



KANSAS CORPORATION COMMISSION 1054539
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>12/10/2010</u>	<u>12/14/2010</u>	<u>4/6/2011</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-125-32019-00-00

Spot Description: _____
E2 SW SW SE Sec. 35 Twp. 31 S. R. 14 East West
330 Feet from North / South Line of Section
2,300 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: Montgomery

Lease Name: FITZPATRICK Well #: 15-35

Field Name: _____

Producing Formation: Cherokee Coals

Elevation: Ground: 916 Kelly Bushing: 0

Total Depth: 1488 Plug Back Total Depth: 1480

Amount of Surface Pipe Set and Cemented at: 20 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: 1480
feet depth to: 0 w/ 155 sx cmf.

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: 4/25/2011



1054539

Operator Name: Layne Energy Operating, LLC Lease Name: FITZPATRICK Well #: 15-35
 Sec. 35 Twp. 31 S. R. 14 East West County: Montgomery

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 (Attach Additional Sheets)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Log Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Name	Top Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	See attached	
Electric Log Run	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Electric Log Submitted Electronically (If no, Submit Copy)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
List All E. Logs Run: Compensated Density Neutron Dual Induction			

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	20	Type 1	4	
Production	6.75	4.5	10.5	1480	Thickset	155	

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 (Amount and Kind of Material Used)	Depth
	See attached		

TUBING RECORD:	Size: <u>2.375</u>	Set At: <u>1406</u>	Packer At:	Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR. <u>4/8/2011</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.	Gas Mcf <u>10</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 (If vented, Submit ACO-18.)	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. (Submit ACO-5) <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: <u>1061 - 1372</u>
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Well Report

FITZPATRICK 15-35

API Number:

AFE Number: G01071400100

Project Area:

SYCAMORE
KS Montgomery
31S - 14E - 35
330FSL - 2300FEL

AFE Amount: \$0.00

Activity Date	Activity Description
12/10/2010	MIRU THORNTON DRILLING, DRILLED 11" HOLE, 20' DEEP, RIH W/1 JT 8 5/8" SURFACE CASING, MIXED 4 SX TYPE 1 CEMENT, DUMPED DOWN THE BACKSIDE. SDFN.
12/13/2010	TIH W/6-3/4" HAMMER BIT AND DRILL PIPE, DRILLED OUT FROM UNDER SURFACE TO 1211', PULLED BACK TO 900' SHUT DOWN FOR NIGHT.
12/14/2010	RESUME DRILLING FROM 1212 TO 1488 TD TESTING ZONES OF INTREST RD DRILL RIG MI OSAGE WIRE LINE PULL LOGS FROM LOGGER DEPTH TO SURFACE RD MOL.
12/15/2010	MI PU, RIH w/ 38 JOINTS 4-1/2" CASING, RIG UP CONSOLIDATED, BREAK CIRCULATION WITH 35 BBLs FRESH WTR PUMP 10 SKS GEL FLUSH W/HULLS, 5 BBLs WATER SPACER, 20 BBLs CAUSTIC PRE-FLUSH, 14 BBLs DYE WTR. MIXED 155 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/23.5 BBLs FRESH WTR. FINAL PUMPING PRESSURE 700 PSI, BUMP PLUG TO 1100 PSI. WAIT 2 MINUTES, RELEASE PRESSURE, FLOAT HELD GOOD CEMENT RETURNS TO SURFACE, 48 BBLs SLURRY, 8 BBLs TO PIT. RD MOL. 38 JTS 4-1/2 PBSD 1479.9 TD1488
3/18/2011	MOL & RU Osage Wireline. Run GR-Ccl-Vcl Cement Bond log from 1468' to Surface. Bond looks good all depths. RDMOL Osage Wireline. Well SI waiting for completion.

Air Drilling Specialist
Oil & Gas Wells

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

PO Box 449
Caney, KS 67333

Date Started	12/10/2010
Date Completed	12/14/2010

Well No.	Operator	Lease	A.P.I.#	County	State
15-35	Layne Energy Operating	Fitzpatrick	125-32019-00-00	Montgomery	Kansas

1/4	1/4	1/4	Sec.	Twp.	Rge.
			35	31	14

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
Billy	Gas	4	20' 8 5/8	1488	6 3/4

Formation Record

0-2	DIRT	962	GAS TEST - NO GAS	1285-1286	COAL
2-58	LIME	1006-1031	LIME (OSWEGO)	1286-1335	SANDY SHALE
58-62	SHALE	1031-1039	BLK SHALE (SUMMIT)	1335-1336	BLK SHALE / COAL
62-140	LIME (DAMP)	1037	GAS TEST - NO GAS	1336-1369	SHALE
140-351	SHALE	1039-1058	LIME	1338	GAS TEST - SAME
351-373	SAND	1058-1064	BLACK SHALE	1369-1370	COAL
373-374	COAL	1062	GAS TEST - NO GAS	1370-1420	SHALE
374-418	SANDY SHALE	1064-1065	COAL (MULKEY)	1388	GAS TEST - SAME
418-423	LIME (WET)	1065-1075	LIME	1420-1421	COAL
423-426	SHALE	1075-1091	SHALE	1421-1425	SHALE
426-446	LIME	1091-1092	COAL	1425-1429	MISS. CHATT (MISS.)
446-472	SHALE	1092-1107	SHALE	1429-1436	GRAY SHALE
472-526	LIME	1107-1108	LIME	1436-1458	MISS. CHATT
526-617	SANDY SHALE	1108-1109	COAL (CROWBERG)	1438	GAS TEST - SAME
617-630	LIME	1109-1158	SHALE	1458-1488	GRAY LIME
630-671	SANDY SHALE	1112	GAS TEST - NO GAS	1463	GAS TEST - SAME
671-676	LIME	1158-1159	COAL (MINERAL)	1488	TD
676-724	SHALE	1159-1177	SHALE		
724-746	LIME	1177-1178	COAL		
746-771	SHALE	1178-1181	SHALE		
771-783	LIME	1181-1188	SAND / OIL ODOR		
783-795	SHALE	1188-1204	SANDY SHALE		
795-799	LIME	1204-1210	WHITE SAND		
799-860	SHALE	1210-1228	SANDY SHALE		
837	WENT TO WATER	1228-1229	COAL		
860-906	SANDY SHALE	1229-1234	SANDY SHALE		
906-907	COAL (MULBERRY)	1234-1255	SHALE		
907-932	LIME (PAWNEE)	1255-1256	COAL		
932-937	BLK SHALE (LEXINGTON)	1256-1285	SHALE		
937-1006	SANDY SHALE	1263	GAS TEST-10R, 1/4", MCF-30.8		



CONSOLIDATED
Oil Well Services, LLC

ENTERED

TICKET NUMBER 30046

LOCATION Empire, KS

FOREMAN Rick Ledford

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
12-15-10	4758	Empire 15-35	35	S1	18E	MC
CUSTOMER			TRUCK #			
Layne Energy			DRIVER			
MAILING ADDRESS			TRUCK #			
P.O. Box 160			DRIVER			
CITY			TRUCK #			
Sycamore			DRIVER			
STATE			TRUCK #			
KS			DRIVER			
ZIP CODE			TRUCK #			
			DRIVER			

Safety meeting
Ck off

JOB TYPE longstring OG HOLE SIZE 6 3/4" HOLE DEPTH 1482' CASING SIZE & WEIGHT 4 1/2"
 CASING DEPTH 1490' DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 13.4# SLURRY VOL. 48 bbl WATER gal/sk 8.0 CEMENT LEFT in CASING 0'
 DISPLACEMENT 28.5 bbl DISPLACEMENT PSI 700 RATE PSI 1100 RATE _____

REMARKS: Safety meeting. Rig up to 4 1/2" casing. Break circulation w/ 35 bbl fresh water. Pump 10 sks gel-flush w/ bulls, 20 bbl caustic soda pre-flush 14 bbl dye water. Mixed 155 sks thickest cement w/ 8" Nelson/sk, 1/2" phenol/sk 1/2% F-110 + 1/2% CAF-38 @ 13.9#/gal. Washout pump + loss, shut down, release plug. Displace w/ 23.5 bbl fresh water. Final pump pressure 700 psi. Pump plug to 1100 PSI. wait 2 mins. release pressure, flow held. Good cement returns to surface = 8 bbl slurry to pit. Job complete. Rig down.

" Thank You "

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	155 sks	thickest cement	17.00	2635.00
1110A	1240 #	8" Nelson/sk	.42	520.80
1107A	20 #	1/2" phenol/sk	1.15	23.00
1135	72 #	1/2% CAF-110	7.50	540.00
1146	39 #	1/4% CAF-38	7.70	300.30
1118B	500 #	gel-flush	.20	100.00
1105	50 #	bulls	.39	19.50
1103	100 #	caustic soda	1.45	145.00
5407A	8.5	for mileage bull truck	1.20	409.44
4404	1	4 1/2" top rubber plug	45.00	45.00
			Subtotal	5854.04
			SALES TAX	225.56
			ESTIMATED TOTAL	6129.60

Form 3737

888100

AUTHORIZATION [Signature] TITLE Perm Foreman 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.