

Confidentiality Requested:

### KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1203977

Form ACO-1 August 2013 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:	
Address 2:	Feet from Dorth / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxx) (e.gxxx.xxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
	Elevation: Ground: Kelly Bushing:
Gas D&A ENHR SIGW	Total Vertical Depth: Plug Back Total Depth:
G G GSW Temp. Abd.	Amount of Surface Pipe Set and Cemented at: Feet
CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used? Yes No
	If yes, show depth set: Feet
If Workover/Re-entry: Old Well Info as follows:	If Alternate II completion, cement circulated from:
Operator:	
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to ENHR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)
Commingled Permit #:	Chloride content: ppm Fluid volume: bbls
Dual Completion     Permit #:	Dewatering method used:
SWD         Permit #:	Location of fluid disposal if hauled offsite:
ENHR     Permit #:	
□ GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec Twp S. R East West
Recompletion Date Recompletion Date	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
Confidentiality Requested
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT I II III Approved by: Date:

	Page Two	1203977
Operator Name:	Lease Name:	Well #:
Sec TwpS. R   East  West	County:	
INCTRUCTIONS. Chain important tang of formations panetrated	tail all carea. Depart all final	apping of drill stome tools giving interval toolad, time tool

**INSTRUCTIONS:** Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken (Attach Additional Sho	eets)	Yes No		-	on (Top), Depth a		Sample
Samples Sent to Geolog	gical Survey	Yes No	Nam	e		Тор	Datum
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No					
List All E. Logs Run:							
			RECORD Ne		ion, 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 / SQU	IEEZE RECORD			
Purpose:	Depth	Turne of Comparet	# On also I land		Turner and f		

Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Protect Casing				
Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?	Yes
Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?	Yes
Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?	Yes

No	(If No, skip questions 2 and 3)
No	(If No, skip question 3)

No

(If No, fill out Page Three of the ACO-1)

Shots Per Foot		PERFORATION Specify For		RD - Bridge F Each Interval		e	A		ement Squeeze Record I of Material Used)	Depth
TUBING RECORD:	Siz	ze:	Set At:		Packer	At:	Liner Ru	un:	No	
Date of First, Resumed	I Product	ion, SWD or ENHF	۶.	Producing N		oing	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wat	er	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITI	ION OF G	GAS:			METHOD	OF COMPLE	TION:		PRODUCTION IN	TERVAL:
Vented Solo	d 🗌 l	Used on Lease		Open Hole	Perf.	Dually		Commingled		
(If vented, Su	ıbmit ACC	D-18.)		Other (Specify	)	(Submit )	,	(Submit ACO-4)		

Form	ACO1 - Well Completion
Operator	TDR Construction, Inc.
Well Name	Nuckolls 4
Doc ID	1203977

## Casing

Purpose Of String	Size Hole Drilled	Size Casing Set		Setting Depth	Type Of Cement		Type and Percent Additives
Surface	9	7	10	21	Portland	5	50/50 POZ
Completio n	5.6250	2.8750	8	763	Portland	118	50/50 POZ



267057

TICKET NUMBER 42752

Bar Old C				FOREMAN /	Coco. V.	
DOX 884, C	hanute, KS 66720	FIELD TICKET & TR		ORT	Casey Kem	reay
	or 800-467-8676	CEM	ENT			
DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
3 26/14	7841	weballs # 4	NE2	16	21	
USTOMER 7DR			in the second second second	har in the state of the		M
			TRUCK #	DRIVER	TRUCK #	DRIVER
120			729	Gasken	V. Infal	Monthing
ITY	57 UIST ISTATE	1710 0005	leteto	Garmoo	V	retering
1).		ZIP CODE	548	Miktha	~	
Course	rg KS	46053	370	Keilar	V	en graden en en en en
DB TYPE low	2-11		PTH 780'	CASING SIZE &	WEIGHT 27	18" FUE
ASING DEPTH			60the - 73:	2 1	OTHER	<u> </u>
URRY WEIGH	11 - 1 111		al/sk	CEMENT LEFT IN		7
	A A A	EMENT PSI MIX PSI		RATE 5-6	m	
EMARKS: he	the second secon	re established cre	dation unix	at truge		t Da :
el tollou	and the second s	Fresh wotor mixed	l + punned	118 1/2 54		+ Premion
2 270 6	elper sk, ce	ment to susface	, flashad a	110 203		in ceme
bber plu	on to saffle w	4. 24 Hols fresh	water accord	ung grea	a pum	ped 2/2
assuce -	shut in casing		piller, piess	uced to b	00 PS/,	released
	/					
				~		
				()	-12	
				/	1×	
1				1	1 /	W
					1	
ACCOUNT				-(-)	/	
CODE	QUANITY or UNITS	DESCRIPTION	of SERVICES or PRC			ΤΟΤΑΙ
CODE HCV	QUANITY or UNITS	DESCRIPTION PUMP CHARGE	l of SERVICES or PRC	вист		TOTAL
CODE HCV	QUANITY or UNITS		l of SERVICES or PRC			1085,00
CODE HOV	1	PUMP CHARGE MILEAGE				and a distance of the second
CODE 3401 5406 5402	1 20 mi 743'	PUMP CHARGE Mileage Casing testage	,			1085.00 84.00
CODE 401 5406 5402	20 mi 7423' minimum	PUMP CHARGE Mileage Casing tootage ton unloag	,			1085.00 84.00 368.00
CODE 401 5406 5402	1 20 mi 743'	PUMP CHARGE Mileage Casing testage	,			1085.00 84.00
CODE 401 5406 5402	20 mi 7423' minimum	PUMP CHARGE Mileage Casing tootage ton unloag	,			1085.00 84.00 368.00
CODE 401 5406 5402 5402 502 C	1 20 mi 7423' minimum 2 hrs	PUMP CHARGE Mileage for unilogg 80 Vac	, C			1085.00 84.00 36.8.00 200,00
CODE 401 5406 5402 867 502C	1 20 mi 743' minimum 2 hrs 118 sts	PUMP CHARGE MILEAGE Casing teotoge ton mileage 80 Vac	cerrent		1357,00	1085.00 84.00 36.8.00 200,00
CODE 401 5406 5402 867 502C	1 20 mi 7423' minimum 2 hrs	PUMP CHARGE Mileage for unilogg 80 Vac	cerrent		1357,00	1085.00 84.00 36.8.00 200,00
CODE 3401 5402 5402 5402 5402 5402 5402 5402	1 20 mi 743' minimum 2 hrs 118 sts	PUMP CHARGE MILEAGE Casing teotoge ton mileage 80 Vac	cerent		(357,00 87.5%	1085.00 84.00 36.8.00 200,00
CODE 3401 5402 5402 5402 5402 5402 5402 5402	1 20 mi 743' minimum 2 hrs 118 sts	PUMP CHARGE MILEAGE Casing teotoge ton mileage 80 Vac	e cerent nat	erials	1357,00 87.5% 1444,56	1085.00 84.00 36.8.00 200,00
3401 5406 5402 5402 5607 5007 5007 1124 1118 B	1 20 mi 7423' Minimun 2 hrs 118 sts 398 #	PUMP CHARGE MILEAGE Casing tootoge four uniloag 80 Uac S/150 Bruix Premism Gu	e cerent l not	erials 276	(357,00 87.5%	1085.00 84.00 368.00 200,00
CODE 401 406 402 807 502C	1 20 mi 743' minimum 2 hrs 118 sts	PUMP CHARGE MILEAGE Casing tootoge four uniloag 80 Uac S/150 Bruix Premism Gu	e cerent l not	erials	1357,00 87.5% 1444,56	1085,00 84,00 368,00 200,00
CODE 401 5406 5402 3607 3502C	1 20 mi 7423' Minimun 2 hrs 118 sts 398 #	PUMP CHARGE MILEAGE Casing teotoge ton mileage 80 Vac	e cerent l not	erials 276	1357,00 87.5% 1444,56	1085.00 84.00 368.00 200,00
CODE 401 5406 5402 3607 502C	1 20 mi 7423' Minimun 2 hrs 118 sts 398 #	PUMP CHARGE MILEAGE Casing tootoge four uniloag 80 Uac S/150 Bruix Premism Gu	e cerent l not	erials 276	1357,00 87.5% 1444,56	1085,00 84,00 368,00 200,00
CODE 3401 5406 5402 3607 502C	1 20 mi 7423' Minimun 2 hrs 118 sts 398 #	PUMP CHARGE MILEAGE Casing tootoge four uniloag 80 Uac S/150 Bruix Premism Gu	e cerent l not	erials 276	1357,00 87.5% 1444,56	1085,00 84,00 368,00 200,00
CODE 3401 5402 5402 5402 5402 5402 5402	1 20 mi 7423' Minimun 2 hrs 118 sts 398 #	PUMP CHARGE MILEAGE Casing tootoge four uniloag 80 Uac S/150 Bruix Premism Gu	e cerent 1 - Ro	erials 575 Sublatel	1357,00 87.5% 1444,56 437.37	1085,00 84,00 368,00 200,00
CODE 401 5406 5402 3607 502C	1 20 mi 7423' Minimun 2 hrs 118 sts 398 #	PUMP CHARGE MILEAGE Casing tootoge four uniloag 80 Uac S/150 Bruix Premism Gu	e cerent 1 - Ro	erials 575 Sublatel	1357,00 87.5% 1444,56	1085,00 84,00 368,00 200,00
CODE 401 5406 5402 3607 502 124 118 B 102	1 20 mi 7423' Minimun 2 hrs 118 sts 398 #	PUMP CHARGE MILEAGE Casing tootoge four uniloag 80 Uac S/150 Bruix Premism Gu	e cerent 1 - Ro	erials 5% Sublatel	1357,00 87.56 1444,56 433.37 3323.83	1085.00 84.00 368.00 200,00
CODE 3401 5406 5402 3607 502C	1 20 mi 7423' Minimun 2 hrs 118 sts 398 #	PUMP CHARGE MILEAGE Casing tootoge four uniloag 80 Uac S/150 Bruix Premism Gu	e cerent 1 - Ro	erials 575 Sublatal	1357,00 87.5% 1444,56 437.37	1085,00 84,00 368,00 200,00

AUTHORIZTION NO Co. Rep on location TITLE \_\_\_\_\_ DATE\_\_\_\_\_ 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 for Miami County, KS Well: Nuckolls #4 Lease Owner: TDR

Town Oilfield Service, Inc.<br/>(913) 837-8400Commenced Spudding:<br/>3/25/2014

## WELL LOG

hickness of Strata	Formation	Total Depth
0-8	Soil-Clay	8
22	Lime	30
7	Shale	37
11	Lime	48
5	Shale	53
20	Lime	73
10	Shale	83
12	Sand	95
9	Shale	104
20	Lime	124
79	Shale	203
22	Lime	225
29	Shale	254
5	Lime	259
42	Shale	301
2	Lime	303
8	Shale	311
10	Lime	321
4	Shale	325
13	Lime	338
9	Shale	347
22	Lime	369
5	Shale	374
3	Lime	377
4	Shale	381
7	Lime	388
28	Shale	416
10	Sandy Shale	426
72	Shale	498
8	Sand	506
34	Shale	540
12	Sand	552
7	Lime	559
33	Shale	592
8	Lime	600
14	Shale	614
3	Lime	617
21	Shale	638
1	Lime	639
24	Shale	663

Miami County, KS Well: Nuckolls #4 Lease Owner: TDR

## Town Oilfield Service, Inc. Commenced Spudding: 3/25/2014

1	Lime	664
7	Shale	671
1	Sand	672
1	Sand and Lime	
1	Sand	673
2	Sand	674
2	Sand	676
1	Sand	678
2		679
3	Sand	681
96	Sand	684
	Sandy Shale	780-TD
	1	



# Short Cuts

BBLS. (42 gal.) equals D<sup>2</sup>x.14xh D equals diameter in feet. h equals height in feet.

BARRELS PER DAY Multiply gals. per minute x 34.2

HP equals BPH x PSI x .0004 BPH - barrels per hour PSI - pounds square inch

TO FIGURE PUMP DRIVES

\* D - Diameter of Pump Sheave \* d - Diameter of Engine Sheave SPM - Strokes per minute RPM - Engine Speed R - Gear Box Ratio

\*C - Shaft Center Distance

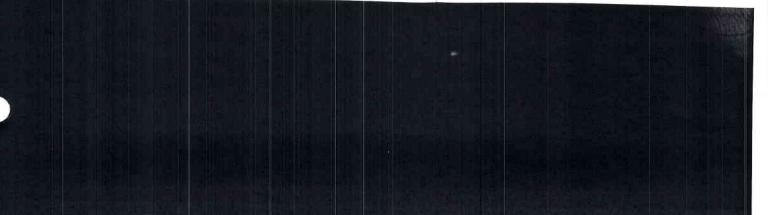
D - RPMxd over SPMxR d - SPMxRxD over RPM SPM - RPMXD over RxD R - RPMXD over SPMxD

BELT LENGTH - 2C + 1.57(D + d) + (D-d)<sup>2</sup> 4C

\* Need these to figure belt length WATTS = AMPS VOLTS 746 WATTS equal 1 HP

ΓΟ	ј во	OK
Well No	4	
FarmNUC	Kolls	
(State)	N	(County)
(Section)	16 (Township)	2   (Range)
For 7DR	Lonstru Well Owner)	ction

Town Oilfield Services, Inc. 1207 N. 1st East Louisburg, KS 66053 913-710-5400



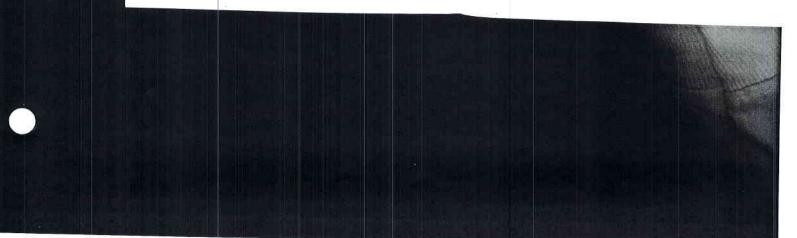
Nuikolls Farm: Miami \_ County KIS State; Well No. 999 **Elevation** March 25 ,20 Commenced Spuding March 26 Finished Drilling Driller's Name hisse Driller's Name **Driller's Name Tool Dresser's Name** oshe **Tool Dresser's Name Tool Dresser's Name** 05 T **Contractor's Name** 16 2 (Section) (Township) (Range) Distance from \_ 785 line, Distance from \_ 105 line, 5 seks Shis CASING AND TUBING RECORD 10" Set 10" Pulled 8" Set 8′′ Pulled 21 7 🖏 " Set 6¼" Pulled 4″ Set 4'' Pulled

2" Set

## CASING AND TUBING MEASUREMENTS

	1 1		1		
Feet	In.	Feet	In.	Feet	Ir
731.	90	Bf	41	C	
	1 11	(Manager			
763	65	FL	X		
			T		71
				2	1
					12
			-+		
					-
					1
			_		
					-

-1-

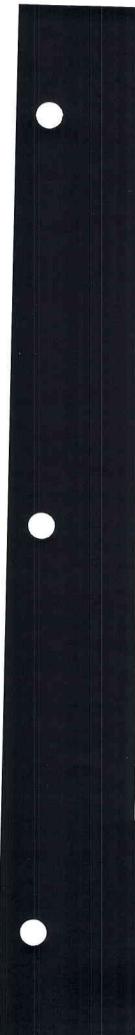


2″

Pulled

ft.

-



Thickness of Strata	Formation	Total Depth	Damada
0-8	Soil- clay	8	Remarks
RR	Limet	30	-
7	Shale	37	
11	Lime	48	
5	Shele	53	
20	Lime	73	Shells
10	Shale	83	- Shells
12	Sanch	95	no Dil
9	Shel-p	104	
20	Lime	124	AIR
79	Sheile	203	
22	Lime	225	
29	Shall C	254	
5	Lime	259	
42	Shall	301	
2	Lime	303	
8	shale	311	
10	Lime	321	
4	Shale	325	
13	Lime	3348	
9	Shall	347	
22	Lime	369	
5	Shale	374	
	Lime	377	
4	Shale	381	
28	Lime Shell	388	Hertha
a0	-2-	416	

-3-



-

		411-	2
Thicknes Strata	s of Formation	Total Depth	
10	) sandy shalt	426	
7.		498	
8	2 Shalt Sind & Sindy 19	506	
34	shall e	540	- 10 5:1
		552	- ne D;
	Lime	559	
3	200316	592	
8		600	
_14	Shale	614	
3	Lina	617	
_21	Shale	638	
24	Lime	639	-
- 27	Shale	663	
	Lime	664	-
	shale	671	-
	Sand	672	no oil
	sand & Lime	673	-
2	Sind	676	no Dil
2	Sand Send	678	broken
1	Sand	679	Solid
2	Sing	631:	black - dead Oil perf
3	Sand	6-54	belling solid
96	Sandy Shale	780	broken
			TD
	-4-		-5-