KOLAR Document ID: 1589967

Confidentiality Requested:

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 - DESCRIPTION OF WELL & LEASE

Address 1:	OPERATOR: License #	API No.:
Address 2:	Name:	Spot Description:
City:	Address 1:	SecTwpS. R East West
Contact Person:	Address 2:	Feet from North / South Line of Section
Designate Type of Completion:   Designate Type of Completion	City: State: Zip: +	Feet from _ East / _ West Line of Section
CONTRACTOR: License #	Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Name:	Phone: ()	□NE □NW □SE □SW
Name:	CONTRACTOR: License #	GPS Location: Lat: . Long:
Designate Type of Completion:	Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxxx)
Purchaser:	Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Designate Type of Completion:   New Well		County:
New Well		Lease Name: Well #:
Oil		Field Name:
Gas		Producing Formation:
OG		Elevation: Ground: Kelly Bushing:
GM (Coal Bed Methane)		Total Vertical Depth: Plug Back Total Depth:
Cathodic   Other (Core, Expl., etc.):   Multiple Stage Cementing Collar Used?   Yes   No		
If Workover/Re-entry: Old Well Info as follows:		
Operator:         Well Name:         If Alternate II completion, cement circulated from:		
Well Name: Original Total Depth: feet depth to: w/ sx cmt.  Original Comp. Date: Original Total Depth: feet depth to: w/ sx cmt.  Deepening	•	
Original Comp. Date: Original Total Depth: Deepening	Operator:	
Deepening Re-perf. Conv. to EOR Conv. to SWD   Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)  Commingled Permit #: Dual Completion Permit #: Dewatering method used: De	Well Name:	feet depth to: w/ sx cmt.
Plug Back       Liner       Conv. to GSW       Conv. to Producer       (Data must be collected from the Reserve Pit)         Commingled       Permit #:	Original Comp. Date: Original Total Depth:	
Commingled Permit #:	☐ Deepening ☐ Re-perf. ☐ Conv. to EOR ☐ Conv. to SWD	
Dual Completion Permit #:	☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer	(Data must be collected from the Reserve Pit)
Dual Completion Permit #: Dewatering method used: Location of fluid disposal if hauled offsite: Operator Name: License #: License #: Quarter Sec Twp S. R East West	Commingled Parmit #	Chloride content: ppm Fluid volume: bbls
SWD         Permit #:		Dewatering method used:
EOR         Permit #:         Operator Name:		Location of fluid disposal if hauled offsite:
GSW		Econion of haid disposal in fladied choice.
Spud Date or Date Reached TD Completion Date or Quarter Sec. Twp. S. R. East West		Operator Name:
Spud Date or Date Reached TD Completion Date or ———————————————————————————————————	<u> </u>	Lease Name: License #:
	Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R
	- P	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:							

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#### Page Two

Operator Name:					Lease Nam	ne:			Well #:	
Sec Tw	pS. F	R [	East	West	County:					
open and closed and flow rates if	, flowing and sh gas to surface t ty Log, Final Lo	nut-in pressurest, along wit	es, whe h final c ain Geo	ther shut-in pre hart(s). Attach physical Data a	essure reached extra sheet if r and Final Electr	station more : ric Loc	level, hydrosta space is needed	tic pressures, d.	bottom hole tempe	val tested, time tool rature, fluid recovery,  Digital electronic log
Drill Stem Tests (Attach Addit			Ye	es No		Lo	og Formatio	n (Top), Deptl	n and Datum	Sample
Samples Sent to	Geological Sur	vey	Ye	es 🗌 No		Name	)		Тор	Datum
Cores Taken Electric Log Run Geologist Repor List All E. Logs F	t / Mud Logs		Y€  Y€	es No						
			Repo		RECORD [	Nev	w Used rmediate, producti	on. etc.		
Purpose of St		ze Hole Orilled	Siz	e Casing (In O.D.)	Weight Lbs. / Ft.		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
				ADDITIONAL	OF MENTING /					
Purpose:	[	Depth	Typo	of Cement	# Sacks Use		EEZE RECORD	Typo a	nd Percent Additives	
Perforate Protect Ca Plug Back	Top	Bottom	туре	or cement	# Sacks Use	,u		туре а	ia reicent Additives	
Plug Off Z										
Did you perform     Does the volum     Was the hydraul	e of the total base	fluid of the hyd	draulic fra	cturing treatmen		•	Yes ns? Yes	No (If No	, skip questions 2 an , skip question 3) , fill out Page Three o	,
Date of first Produ	ction/Injection or	Resumed Produ	uction/	Producing Meth			Coolift 0	thor (Fundain)		
Estimated Produc	otion	Oil Bb	le.	Flowing Gas	Pumping	Wate		ther <i>(Explain)</i> bls.	Gas-Oil Ratio	Gravity
Per 24 Hours		Oli Bb	15.	Gas	IVICI	vvale	ı Di	JIS.	Gas-Oil Hallo	Gravity
DISPO	OSITION OF GAS	S:		N	METHOD OF CO	MPLE.	TION:		PRODUCTIO	N INTERVAL:
Vented	Sold Use	d on Lease		Open Hole				nmingled	Тор	Bottom
(If vente	ed, Submit ACO-18	.)			(5	SUDITIIL I	ACO-5) (Subi	mit ACO-4)		
Shots Per Foot	Perforation Top	Perforation Bottom	on	Bridge Plug Type	Bridge Plug Set At		Acid,		Cementing Squeeze Kind of Material Used)	Record
TUBING RECOR	D: Size:		Set At:		Packer At:					

Form	ACO1 - Well Completion							
Operator	Murfin Drilling Co., Inc.							
Well Name	KB 1-2							
Doc ID	1589967							

## Casing

Purpose Of String		Size Casing Set	Weight	Setting Depth			Type and Percent Additives
Surface		8.625					
Production	7.875	5.500	15.5	5235	HCon	415	

Davis T #1-2, 808 FNL 445 FWL Sec. 2-T17S-R43W Greeley County, Kansas

3914' KB

MDCI

WO 6/2021 as KB #1-2 808 FNL 445 FWL Sec. 2-T17S-R43W Greeley County, Kansas 3912' KB

MDCI

Formation	Sample top	Datum	Log tops	Datum	Log tops	Datum
Anhydrite	2665	1249	2663	1251		
B/Anhydrite	2693	1221	2691	1223		
Neva						
Topeka	3849	65	3845	69	3841	71
Heebner	4079	-165	4079	-165	4075	-163
Lansing	4144	-230	4144	-230	4140	-228
Stark	4420	-506	4418	-504	4414	-502
Marmaton	4558	-644	4540	-626	4538	-626
Cherokee	4768	-854	4758	-844	4754	-842
Atoka						
Morrow	5006	-1092	5006	-1092	5002	-1090
Keyes Lm	5130	-1216	5130	-1216	5126	-1214
Mississippi			5152	-1238	5148	-1236
RTD	5235				5235	
LTD			5235		5240	



EMENT TREA	ATMEN	TREP	DRT							
Customer:	Vlurfin D	rilling		Well:	KB #1-2	KB #1-2 Ticket:				
City, State:			·	County:	Greeley KS	Date:	6/13/2021			
Field Rep:	Fennis C	ardund	)	S-T-R:						
							5.5" 2 stage PROD			
Downhole In	formatio	n		Calculated Siu	irry - Lead	Calcu	lated Slurry • Tail			
Hole Size:	7.875	ln		Blend:	Н-Соп	Blend:	H-LD Blend			
Hole Depth:	5245	ft		Weight:	12.0 ppg	Weight:	14.8 ppg			
Casing Size:	5 1/2	in		Water / Sx:	15.5 gal / sx	Water / Sx:	6.5 gal / sx			
Casing Depth:	5245	ft		Yield:	2.56 ft <sup>3</sup> / sx	Yield:	1.51 ft³/sx			
fubing / Liner:		in		Annular Bbls / Ft.:	bbs / ft.	Annular Bbls / Ft.:	bbs / ft.			
Depth:		ft		Depth:	ft	Depth:	ft			
Tool / Packer:				Annular Volume:	0.0 bbls	Annular Volume:	0 bbls			
Tool Depth:		ft		Excess:		Excess:				
Displacement:	124.4	bbls		Total Slurry:	133.0 bbls	Total Slurry:	34.0 bbis			
		STAGE	TOTAL	Total Sacks:	290 sx	Total Sacks:	125 sx			
TIME RATE	PSI	BBLS	BBLs	REMARKS						
5:15 PM			•	Journey management me	eting 1st stage					
5:30 PM				Convoy to location						
7:00 PM				Arrive on location						
7:05 PM			-	Safety meeting						
7:20 PM			-	Spot in / rig up equipmen	nt					
8:15 PM				Start running casing / flo	at equipment					
				Centralizers on Jts 1,3,5,7	7,9,11,13,15,17,19,21,23,25,27,63	. Baskets on jts 19,44,70,93. DV	tool on jts 68= top of DV 2395' TP= 5			
12:00 AM				Rig land casing drop ball	l blow seat	······································				
1:05 AM 5.0	160.0	12.0		Pump mud flush						
1:07 AM 5.0	160.0	5.0	**********	Pump fresh water spacer	<u> </u>					
1:10 AM 7.0	240.0	133.0		Mix 290 sx H-Con @ 12 p	Pg	***************************************				
1:30 AM 7.0	240.0	34.0		Mix 125 sx H-LD blend @	) 14.8 ppg					
1:35 AM			·······	SID wash pumps and line	BS					
2:00 AM 7.0	80.0		~~	Drop latch down plug sta	art fresh water displacement wit	h kcl				
2:08 AM 5.0	100.0	50.0			n plug to pass through dv tool					
2:17 AM 7.0	120.0	67.0			cement away switch to WBM dis	splacement				
2:25 AM 2.0	1,000.0	114.0		Slow down to land plug						
2:32 AM 2.0	1,500.0	124.3		Land plug						
2:35 AM				Check floats floats held o	got .5 bbl back					
2:38 AM				Drop opening tool	· · · · · · · · · · · · · · · · · · ·					
3:02 AM 1.5	850.0	10.0		Use cement pump to ope						
				Rig circulate for 3 hours						
TO STATE OF THE ST	Mela Million	XX1214930		Rig circulated 100 sx cen	ment to pit					
	CREW			TINU		SUMMARY	AND THE SECTION AND THE PROPERTY OF THE PROPER			
-	Cementer: Fennis			78	Average Rate	Average Pressure	Total Fluid			
						1				
Cementer: Pump Operator: Bulk #1:	Mike John			180/520 194/254	5.0 bpm	423 psi	566 bbls			

ftv: 13-2021/01/19 mplv: 105-2021/01/27



		EATMEN	1 112 cost 2 co. 1 40c; 50	ORT				
Cus	tomer	Murfin I	Drilling	****	Well:	KB #1-2	Ticket:	WP 1478
City,	State				County:	Greeley KS	Date:	6/13/2021
Fie	d Rep				S-T-R:	2-17S-43W		5.5" 2 stage PROD
Dow	mhole	Informati	on sold				7 TX 1 ( 1 ( 1 ( 1 ( 1 ( 1 ( 1 ( 1 ( 1 ( 1	
	e Size:	Christ-Strongs, Vi	in		Calculated Sit			ulated Slurry - Tail
Hole	Depth:		ft		Blend: Weight:	H-Con	Blend:	H-Plug
Casin	g Size:	5 1/2			Water / Sx:	12.0 ppg 15.5 gal / sx	Weight:	13.8 ppg
asing	Depth:	2395	ft		Yield:	2.56 ft <sup>3</sup> / sx	Water / Sx:	6.9 gal/sx
ubing /	Liner:		ln		Annular Bbls / Ft.:	bbs / ft.	Yield: Annular Bbls / Ft.:	1,42 ft <sup>3</sup> / sx bbs / ft.
	Depth:		ft		Depth:	ft	Depth:	ft
Tool / P	acker:	) di	,		Annular Volume:	0.0 bbls	Annular Volume:	0 bbls
	Depth:		ft		Excess:		Excess:	y DUIS
isplace	ment:	57.0	bbls		Total Slurry:	217.0 bbls	Total Slurry:	7.5 bbls
			STAGE	TOTAL	Total Sacks:	475 sx	Total Sacks:	30 sx
rime .	RATE	PSI	BBLs		REMARKS			
	-	444.5	•		STAGE 2			Market - Mar
6:00 AM 6:03 AM	<del> </del>	160.0	12.0	12.0	Pump mud flush		·····	
6:05 AM	-	160.0 80.0	5.0	17.0	Pump fresh water spacer			
6:20 AM		240.0	7.5	24.5	Plug rat hole with 30 sx F			
6:53 AM	0.0	240.0	217.0	241.5 241.5	Mix 475 sx H-Con @ 12 p			
7:05 AM	7.0	330.0	+	241.5	S/D wash pumps and line			
7:16 AM	2.0	500.0	47.0	288,5	Slow down to land plug	er displacement with KCL		
7:26 AM	2.0	1,600.0	57.0	345.5		enlacement 1000 pel must less	circulation pressure of 600 psi	
7:28 AM				345,5	Check floats , floats held		circulation pressure of 600 psi	
8:15 AM				345.5	Rig down leave location	3-11-23-1		
				345.5				
				345.5	CIRCULATED 100 SX CEN	MENT TO PIT		
				345.5				
				345.5				
				345.5				
				345,5	·····		***************************************	
				345.5				
				345.5				
				345.5				···
				345.5				
				345.5				
				345.5				
				345.5				
				345.5				
				345.5				
Maj di		CREW			UNIT		SUMMARY	
Cem	enter:	Fennis			78	Average Rate	Average Pressure	Total Fluid
ump Ope	rator:	Mike			180/520	4.1 bpm	438.6 psi	346 bbls
	lk #1:	John			194/254	1		
Bu	ik #2:	Kale	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		527/250			



CEMENT	TRE	ATMEN	T REP	ORT	ing a second					
Cust	tomer:	Murfin [	Orilling		Well:	KB #1-2	Ticket:	WP 1813		
City,	State:				County:	Greeley H	9/1/2021			
Field	d Rep:	Fennis (	Gardun	0	S-T-R:	Greeley KS Date: 9/1/2021  2-17S-43W Service: Squeeze				
		Informatio			Calculated Sit			ulated Slurry - Tail		
	Size:		in		Blend:	Micro Fine	Blend:	Class A 25 sx with add 25 sx neat		
Hole I			ft		Weight:	11.8 ppg	Weight:	15.6 ppg		
Casing Casing D					Water / Sx:	7.6 gal / sx	Water / Sx:	5.2 gai/sx		
Tubing /					Yield:	1.28 ft <sup>3</sup> / sx	Yield:	1.18 ft <sup>3</sup> / sx		
•	Depth:				Annular Bbls / Ft.:	bbs / ft.	Annular Bbls / Ft.:	bbs / ft.		
Tool / Pa					Depth:	ft	Depth:	ft		
	Depth:				Annular Volume: Excess:	0.0 bbls	Annular Volume:	0 bbls		
Displace			bbis			5.7 bbls	Excess:	10.5 bbls		
			STAGE	TOTAL	Total Slurry: Total Sacks:	25 sx	Total Slurry: Total Sacks:	10.5 sx		
TIME	RATE	PSI	BBLs	BBLs	REMARKS		Total backs:			
6:00 AM				•	8-31-2021 Started toward	is location was told by comp	pany rep that they were not ready f	or us and to come back on 9-1-21		
5:45 AM				•	9-1-01 Journey managen					
6:00 AM					Convoy to location					
8:00 AM					Arrive on location / safet	y meeting				
8:15 AM				-	Spot in / rig up equipmer	nt				
					Retainer set @ 5070' hol	es 5101-5105'				
				•	Pro-Stim acidize well , pu	umping 2 bpm @ 900 psi				
			28.0	28,0	Pro-Stim pump 28 bbls fr	resh water down annulus				
9:00 AM	2.0	500.0	16.0	44.0	Hook cementing equipme	ent to well , load annulus wi	th 16 bbls fresh water plus 28 bbls	fresh water from Pro-Stim pressure to 500		
9:15 AM	2.0	750.0	19.0	63.0	Load tubing with 14 bbis	fresh water , establish injec	tion rate			
10:00 AM	2.5	110.0	5.7	68.7	Mix 25 sx Micro Fine cen	nent @ 11.8 ppg				
10:10 AM	2.5	110.0	5.2		Mix 25 sx Class A with flo	uld loss & defoamer additive	s @ 15.6 ppg			
10:15 AM	2.5	110.0	5.2		Mix 25 sx Class A neat @	15.6 ppg				
10:18 AM					S/D wash pumps and line					
10:20 AM		80.0			Start fresh water displac					
10:22 AM		2,000.0	4.8		Tubing pressure up to 20					
10:27 AM		2,500.0				per customer request s/d				
10:35 AM		1,500.0				, circulating 15 bbls slurry to	o pit			
10:55 AM	2.0	400.0	30.0		S/D	.1	A 75 LLIL 14 1 21 2	form by the state of the total control of the t		
44,45 41						nicro line into formation , lex	tt.75 bbis / 4 sx micro fine in casir	y from below retainer to noies		
11:45 AM					Rig down leave location					
				······································						
				, , , , , , , , , , , , , , , , , , , ,						
				·						
	,	CREW		74 N	UNIT		SUMMAR			
Cem	nenter:	Fenn			78	Average Ra		Total Fluid		
Pump Ope		Kale			230	2.1 bpm		114 bbis		
	ulk #1:	Trevi	по		205					
В	ulk #2:									