

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

RECEIVED ORIGINAL

JUL 28 2010

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

KCC WICHITA

7/26/10

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:

CONFIDENTIAL
JUL 26 2010
KCC

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 #:

4/15/2010	4/20/2010	Pending
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 125-31945-00-00

Spot Description:
N2_SE Sec. 20 Twp. 31 S. R. 17 East West
1,261 Feet from North / South Line of Section
822 Feet from East / West Line of Section

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

County: Montgomery
Lease Name: Pierce Well #: 16-20
Field Name: Cherokee Basin Coal Area
Producing Formation: Cherokee Coals
Elevation: Ground: 818' Kelly Bushing: N/A
Total Depth: 1062' Plug Back Total Depth: 1047'
Amount of Surface Pipe Set and Cemented at: 21 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set: N/A Feet
If Alternate II completion, cement circulated from: 1047
feet depth to: Surface w/ 115 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

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: 7/26/2010

KCC Office Use ONLY

- Letter of Confidentiality Received Date: 7/26/10 - 7/26/10
- Confidential Release Date:
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: *NY* Date: 7/29/10

Operator Name: Layne Energy Operating, LLC Lease Name: Pierce Well #: 16-20 JUL 26 2010
 Sec. 20 Twp. 31 S. R. 17 East West County: Montgomery

KCC

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 type="checkbox"/> Yes <input checked="" 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; font-size: 1.2em; font-weight: bold;"> RECEIVED JUL 28 2010 KCC WICHITA </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	21'	Class A	8	Type 1 Cement
Production	6.75"	4.5"	10.5	1047'	Thick Set	115	

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

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
----------------	-------	---------	------------	--

Date of First, Resumed Production, SWD or ENHR. Pending Completion		Producing Method: <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: <input type="checkbox"/> Vented <input 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 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: _____ _____
---	---	--

Air Drilling Specialist
Oil & Gas Wells

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

RECEIVED
PO Box 449 JUL 28 2010
Caney, KS 67333
KCC WICHITA

Date Started	4-14-2010
Date Completed	4-20-2010

Well No.	Operator	Lease	A.P.I.#	County	State
16-20	Layne Energy Operating	Pierce	15-125-31945	Montgomery	Kansas

1/4	1/4	1/4	Sec.	Twp.	Rge.
			20	31	17E

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
Sean	Gas	4	19" 7" 85/8	1062	6 3/4

Formation Record

0-3	DIRT	540-545	BLK SHALE (SUMMIT)	793-799	SHALE
3-29	LIME	545-564	LIME	799-800	COAL
29-44	SHALE	561	GAS TEST - SAME	800-886	SHALE
44-45	COAL	564-570	BLK SHALE (EXCELLO)	886-888	COAL
45-76	SAND	570-571	COAL (MULKEY)	888-961	SHALE
76-114	LIME (WET)	571-578	LIME	912	GAS TEST-5#, 1/4, MCF-20.7
111	WENT TO WATER	578-598	SHALE	961-962	COAL
114-128	SHALE	586	GAS TEST - SAME	962-970	SHALE
128-148	LIME	598-599	COAL	962	GAS TEST - SAME
148-158	SHALE	599-617	SHALE	970-1000	MISS CHAT/CHIRT
158-169	LIME	617-619	LIME	987	GAS TEST - SAME
169-230	SHALE	619-621	SHALE	1000-1062	BROWN LIME
230-251	LIME	621-622	COAL	1062	TD
251-271	LMY SHALE	622-626	SHALE		
271-283	LIME	626-643	SAND		
283-294	SHALE	636	GAS TEST - SAME		
294-304	LIME	643-662	SHALE		
304-310	SHALE	662-663	COAL		
310-366	SAND	663-667	SHALE		
366-376	SANDY SHALE	667-681	SANDY SHALE		
376-420	SHALE	681-682	COAL		
420-441	LIME (PAWNEE)	682-685	SHALE		
436	GAS TEST- NO GAS	685-713	SAND		
441-446	LMY SHALE	686	GAS TEST - SAME		
446-451	BLACK SHALE	713-739	SHALE		
451-456	SHALE	739-740	COAL		
456-503	SAND (SLIGHT ODOR-476)	740-779	SAND (OIL ODOR-774)		
461	GAS TEST-2#, 1/4, MCF-12.7	779-780	COAL		
503-535	LIME (OSWEGO)	780-793	SANDY SHALE		
535-540	SHALE	787	GAS TEST-3#, 1/4, MCF-15.7		

CONFIDENTIAL
JUL 26 2010
KCC

Daily Well Work Report

PIERCE 16-20
4/15/2010

Well Location:
MONTGOMERY KS
31S-17E-20 N2 SE
1261FSL / 822FEL

Cost Center C01021600500
Lease Number C010216
Property Code COLT-0126
API Number 15-125-31945

Spud Date	RDMO Date	First Compl	First Prod	EFM Install	CygnnetID
4/15/2010	4/20/2010				

TD	PBTD	Sf Csg Depth	Pr Csg Depth	Tbg Size	Csg Size
1062	1047	21	1047		

Reported By JM	Rig Number	Date 4/15/2010
Taken By KD		Down Time
Present Operation SET SURFACE		Contractor THORNTON

Narrative

MIRU Thornton, drilled 11" hole 21' deep, RIH W/1 joint 8-5/8" surface casing. Mixed 8 sx type 1 cement, dumped down the backside. SDFN.

RECEIVED
JUL 28 2010
KCC WICHITA

CONFIDENTIAL
JUL 26 2010
KCC



CONSOLIDATED
Oil Well Services, LLC



ENTERED

TICKET NUMBER 24320

LOCATION Eureka

FOREMAN Troy Strickler

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
4-21-10	4758	Peirce 16-20				MG
CUSTOMER <u>Layne Energy</u>			TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS <u>P.O. Box 160</u>			<u>520</u>	<u>Cliff</u>		
CITY <u>Sycamore</u>			<u>515</u>	<u>Chris</u>		
STATE <u>Ks</u>			<u>437</u>	<u>Jim</u>		
ZIP CODE						

JOB TYPE Longshy HOLE SIZE 6 3/4 HOLE DEPTH 1062' CASING SIZE & WEIGHT 4 1/2"
 CASING DEPTH 1047' DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 13.2" SLURRY VOL 368bl WATER gal/sk 8° CEMENT LEFT IN CASING 0'
 DISPLACEMENT 16.6bl DISPLACEMENT PSI 500 MIX PSI 1000 supply RATE _____

REMARKS: Safety Meeting: Rig up to 4 1/2 Casing Break Circulation w/ 20bl water Pump 10sk Gel Flush w/ Halls. 2bl water spacer, 10bl Caustic Soda Pre-Flush. 7bl Nye water. Mixed 115SK Thickset Cement w/ 8" 1sk Kol-Seal, 1/2" Phenoseal, 1/2" CFL-110, + 1/4" CAF-38 @ 13.2"/gal. Wash out pump + line Release Plug. Displace w/ 16.6bl water. Final Pumping Pressure 500 PSI. Bump Plug to 1000 PSI. wait 2mins Release Pressure. Float Held. Good Cement to surface = 78bl Slurry to Pit.
Job Complete

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
1126A	115SK	Thick Set Cement	16.50	1897.50
1110A	920 #	8" Kol-Seal Pipe	.40	368.00
1107A	15 #	1/2" Phenoseal Pipe	1.12	16.80
1135	55 #	1/2" CFL-110	7.26	399.30
1146	28 #	1/4" CAF-38	7.50	210.00
1118A	500 #	Gel-Flush	.17	85.00
1105	50 #	Halls	.38	19.00
1103	100 #	Caustic Soda	1.40	140.00
5502C	4hrs	80bl Vac Truck	96.00/hr	384.00
5407A	6.32 Ton	Ton-mileage	1.20	303.36
4404	1	4 1/2" Top Rubber Plug	44.00	44.00
			Sub Total	4908.96
			SALES TAX	168.50
			ESTIMATED TOTAL	5077.48

CONFIDENTIAL
JUL 26 2010
KCC

RECEIVED
JUL 28 2010

KCC WICHITA

Ravin 3737

033816

AUTHORIZATION witnessed by Jacob

TITLE co-Rep

DATE _____