



**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
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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 Bbbs.	Gas Mcf	Water Bbbs.	Gas-Oil Ratio	Gravity
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<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <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) _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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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

Date Started	<b>12/20/2010</b>
Date Completed	<b>12/21/2010</b>

Well No.	Operator	Lease	A.P.I.#	County	State
<b>15Q-34</b>	<b>Layne Energy Operating</b>	<b>Metzger</b>	<b>205-27980-00-00</b>	<b>Wilson</b>	<b>Kansas</b>

1/4	1/4	1/4	Sec.	Twp.	Rge.
			<b>34</b>	<b>30</b>	<b>14</b>

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
<b>Billy</b>	<b>Oil</b>	<b>8</b>	<b>43' 8 5/8</b>	<b>1262</b>	<b>6 3/4</b>

### Formation Record

0-4	DIRT	897-898	LIME		
4-66	LIME	898-904	BLACK SHALE		
66-80	LMY SHALE	904-914	SHALE		
80-201	SHALE	914-921	SAND		
201-295	LMY SHALE	921-949	SHALE		
295-306	LIME	949-975	LIME (OSWEGO)		
306-413	SAND (DAMP)	975-986	BLK SHALE (SUMMIT)		
361	WENT TO WATER	986-989	LIME		
413-418	LIME	989-995	BLACK SHALE		
418-426	SHALE	995-996	COAL (MULKEY)		
426-524	LIME	996-1062	SHALE		
524-530	BLACK SHALE	1062-1063	LIME		
530-548	LIME	1063-1066	SHALE		
548-576	SANDY SHALE	1066-1067	COAL (CROWBERG)		
576-635	LIME	1067-1106	SHALE		
586	GAS TEST - NO GAS	1106-1107	COAL (MINERAL)		
635-703	SHALE	1107-1153	SHALE		
703-712	LIME	1153-1158	SANDY SHALE		
712-734	SHALE	1158-1173	SAND / OIL ODOR		
734-746	LIME	1173-1177	SANDY SHALE		
746-749	BLACK SHALE	1177-1180	COAL		
749-758	LIME	1180-1188	SAND / OIL ODOR.		
758-770	SAND/LITE OIL ODOR	1187	GAS TEST-8#, 1/4", MCF-27		
770-785	SANDY SHALE	1188-1203	SANDY SHALE		
785-859	SHALE	1203-1207	GRAY SAND		
859-860	LIME	1207-1262	SHALE		
860-861	COAL (MULBERRY)	1262	TD		
861-863	SHALE				
863-892	LIME (PAWNEE)				
892-897	BLK SHALE (LEXINGTON)				



ENTERED

TICKET NUMBER 30124  
 LOCATION EUREKA  
 FOREMAN KEVIN MCCOY

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												
12-22-10	4758	Metzger 15 Q 34				Wilson												
CUSTOMER Layne Energy			<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 S.</td> <td></td> <td></td> </tr> <tr> <td>543</td> <td>Shannon F</td> <td></td> <td></td> </tr> </tbody> </table>				TRUCK #	DRIVER	TRUCK #	DRIVER	445	John S.			543	Shannon F		
TRUCK #	DRIVER	TRUCK #					DRIVER											
445	John S.																	
543	Shannon F																	
MAILING ADDRESS P.O. Box 160																		
CITY Sycamore	STATE Ks	ZIP CODE																

Safety Meeting  
 Km  
 JS  
 S.F.

JOB TYPE longstring O HOLE SIZE 6 3/4 HOLE DEPTH 1262' CASING SIZE & WEIGHT 4 1/2  
 CASING DEPTH 1252' DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 13.4\* SLURRY VOL 42 BBL WATER gal/sk 9.0 CEMENT LEFT in CASING 0'  
 DISPLACEMENT 20 BBL DISPLACEMENT PSI 700 MAX PSI 1200 Bump Plug RATE \_\_\_\_\_

REMARKS: Safety Meeting: Rig up to 4 1/2 casing. Break circulation w/ 25 BBL fresh water. Pump 10 sks Gel flush w/ Halls, 10 BBL water spacer, 10 BBL caustic pre flush, 9 BBL dye water. Mixed 135 sks Thick Set Cement w/ 8" Kol-Seal/sk, 1/8" pheno seal, 1/2% CFL-110, 1/4% CAF-38 @ 13.4\*/gal, yield 1.75. Shut down. Wash out pump & lines. Release Plug. Displace w/ 20 BBL fresh water. FINAL Pumping Pressure 700 PSI. Bump Plug to 1200 psi. wait 2 minutes. Release Pressure. float held. Good Cement Returns to Surface = 6 BBL Slurry to Pit. Job Complete. Rig down.

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
1126 A	135 sks	THICK Set Cement	17.00	2295.00
1110 A	1080 *	Kol-Seal 8"/sk	.42	453.60
1107 A	17 *	Pheno Seal 1/8"/sk	1.15	19.55
1135	68 *	CFL-110 1/2 %	7.50	510.00
1146	34 *	CAF-38 1/4 %	7.70	261.80
1118 B	500 *	Gel flush	.20	100.00
1105	50 *	Halls	.39	19.50
1103	100 *	Caustic Soda	1.45	145.00
5407 A	7.43 Tons	40 miles Bulk Delv.	1.20	356.64
4404	1	4 1/2 Top Rubber Plug	45.00	45.00
			Sub Total	5277.09
			SALES TAX 6.3%	242.53
			ESTIMATED TOTAL	5519.62

THANK YOU  
 038846

Ravin 3737

AUTHORIZATION [Signature] 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.

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# Well Report

## METZGER 150-34

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**API Number:**

**AFE Number:** G01027401500

**Project Area:**

SYCAMORE  
KS Wilson  
30S - 14E - 34  
200FSL - 1975FEL

**AFE Amount:** \$0.00

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Activity Date	Activity Description
12/20/2010	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
12/21/2010	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
12/22/2010	MI PU, RIH w/ 32 JOINTS 4-1/2" CASING, RIG UP CONSOLIDATED, BREAK CIRCULATION WITH 25 BBLS FRESH WTR PUMP 10 SKS GEL FLUSH W/HULLS, 5 BBLS WATER SPACER, 20 BBLS CAUSTIC PRE-FLUSH, 9 BBLS DYE WTR. 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 700 PSI, BUMP PLUG TO 1200 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 @ 1252' PBSD - 1252' TD 1263'
12/29/2010	MOL RU Osage Wireline. RIH with GR-CCL/VDL Cement Bond log. Logged from 1242' (Loggers PBSD 1243') to surface. Good bond except 300'-328'.  Rig down Osage Wireline. SI Well.
1/5/2011	MIRU Osage Wireline and Consolidated Oil Well Services. Osage RIH and perforate Cattleman from 1155' to 1169' with 2 SPF, 180 degree phase, 25 gm charges. (29 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 6,000 lbs 16/30 and 8,000 lbs 12/20 sand @ 0.25 to 2.5 ppg concentrations. Dropped 10 balls during frac. Flushed sand with 24 bbls gelled water. Breakdown 1,383 psig, ISIP 588 psig, 5 min 502 psig, 10 min 468 psig, 15 min 444 psig. ATP 820 psig, MTP 935 psig, ATR 26.5 BPM, MTR 26.7 BPM.  TOTALS 400 gallons 15% HCL, 14,000 lbs 16/30 & 12/20 sand, 349 bbls gelled water.  Shut well in overnight to allow gel to break. Rig down Osage and Consolidated.

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**1/6/2011**

MI RU TRIPPED IN HOLE WITH TUBING HIT 15' OF SAND WASHED TO TD HUNG SN @ 1184' 15' OEMA @1199' RAN NEW RODS WITH GUIDES AND 6' BHD CUP PMP HUNG OFF ON WELL HEAD WELL READY FOR PROD.

**TUBING STRING**

36 JTS 2-3/8

0' SUB

SN @ 1184

15' OEMA 1199

**ROD STRING**

46 - 3/4 RODS

1-8',2-6'-2' ROD SUBS

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

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 15-205-27890-00-00  
METZGER 15Q-34  
SE/4 Sec.34-30S-14E  
Wilson 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