

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1054482

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

	API No. 15 - 15-205-27892-00-00
Name: Layne Energy Operating, LLC	Spot Description:
Address 1: 1900 SHAWNEE MISSION PKWY	NE_SE_NW_SE_Sec. 28 Twp. 30 S. R. 14 V East West
Address 2:	1805 Sec. — Iwp. — S. R. — V East West
City: MISSION WOODS State: KS Zip: 66205 + 2001	1,805 Feet from North / South Line of Section
Contact Person; Victor H. Dyal	Feet from ☑ East / ☐ West Line of Section
Phone: (913) 748-3955	Footages Calculated from Nearest Outside Section Corner:
CONTRACTOR: License #_33606	NE □NW ☑SE □SW
Name: Thornton Air Rotary, LLC	County: Wilson
N/A	Lease Name: HUMMER Well #: 10J-28
	Field Name:
Purchaser:	Producing Formation: Cattleman
Designate Type of Completion:	Elevation: Ground: 891 Kelly Bushing: 0
✓ New Well Re-Entry Workover	Total Depth: 1262 Plug Back Total Depth: 1233
Ø oil ☐ wsw ☐ swd ☐ slow	Amount of Surface Pipe Set and Cemented at: 40 Feet
☐ Gas ☐ D&A ☐ ENHR ☐ SIGW	Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
☐ OG ☐ GSW ☐ Temp. Abd.	If yes, show depth set:Feet
CM (Coel Bed Methane)	If Alternate II completion, cement circulated from: 1233
Cathodic Other (Core, Expl., etc.):	feet depth to: 0 w/ 135 sx cmt.
If Workover/Re-entry: Old Well Info as follows:	SX CITIL.
Operator:	Deithor Shild Manager A. D.
Well Name:	Orilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth:	
☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD	Chloride content: 0 ppm Fluid volume: 0 bbls
Conv. to GSW	Dewatering method used: Evaporated
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #:	Operator Name:
Dual Completion Permit #:	
SWD Permit #:	Lease Name: License #:
ENHR Permit #:	QuarterSecTwpS. REast West
GSW Permit #:	County: Permit #:
12/8/2010 12/9/2010 12/20/2010	
pud Date or Date Reached TD Completion Date or 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:
Wirefine Log Received
Geologist Report Received
UIC Distribution
ALT I I II Approved by: Described Date: 04/25/2011

Side Two



Operator Name: <u>La</u>	iyne Energy Oper	ating, LLC	}	Lease	Name:	HUMMER		Well #:1(J-28	
Sec. 28 Twp.36	0s. R. <u>14</u>	East		County	: Wils	son				
recovery, and flow ra	how important tops and should and should and should should should should should and should sh	est, along wi	th final chart	รถเม-เก กรอง	CHIPA FA:	ached static love	hud-assais			
Drill Stem Tests Take (Attach Additional		Yes	₃ ✓ No			og Formatio	on (Top), Depth a	nd Datum		Sample
Samples Sent to Geo	ological Survey	Yes	i ✓ No		Nan	ne ittached		Тор		Datum
Cores Taken Electric Log Run Electric Log Submitte (If no, Submit Cop		Yes Yes Yes	□No		366.5	utacneo				
List All E. Logs Run:										
Compensated Density Neutro Dual Induction	on									
			CASING	RECORD	 	ew Used	······································	· · · · · · · · · · · · · · · · · · ·		
		Report			_	ermediate, product	ion, etc.			
Purpose of String	Size Hole Drilled		Casing n O.D.)	Weig Lbs./		Setting Depth	Type of Cement	# Sacks Used		and Percent
Surface	11	8.625		24		40	Type 1	8		
Production	6.75	4.5		10.5		1232.9	Thickset	134		
ļ								101	}	
			ADDITIONAL	. CEMENTIN	G / SQL	JEEZE RECORD				
Purpose:	Depth Top Bottom		Cement	-	# Sacks Used Type and Percent Additive					
Plug Back TD Plug Off Zone	-							· 1		
Shots Per Foot	PERFORATION Specify F	N RECORD	- Bridge Plugs th Interval Perf	s Set/Type orated		Acid, Frac	cture, Shot, Cement	Squeeze Record	1	Depth
2	Cattleman						12/20 sand,400 gal 1		elled water	1123 to 1126 - 1144 to
					_					
		-		·	_					
								<u>.</u>		
TUBING RECORD: 2	Size: .375	Set At: 1175		Packer At:		, Liner Run:	Yes 🗸 No			
Date of First, Resumed I 12/21/2010	Production, SWD or ENH	R. P	roducing Metho	od: Pumping		Gas Lift 🔲 Ot	her (Explain)			
Estimated Production Per 24 Hours	Oil B	ols.	Gas N	/lcf	Wate			as-Oil Ratio		Gravity
DISPOSITIO	N OF GAS:		. AAI	ETHOD OF C	OMPLE:	TION				
☐ Vented	Used on Lease	Орег		Perf.	OMPLE Dually		mingled 11	PRODUCTION 20 to 1150	N INTERV	AL:
(If vented, Subr	_	Othe	r (Specify)		Submit A		it ACO-4)	20 (0 1130		

Well Report HUMMER 10J-28

API Number:

Project Area:

SYCAMORE KS Wilson 30S - 14E - 28 AFE Number: G01013600700

AFE Amount: \$0.00

30S - 14E - 28 1805FSL - 1640FEL

Activity Date	Activity Description
12/8/2010	MIRU THORNTON DRILLED 11" HOLE 40 DEEP, RIH W/2 JOINTS 8-5/8" SURFACE CASING MIXED 8 SX TYPE 1 CEMENT, DUMPED DOWN THE BACKSIDE. SDFN
12/9/2010	TIH W/ 6 3/4" BIT, HAMMER AND DRILL PIPE, DRILLED OUT FROM UNDER SURFACE TO 1262' TD, TESTING SAMPLES AT ZONES OF INTEREST RD DRILL RIG MOVE IN OSAGE WIRELINE PULLED LOGS FROM LOGGER DEPTH TO SURFACE RD MOL.
12/10/2010	MI PU, RIH W/31 JOINTS 4-1/2" CASING, RIG UP CONSOLIDATED, BREAK CIRCULATION WITH 30 BBLS FRESH WATER PUMP 10 SKS GEL FLUSH WITH 5 BBLS WATER SPACER W/HULLS, 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/19.6 BBLS FRESH WTR. FINAL PUMPING PRESSURE 600 PSI, BUMP PLUG TO 1100 PSI. WAIT 2 MINUTES, RELEASE PRESSURE, FLOAT HELD GOOD CEMENT RETURNS TO SURFACE, 8 BBLS TO PIT. RD MOL. WELL SHOWED GOOD OIL FLOW TO PIT WHILE RUNNING IN CASING STRING.
	CSG STRING: 31 JOINTS 4-1/2" LANDED CSG @ 1232.9' PBTD - 1232.9' TD 1262"
12/20/2010	MOL RU Osage Wireline and Consolidated Oil Well Servicing. Osage RIH and ran CBL-CCL-VDL Log from 1222' to surface. Good Bond all depths. Osage Perfed the Cattleman sands from 1123' to 1126' and 1144' to 1150' with 2 spf, 180 degree phase, and 25 gm charges. Total 20 holes. Consolidated rigged up and spotted 100 gallons 15% HCL across Cattleman perfs. Pumped 300 gallons additional (400 gal total) 15% HCL with 35 ball sealers. Good ball action and balled off perfs. RIH with wireline junkbasket and knock balls off. Fracked Cattleman with 85 bbls PAD (25 ppt gelled water with 2% KCL & biocide) followed with 4,000 lbs 16/30 and 6,800 lbs 12/20 frac sand @ 0.25 ppg - 3 ppg concentration, droping 7 balls during frac. Flushed with 20 bbls gel.
	Breakdown 1637 psig, ISIP 568 psig, 5 min 510 psig, 10 min 496 psig, 15 min 487 psig, ATP 850 psig, MTP 948 psig, ATR 26 BPM, MTR 26 BPM.

TOTAL JOB: 10,800 lbs 16/30 & 12/20 sand, 400 gallons 15% HCL, and 295 bbls gelled water

SI WELL AFTER FRAC TO ALLOW GEL TO BREAK

12/21/2010

TIH W/ TBG WASHED TO TD TIH W/ RODS SPACED ROD STRING HUNG ON JACK. WASHED 20' OF SAND

TBG STRING 36- 2 3/8 TBG 0- SUBS SN @ 1175 15' OEMA @ 1180

ROD STRING 46- 3/4 RODS 1-8',1-4' PONYS 1 1/2 X 6' BHD CUP INST PMP 1 1/8 X 11' POLISH ROD

1/11/2011

POOH W/ RODS & PMP REPLACED PMP BECAUSE OF SAND TIH W/ ROD & REBLT PMP HUNG ON JACK WELL ON PROD.

TBG STRING 36- 2 3/8 TBG 0- SUBS SN @ 1175 15' OEMA @ 1180

ROD STRING 46- 3/4 RODS 1-8',1-4' PONYS 1 1/2 X 6' BHD CUP INST PMP 1 1/8 X 11' POLISH ROD

1/28/2011

POOH W/ RODS & PMP REPLACED PMP BECAUSE OF SAND TIH W/ ROD & REBLT PMP HUNG ON JACK WELL ON PROD.

TBG STRING 36- 2 3/8 TBG 0- SUBS SN @ 1175 15' OEMA @ 1180

ROD STRING 46- 3/4 RODS 1-8',1-4' PONYS 1 1/2 X 6' BHD CUP INST PMP 1 1/8 X 11' POLISH ROD

3/14/2011

MI RU POOH WITH RODS AND PUMP CHECKED FILL TO 32' NO SAND. PUT ON REBUILT PUMP RAN RODS BACK IN HUNG OFF ON WELL HEAD WELL BACK ON PROD.

TBG STRING 36- 2 3/8 TBG 0- SUBS SN @ 1175 15' OEMA @ 1180

ROD STRING 46- 3/4 RODS 1-8',1-4' PONYS 1 1/2 X 6' BHD CUP INST PMP 1 1/8 X 11' POLISH ROD Air Dolling Specialist
Oit & Gas Wells

THORNTON AIR ROTARY, LLC

Office Phone: 620-879-2073

PO 86x 449 Carex 33 57333

Date Started	12/8/2010
Date Completed	12/9/2010

Well No.	Operator	Lease	A.P.1#	County	State	
10)-28	28 Layne Energy Operating Hummer 25-2		25-205-27892-00-00	Wilson	Kensas	
1/4	1/4	1/4	Sec.	Twp.	Rge.	
-17-4						

Driller	Type/Well	Cement Used	Casi	ng Used	 Depth	Size of Hole
Sean	Oil	8	44'	8 5/8	1262	63/4

Formation Record

			DII RECOID		,
0-2	DIRT	850-869	SANDY SHALE	1173-1179	SAND / ODOR
2-13	CLAY	869-871	LIME	1179-1200	SANDY SHALE
13-49	SHALE	871-872	COAL (MULBERRY)	1200-1262	SHALE
49-55	LIME	872-911	LIME (PAWNEE)	1262	TD
55-70	LMY SHALE	911-916	BLK SHALE (LEXINGTON)		
70-118	LIME	916-953	SHALE		
118-134	SHALE	953-975	LIME (OSWEGO)		
134-146	SAND	975-984	BLK SHALE (SUMMIT)		
146-340	SHALE	984-992	LIME		
340-420	SAND	992-995	BLACK SHALE		
420-448	SHALE	995-996	COAL		
448-558	LIME	996-999	LIME		
536	WENT TO WATER	999-1041	SHALE		
558-563	SHALE	1041-1042	COAL		
563-573	LIME	1042-1058	SHALE		
573-578	SAND	1058-1060	LIME		
578-579	COAL	1060-1061	SHALE	Ţ.	
579-596	SAND	1061-1062	COAL		
596-601	SANDY SHALE	1062-1080	SANDY SHALE		
601-655	LIME	1080-1099	SHALE		
655-685	SHALE	1099-1100	COAL		
685-689	LIME	1100-1106	SHALE	_ i	
689-694	SHALE	1106-1123	SANDY SHALE		
694-699	LIME	1123-1130	SAND / ODOR		
699-726	SHALE	1130-1133	SANDY SHALE		
726-735	LIME	1133-1140	SHALE		
735-751	SAND	1140-1153	SAND / ODOR		
751-771	LIME	1153-1156	SANDY SHALE		
771-810	SANDY SHALE	1156-1163	SAND		
810-850	SAND/SANDY SHALE	1163-1173	SANDY SHALE		



TICKET NUMBER	30072
LOCATION_ Eur	
FOREMAN Troe	Ftickler

DATE	CUSTOMER #	WELL	NAME & NUME	CEMEN	SECTION	TOWNSHIP	HANGE	COUNTY
12-10-10	4758					 	 	
2-10-10 LSTOMER		Hunne	!!-1		in a series s	भग रहर १ ११६५ म् <u>म</u>ुस्	YANY KALAN	ا بن:۱٫۰۰
La	una France	l y	10253	Stafet	TRUCK #	DRIVER	TRUCK #	DRIVEK
AILING ADDR	ESS			747	44.	John.		1
PO	Box 160			37E	429	010		
TY.		STATE	ZIP CODE	•	- "			
C		K.				 	 	
Sycamo B TYPE 4	/s 0	HOLE SIZE	6 /4	i Hole Depth	12191	CASING SIZE &	NEIGHT 4%	!
LSING DEPTH		DRILL PIPE				CASING SIZE &	-	
CONG DEPT	112.31		113.60	TURING	8*		OTHER	
JRHY WEIGI	HT 13.4 P	ELURKY VOL_		WATER gal/si		CEMENT LEFT IN	CASING 0	
3PLACEMEN	19.60M	DISPLACEMENT	PBI_ <u>6/20</u> _	MIX P 81	O Bride Ch	RATE		
MARKS: S	Cal Meety	· Physic to	<u> 4%" </u>	cine. Bre	ak Condet	n -1 3064	Fresh Ma	iac.
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نالمهدد	Make Thus	Krat Com	mt in	P Wal-S	and law. He	Amosesi (C	K . 12 % FL	-110, + 143
4F-38 C	13.44/94/.	Wash out	Rama +	lines R	Henre PM	Distalace	4/ 19.60	bl Freih
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eour.	Flori Hold	8			a - Pasi	there to pi	<u>*</u>	
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ACCOUNT	· · · · · · · · · · · · · · · · · · ·							
CODE	QUANITY	or UNITS	DEI	CRIPTION of	BERVICES or PRO	DDUCT	UNIT PRICE	TOTAL
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1174 4	19-						—	
11264	1324			et Ome	<u>.+</u>		/7.00	2295.0
1104	1080	'	8 K 41-2				.42	453.60
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135	684		457, FL.	- 110			7.50	ده ۱۵۰
							_	261.80
146	34#		42 CAF			_	7.70	
146	34#		WZ CAF				7.70	
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1188	Spar	*	Gel-Flu	-37			,20	100.00
10 <u>C</u>	200	r	Gel-Flui Halls	-37			,20 -17	19.co
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118B 10T 103 407 A	500° 100° 7,41 4hrs.		Gol-Flug Holls Coetic So Tone Mill ROCK Y	ada laye se Trick			,20 ,39 -45	19.00
1188 105 103 407 A 302 E	5007 4001 1007 17,47		Gel-Flui Holls Coetic So Ton Mil ROBA YO Coth Mach	ands layer or Truck			,20 ,37 ,45 ,20	00.001 07P1 00.7YL
118B 10T 103 407A 302E	500° 100° 7,41 4hrs.		Gel-Flui Holls Coetic So Ton Mil ROBA YO Coth Mach	ands layer or Truck	<i>A</i> 4		120 137 1.45 1.20 85,00/hm	00.001 01.91 00.31 00.001
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