



KANSAS CORPORATION COMMISSION 1054300
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 # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

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 #: _____

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - _____

Spot Description: _____

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

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

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: _____ Date: _____



Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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

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

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: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method: Flowing Pumping Gas Lift 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> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
---	--	--

Air Drilling Specialist
Oil & Gas Wells

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

PO Box 449
Caney, KS 67333

Date Started	12/28/2010
Date Completed	12/29/2010

Well No.	Operator	Lease	A.P.I #	County	State
1R-3	Layne Energy Operating	Zook	125-32016-00-00	Montgomery	Kansas

1/4	1/4	1/4	Sec.	Twp.	Rge.
			3	31	14E

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
Billy	Oil	4	21' 8 5/8	1287	6 3/4

Formation Record

0-4	DIRT	1017-1021	BLACK SHALE		
4-76	LIME	1021-1022	COAL (MULKEY)		
76-286	LMY SHALE	1022-1028	LIME		
286-291	LIME	1028-1070	SHALE		
291-396	SAND (DAMP)	1070-1071	COAL		
311	WENT TO WATER	1071-1084	SHALE		
396-399	LIME	1084-1086	LIME		
399-430	SHALE	1086-1088	SHALE		
430-463	LIME	1088-1089	COAL (CROWBERG)		
463-512	LMY SHALE	1089-1130	SHALE		
512-532	LIME	1130-1132	COAL (MINERAL)		
532-537	BLACK SHALE	1132-1173	SHALE		
537-560	LIME	1162	GAS TEST - NO GAS		
560-596	SANDY SHALE	1173-1178	BLACK SHALE		
596-617	LIME	1178-1182	SANDY SHALE		
617-625	SHALE	1182-1196	SAND / OIL ODOR		
625-655	LIME	1196-1198	COAL (WEIR)		
655-712	SHALE	1198-1207	SHALE		
712-726	LIME	1207-1219	SANDY SHALE		
726-753	SHALE	1212	GAS TEST - SAME		
753-778	LIME	1219-1228	SAND/SOY SHALE / LT OIL ODOR		
778-791	SAND	1228-1255	SHALE		
791-887	SHALE	1255-1260	SAND		
887-888	COAL (MULBERRY)	1260-1287	SHALE		
888-918	LIME (PAWNEE)	1287	TD		
918-925	BLK SHALE (LEXINGTON)				
925-974	SHALE				
974-997	LIME (OSWEGO)				
997-1005	BLK SHALE (SUMMIT)				
1005-1017	LIME				

Well Report

ZOOK 1R-3

API Number:

AFE Number: W846

Project Area:

SYCAMORE
KS Montgomery
31S - 14E - 3
1354FNL - 170FEL

AFE Amount: \$0.00

Activity Date	Activity Description
12/28/2010	MIRU Thornton, drilled 11" hole 22' deep, RIH W/1 joint 8-5/8" surface casing. Mixed 4 sx type 1 cement, dumped down the backside. SDFN.
12/29/2010	TIH W/ 6 3/4" BIT, HAMMER AND DRILL PIPE, DRILLED OUT FROM UNDER SURFACE TO 1287', PULLING SAMPLES AND TESTING ZONES OF INTEREST, PULL BIT OFF BOTTOM, WASHED HOLE CLEAN MI OSAGE, PULLED OPEN HOLE LOG FROM TD TO SURFACE. See Driller's Log LOGGING TOOL HAD GOOD OIL SHOW WHEN FINISHED RUN.
12/30/2010	MI RIH w/33 JOINTS 4-1/2" CASING, RIG UP CONSOLIDATED, BREAK CIRCULATION W/25 BBLs FRESH WATER, WASHED DOWN 6' PUMP 10 SKS GEL FLUSH, 5 BBLs WATER SPACER, 20 BBLs CAUSTIC SODA PRE FLUSH, 10 BBLs DYE WATER, MIXED 135 SKS THICKSET CEMENT W/8# KOL SEAL/SK 1/8# PHENO SEAL/SK 1/2% CFL-110, 1/4% CAF-38, @13.4# 1 GAL. SHUT DOWN, WASH OUT PUMP AND LINES RELEASE PLUG, DISPLACE WITH 20 BBLs FRESH WATER FINAL PUMPING PRESSURE 600 PSI. BUMP PLUG TO 1000 PSI. WAIT 2 MINUTES, RELEASE PRESSURE, FLOAT HELD. GOOD CEMENT RETURNS TO SURFACE, 42 BBLs SLURRY, 9 BBLs TO PIT. SD MOL. MAY HAVE A MIXTURE ON 10.5 AND 9.5 LIMITED SERVICE CASING DISPLACEMENT WAS .5 BBL OFF. CSG STRING: 33 JOINTS 4-1/2" LANDED CSG @ 1280.6' PBSD - 1280.6' TD 1287

1/18/2011

MIRU Osage Wireline and Consolidated Oil Well Services. Osage RIH and ran Digital Bond Log from 1274' to surface. Good Bond entire well. Perforated Cattleman from 1180' to 1192' 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. Transducer on Blender malfunctioned during balloff. Flowed back to clear perfs. Osage RIH with junkbasket/gauge ring and knocked off ball sealers. Consolidated fracked the Cattleman with 90 bbls PAD of 25 ppt gelled water with 2% KCL and boicide followed with 7,000 lbs 16/30 and 7,400 lbs 12/20 sand @ 0.25 to 2.5 ppg concentrations. Dropped 10 balls during frac. Flushed sand with 20 bbls gelled water. Due to malfunctioning of blender transducer, we used additional water during job and ran out at end of flush.

Breakdown 1,554 psig, ISIP 575 psig, 5 min 510 psig, 10 min 475 psig, 15 min 442 psig. ATP 1060 psig, MTP 1152 psig, ATR 26.0 BPM, MTR 26.3 BPM.

TOTALS 400 gallons 15% HCL, 14,400 lbs 16/30 & 12/20 sand, 400 bbls gelled water.

Shut well in overnight to allow gel to break. Rig down Osage and Consolidated.

1/19/2011

TIH W/ TBG WASHED 40 FT OF SAND TO TD HUNG OFF TBG TIH W/ ROD STRING SPACED OUT ROD STRING HUNG ON JACK PLUMED IN WELL HEAD WOP.

TUBING STRING

37 JTS 2-3/8

SN @ 1216'

15' OEMA 1232'

ROD STRING

48 - 3/4 RODS

1-6' 1-2' ROD SUBS

1-1/2 X 6' CUP PUMP WITH 4' GTA THD



CONSOLIDATED
Oil Well Services, LLC



ENTERED

TICKET NUMBER 30110

LOCATION Eureka 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
12-30-10	4758	Zook 1R-3				MG
CUSTOMER <u>Layne Energy</u>		Safety meeting 5:30 AM	TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS <u>P.O. Box 160</u>			445	John		
CITY <u>Sycamore</u>			515	Allen B.		
STATE <u>KS</u>	ZIP CODE					

JOB TYPE logstring HOLE SIZE 6 3/4" HOLE DEPTH 1287' CASING SIZE & WEIGHT 4 1/2"
 CASING DEPTH 1281' DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 13.9" SLURRY VOL 42 BW WATER gal/sk 8.0 CEMENT LEFT in CASING 0'
 DISPLACEMENT 20.4 DISPLACEMENT PSI 600 ~~MAX~~ PSI 1000 RATE _____

REMARKS: Safety meeting - Rig up to 4 1/2" casing. Break circulation w/ 25 BW fresh water. Washdown 6' to PSTD. Pump 20 sacks gel-flush w/ hulls, 5 BW water spacer 20 BW caustic soda pre-flush, 10 BW dye water. Mixed 135 sacks thickset cement w/ 8" Kol-seal/sk, 1/8" phenoxal/sk, 1/2% CSE-110 + 1/4% CAF-38 @ 13.4"/gal. Washout plug + lines, release plug. Displace w/ 20.4 BW fresh water. Final pump pressure 600 PSI. Pump plug to 1000 PSI wait 2 mins. release pressure, float hatch. Good cement returns to surface = 9 BW 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	135 sacks	thickset cement	17.00	2295.00
1110A	1080 #	8" Kol-seal/sk	.42	453.60
1107A	17 #	1/8" phenoxal/sk	1.15	19.55
1135	68 #	1/2% CSE-110	7.50	510.00
1146	34 #	1/4% CAF-38	7.70	261.80
11186	500 #	gel-flush	.20	100.00
1105	50 #	hulls	.39	19.50
1103	100 #	caustic soda	1.45	145.00
5407A	7.43	top mileage bulk truck	1.20	356.64
4404	1	4 1/2" top rubber plug	45.00	45.00
		Subtotal		5277.09
		SALES TAX		242.52
		ESTIMATED TOTAL		5519.62

Revin 3737

AUTHORIZATION Jacob Meador TITLE Drill Farmer 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.

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



phone: 316-337-6200
fax: 316-337-6211
<http://kcc.ks.gov/>

Thomas E. Wright, Chairman
Ward Loyd, Commissioner

Corporation Commission

Sam Brownback, Governor

April 19, 2011

Victor H. Dyal
Layne Energy Operating, LLC
1900 SHAWNEE MISSION PKWY
MISSION WOODS, KS 66205-2001

Re: ACO1
API 15-125-32016-00-00
ZOOK 1R-3
NE/4 Sec.03-31S-14E
Montgomery County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Victor H. Dyal