



KANSAS CORPORATION COMMISSION 1054394
OIL & GAS CONSERVATION DIVISION

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

OPERATOR: License # 33365
Name: Layne Energy Operating, LLC
Address 1: 1900 SHAWNEE MISSION PKWY
Address 2: _____
City: MISSION WOODS State: KS Zip: 66205 + 2001
Contact Person: Victor H. Dyal
Phone: (913) 748-3955
CONTRACTOR: License # 33606
Name: Thornton Air Rotary, LLC
Wellsite Geologist: N/A
Purchaser: _____

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 #: _____

<u>12/17/2010</u>	<u>12/20/2010</u>	<u>12/29/2010</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-205-27895-00-00

Spot Description: _____
SW NE SW SE Sec. 34 Twp. 30 S. R. 14 East West
925 Feet from North / South Line of Section
1,900 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: Wilson

Lease Name: METZGER Well #: 15G-34

Field Name: _____

Producing Formation: Cattleman

Elevation: Ground: 926 Kelly Bushing: 0

Total Depth: 1263 Plug Back Total Depth: 1255

Amount of Surface Pipe Set and Cemented at: 44 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: 1255

feet depth to: 0 w/ 135 sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 0 ppm Fluid volume: 0 bbls

Dewatering method used: Evaporated

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

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.

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: Deanna Garrison Date: 04/27/2011



1054394

Operator Name: Layne Energy Operating, LLC Lease Name: METZGER Well #: 15G-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 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 type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum See attached
---	---

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	# Sacks Used	Type and Percent Additives
Surface	11	8.75	24	44	Type 1	8	
Production	6.75	4.5	10.5	1255	Thickset	135	

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate				
___ Protect Casing				
___ Plug Back TD	-			
___ 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
2	Cattleman	400 gal 15% HCL, 6,000 lbs 16/30 & 12/20 sand, 273 bbls gelled water	1157 - 1169

TUBING RECORD: Size: <u>2/375</u> Set At: <u>1190</u> Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Date of First, Resumed Production, SWD or ENHR. <u>12/31/2010</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>19</u>	Gas Mcf	Water Bbls. <u>9</u>
		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>1157 - 1169</u>
--	--	--

Well Report

METZGER 15G-34

API Number:

AFE Number: G01027401700

Project Area:

SYCAMORE
KS Wilson
30S - 14E - 34
925FSL - 1900FEL

AFE Amount: \$0.00

Activity Date	Activity Description
12/17/2010	MIRU THORNTON DRILLED 11' HOLE 44.' DEEP, RIH W/2 JOINTS 8-5/8" SURFACE CASING MIXED 8 SX TYPE 1 CEMENT, DUMPED DOWN THE BACKSIDE. SDFN
12/20/2010	TIH W/ 6 3/4" BIT, HAMMER AND DRILL PIPE, DRILLED OUT FROM UNDER SURFACE TO 1263' TD, CATCHING SAMPLES AT ZONES OF INTEREST. RD DRILL RIG, RU OSAGE WIRELINE PULL LOGS FROM LOGGER DEPTH TO SURFACE. SDFN
12/21/2010	MI PU, RIH w/ 32 JOINTS 4-1/2" CASING, RIG UP. CONSOLIDATED, BREAK CIRCULATION WITH 25 BBLs FRESH WTR WASH DOWN 5' PUMP 10 SKS GEL FLUSH W/HULLS, 5 BBLs WATER SPACER, 20 BBLs CAUSTIC PRE-FLUSH, 10 BBLs DYE WATER MIXED 135 SKS THKSET CMT W/8#KOL-SEAL, 1/8# PHENOSEAL PER SK., 1/2% CFL-110, 1/4% CAF-38 13.4#/GAL YIELD 1.75. WASHED OUT PUMP AND LINES SHUTDOWN, RELEASE PLUG, DISPLACE W/20 BBLs FRESH WTR. FINAL PUMPING PRESSURE 800 PSI, BUMP PLUG TO 1300 PSI. WAIT 2 MINUTES, RELEASE PRESSURE, FLOAT HELD GOOD CEMENT RETURNS TO SURFACE, 42 BBLs SLURRY, 6 BBLs TO PIT. RD MOL. CSG STRING:10' SUB, 8' SUB 32 JOINTS 4-1/2" LANDED CSG @ 1255' PBTD - 1255' TD 1263'
12/27/2010	MIRU Osage Wireline. Log GR-CCL/VDL Cement Bond log from 1248' to surface. Good bond except 490'-500' and 542'-566' with marginal bond across those intervals. Rig down and MOL with Osage. Well SI. Scheduled to frac 12/29/10.
12/29/2010	MIRU Osage Wireline and Consolidated Oil Well Services. Osage RIH and perforate Cattleman from 1157' to 1169' with 2 SPF, 180 degree phase, 25 gm charges. (25 HOLES) Consolidated spotted 100 gallons 15% HCL across Cattleman perfs. Spearheaded 300 gals additional (400 total) and dropped 40 ball sealers and balled off perfs. Flowed back to clear perfs. Osage RIH with junkbasket/gauge ring and knocked off ball sealers. Consolidated fracked the Cattleman with 85 bbls PAD of 25 ppt gelled water with 2% KCL and boicide followed with 3,500 lbs 16/30 and 2,500 lbs 12/20 sand @ 0.25 to 1.5 ppg concentrations. Flushed sand with 23 bbls gelled water. Breakdown 1,573 psig, ISIP 559 psig, 5 min 451 psig, 10 min 412 psig, 15 min 387 psig. ATP 700 psig, MTP 777 psig, ATR 18.2 BPM, MTR 18.4 BPM. TOTALS 400 gallons 15% HCL, 6,000 lbs 16/30 & 12/20 sand, 273 bbls gelled water. Shut well in overnight to allow gel to break. Rig down Osage and Consolidated.

12/30/2010

TIH W/ TBG WASHED TO TD TIH W/ RODS SPACED ROD STRING HUNG ON JACK.
WASHED 40' OF SAND

TBG STRING
36- 2 3/8 TBG
0- SUBS
SN @ 1190
15' OEMA @ 1215

ROD STRING
47- 3/4 RODS
1-2' PONYS
1 1/2 X 6' BHD CUP INST PMP
1 1/8 X 11' POLISH ROD

Air Drilling Specialist
Oil & Gas Wells

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

PO Box 449
Caney, KS 67333

Date Started	12/17/2010
Date Completed	12/20/2010

Well No.	Operator	Lease	A.P.I #	County	State
15G-34	Layne Energy Operating	Metzger	205-27895-00-00	Wilson	Kansas

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

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
Billy	Oil	8	43' 8 5/8	1263	6 3/4

Formation Record

0-4	DIRT	909-952	SANDY SHALE		
4-100	LIME	953-976	LIME (OSWEGO)		
100-172	SHALE	976-984	BLK SHALE (SUMMIT)		
172-298	LMY SHALE	984-996	LIME		
298-300	SANDY SHALE	996-998	BLK SHALE (EXCELLO)		
300-434	SAND (DAMP)	998-999	COAL (MULKEY)		
434-494	LIME	999-1000	SHALE		
494-520	SAND	1000-1004	LIME		
512	WENT TO WATER	1004-1049	SANDY SHALE		
520-533	LIME	1049-1050	COAL		
537	GAS TEST - NO GAS	1050-1062	SHALE		
533-538	SHALE	1062-1063	LIME		
538-552	LIME	1063-1066	SHALE		
552-572	SAND	1066-1067	COAL (CROWBERG)		
572-640	LIME	1067-1107	SANDY		
640-695	SHALE	1088	GAS TEST - NO GAS		
695-716	LIME	1107-1108	COAL (MINERAL)		
716-717	COAL	1108-1123	SHALE		
717-737	SANDY SHALE	1123-1125	BLK SHALE / COAL		
737-747	LIME	1125-1148	SHALE		
747-757	SHALE	1148-1156	SANDY SHALE		
757-768	SAND /LITE OIL ODOR	1156-1177	SAND / OIL ODOR		
768-773	SANDY SHALE	1177-1181	SHALE		
773-797	SHALE	1181-1182	COAL		
797-798	COAL	1182-1195	SHALE		
798-868	SHALE	1188	GAS TEST-10# 1/4", MCF-30.8		
868-898	LIME (PAWNEE)	1195-1210	SANDY SHALE		
898-901	SHALE	1210-1263	SHALE		
901-903	LIME	1263	TD		
903-909	BLK SHALE (LEXINGTON)				



CONSOLIDATED
Oil Well Services, LLC

ENTERED

TICKET NUMBER 30077

LOCATION Eureka

FOREMAN Troy Strickler

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8878

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY												
12-21-10	4758	Metzger 15 G-34				Wilson												
CUSTOMER			<table border="1"> <thead> <tr> <th>TRUCK #</th> <th>DRIVER</th> <th>TRUCK #</th> <th>DRIVER</th> </tr> </thead> <tbody> <tr> <td>445</td> <td>John F</td> <td></td> <td></td> </tr> <tr> <td>441</td> <td>Calia</td> <td></td> <td></td> </tr> </tbody> </table>				TRUCK #	DRIVER	TRUCK #	DRIVER	445	John F			441	Calia		
TRUCK #	DRIVER	TRUCK #					DRIVER											
445	John F																	
441	Calia																	
Layne Energy																		
MAILING ADDRESS																		
P.O. Box 160																		
CITY	STATE	ZIP CODE																
Sycamore	Ks																	

JOB TYPE L/S '0' HOLE SIZE 6 3/4" HOLE DEPTH 1263' CASING SIZE & WEIGHT 4 1/2"
 CASING DEPTH 1255' DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 13.4" SLURRY VOL 42 WATER gal/sk 8" CEMENT LEFT in CASING 0'
 DISPLACEMENT 208bl DISPLACEMENT PSI 800 MIX PSI 1300 Bmp P_y RATE _____

REMARKS: S. Job Metzger: Rig up to 4 1/2" casing. Break circulation w/ 250bl Fresh water. Wash down 5' to PRTD 1255'. Pump 100bl Gel-Flur w/ Hulls, 100bl water, shut down. Rig up to cement. Break circulation Pump 100bl Gartic Pre-Flur 90bl dye marker. Mixed 135sk Thick Set Cement w/ 8" Kol-Flur, 1/2" Phenoxal, 1/2% FL-110, + 1/2% CAF-38 @ 13.4" gal. Work out Pump + line. Release Plug. Displace w/ 208bl Fresh water. Final Pumping pressure 1000PSI. Bmp P_y to 1300 PRT. Wait 2mins. Release Pressure. Float held. Good Cement to surface = 60bl 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	135sk	Thick Set Cement	17.00	2295.00
1110A	1080*	8" Kol-Flur / sk	.42	453.60
1107A	17*	1/2" Phenoxal / sk	1.15	19.55
1135	68*	1/2% FL-110	7.50	510.00
1146	24*	1/2% CAF-38	7.70	261.80
1118B	500*	Gel-Flur	.20	100.00
1105	50*	Hulls	.39	19.50
1107	100*	Gartic / sk	1.45	145.00
5407A	7.43	Ton-mileage	1.20	891.64
4404	1	4 1/2" Top Rubber Plug	45.00	45.00
			Sub Total	5277.09
			SALES TAX	242.53
			ESTIMATED TOTAL	5519.62

Rev'n 3737

Mike Jensen

Troy Strickler
30077-14

AUTHORIZATION _____

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.