## KOLAR Document ID: 1411358

Confident	tiality Re	equested:
Yes	No	

## KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

Form ACO-1 January 2018 Form must be Typed Form must be Signed All blanks must be Filled

# WELL COMPLETION FORM

WELL	HISTORY -		WELL &	IEASE
VVELL	nisioni ·	DESCRIP	WELL Q	LEASE

OPERATOR: License #	API No.:
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.xxxxx) (e.gxxx.xxxxx)
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:
	Total Vertical Depth: Plug Back Total Depth:
	Amount of Surface Pipe Set and Cemented at: Feet
CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?
	If yes, show depth set: Feet
If Workover/Re-entry: Old Well Info as follows:	
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to EOR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Liner 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:
EOR 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 Drill Stem Tests Received			
Geologist Report / Mud Logs Received			
UIC Distribution			
ALT I II III Approved by: Date:			

## KOLAR Document ID: 1411358

Operator Nam	ne:			Lease Name:	Well #:
Sec	Twp	S. R	East West	County:	

Page Two

**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 Take	en		<u> </u>	/es 🗌 No			.og l	-ormation	(Top), Depth	and Datum	Sample
(Attach Additional		1011		⁄es 🗌 No		Nam	е			Тор	Datum
Samples Sent to Ge Cores Taken Electric Log Run Geologist Report / M List All E. Logs Run:	lud Logs	vey	Y    Y	∕es ∐No ∕es ∏No ∕es ∏No ∕es ∏No							
			Bep	CASING ort all strings set-	RECORD	Ne Ne		lsed production	n etc		
Purpose of String		e Hole rilled	Si	ze Casing et (In O.D.)	Weight Lbs. / F		Set	ting pth	Type of Cement	# Sacks Used	Type and Percent Additives
		'		ADDITIONAL		i / SQL	JEEZE R	ECORD			
Purpose: Perforate Protect Casing	Тор	epth Bottom	Тур	e of Cement	# Sacks U	sed			Type and	Percent Additives	
Plug Back TD Plug Off Zone											
<ol> <li>Did you perform a hy</li> <li>Does the volume of</li> <li>Was the hydraulic fra</li> </ol>	the total base	fluid of the hy	draulic fr	acturing treatmen		-		] Yes ] Yes ] Yes	No (If No,	skip questions 2 ar skip question 3) fill out Page Three	
Date of first Production Injection:	n/Injection or F	Resumed Proc	luction/	Producing Met	hod:		Gas Lift	Oth	ner <i>(Explain)</i>		
Estimated Production Per 24 Hours		Oil Bl	bls.	Gas	Mcf	Wate	er	Bbl	S.	Gas-Oil Ratio	Gravity
DISPOSIT	TION OF GAS	d on Lease		N Open Hole	METHOD OF C	F COMPLETION:		PRODUCTIC Top	PRODUCTION INTERVAL: Top Bottom		
(If vented, S	ubmit ACO-18.,	)				(Submit	ACO-5)	(Subm	it ACO-4)		
Shots Per Foot	Perforation Top	Perforati Bottom		Bridge Plug Type	Bridge Plug Set At			Acid, F		ementing Squeeze	
						_					
TUBING RECORD:	Size:		Set At:		Packer At:						

Form	ACO1 - Well Completion
Operator	LH Oil, LLC
Well Name	LK LEASE 9
Doc ID	1411358

# Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	9.875	7	0	20	portland	3	service company
Production	5.625	2.875	0	660	50/50		service company

PO Box 884,	E PUMPING LLC Chanute, KS 6672 10 or 800-467-8670		306	TICKET NUME LOCATION ( FOREMAN ( ORT	Hawa, K	31 S nedy
DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
6/4/18	5949	LK Lease #9	NWG	18	22	MI
REMARKS: 6	B Catalin od gstring (ey) 17.2 #/ga 13.53 bils bid safety wedge by wedge by	STATE ZIP CODE KS (20209) HOLE SIZE <u>57/8''</u> HOLE D DRILL PIPE <u>TUBING</u> SLURRY VOL WATER DISPLACEMENT PSI MIX PSI Machine, established 56665 Fresh water, I per St. Cement ber plus to battle w	circulation mixed to	DRIVER (asken Kei Car HarBac Kei Car HarBac Casing size & W Ho CEMENT LEFT in RATE 460 Mai xel CEMENT LEFT in RATE 460 CEMENT LEFT in CEMENT LEFT IN CEMEN	OTHER CASING 30 h purper Nes Por	DRIVER Meeting 18" 1 1 (00 # 2 lend 1/ 2 lend 1/ 2 lend 1/

ACCOUNT	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CEO450	1	PUMP CHARGE	1500.00	
(E0002	20 mi	MILEAGE	143.00	
CEOZII	min	ton mileage	660.00	
WE0853	aws	80 Vac	200.00	
		trucks	2503.00	
-		-30%	750.90	-
		Subtotal		1752.10
CC 5840	79 sks	Porplend 1A coment	1066.50	
CC 5965	233#	Gel	69.90	
CP8176	)	21/2" rubber dug	45.00	
		materials	1181.40	
		-30 %	354.42	
		Subtotal		826.98
		SCANNED		
1.1:-0-	THE PARTY A	GCANNED		
티켓르바카				
6/5	118 08			
	a al	8%	SALES TAX	66.16
Ravin 3737	1 1 1/6		ESTIMATED TOTAL	2645.24
AUTHORIZTION	an mull	TITLE	DATE	3778.91

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.

# Short Cuts

BBLS. (42 gal.) equals D²x.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

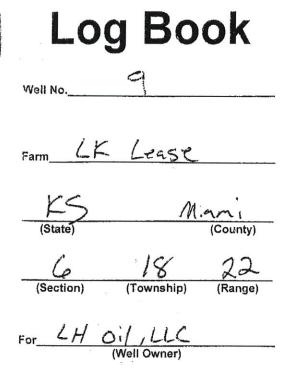
\* D - Diameter of Pump Sheave \* d - Diameter of Engine Sheave SPM - Strokes per minute RPM - Engine Speed R - Gear Box Ratio \*C - Shaft Center Distance

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>

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

51



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

×.4

Well: LK # 9 Lease Owner:LH Oil

6/1/18

### WELL LOG

Thickness of Strata	Formation	Total Depth
0-5	Soil-Clay	5
12	Lime	17
10	Shale	27
2	Lime	29
8	Shale	37
7	Lime	44
23	Shale	67
1	Lime	68
17	Shale	85
16	Lime	101
9	Shale	110
29	Lime	139
7	Shale	146
21	Lime	167
5	Shale	172
5	Lime	177
2	Shale	179
4	Lime	183
25	Shale	208
7	Sand	215
111	Shale	326
14	Limey Sand	340
8	Lime	348
1	Shale	349
8	Lime	357
46	Shale	403
7	Lime	410
9	Shale	419
4	Lime	423
13	Shale	436
9	Lime	445
18	Shale	463
2	Lime	465
4	Shale	469
6	Lime	475
6	Shale	481
12	Sand	493
2	Sand	495
5	Sandy Shale	500
68	Shale	568

Lease Owner:LH Oil

r.

2	Lime	570
26	Shale	596
6	Sand	602
38	Sandy Shale	640
20	Sand	660-TD
	Guild	000-10
1.		

LK Leex Farm: \_ Miami County KS State; Well No. Ble Elevation\_ **Commenced Spuding** 0 Finished Drilling Nes **Driller's Name** e **Driller's Name Driller's Name Tool Dresser's Name Tool Dresser's Name Tool Dresser's Name Contractor's Name** 22 n 14 (Section) (Township) (Range) 165 N líne, Distance from ft. Distance from line, ft. 3 sacks Shirs 578 borchale 278 casing CASING AND TUBING RECORD 10" Set 10" Pulled 8" Set 8" Pulled 20 Ada" Set \_ 61/4" Pulled 4" Set 4" Pulled .

2"

Pulled

2" Set \_

## CASING AND TUBING MEASUREMENTS

[ash ]		
Feet In.	Feet In.	Feet In.
613-	Battle	010/
		XK
		0110
642 F	(b. T	
OIT I		
660 T.	ND I	
0001.	¥	
	1	
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Thickness of	Formation	Total	
Strata	soil-clay	Depth 5	Remarks
12	The second se	17	. <u>*</u>
10	Lime		
		27	
28	Lime	29	
1	Jale	37	- <u></u>
- 22	Lime	44	
23	Shale	67	redbed
	Lime	68	
17	Shale	85	
16	Lime	101	
9	Shale	110	-
29	Lime	139	e
	Shale	146	
21	Lime	167	
_ 5	Shale	172	
5	Lime	177	
2	Shall	179	
- 4	Lime	183	Heitha
25	Shale	208	
7	Sand	215	arcy-noncil
111	Shale.	326	3/6-redbed
14	limey sand	340	gas odal-slight oil Star
8	Lime	348	Un signe On Stall
1	Shale	349:	1
8	Lime	357	
46	Shale		
7	Lime	410	19 4. <sup>1</sup> .
	-2-		-3-

		410	
Thickne	ess of Formatio	774 . 1 . 1	Remarks
0		2 419	
4	1 Lime	- 423	1 <u></u>
/_	3 Shalt	2 436	
	7 Lime	445	
	5 Shalt	e 163	
	2 Lime	465	
7	Shelt	e 469	
	2 Lime	475	
		e 481	
		493	-broken - poor saturation - not much
×	- Sand	495 Le 500	-broken-very little Oil
	Shelp		
2		568	
2	6 Shelt	596	
1	Sand	602	har
3	8 savely s	Le P 640	-broken-good saturation
2		6/00	bown-no Dil-TD
	- -		
			¢
			·
			-5-

Land to the second of an and