

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

Form ACO-4 Form must be typed

Commingling ID #_

March 2009

APPLICATION FOR COMMINGLING OF

PRODUCTION (K.A.R. 82-3-123) OR FLUIDS (K.A.R. 82-3-123a)

OPERAT	OR: License #	API No. 15					
Name:		Spot Description:					
Address	1:		Sec	Twp S.	R East West		
Address	2:		Fee	et from Dorth /	South Line of Section		
City:	State: Zip:+		Fee	et from 🗌 East /	West Line of Section		
Contact	Person:	County:					
Phone:	()	Lease Nam	ie:	Well #: _			
1.	Name and upper and lower limit of each production interval to	be commingled:					
	Formation:	((Perfs):				
	Formation:	((Perfs):				
	Formation:	((Perfs):				
	Formation:	((Perfs):				
	Formation:	((Perfs):				
2.	Estimated amount of fluid production to be commingled from e						
	Formation:				BWPD:		
	Formation:				BWPD:		
	Formation:		-		BWPD:		
	Formation:	BOPD:	MC	FPD:	BWPD:		
	Formation:	BOPD:	MC	FPD:	BWPD:		
3.	Plat map showing the location of the subject well, all other we	,		on offsetting leases w	ithin a 1/2 mile radius of		
	the subject well, and for each well the names and addresses of	of the lessee of recor	rd or operator.				
4.	Signed certificate showing service of the application and affida	avit of publication as	required in K.A.R	. 82-3-135a.			
Fa # O a#							
_	Initialize log of PRODUCTION ONLY, include the following:						
5.	Wireline log of subject well. Previously Filed with ACO-1:						
6.	Complete Form ACO-1 (Well Completion form) for the subject	well.					
For Con	nmingling of FLUIDS ONLY, include the following:						
7.	Well construction diagram of subject well.						
8.	Any available water chemistry data demonstrating the compat	ibility of the fluids to	be commingled.				
	/IT: I am the affiant and hereby certify that to the best of my						
	formation, knowledge and personal belief, this request for com- is true and proper and I have no information or knowledge, which		Submitte	ed Electronical	lly		
	istent with the information supplied in this application.						
]					
KCC	Coffice Use Only				e application. Protests must be wihin 15 days of publication of		
De	nied Approved	the notice of applica					
15-Day	Periods Ends:						

Date: _

Approved By:

CONFIDENTIAL V	NSAS CORPORATION COMMISSION 1184768 August 2013 DIL & GAS CONSERVATION DIVISION VELL COMPLETION FORM STORY - DESCRIPTION OF WELL & LEASE
OPERATOR: License # 30606	API No. 1515-063-22142-00-00
Name: Murfin Drilling Co., Inc.	Spot Description:
Address 1: 250 N WATER STE 300	SW_SE_NE_SE_Sec. 25 Twp. 12 S. R. 31 Sec. 7 West
Address 2:	Feet from North / Z South Line of Section
City: WICHITA State: KS Zip: 672	202 + 1216 408 Feet from 📝 East / 🗌 West Line of Section
Contact Person: Leon Rodak	Footages Calculated from Nearest Outside Section Corner:
Phone: (<u>316</u>) <u>267-3241</u>	NENW 🗹 SE 🗋 SW
CONTRACTOR: License # 30606	GPS Location: Lat:, Long:, (e.gxxxxxxxx) (e.gxxxxxxxxx)
Name: Murfin Drilling Co., Inc.	
Wellsite Geologist: Saman Sharifale	Datum: NAD27 NAD83 WGS84
Purchaser: MV Purchasing, LLC	County: Gove
Designate Type of Completion:	Lease Name: Abell Ranch Well #: 2-25
V New Well Re-Entry W	Field Name:
	Producing Formation: Fort Scott, Johnson, Mississippi
	Elevation: Ground: 28/4 Kelly Bushing: 2005
	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: 224 Feet
Cathodic Other (Core, Expl., etc.):	
If Workover/Re-entry: Old Well info as follows:	If yes, show depth set: 2396 Feet
Operator:	
Well Name:	feet depth to: 0 w/ 200 sx cmt.
Original Comp. Date: Original Total De	oth:
Deepening 🔲 Re-perf. 🗌 Conv. to ENHR	
Plug Back Conv. to GSW	
Commingled Permit #:	Chloride content: 1500 ppm Fluid volume: 1500 bbls
Dual Completion Permit #:	Dewatering method used: Evaporated
SWD Permit #:	
ENHR Permit #:	Operator Name:
GSW Permit #:	
10/02/2013 10/12/2013 11/	01/2013 Cuarter Sec TwpS. R East West
Spud Date or Date Reached TD Com	pletion Date or County: Sec WpS. R [_East _] West

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: 01/29/2014
Confidential Release Date:
Geologist Report Received
ALT I III Approved by: NAOMI JAMES Date: 01/31/2014

	Page Two	1184768
Operator Name: Murfin Drilling Co., Inc.	Lease Name: Abell Ranch	Well #:2-25
	County: Gove	

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 Stern Tests Taken (Attach Additional Sheets)		🚺 Yes	✓ Yes □ No□ Yes ✓ No		Log Formation (Top), Depth and Name See Attachment			nd Datum	Sample
Samples Sent to Geolo	[]] Yes	Тор						Datum	
Cores Taken Electric Log Run	☐ Yes ☑ Yes	⊠No □No							
List All E. Logs Run:									
Dual Induction Dual Compensated Microresistivity									
	· ·	Report all		RECORD	V Ne Inface, inte	ew Used ermediate, produ	ction, etc.		
Purpose of String	Size Hole Drilled	Size Cas Set (In C		Weig Lbs./		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.2500	8.6250		23		224	Common	170	3% сс
Production	7.8750	5.5000		15.5		4598	owc	175	

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Protect Casing	-			
Plug Off Zone	. <u></u>			

Did you perform a hydraulic fracturing treatment on this well? Yes V No Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? 🗌 Yes No No Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No

Other (Specify)

(If No, skip questions 2 and 3) (If No, skip question 3) (If No, fill out Page Three of the ACO-1)

A DRAFFIC COMPANY AND DEDIDED TO DESCRIPTION AND

Shots Per Foot			ORD - Bridge Plugs Set/Type of Each Interval Perforated			Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)		
4	4410 - 4414 Fort	Scott			250 g	al 15% MCA		
4	4486 - 4490 John	son				al 15% MCA		
4	4516 - 4522 Missi	ssippi			200 g	al 15% MCA	· · ·	
TUBING RECORD: 2	Size: 	Set At: 4537	Pe NA	acker At:	Liner F		No	·
Date of First, Resume 11/12/2013	ed Production, SWD or El	IHA.	Producing Method:	Pumping] Gas Lift	Other (Explain)		
Estimated Production	n Oil	Bbis.	Gas Mcf	W	ater	Bbls.	Gas-Oil Ratio	Gravity
Per 24 Hours	111		6		6			32
DISPOSI	TION OF GAS:	- <u> -</u>	METH	OD OF COMP	ETION:		PRODUCTION I	NTERVAL:
Vented Sold Used on Lease			Dpen Hole 🗹 Per		ly Comp. t ACO-5)	Commingled (Submit ACO-4)	4410 - 4522	<u> </u>

Mall to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

		A 13 Se	MDCI Abell Ranch #1-25 956 FSL 875' FEL Sec. 25-T12S-R31W 2873' KB					
Formation	Sample tops	Datum	Ref	Log Tops	Datum	Ref	Log Tops	Datum
Anhydrite	2370	+515	-13	2363	+522	-6	2345	+528
B/Anhydrite	2398	+487	-15	2388	+497	-5	2371	+502
Topeka	3684	-799	-11	3676	-791	-3	3661	-788
Heepner	3902	-1017	-6	3896	-1011	Flat	3884	-1011
Lansing	3938	-1053	-5	3928	-1043	5	3921	-1048
Stark	4164	-1279	-17	4158	-1273	-1	4135	-1262
Marmaton	4278	-1493	-3	4285	-1400	-10	4263	-1390
Fort Scott	4418	-1533	-6	4409	-1524	+3	4400	-1527
Cherokee	4442	-1557	-4	4437	-1552	+1	4426	-1553
Mississippi	4503	-1618	-4	4503	-1618	-4	4487	-1614
RTD	4600			1			4610	
LTD	[ļ.		4599			4612	-1739

Affidavit of Notice Served Re: Application for: ACO-4 Application for Commingling of Production of Fluids Well Name: Abell Ranch #2-25 Legal Location: SW SE NE SE Sec. 25-128-31W The undersigned hereby certificates that he / she is a duly authorized agent for the applicant, and that on the day 8th of October of October 2015 , a true and correct copy of the application referenced above was delivered or mailed to the following parties: Note: A copy of this affidavit must be served as a part of the application. Name Address (Attach additional sheets it necessary)

I further attest that notice of the filing of this application was published in the	Gove County Advocate	, the official county publication
ofGove	_ county. A copy of the affidavit of this publication is attached.	
Signed this8th day of October,	2015 Dent Dean	
	Applicant of Duly Authorized Agent	
Subscribed and sworn to	before me this 8th day of October	, 2015
My Apple Explice 9 0 000	Notary Public My Commission Expires: 5-9-90/9	1

Protests may be filed by any party having a valid interest in the application. Petitions for protests shall be in writing and shall clearly identify the name and address of the protestant and the title of the application. The petition shall include a clear and concise statement of the direct and substantial interest of the protestant in the proceedings, including the manner in which the protestant may be affected, and the nature, extent, character and grounds of the protest. Protestants shall serve the protest upon the applicant by mail or personal service at the same time or before the protestant files the protest with the Conservation Division. Protests must be filed within 15 days of the publication notice of the application.

(Attach additional sheets if necessary)	
Name:	Legal Description of Leasehold: W/2 Sec. 30, W/2 Sec. 31 in 12S-30W
Murfin Drilling Co., Inc.	
250 N. Water, Suite 300	Sec. 25, Sec. 36 in 12S-31W
Wichita, KS 67202	
I hereby certify that the statements made herein are true and correct to the best of m	y knowledge and belief.
	16 the hand
Applicar	nt or Duly Authorized Agent
Subscribed and sworn before	me this 8th day of October , 2015
	Min R I C
ALISSA B. TEVIS	(llesse Jews
Notary Public - State of Kansas	5-9-2010
My Appt. Expires 5-2-2019 My Com	mission Expires: J J J JUI 9

Instructions:

- 1. Fully complete application, including page 4 (*plat map*) showing subject well and all known oil, gas and input wells, including wells being drilled, inactive wells, or dry holes, within one-half mile. Show lease names and operators or unleased mineral rights owners of all lands within one-half mile. Show well numbers and elevations of producing formation tops.
- 2. Attach some type of log (drillers log, electric log, etc.).

Offset Operators, Unleased Mineral Owners and Landowners acreage

- 3. Attach some type of verification of cementing for surface casing, longstring, D.V. tool, perforations, etc. (Cement ticket and job log, bond log, etc.)
- 4. Attach Affidavit of Notice.
- 5. Fill in schematic drawing of subsurface facilities including: size, setting depth, amount of cement, measured or calculated tops of cement for each of surface, intermediate (*if any*) and production casing; size and setting depth of tubing and packer; geological zone of injection showing top and bottom of injection interval.
- 6. The original and one copy of the application and all attachments shall be mailed to the State Corporation Commission, Conservation Division.
- 7. Deliver or mail one (1) copy of the application to the landowner on whose land the injection well is located and to each operator or lessee of record and each unleased mineral rights owner within one-half mile of the applicant well.
- 8. Approval of this application, if granted, is valid only as long as there are no substantial changes in operation set forth in the application. A substantial change requires the approval of a new application. *No injection well may be used without prior written authorization.*
- 9. All application fees must accompany the application.

AFFIDAVIT OF PUBLICATION State of Kansas, Gove County, ss:

Roxanne Broeckelman

being first duly sworn, deposes and

says:	That_	she	is
	co-pu	ıblisher	of

Gove County Advocate, a weekly newspaper printed in the State of Kansas, and published in and of general circulation in Gove County, Kansas, with a general paid circulation on a weekly basis in Gove County, Kansas, and that said newspaper is not a trade, religious or fraternal publication.

Said newspaper is a weekly published at least 50 times a year; and has been so published continuously and uninterruptedly in said county and state for a period of more than five years prior to the first publication of said notice; and has been admitted at the post office in Quinter in said county as periodical class mail matter.

That the attached notice is a true copy thereof and was published in the regular and entire issue of said

newspaper for	or	ne		
consecutive	week	:(s),	the f	irst
publication the	reof l	being	made	as

aforesaid	on the	24th	day

of <u>J</u> L	une	, <u>2015</u>
with su	ubsequent publica	ations being
made	on the following d	ates:

made on the lo	nowing dates.	

Printer's Fee	<u>\$ 19.25</u>
Additional Copies .	\$
Affidavit Fees	\$ <u>2.00</u>
	es . <u>\$21.25</u>
Ranner	veckolman

this	24th	day	1

of

2015 ァル

Notary Public My commission expires: January 8, 2017

LEGAL ADVERTISING

(Published in the Gove County Advocate, Quinter, KS, Wed., June 24, 2015 - 1t) BEFORE THE STATE CORPORATION

COMMISSION OF THE STATE OF KANSAS NOTICE OF FILING APPLICATION

RE: Murfin Drilling Co., Inc.- Application for Commingling of Production on the Abeli Ranch #2-25, located in Gove County, Kansas.

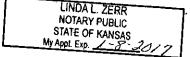
TO: All Oil and Gas Producers, Unleased Mineral Interest Owners, Landowners, and all persons whomever concerned.

You, and each of you, are hereby notified that Murfin Drilling Company, Inc. has filed an application for Commingling of Production from the Ft Scott, Johnson, and Missippian at the Abell Ranch #2-25 well located in the SW SE NE SE of Sec. 25-12S-31W, Gove Co., KS.

Any persons who object to or protest this application shall be required to file their objections or protest with the Conservation Division of the State Corporation Commission of the State of Kansas within fifteen (15) days from the date of this publication. These protests shall be pursuant to Commission regulations and must state specific reasons why the grant of the application may cause waste, violate correlative rights or pollute the natural resources of the State of Kansas.

All persons interested or concerned shall take notice of the foregoing and shall govern themselves accordingly.

Murfin Drilling Company, Inc. 250 N. Water, Suite 300 Wichita, KS 67202 316-267-3241



AFFIDAVIT

STATE OF KANSAS

County of Sedgwick

Mark Fletchall, of lawful age, being first duly sworn, deposeth and saith: That he is Record Clerk of The Wichita Eagle, a daily newspaper published in the City of Wichita, County of Sedgwick, State of Kansas, and having a general paid circulation on a daily basis in said County, which said newspaper has been continuously and uninterruptedly published in said County for more than one year prior to the first publication of the notice hereinafter mentioned, and which said newspaper has been entered as second class mail matter at the United States Post Office in Wichita, Kansas, and which said newspaper is not a trade, religious or fraternal publication and that a notice of a true copy is hereto attached was published in the regular and entire Morning issue of said The Wichita Eagle for _1_ issues, that the first publication of said notice was

1 - SS.

made as aforesaid on the 22^{nd} of

June A.D. 2015 , with

subsequent publications being made on the following dates:

And affiant further says that he has personal knowledge of the statements above set forth and that they are true.

Fletchall

Subscribed and sworn to before me this

22nd day of June, 2015



Notary Public Sedgwick County, Kansas

Printers Fee: \$142.60

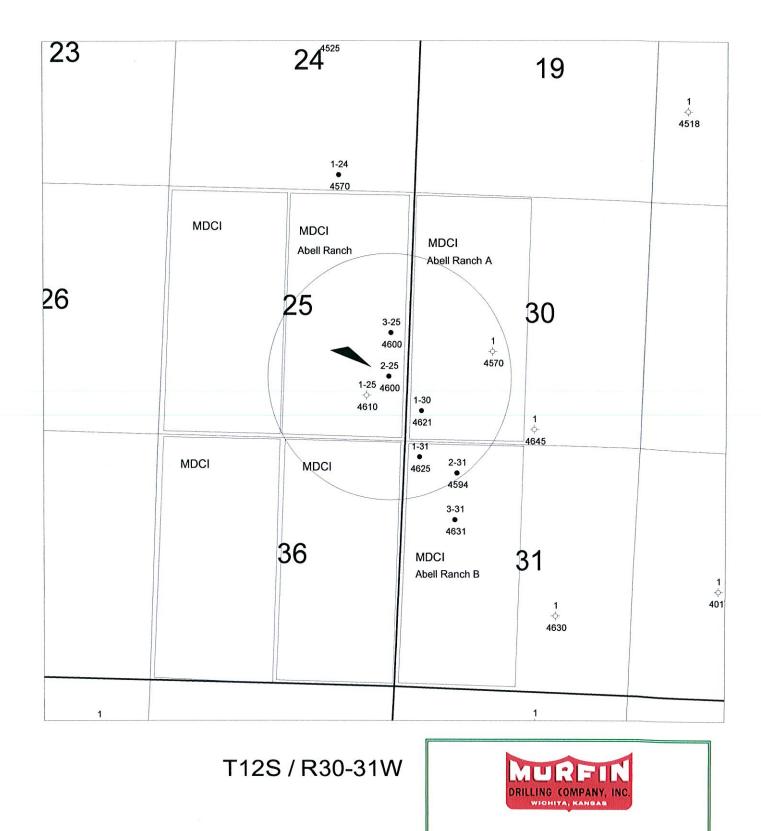
LEGAL PUBLICATION

Published in The Wichita Eagle June 22, 2015 (3353650) BEFORE THE STATE CORPORATION COMMISION OF THE STATE OF KANSA NOTICE OF FILING APPLICATION

RE: Murfin Drilling Co., Inc.- Application for Commingling of Production on the Abell Ranch #2-25, located in Gove County, Kansas.

Kansas.
 TO: All Oil and Gas Producers, Unleased Mineral Interest Owners, Landowners, and all persons whomever concerned.
 You, and each of you, are hereby notified that Murfin Drilling Company, Inc.
 has filed an application for Commingling of Production from the FI Scott, Johnson, and Missippian at the Abell Ranch #2-25 well located in the SW SE NE SE of Sec. 25-125-31W, Gove Co., KS.
 Any persons who object to or profest this application shall be required to file their objections or protest with the Conservation Division of the State of Kansas within fifteen (15) days from the date of this publication. These profests shall be pursuant to Commission

days from the date of this publication. These protests shall be pursuant to Commission regulations and must state specific reasons why the grant of the application may cause waste, violate correlative rights or pollute the natural resources of the State of Kansas. All persons interested or concerned shall take notice of the foregoing and shall govern themselves accordingly. Murfin Drilling Company, Inc. 250 N. Water, Suite 300 Wichita, KS 67202 316-267-3241



Abell Ranch #2-25 Commingling App. Sec. 25-12S-31W, Gove Co. KS

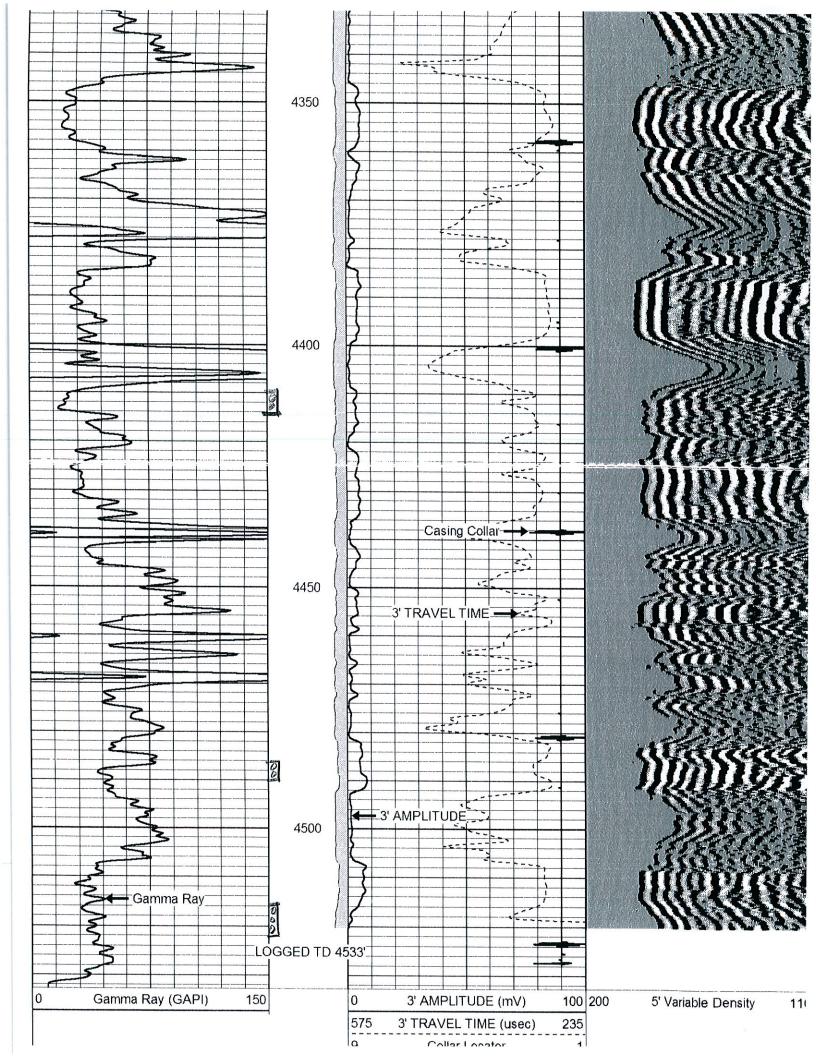
Author: Date: 8 October, 2015 Horizontal Scale: Contour Interval:

Perf-Tech Wireline Services

DUAL RECEIVER CEMENT BOND LOG

Ŭ N		Coi	mpany	M	JRFIN DI	RILLI	NG C	OMPANY	, INC.		
ANY,		We	11	ABELL RANCH #2-25							
20MP		Fie	ld								
LING (Co	unty	G	DVE			State	KANSA	٩S	
ANC		Loc	ation:			AP	#: 15	5-063-22142	-00-00	Otł	ner Services
MURFIN DRILLING COMPANY, INC. ABELL RANCH #2-25 GOVE	и W X V X V X V X V X V X V X V X V										
	X		5	SEC	25 TWP	12S	RGE	E 31W			Elevation
Company Well Field County	State	Permanent DatumGROUND LEVELElevation2874Log Measured FromKELLY BUSHING 11' A.G.L.D.F.									
Date					DCT. 22, 20				-		
Run Number					ONE						
Depth Driller					4600						
Depth Logger					4533						
Bottom Logged Interval 4532											
Top Log Interval				3000							
Open Hole Size					/// WATER						
Type Fluid Density / Viscosity											
Max. Recorded Temp.			124F								
Estimated Cement Top			3150								
Time Well Ready			/// ····								
Time Logger of	n Bot	tom									
Equipment Number PT-06											
Location					HAYS						
Recorded By BOB KLAUS Witnessed By JOHN GERSTNER											
Williessed by	Bo	robolo	Record	10	MIN GERSI	NER		Tubing	Record		
Run Number		Bit	From		То	S	ze	Weight	From	<u> </u>	To
ONE		.25	00		222			, , , , , , , , , , , , , , , , , , ,	110/11		+0
TWO	7.8	375	222		4600						
							-			$ \longrightarrow $	ottom
Casing Record		لـــــــا	Size	1	Mo	L		Тор	I	<u>_</u>	ottom
Surface String		t	8 5/8	Wgt/Ft 23#			10p 00		Bottom 222		
Prot. String	Surface String 8 5/8 23# 00 222 3 Prot. String										
Production Stri	ng		5 1/5		15	.5#		00			4597
Liner		1									
	__	l									

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Conservation Division 266 N. Main St., Ste. 220 Wichita, KS 67202-1513



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Shari Feist Albrecht, Chair Jay Scott Emler, Commissioner Pat Apple, Commissioner Sam Brownback, Governor

October 26, 2015

Kenneth Dean Murfin Drilling Co., Inc. 250 N Water, Ste 300 Wichita, KS 67202-1216

RE: Approved Commingling CO101501 Abell Ranch 2-25 API No. 15-063-22142-00-00

Dear Mr. Dean:

Your Application for Commingling (ACO-4) for the above described well has been reviewed and approved by the Kansas Corporation Commission (KCC) per K.A.R. 82-3-123. Notice was examined and found to be proper per K.A.R. 82-3-135a. No protest had been filed within the 15-day protest period.

Based upon the depth of the Mississippian formation perforations, total oil production shall not exceed 200 BOPD and total gas production shall not exceed 50% of the absolute open flow (AOF).

Sincerely,

Rick Hestermann Production Department