down Time	
Present Operation SET SURFACE		Contractor	THORNTON ROTARY

Narrative

MIRU THORNTON DRILLED 11' HOLE 40 DEEP, RIH W/2 JOINTS 8-5/8" SURFACE CASING MIXED 116 SX TYPE 1 CEMENT, DUMPED DOWN THE BACKSIDE. SDFN

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CONSOLIDATED
ON Well Services, LLC



ENTERED

TICKET NUMBER 28782
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
6-2-10	4158	Metzger 16E-34				M/son
CUSTOMER Layne Energy			KCC			
MAILING ADDRESS P.O. Box 160			TRUCK #	DRIVER	TRUCK #	DRIVER
CITY Syrmors			520	Cliff		
STATE Ks			55	Rick		
ZIP CODE						

JOB TYPE Loging 0 HOLE SIZE 6 7/8" HOLE DEPTH 1286' CASING SIZE & WEIGHT 4 1/2" Cmg
CASING DEPTH 1273' DRILL PIPE _____ TUBING _____ OTHER _____
SLURRY WEIGHT 13.2" SLURRY VOL 4284 WATER gal/sk 80 CEMENT LEFT In CASING 0'
DISPLACEMENT 20.2581 DISPLACEMENT PSI 600 MIX PSI 1100 Pump Fly RATE _____

REMARKS: Safety Meeting! Rig up to 4 1/2" Cmg. Break Circulation w/ 2581 water
Pump 10sk Gel-Flush w/ Halls 586l water spacer, 1081 Caustic Soda
Pre-Flush, 1081 Dye water. Mixed 135sk Thick Set Cement w/ 1081
8" Kol-Seal, 1/8" Phenosal, 1/2" CFL-110, +KCAF-38 C 13.2" gal. Without
Pump + lines. Release Plug Displace w/ 20.2581 water. Final Pump
Pressure 600 PSF. Run Fly to 1100 PSF wait 2mins. Release Pressure
Float Held. Good Cement to surface = 286l Slur to P.T

Job Compl

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	900.00	900.00
5406	40	MILEAGE	3.55	142.00
11264	135sk	Thick Set Cement	16.50	2227.50
1110A	1080"	Kol-Seal 8" /sk	.40	432.00
1107A	17"	Phenosal 1/8" /sk	1.12	19.04
1135	68"	CFL-110 1/2"	7.26	493.68
1146	34"	CAF-38 1/2"	7.50	255.00
1118A	500"	Gel-Flush	.17	85.00
1105	50"	Halls	.38	19.00
1103	100"	Caustic Soda	1.40	140.00
5407A	7.43	Ton - m: kggr	1.20	356.64
4404	1	4 1/2" Top Rubber Fly	44.00	44.00
			Sales Tax	511380
			ESTIMATED TOTAL	196.93
				6310.19

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AUTHORIZATION Jacob Meek TITLE _____ DATE _____

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