Confidentiality Requested: Yes No

KANSAS CORPORATION COMMISSION **OIL & GAS CONSERVATION DIVISION**

1187997

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 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: ()	
CONTRACTOR: License #	
Name:	
Wellsite Geologist:	-
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
☐ Oil ☐ WSW ☐ SWD ☐ SIOW □ Gas □ D&A □ ENHR □ SIGW	Elevation: Ground: Kelly Bushing:
Gas D&A ENHR SIGW	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used? Yes No
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	
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 Produce	
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 TwpS. 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:

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Operator Name:	Lease Name:	Well #:
Sec TwpS. R East West	County:	
INCTRUCTIONS: Chain important tang of formations paratrated De	tail all aaraa Bapart all final	apping of drill stome tools giving interval tooled, 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 She	eets)	Yes No		-	on (Top), Depth an		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				
		Report all strings set-	conductor, surface, inte	ermediate, producti	on, 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	EEZE RECORD			
Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used		Type and Pe	ercent Additives	
Protect Casing							

	Plug Off Zone						
Did you perform a hydraulic fracturing treatment on this well?						No	(If No, skip questions 2 and 3)
Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?					Yes	No	(If No, skip question 3)
Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?					Yes	No	(If No, fill out Page Three of the ACO-1)

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated					ement Squeeze Record d of Material Used)	Depth			
TUBING RECORD:	Si	ze:	Set At:		Packe	r At:	Liner F		No	
Date of First, Resumed	I Product	ion, SWD or ENH	۲.	Producing I		ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wat	ər	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITI	ION OF (GAS:			_				PRODUCTION INTER	RVAL:
Vented Solo	d 🗌	Used on Lease		Open Hole	Perf.	Uually (Submit)		Commingled (Submit ACO-4)		
(If vented, Su	ıbmit ACC	D-18.)		Other (Specify	<i>י</i>)	(Cubinit)		(00011117100 4)		

Formation Tops

	DK Operating, Inc.
	Lupfer #1-10
	Sec. 10 T23s R22w
Formation	650' FSL & 1580' FWL
Anhydrite	1326', +887
Base	1358', +855
Heebner	3773', -1560
Lansing	3847', -1634
BKc	4201', -1988
Marmaton	4219', -2006
Pawnee	4302', -2089
Fort Scott	4369', -2156
Cherokee	4393', -2180
Mississippian	4444', -2231
RTD	4466', -2253

Sample Zone Descriptions

Miss. Osage

(4444', -2231): Covered in DST #1,2 Dolo $-\Delta$ – Fine sucrosic crystalline with poor scattered vuggy porosity, fresh chert with scattered fair to good vuggy porosity, light spotted oil stain, no show of free oil, dull yellow fluorscents.

Drill Stem Tests

Trilobite Testing Inc.

"Brannan Lonsdale"

DST #1	<u>Mississippian Osage</u> Interval (4412' – 4458') Anchor Length 46' IHP – 2244 #	
	IFP -30 " – Built to 4 in.	46-78 #
	ISI -30 " – Dead	1318 #
	FFP -30 " – Built to 1 in.	74-88 #
	FSI – 30" – Dead	1283 #
	FHP – 2206 #	
	BHT – 109°F	
	Recovery: 5' Clean Oil	

Recovery: 5' Clean Oil 115' OCMW 20% Oil, 60' Water

DST #2 <u>Mississippian Osage</u>

Interva	al (4412' – 4463') Anchor Length 51'	
IHP	- 2240 #	
IFP	- 30" - Built to 4 in.	44-96 #
ISI	- 30" - V.W.S.B.	1243 #
FFP	- 30" - Built to 2 in.	99-134 #
FSI	- 30" - Dead	1188 #
FHP	- 2179 #	
BHT	– 106°F	

Recovery: 233' OCM

30% Oil

DK OPERATING, INC Lupfer #1-10 650' FSL & 1580' FWL Sec 10-23S-22W Hodgeman Co., Kansas

2203' GL

2213' KB

Report: Squeeze perf, drill out & deepen

04-14-14	MIRU Cheyenne Well; Svc DD. TOH w/ rods, pump & tbg.	TIH w/ pkr
	& tbg. TIH w/ pkr & tbg, let pkr swing @ 4450'. SDFN	

- 04-15-14 RU Swift Svc, load csg but had 1 ½ bpm @ 400#. Drop standing valve in tbg, load tbg but same results, pump 1 ½ bpm @ 400#. TOH w/ tbg & pkr, found sub abovce pkr leaking. Replace tbg sub, TIH w/ pkr & tbg, set pkr @ 4360', RU Swift Svc, load csg & pressure to 500#, held, took inj rate on tbg, 3 bpm @ 600#. Squeeze of Miss perfs 4453-63' w/ 75 sx common, staged up to 1200# w/ 53 sx in formation. Held pressure, washed up pkr & tbg, pulled pkr up to 4240', repressure up to 500#, SIT, SDFN
- 04-16-14 TOH w/ tbg & pkr, TIH w/ 4-7/8" bit & tbg. Tagged cement @ 4355', drilled cement to auto fill shoe @ 4464.5'. Drilled .5' of auto fill shoe, then 1' of open hole then 2' of new open hole to <u>4468</u>'. Circulate hole clean, pull bit up to 4440', SDFN
- 04-17-14 FL @ surface, start swabbing steady. Swabbed fluid down to 4240', let set 30 min, no fluid entry. Let set 30 min, no fluid entry. Drilled 2.5' to 4470.5' w/ drilling break @ 1.5'(4469.5'), circulate hole clean, pulled bit up to 4440', start swabbing steady to test. Swabbed fluid down to 4200', SDFN
- FL @ 4000', 270' FIH w/ good show of oil(~1%,covered top bucket). TOH w/ tbg & bit. RU Perf-Tech, perf Miss 4464.5-69.5'(5') w/ 3-1/8" Expendable gun 4 spf then reperf the same. RIH w/ swab, FL @ 3900', 570' FIH w/ good show oil. Swabbed fluid down to 4450', let set 30 min w/ no fluid entry. TIH w/ 1 jt tailpipe, pkr & tbg, RU Swift Svc, spot acid & acidize Miss w/ 500 gal 20% NE/Fe/3% MS. Max press – 1400#, min – 500#, avg treat – 800#, max rate – 1.1 bpm, min – staging, avg treat – .75 bpm, ISIP – 700# & 3 ½ min – vac. Total load – 40 bbl, let set 15 min, FL @ 100'. Swabbed steady recovering 28.39 bbl, FL @ 3500' w/ pull from SN & show of oil. Let set 15 min, FL @ 3400', 1070' FIH, recovered 6 bbl & 34.39 bbl of 40 bbl load w/ 6% oil. SDFN & Weekend

Lupfer #1-10

04-21-14 FL @ 1200', 3270' FIH w/ 40' oil(1.2%). Swab test as follows:

Time	bbl	cum	%	comments
Swb dn	26.70	61.09	6	FL 3900' such stay
2^{nd} hr	12.50	73.59	2	FL 3800', 4-pulls

TOH w/ tbg & pkr. TIH w/ tbg as follows:

2-7/8" 8rd EUE TP MA 2-7/8" 8rd SN 2-7/8" 8rd EUE tbg Below Zero	1jt 1jt 137jts	15.00' 1.10' 4430.76'	Set @ 4459.86' 4444.86' 4443.76'
Below Zero		13.00'	

Landed tbg 9' off bottom. TIH w/ pump & rods as follows:

2 ¹/₂"x 2"x 12' RWT 7/8"x 2' pony rod 8 – 7/8"x 25' sucker rods 99 – ³/₄"x 25' sucker rods 77 – 7/8"x 25' sucker rods 7/8"x 6',8' pony rods 1 ¹/₄"x 22' PR w/ 8' PRL

Longstroke well w/ good pump action. RDMODD