CONFIDENTIA KANSAS CORPORATION COMMISSION CONFIDENTIA OIL & GAS CONSERVATION DIVISION

ORIGINAL Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 33365 API N	No. 15 - 205-27860-00-00
Name: Layne Energy Operating, LLC Spot	Description:
	_NE_SW_SE_Sec. 34 Twp. 30 S. R. 14 🗹 East West
Į.	88 Feet from North / South Line of Section
	Feet from ✓ East / West Line of Section
	ages Calculated from Nearest Outside Section Corner:
	□ne □nw ☑se □sw
12 1 3 J	hty: Wilson
Thornton Air Rotery LLC	e Name: Metzger Well #: 15A-34
Wellsite Geologist: CONFIDENTIAL Field	Name: Cherokee Basin Coal Area
Vveilsite Geologist.	ucing Formation: Cattleman Sands
	ation: Ground: 913' Kelly Bushing: N/A
	Depth: 1262' Plug Back Total Depth: 1251'
	•
	unt of Surface Pipe Set and Cemented at: Feet
-	ple Stage Cementing Collar Used?
	s, show depth set: N/A Feet
CM (Coal Bed Methane) If Alte	ernate II completion, cement circulated from: 1251
	depth to: Surfacew/_ 135sx cmt.
If Workover/Re-entry: Old Well Info as follows:	
Operator: Drilli	ing Fluid Management Plan
Well Name:(Data	must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth: Chlor	ride content: N/A ppm Fluid volume: N/A bbls
Deepening Re-perf. Conv. to ENHR Conv. to SWD	atering method used: N/A Air Drilled
Conv. to GSW	
	tion of fluid disposal if hauled offsite:
	ator Name:N/A
Dual Completion Permit #: Leas	e Name: N/A License #: N/A
☐ SWD Permit #:	ter <u>N/A</u> Sec. <u>N/A</u> Twp. <u>N/A</u> S. R. <u>N/A</u> East West
	nty: N/A Permit #: N/A
8/17/2010 8/18/2010 9/9/2010	
Spud Date or Date Reached TD Completion Date or Recompletion Date	

tiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.

Signature: List Alley A	
Title: Manager of Engineering	Date: 11/15/2010

1 1
1 .

Letter of Confidentiality Received / Date: 1115/10 - 11/15/2

Confidential Release Date: Wireline Log Received NOV 1 6 2010

KCC Office Use ONLY

Geologist Report Received

Side Two

Operator Name: Lay	ne Energy Opera	ating, LL	.C	Lease I	Name: _	Metzger		Well #:1	5A-34	
Sec. 34 Twp.30			West		: Wilso					
INSTRUCTIONS: Sh time tool open and clo recovery, and flow rate line Logs surveyed. A	osed, flowing and shu es if gas to surface te	ut-in pressi est, along v	ures, whether s with final chart(shut-in pres	sure rea	ched static	level, hydrostatic p	oressures, bottom	hole tempe	erature, fluid
Drill Stem Tests Taken		Y	es ✓ No		V L	og Fori	mation (Top), Dept	th and Datum		Sample
Samples Sent to Geol	,	□ Ye	es ☑No		Nam See D	e riller's Log		Тор	ם	Datum
Cores Taken ☐ Yes ✓ No Electric Log Run ✓ Yes ☐ No			es No			······			KC NOV 1	
List All E. Logs Run: Compensated Dual Induction	Density Neutror	1						C	ONFID	ENTIAL
			CASING	RECORD	⊥ ✓ N	ew Use	d			
	Size Hole	,	ort all strings set- ze Casing	conductor, su		ermediate, pr		# Sacks	Type s	and Percent
Purpose of String	Drilled		t (In O.D.)	Lbs.		Depth				dditives
Surface	11"	8.625"		24		46'	Class A	8	Type 1	Cement
Producton	6.75"	4.5"		10.5	<u>,</u>	1251'	Thick Set	135		
		<u> </u>	ADDITIONAL	CEMENTI	NG / SOL	JEEZE REC	ORD			
Purpose: Perforate	Depth Top Bottom	Туре	e of Cement				e and Percent Additives			
Protect Casing Plug Back TD Plug Off Zone										
Shots Per Foot			RD - Bridge Plug Each Interval Per			Aci	d, Fracture, Shot, Ce		ord	Depth
	See Attached Pa	ge								
					···					
								RI	ECEIVE	ED .
TUBING RECORD:	Size: 2-3/8"	Set At: 1218'	,	Packer A	t:	Liner Run:		o NC	V 16	2010
Date of First, Resumed 9/9/2010	Production, SWD or EN	iHR.	Producing Met	:hod: Pumpin	ıg 🗌	Gas Lift	Other (Explain)	KC	S WICI	HITA
Estimated Production Per 24 Hours	0il 7	Bbls.	Gas 5	Mcf	Wat		Bbls.	Gas-Oil Ratio		Gravity
DISPOSITIO	ON OF GAS:			METHOD OF	COMPLI	TION:		PRODUCT	ION INTERV	/Al ·
Vented ✓ Sold	Used on Lease			✓ Perf.		Comp.	Commingled (Submit ACO-4)	Cattleman Sa		
(If vented, Sub	omit ACO-18.)		Other (Specify) _			<u>. </u>		FIRM UPS. STOTE HILL SHIP HAVE HAVE IN	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

Layne Energy Operating, LLC #33365

Lagre Legengy

METZGER 15A-34 NE NE SW SE 34 - 30S - 14E WILSON COUNTY, KANSAS 15-205-27860-00-00

Stage #

Perforation Record

Acid, Fracture, Shot, Cement Squeeze Record

Stage 1 9/8/2010

Cattleman Sand 1165' - 1179'

390 Water (bbls) 400 HCI (15%) (gal) 7000 Sand (12/20) Brown 7000 Sand (20/40) (lbs)

> KCC NOV 1 5 2010 CONFIDENTIAL

NOV 1 6 2010

KCC WICHITA

Daily Well Work Report

METZGER 15A-34 8/18/2010

Well Location: WILSON KS 30S-14E-34 NE NE SW SE 1288FSL / 1541FEL

Cost Center Lease Number

G01027400900 G010274 Property Code KSSY30S14E3415A API Number 15-205-27860

Spud D	ate	RDMO Date	First Compl	First Prod	EFM Instal	-,5	i i
8/17/20	010	8/18/2010	9/9/2010	9/9/2010			
TD	PBTI	Sf Csg Dep	th Pr Csg Dep	th Tbg Size	Csg Size		VCC
1262	1251	. 42	1251	0	0		KCC NOV 1 5 2010
Reported	By KRI) Ri	g Number		Date	8/17/2010	CONFIDENTIAL
Taken By	KRI				Down Time		CONFIDENTIAL
Present O	peratio	n DRILL OUT SU	JRFACE		Contractor	THORNTON	
Narrative							

MIRU THORNTON DRILLED 11" HOLE 46" DEEP, RIH W/2 JOINTS 8-5/8" SURFACE CASING MIXED 8 SX TYPE 1 CEMENT, DUMPED DOWN THE BACKSIDE. SDFN

> RECEIVED NOV 1 5 2010 KCC WICHITA

Air Drilling Specialist
Oil & Gas Wells

THORNTON AIR ROTARY, LLC

Office Phone: 620-879-2073

PO Box 449 Caney, KS 67333

Date Started	8/17/2010	125
Date Completed	8/18/2010	, V

Well No.	Operator	Lease	#1.9.A	County	State
15A-34 Layne Energy Operating		Metzger 15-205-27860-00-00		Wilson	Kansas
1/4	1/4	1/4	Sec.	Twp.	Rge.
					Ngc.
Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
Sean	Oil	8	46' 85/8	1262	63/4

Formation Record

0-2	DIRT	909-958	SHALE	
2-10	CLAY	937	GAS TEST-SAME	
10-76	LIME	958-981	LIME (OSWEGO)	
76-156	SHALE	981-983	SHALE	KCC
156-190	LMY SHALE	983-992	BLK SHALE (SUMMIT)	NOV 1 5 2010
190-287	SHALE	987	GAS TEST - SAME	MOA 1 3 East
287-290	LIME	992-1000	LIME	CONFIDENTIA
290-306	SANDY SHALE	1000-1004	BLK SHALE (EXCELLO)	
306-397	SAND	1004-1005	COAL (MULKEY)	
361	WENT TO WATER	1005-1009	LIME	
397-420	SANDY SHALE	1009-1053	SHALE	
420-433	SAND	1053-1054	COAL (BEVEIR)	
433-438	SHALE	1054-1069	SHALE	
438-536	LIME	1069-1071	LIME (VERDIGRIS)	
536-555	LMY SHALE	1071-1074	SHALE	
555-576	SAND	1074-1075	COAL (CROWBERG)	
576-602	LIME	1075-1079	SHALE	
602-609	SHALE	1079-1088	SAND	
609-639	LIME	1088-1118	SHALE	
639-700	SHALE	1118-1119	COAL	
700-716	LIME	1119-1147	SHALE	
716-721	LMY SHALE	1147-1160	SANDY SHALE	
721-743	SHALE	1160-1179	SAND (ODOR)	RECEIVED
743-759	LIME	1162	GAS TEST - SAME	
759-773	SAND	1179-1181	SHALE	NOV 1 6 2010
773-868	SHALE	1181-1182	COAL	
811	GAS TEST-2#,1/4",MCF-12.7	1182-1262	SHALE	KCC WICHITA
868-869	COAL	1187	GAS TEST-5#,1/4",MCF-20.7	
869-903	LIME (PAWNEE)	1262	TD	
903-909	BLK SHALE (LEXINGTON)			



ENTERED

TICKET NUMBER_	29039
LOCATION Eu	reka
FOREMAN Trom	Strictler

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 & NUME	BER	SECTION	TOWNSHIP	RANGE	COUNTY
8-19-10	4758	Metrer	ISA	1-34				wile.
CUSTOMER					1975			00 1 BG ×
Layne	Energy			j [TRUCK#	DRIVER	TRUCK#	DRIVER
MAILING ADDRE	SS '	-	-	l f	520	Cliff	KUU	
P.O. B=	x 160			i i	479	·	NOV 15	2010
CITY	<u> </u>	STATE ZII	CODE			John	MILLA	
5.00		K1		}	436	Alens.	CONFIDE	NTIAL
Sycamor				l [·			
JOB TYPE		HOLE SIZE 6	3/4	HOLE DEPTH	1262'	CASING SIZE & W	'EIGHT <u> </u>	1054
CASING DEPTH		DRILL PIPE		TUBING			OTHER	
SLURRY WEIGH	T <u>13.4#</u>	SLURRY VOL4	2851	WATER gal/si	< 8°	CEMENT LEFT in	CASING 0'	
DISPLACEMENT	19.8 Bbl	DISPLACEMENT PS	SI_500	MIX PSIloo	O Bus Aly	RATE	<u>-</u>	
REMARKS: S		m: Rig w				culation w	25RLI WA	ater.
Pump 10s		• . u .				Cautic So	da Are-Flux	L, 10851
	ter. Mixe					# Kol-Seel Pa		enoseel Pake
1/2 CFL	-110 , + 1/4		,0 13	*		Pump + lines.		
Displace	W/ 19.8 BS	Water.	Final	A .	Pressure 50	7. —	me Plus to	
Wait 2	an Rela	esse Prasur		t Held		_	surface = 1	
<i>-</i>	u pit.			4.7		<u> </u>	July Volume	- 507
		Tob Corplet	1					
					 -			

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401		PUMP CHARGE	925.00	925.00
5406	40	MILEAGE	3.65	146.00
1126A	135.0Ks	Thick Set Cement	17.00	229500
IIIOA	1080 #	8 * Kol-Seal Reffx	.42*	453.60
1107A	17 <i>*</i>	1/8 # Phonoseul Per/x	1.15 4	19.55
1135	68 H	1/2 CFZ - 110	7.504	570.00
1146	34 [#]	47. CAF-38	7.70 ^{PF}	261.89
1118A	500*	Gel-Flush	. 20#	100.00
1105	50#	Hulls	.39 *	19.50
//03	100 #	Caustic Sode	1.45*	145.00
4404	l .	4%" Top Pubber Ply RECEIVED	45.00	45.∞
SYOT A	7 - 43	Ton-Mileage NOV 1 6 2010	1.20	356.64
5502C	4h3	SURI Vac Trick	86.00	340.00
1123	300021	City water KCC WICHITA	14.90/00	44.70
			Sub Total	5661.19
avin 3737	<u> </u>	6.37	SALES TAX	_245.35
av ici 3/3/	< . M . I.A	<i> 636055</i>	ESTIMATED TOTAL	5907.14

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.

TITLE_