

Kansas Corporation Commission Oil & Gas Conservation Division

1054394

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 #	API No. 15
Name:	Spot Description:
Address 1:	SecTwpS. R
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	County:
Name:	Lease Name: Well #:
Wellsite Geologist:	Field Name:
Purchaser:	Producing Formation:
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:
☐ New Well ☐ Re-Entry ☐ Workover	Total Depth: Plug Back Total Depth:
☐ Oil ☐ WSW ☐ SIOW ☐ Gas ☐ D&A ☐ ENHR ☐ SIGW ☐ OG ☐ GSW ☐ Temp. Abd. ☐ CM (Coal Bed Methane) ☐ Cathodic ☐ Other (Core, Expl., etc.):	Amount of Surface Pipe Set and Cemented at: Feet Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	·
Operator: Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth: Conv. to ENHR	Chloride content: ppm Fluid volume: bbls Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #:	Operator Name:
Dual Completion Permit #:	Lease Name: License #:
SWD Permit #:	Quarter Sec TwpS. R
☐ ENHR Permit #: ☐ GSW Permit #:	County: Permit #:
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date Recompletion Date	

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 Approved by: Date:

Side Two



Operator Name:			Lease Name	e:			_ Well #:	
Sec Twp	S. R	East West	County:					
time tool open and clos	sed, flowing and shut s if gas to surface tes	I base of formations per in pressures, whether set, along with final chart well site report.	shut-in pressure	reached s	static level,	hydrostatic press	sures, bottom h	ole temperature, fl
Orill Stem Tests Taken (Attach Additional S		Yes No		Log	Formatio	n (Top), Depth an	d Datum	Sample
Samples Sent to Geolo		☐ Yes ☐ No	N	lame			Тор	Datum
Cores Taken Electric Log Run Electric Log Submitted (If no, Submit Copy)	I Electronically	Yes No Yes No Yes No						
List All E. Logs Run:			RECORD [Used			
	Size Hole	Report all strings set- Size Casing	-conductor, surface Weight		ate, producti Setting	on, etc. Type of	# Sacks	Type and Percen
Purpose of String	Drilled	Set (In O.D.)	Lbs. / Ft.		Depth	Cement	Used	Additives
		ADDITIONA	L OFMENTING (00115575	DECORD			
		ADDITIONA	L CEMENTING / :	SQUEEZE	RECORD			
Purpose: Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Type of Cement	# Sacks Used	d		Type and F	Percent Additives	
Shots Per Foot		ON RECORD - Bridge Plu ootage of Each Interval Pe				cture, Shot, Cement mount and Kind of Ma	•	d Depth
TUBING RECORD:	Size:	Set At:	Packer At:	Line	r Run:	Yes No		
Date of First, Resumed I	Production, SWD or ENI	HR. Producing Me	thod:	Gas Li	ift C	Other (Explain)		
Estimated Production Per 24 Hours	Oil E	Bbls. Gas	Mcf	Water	В	ols. (Gas-Oil Ratio	Gravity
DISPOSITIO	Used on Lease	Open Hole	METHOD OF COM Perf. D (Sub	MPLETION: ually Comp omit ACO-5)	. Cor	nmingled mit ACO-4)	PRODUCTIO	DN INTERVAL:
(If vented, Sub	mit ACO-18.)	Other (Specify)						

Well Report METZGER 15G-34

API Number: G01027401700

Project Area: SYCAMORE **AFE Amount:** \$0.00

KS Wilson 30S - 14E - 34 925FSL - 1900FEL

Activity Date	Activity Description
12/17/2010	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
12/20/2010	TIH W/ $63/4$ " 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
12/21/2010	MI PU, RIH w/ 32 JOINTS 4-1/2" CASING, RIG UP CONSOLIDATED, BREAK CIRCULATION WITH 25 BBLS FRESH WTR WASH DOWN 5' PUMP 10 SKS GEL FLUSH W/HULLS, 5 BBLS WATER SPACER, 20 BBLS CAUSTIC PRE-FLUSH, 10 BBLS DYE WATER 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 800 PSI, BUMP PLUG TO 1300 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 @ 1255' PBTD - 1255' TD 1263'
12/27/2010	MIRU Osage Wireline. Log GR-CCL/VDL Cement Bond log from 1248' to surface. Good bond except 490'-500' and 542'-566' with marginal bond across those intervals. Rig down and MOL with Osage. Well SI. Scheduled to frac 12/29/10.
12/29/2010	MIRU Osage Wireline and Consolidated Oil Well Services. Osage RIH and perforate Cattleman from 1157' to 1169' 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. 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 3,500 lbs 16/30 and 2,500 lbs 12/20 sand @ 0.25 to 1.5 ppg concentrations. Flushed sand with 23 bbls gelled water. Breakdown 1,573 psig, ISIP 559 psig, 5 min 451 psig, 10 min 412 psig, 15 min 387 psig. ATP 700 psig, MTP 777 psig, ATR 18.2 BPM, MTR 18.4 BPM.
	TOTALS 400 gallons 15% HCL, 6,000 lbs 16/30 & 12/20 sand, 273 bbls gelled water.
	Shut well in overnight to allow gel to break. Rig down Osage and Consolidated.

Wednesday, April 20, 2011 Page 1 of 2

12/30/2010 TIH W/ TBG WASHED TO TD TIH W/ RODS SPACED ROD STRING HUNG ON JACK. WASHED 40' OF SAND

TBG STRING 36- 2 3/8 TBG 0- SUBS SN @ 1190 15' OEMA @ 1215

ROD STRING 47- 3/4 RODS 1-2' PONYS 1 1/2 X 6' BHD CUP INST PMP 1 1/8 X 11' POLISH ROD

Wednesday, April 20, 2011 Page 2 of 2

Air Drilling Specialist Oil & Gas Wells

THORNTON AIR ROTARY, LLC

Office Phone: 620-879-2073

PO 8ox 449 Caney, KS 67333

Date Started	12/17/2010
Date Completed	12/20/2010

Well No.	Operator	Lease	A.P.1#	County	State
15G-34	Layne Energy Operating	Metzger	205-27895-00-00	Wilson	Kansas
1/4	1/4	1/4	Sec.	Twp.	Rge.

Driller	Type/Well	Cement Used	Casir	ng Used	7	Depth	Size of Hole	
Billy	Oil	 8	43'	85/8		1263	63/4	

Formation Record

-		I VIIIIat	ion kecora		
0-4	DIRT	909-952	SANDY SHALE		
4-100	LIME	953-976	LIME (OSWEGO)	T-	
100-172	SHALE	976-984	BLK SHALE (SUMMIT)	<u> </u>	
172-298	LMY SHALE	984-996	LIME		
298-300	SANDY SHALE	996-998	BLK SHALE (EXCELLO)		
300-434	SAND (DAMP)	998-999	COAL (MULKEY)		
434-494	LIME	999-1000	SHALE		
494-520	SAND	1000-1004	LIME		
512	WENT TO WATER	1004-1049	SANDY SHALE		
520-533	LIME	1049-1050	COAL		
537	GAS TEST - NO GAS	1050-1062	SHALE		
533-538	SHALE	1062-1063	LIME		
538-552	LIME	1063-1066	SHALE	 -	
552-572	SAND	1066-1067	COAL (CROWBERG)	· · · · · · · · · · · · · · · · · · ·	
572-640	LIME	1067-1107	SANDY		
640-695	SHALE	1088	GAS TEST - NO GAS	•	
695-716	LIME	1107-1108	COAL (MINERAL)	_,	
716-717	COAL	1108-1123	SHALE		
717-737	SANDY SHALE	1123-1125	BLK SHALE / COAL		
737-747	LIME	1125-1148	SHALE	<u> </u>	
747-757	SHALE	1148-1156	SANDY SHALE		
757-768	SAND /LITE OIL ODOR	1156-1177	SAND / OIL ODOR		
768-773	SANDY SHALE	1177-1181	SHALE		
773-797	SHALE	1181-1182	COAL		
797-798	COAL	1182-1195	SHALE		
798-868	SHALE	1188	GAS TEST-10#,1/4",MCF-30.8		
868-898	LIME (PAWNEE)	1195-1210	SANDY SHALE		
898-901	SHALE		SHALE	 	
901-903	LIME		TD		
903-909	BLK SHALE (LEXINGTON)			+	
			· · · · · · · · · · · · · · · · · · ·		<u>.</u>





TICKET NUMBER	30077
LOCATION	Eureka
FOREMAN TO	ou State Kleic

DATE

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

AUTHORIZTION_

FIELD TICKET & TREATMENT REPORT CEMENT

DATE	CUSTOMER#	WELL NA	ME & NUMB	ER	SECTION	TOWNSHIP	RANGE	COUNTY
12-21-10	4758	Metzger	15 G	- 34				Wilson
CUSTOMER	_			SIGHMAY			Cucton Indian'i (17 15 17 17 17 17 17 17 17 17 17 17 17 17 17
Lay				77 /	TRUCK#	DRIVER	TRUCK#	DRIVER
MAILING ADDRE	ESS C			<i>)</i> 5	445	John E		
P.o. B	ox 160			CF	441	Calin		
CITY		STATE ZIP	CODE	_				
Svam	gre	K ₃						
JOB TYPE	15 '0'	اط HOLE SIZE	<i>y</i>	HOLE DEPTH	1263'	CASING SIZE & W	/EIGHT <u>4%</u> *	
CASING DEPTH	1255	DRILL PIPE		TUBING			OTHER	
SLURRY WEIGH	IT 13.4"	SLURRY VOL_ 42	<u> </u>	WATER gal/sl	<u>8.°</u>	CEMENT LEFT in	CASING 0'	
DISPLACEMENT	2081	DISPLACEMENT PS	<u> 800</u>	MIX PSI 130	Bus Py	RATE		
REMARKS: 52	Soh Meeter	Rig woto	4% C	esing. B	reck Circul	atta ul 2	SAN Fresh	wate.
Wash down	of 12	PRTO 1255	Pens	IDIK Ge	1-Flux w	Hulls, lor	U nater.	Short Down
Rig up to	Cement.	Breek Cira	elation.	Ring 10	Obl Church	2 Pre-Flux	9BLI Dye	nakri
V 1.		hick Set Co	nent	<u>~/ 8 \/</u>	kol-feel	1/8" Phenose	1 /22	<u> 2~110, </u>
4 Y4Z		2 13.4 M/gal.						
W/ 2084	I Freil	water. Fina	Pus	or wise	erre 100	PRIT. Bup	Phy to 1	ROO PIT.
Wait 2mil	m. Reloa	re Pressure.				emmt to	suffere =	
Starry 1	to pit.	·						
		Db Complet						
		1						

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
1012	1	PUMP CHARGE	925.00	925-00
5406	40	MILEAGE	3.65	146.00
1126A	13574	Thickset Cement	17.00	2295.60
1110A	1080 #	8 + Kol-Gal/JK	,42	453.60
1107A	17#	1/8# Phenoreal 1sk	1.15	12.51
1135	68 H	1/27. FL-110	7.50	51000
1146	34 #	147 CAF-38	7.70	261.80
11186	500#	Gel- Flust	.20	100.00
1105	70°	Hulle	1.79	19.50
1103	100#	Caustic soda	1.46	/5.00
SYOTA	7.43	Ton-milaye	1.20	354.64
4404		4x Top Rubber Ply	4.C. 00	45.00
			Sib Hed	5277.09
		Truk 63?		242.53
avin 9737	MIL	·	ESTIMATED TOTAL	5519.68

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.