KOLAR Document ID: 1628480

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

OPERATOR: License #	API No.:
Name:	Spot Description:
Address 1:	SecTwpS. R
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: ()	□NE □NW □SE □SW
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:
□ Oil □ WSW □ SWD	Producing Formation:
Gas DH EOR	Elevation: Ground: Kelly Bushing:
☐ OG ☐ GSW	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:	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)
Committed at Provider	Chloride content: ppm Fluid volume: bbls
Commingled Permit #: Dual Completion Permit #:	Dewatering method used:
SWD Permit #:	Location of fluid disposal if hauled offsite:
EOR Permit #:	Location of fluid disposal if fladied offsite.
GSW Permit #:	Operator Name:
<u> </u>	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 Drill Stem Tests Received								
Geologist Report / Mud Logs Received								
UIC Distribution								
ALT I II 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	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		# Sacks Use		EEZE RECORD	Typo a	ad Paraant Additivas		
Perforate Protect Ca Plug Back	Top	Bottom	туре	ype of Cement # Sacks Used			d Type and Percent 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 Gas Lift Other (Explain) Mcf Water Bbls. Gas-Oil Ratio				Gas Oil Patio	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		Dually Comp. Commingled Submit ACO-5) (Submit ACO-4)			Тор	Bottom	
(If vente	ed, Submit ACO-18	.)			(5	SUDITIIL I	ACO-5) (SUDI	mit ACO-4)			
Shots Per Perforation Perforation Foot Top Bottom			Bridge Plug Type				Cementing Squeeze Kind of Material Used)	ementing Squeeze Record d of Material Used)			
TUBING RECOR	D: Size:		Set At:		Packer At:						

Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	ORTH 9
Doc ID	1628480

All Electric Logs Run

DIL	
DUCP	
MEL	
BHCS	

Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	ORTH 9
Doc ID	1628480

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	12.25	8.625	23	362	Common	255	3%cc, 2%gel
Production	8.875	5.5	15.5	3937	H Con	375	3%cc,2% Gyp, 2% metso, 3/4 FRC



CEMENT TR	EATMEN	ा स्वः	ORT		· ·					
Customer	Ser a servat confinence and Ser-	Advanced actions and Australia		Well:	Orth # 9		WP-2133			
City, State			·····	Countys						
Field Rep					· · · · · · · · · · · · · · · · · · ·	Ellis KS Date:				
rieia kep	Andy D	inkei		S-T-R:	2-14S-20W	Service:	Surface			
Downhole	Informati	on		Calculated S	lurry - Lead	Cal	culated Slurry - Tall			
Hole Size:	12 1/4	in		Blend:	H-325	Blend:				
Hole Depth:	362			Welght:	14.8 ppg	Weight:	ppg			
Casing Size:				Water / Sx:	6.9 gal / sx	Water / Sx:	gal / sx			
Casing Depth: Tubing / Liner:	362			Yield:	1.41 ft ³ / sx	Yield:	ft³/sx			
lubing / Liner: Depth:		in ft		Annular Bbls / Ft.:	0.0735 bbs / ft.	Annular Bbls / Ft.:				
Tool / Packer:		11		Depth:	362 ft	Depth:	ft			
Tool Depth:		ft		Annular Volume: Excess:	26.6 bbls 100%	Annular Volume:	0 bbls			
Displacement:	21.8	bbls		Total Slurry:	64.0 bbls	Excess: Total Slurry:	0.0 bbis			
		STAGE	TOTAL	Total Sacks:	255 sx	Total Sacks:	0.0 bais			
TIME RATE	PSI	BBLs	BBLs	REMARKS						
9:40p			-	Arrival						
9:45p			•	Safety meeting						
9:50p			-	Rig up		······································				
12:23a			-	Circulate hole						
12:29a 5.2 12:32a 5.4	60.0 130.0	5.0 64.0	5.0	H2O ahead						
12:49a 4.0	80.0	21.8	69.0 90.8	Mix 255 sks @14.8 ppg (Displaced H2O	@362					
1:00a	00.0	21.0	90.8	Plug down						
1:04a			90.8	Wash up						
1:10a			90,8	Rig down						
1:26a			90.8	Depart location						
				4 bbl to pit						
				***************************************		THE THE PARTY OF T				

						· · · · · · · · · · · · · · · · · · ·				
				· · · · · · · · · · · · · · · · · · ·						
							-			
	CREW	Place and resident gibts ground and a				SUMMAR				
Cementer:	Jesse	***************************************		78	Average Rate	Average Pressure	Total Fluid			
Pump Operator:	Michae			180/520	4.9 bpm	90 psi	91 bbls			
Bulk #1: Bulk #2:	Kale C			205						



CEMEN	ŪΠR	EATME	NT RE	PORT	F.							
Cu:	stome	# Murfin	Drilling		Well:		Orth #9 Ticket: WP-2161					
City	, State	Oakley	KS	······································	County:			Ellis KS Pate: 12/2/2021				
		Andy D			S-T-R:		2-14S-20W					
		,,				·	2-140-2011	Service	2 stage			
Dov	vnhole	: Informat	lon		Calculated :	Slurry - Le	ead	Cal	culated Slurry - Tail			
Ho	le Size	E 7 7/8	3 in]	Blend:	ŀ	l-Con	Blend				
Hole	Depth	3950) ft]	Weight:	12.	0 ppg	Weight	14.8 ppg			
Casin	ıg Size	8 5/8	3 in]	Water / Sx:	5.	2 gal/sx	Water / Sx	* · · · · · · · · · · · · · · · · · · ·			
Casing	Depth	362	? ft		Yield:	2.5	6 ft ³ / sx	Yield	1.51 ft ³ / sx			
Tubing		4	in		Annular Bbls / Ft.:	0.030	9 bbs / ft.	Annular Bbls / Ft.:	0.0309 bbs / ft.			
	Depth	<u> </u>	ſt		Depth:	394	0 ft	Depth	3940 ft			
Tool / F		<u> </u>		-	Annular Volume:	121.	7 bbls	Annular Volume:	121.7 bbls			
	Depth	<u></u>			Excess:	359	%	Excess	35%			
Displac	ement	93.0	bbls		Total Slurry:		5 bbls	Total Slurry:				
TIME	RATI	E PSI:	STAGE BBLs	TOTAL BBLs	Total Sacks: REMARKS	NATIONAL DESIGNATION OF THE PARTY OF	5 sx	Total Sacks:	150 sx			
1:00p	STOCKED COMPANY		111173		Arrival							
1:05	 	 	 •	<u>.</u>	Safety meeting							
1:25p	1	1	-	-	Run float equiment							
3:12p	 			_	Dropped ball / Circulat	e for 1 hou	r					
4:30p	1	150.0	5.0	5.0	H2O ahead	0 101 1 1100	1					
4:32p	1	300.0	12.0	17.0	Mud flush							
4:35p	<u> </u>	180.0	5.0	22.0	H2O behide							
4:39p	 	340.0	102.5	124.5	Mixed 225 sks of H-Co	n @ 12 ppg	a @ 3940'					
4:56p	7.0	440.0	40.3	164.8	Mixed 150 sks of H-LD							
5:08p				164.8	Dropped plug							
5:10p				164.8	Washed up pump and	ines						
5:12p	8.0	240.0	60.0		Displaced H2O							
5:20p	7.0	900.0	34.0		Displaced mud with tru	ck 34 bbl						
5:28p					Landed plug @ 1500 ps	sl						
5:32p					Dropped bomb							
5:40p	ļ				Opened tool with truck	900 psi						
5:52p	· · · · · · · · · · · · · · · · · · ·				Circulated hole with rig	1 hour se	en traces of cement					
7:12p	1	160.0	11.0		Rat hole mixed 25 sks			-				
7:18p	-	160.0	11.0		Mouse hole mixed 25 s							
7:20p		200.0	102.5		Mixed 225 sks of H-Cor	1 @ 12 ppg	@ 1569'		·			
7:39p		4			Dropped plug							
7:41p		180.0	37.0		Displaced H2O							
7:49p		300.0			Landed plug @ 1350 ps	1	· · · · · · · · · · · · · · · · · · ·					
7:53p					Wash up			***************************************				
8:00p 8:30p					Rig down							
σισυρ					Depart location	CI	rculated 29 etc coment to	o nit				
		CREW			UNIT	U)	rculated 28 sks cement to	SUMMAR	V			
Cen	nenter:	Jesse			78		Average Rate	Average Pressure	Total Fluid			
oon Jump Op		Micha			180/520		6.3 bpm	296 psi	420 bbls			
	ulk #1:	Kale			165/250		2.2 89111	1 200 por	TAV NOW			
	ulk #2:	Jimm			205							

DRILLING REPORT - LOG TOPS

			Orth 00FSL 19 c. 2-T149 2268'				
Formation	Sample tops	Datum	Ref	Log Tops	Datum	Ref	
Anhydrite				1538	730		
B/Anhydrite				1582	686		
Oread				3446	-1178		
Heebner				3490	-1222		
Lansing				3530	-1262		
Stark				3725	-1457		
Arbuckle				3868	-1600		
RTD							
LTD							