

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

11/15/12

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: _____

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 #: _____

8/18/2010 8/19/2010 9/9/2010
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 205-27859-00-00
Spot Description:
NE NW SW SE Sec. 34 Twp. 30 S. R. 14 East West
1,295 Feet from North / South Line of Section
2,238 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Wilson
Lease Name: Metzger Well #: 15C-34
Field Name: Cherokee Basin Coal Area

Producing Formation: Cattleman Sands
Elevation: Ground: 913' Kelly Bushing: N/A
Total Depth: 1236' Plug Back Total Depth: 1232'
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: 1232
feet depth to: Surface w/ 130 sx cmf.

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

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: Victor H. Dyal
Title: Manager of Engineering Date: 11/15/2010

KCC Office Use ONLY RECEIVED
 Letter of Confidentiality Received
Date: 11/15/10 - 11/15/12 NOV 16 2010
 Confidential Release Date: _____
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT I II III Approved by: NJS Date: 11-15-10
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Operator Name: Layne Energy Operating, LLC Lease Name: Metzger Well #: 15C-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: 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; font-weight: bold; font-size: 1.2em;"> KCC NOV 15 2010 CONFIDENTIAL </div>
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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"	8.625"	24	42'	Class A	8	Type 1 Cement
Producton	6.75"	4.5"	10.5	1251'	Thick Set	130	

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>1182'</u> Packer At: _____ Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		NOV 16 2010
Date of First, Resumed Production, SWD or ENHR. <u>9/9/2010</u>		KCC WICHITA
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 Bbbs. <u>1</u>	Gas Mcf <u>2</u>
		Water Bbbs. <u>1</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>Cattleman Sands 1150'-1162'</u>
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Layne Energy Operating, LLC #33365



METZGER 15C-34

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

15-205-27859-00-00

<i>Stage #</i>	<i>Perforation Record</i>	<i>Acid, Fracture, Shot, Cement Squeeze Record</i>
Stage 1 9/8/2010	Cattleman Sand 1150' - 1162'	327 Water (bbls) 400 HCl (15%) (gal) 6000 Sand (12/20) Brown 6000 Sand (20/40) (lbs)

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Daily Well Work Report

METZGER 15C-34
8/19/2010

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Well Location:
WILSON KS
30S-14E-34 NE NW SW SE
1295FSL / 2238FEL

Cost Center G01027401000
Lease Number G010274
Property Code KSSY30S14E3415C
API Number 15-205-27859

Spud Date	RDMO Date	First Compl	First Prod	EFM Install	CygnnetID
8/18/2010	8/19/2010	9/9/2010	9/9/2010		

TD	PBTD	Sf Csg Depth	Pr Csg Depth	Tbg Size	Csg Size
1236	1232	42	1232	0	0

Reported By JM **Rig Number** **Date** 8/18/2010
Taken By KRD **Down Time**
Present Operation DRILL OUT SURFACE **Contractor** THORNTON

Narrative

MIRU THORNTON DRILLED 11" HOLE 42' DEEP, RIH W/2 JOINTS 8-5/8" SURFACE CASING MIXED 8 SX TYPE
1 CEMENT, DUMPED DOWN THE BACKSIDE. SDFN

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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

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Date Started	8/18/2010
Date Completed	8/19/2010

Well No.	Operator	Lease	A.P.I.#	County	State
15C-34	Layne Energy Operating	Metzger	15-205-27859-00-00	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	1236	6 3/4

Formation Record

0-2	DIRT	709-727	SHALE	1066-1076	SAND
2-6	CLAY	727-748	LIME	1076-1099	SANDY SHALE
6-66	LIME	748-759	SAND / LITE ODOR	1099-1100	COAL
66-280	SHALE	759-854	SAND SHALE	1100-1145	SHALE
280-283	LIME	854-856	LIME	1111	GAS TEST-3 1/2", 1", MCF-263
283-297	SHALE	856-858	COAL (MULBERRY)	1145-1164	SAND
297-370	SAND	858-886	LIME (PAWNEE)	1161	GAS TEST-5", 1", MCF-319
360	WENT TO WATER	886-888	SHALE	1164-1168	SANDY SHALE
370-400	SANDY SHALE	888-891	LIME	1168-1169	COAL
400-419	SAND	891-895	BLK SHALE (LEXINGTON)	1169-1236	SHALE
419-421	LIME	895-908	SHALE	1236	TD
421-427	SHALE	908-930	SAND		
427-446	LIME	930-938	SANDY SHALE		
435	GAS TEST-13", 1", MCF-552	938-944	SHALE		
446-453	LMY SHALE	944-967	LIME (OSWEGO)		
453-460	SHALE	961	GAS TEST-1 1/2", 1 1/2", MCF-456		
460-521	LIME	967-969	SHALE		
521-527	BLACK SHALE	969-976	BLK SHALE (SUMMIT)		
527-546	LIME	976-985	LIME		
546-566	SAND	985-990	BLK SHALE (EXCELLO)		
566-567	LIME	990-991	COAL (MULKEY)		
567-572	SANDY SHALE	991-995	LIME		
572-593	LIME	995-1006	SANDY SHALE		
593-598	SHALE	1006-1039	SHALE		
598-630	LIME	1039-1040	COAL (BEVEIR)		
610	GAS TEST-16", 1", MCF-627	1040-1054	SHALE		
630-659	SHALE	1054-1056	LIME		
659-661	LIME	1056-1058	SHALE		
661-687	SHALE	1058-1059	COAL (CROWBERG)		
687-709	LIME	1059-1066	SHALE		

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ENTERED

TICKET NUMBER 29082
 LOCATION Eureka
 FOREMAN Troy Stricker

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

FIELD TICKET & TREATMENT REPORT
CEMENT

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DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
8-20-10	4758	Metzger 15C-34				Wilson
CUSTOMER Layne Energy			TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS P.O. Box 160			520	Cliff		
CITY Sycamore			479	John		
STATE KS			436	Dave		
ZIP CODE						

JOB TYPE 4 1/2" 0" HOLE SIZE 6 3/4" HOLE DEPTH 1236' CASING SIZE & WEIGHT 4 1/2" 10.5#
 CASING DEPTH 1232' DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 13.4# SLURRY VOL 42 Bbl WATER gal/sk 80 CEMENT LEFT in CASING 0'
 DISPLACEMENT 19.5 Bbl DISPLACEMENT PSI 600 MIX PSI 1100 Bpp RATE _____

REMARKS: Safety Meeting 8-19-10 killed well. (with water only) 8-20-10 - Rig upto 4 1/2" casing. Break Circulation w/ 25 Bbl water. Pump 10sk Gel-Flush, 58 Bbl water, 20 Bbl Caustic Soda Acc-Flush, 10 Bbl Dry Water. Mixed 135 sk Thick Set Cement w/ 8" Kol-Seal @ 13.4 #/sk. Cement Had 1/4" Phenoseal, 1/2% CFL-110 + 1/2% CAF-38. Washout Pump + liner. Release Plug. Displace w/ 19.5 Bbl Water. Final Pumping Pressure 600 PSI. Bump Plug to 1100 PSI wait 2 min. Float Held. Good Cement to surface = 8 Bbl 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
5609	2 1/2 hrs	m.sc Pmp (8-19-10 kill well)	200.00	500.00
5502	2 1/2 hrs	80 Bbl Vac Truck	85.00	212.50
1126A	135 sk	Thick Set Cement	17.00	2295.00
1110A	1080 #	Kol-Seal 8" / sk	.42 #	453.60
1107A	17 #	1/4" Phenoseal Pmp	1.15 #	19.55
1135	68 #	1/2% CFL-110	7.50 #	510.00
1146	34 #	1/2% CAF-38	7.70	261.80
1118A	500 #	Gel-Flush	.20 #	100.00
1105	50 #	Hulls	.39 #	19.50
1103	100 #	Caustic Soda	1.45 #	145.00
4404	1	4 1/2" Top Rubber Ply	45.00	45.00
4161	1	4 1/2" AFU Float Shoe	273.00	273.00
5407A	7.43 hr	Ton-mileage	1.20	356.64
5502C	4 hrs	80 Bbl Vac Truck	85.00	340.00
1123	600 gal	City water	14.90 / hr	89.40
			567.41	6691.99
			SALES TAX	265.26
			ESTIMATED TOTAL	6957.25

AUTHORIZATION Suey McClure TITLE _____ DATE _____
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 Thanks @32

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.