

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 Des	cription:				
Address	1:	_	Sec	Twp.	S. R	R	East West
Address	2:			Feet from	North /	South	Line of Section
City:	State: Zip:+			Feet from	East /	West	Line of Section
Contact I	Person:	County: _					
Phone:	()	Lease Na	me:		_ 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:	BOPD:		MCFPD:		BWPD:	
	Formation:	BOPD: _		MCFPD:		BWPD:	
	Formation:	BOPD: _		MCFPD:		BWPD:	
	Formation:	BOPD: _		MCFPD:		BWPD:	
	Formation:	BOPD: _		MCFPD:		_ BWPD:	
3.4.	Plat map showing the location of the subject well, all other we the subject well, and for each well the names and addresses of Signed certificate showing service of the application and affida	of the lessee of rec	ord or operator.		C	thin a 1/2 ו	nile radius of
_	nmingling of PRODUCTION ONLY, include the following:	_					
5.	Wireline log of subject well. Previously Filed with ACO-1:	Yes No					
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 t	o be commingle	ed.			
current ir mingling	/IT: I am the affiant and hereby certify that to the best of my formation, knowledge and personal belief, this request for comis true and proper and I have no information or knowledge, which istent with the information supplied in this application.		Subm	itted Ele	ctronicall	ly	
KCC	Office Use Only						Protests must be
De	nied Approved	in writing and col the notice of appl		52-3-135b and	must be filed	wihin 15 da	ys of publication of
15-Day	Periods Ends:						

Date: _

Approved By: _



KANSAS CORPORATION COMMISSION 1208227

OIL & GAS CONSERVATION DIVISION

Confidentiality Requested:

Yes 🗌 No

Form ACO-1 August 2013 Form must be Typed Form must be Signed All blanks must be Filled

WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 30606		API No. 15 - 15-063-22177-00-00				
Name: Murfin Drilling Co., Inc.		Spot Description:				
Address 1: 250 N WATER STE 300		NW_NW_NW_Sec. 31 Twp. 12 S. R. 30 East West				
Address 2:						
City: WICHITA State: KS		330 Feet from East / 17 West Line of Section				
Contact Person: Leon Rodak		Footages Calculated from Nearest Outside Section Corner:				
Phone: (<u>316</u>) 267-3241						
CONTRACTOR: License # 30606		GPS Location: Lat:, Long:				
Murfin Drilling Co. Inc.		GPS Location: Lat:, Long:, (a.gxxxxxxxxxx) (a.gxxxxxxxxxxxx)				
Wellsite Geologist: Saman Sharifale		Datum: NAD27 NAD83 WGS84				
		County: Gove				
Purchaser:		Lease Name: Abell Ranch 'B' Well #: 1-31				
Designate Type of Completion:		Field Name:				
Vew Well Re-Entry	Workover	Producing Formation: Lans E, Miss				
🖌 Oli 🗌 WSW 🔲 SWD	D SIOW	Elevation: Ground: 2896 Kelly Bushing: 2907				
🗌 Gas 🛄 D&A 🔄 ENH	IR 🗌 SIGW					
🗋 OG 🔤 GSV	V Temp. Abd.	Total Vertical Depth: 4625 Plug Back Total Depth: 4588				
CM (Coal Bed Methane)		Amount of Surface Pipe Set and Cemented at: 222 Feet				
Cathodic Other (Core, Expl., etc.)	k	Multiple Stage Cementing Collar Used? 🛛 Yes 🗌 No				
If Workover/Re-entry: Old Well Info as follow	S.	If yes, show depth set: 2398 Feet				
Operator:		If Alternate II completion, cement circulated from: 0				
Well Name:	· · · · · · · · · · · · · · · · · · ·	feet depth to: 2398 w/ 200 sx cmt.				
Original Comp. Date: Origin	nal Total Depth:					
📄 Deepening 🔛 Re-perf. 📋 Conv.	to ENHR [] Conv. to SWD	Drilling Fluid Management Plan				
Plug Back Conv.	to GSW	(Data must be collected from the Reserve Pit)				
		Chloride content: 1300 ppm Fluid volume: 1400 bbls				
	·	Dewatering method used: Evaporated				
		Location of fluid disposal if hauled offsite:				
—	• • •	Operator Name:				
GSW Permit #	• •	Lease Name: License #:				
02/21/2014 03/02/2014	03/24/2014	Quarter Sec TwpS. R [East] West				
Spud Date or Date Reached TD Recompletion Date	Completion Date or 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: 06/17/2014
Confidential Rolease Date:
Geologist Report Received
 ALT I I III Approved by: NAOM JAMES Date: 06/17/2014

	1208227
Operator Name: Murfin Drilling Co., Inc.	Lease Name: Abell Ranch 'B' Well #: 1-31
Sec. <u>31</u> Twp. ¹ 2 S. R. <u>30</u> East Twest	County: Gove

Pane 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 Taken (Attach Additional Sheets)	🗹 Yes	No	🗹 Log	Formation (Top), Depth and Datum	Sample
Samples Sent to Geological Survey	✓ Yes	No	Name See Attachmer	nt Top	Datum
Cores Taken Electric Log Run	🗌 Yes 🗹 Yes	☑ No □ No			
List All E. Logs Run: Attached					
· · · · · · · · · · · · · · · · · · ·			I		

Report all strings set-conductor, surface, intermediate, production, 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			
Surface	12.2500	8.6250	23	222	Common	175	3% CC			
Production	7.8750	5.5000	15.5	4613	EA 2	175	10% set, 5% cel sest, 1/18 per az fio ses			

Purpose: Perforate	Depth Top Bottom	Type of Coment	# Sacks Used	Type and Percent Additives
Protect Casing Plug Back TD	₩ ₩			
Plug Off Zone	.			

Did you perform a hydraulic fracturing treatment on this well?	Yes	🖌 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 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	Specify For			RECORD - Bridge Plugs Set/Type tage of Each Interval Perforated			1	Depth		
.4	4039-4045 Lans E					250g 15% MCA, 750g 15% NEFE				
4	4543-4	555 Miss		······································		· · · ·	300g 2	20% MCA, 900g 20	9% SGA, 900g 20% NEFE	
		· · · ·				· · · · · ·				
			· · ·							······································
TUBING RECORD: 2.	Siz 375	e: 45	Set At: 87		Packer	At:	Liner R		No	
Date of First, Resume 03/26/2014	d Producti	on, SWD or ENHF	ł.	Producing M	lethod: I Pum	ping	Gas Lift	Other (Explain)	·····	
Estimated Production Per 24 Hours		Oil⊧ Bb 44	ls.	Gas	Mcf	Wat	er 18	Bbis.	Gas-Oil Ratio	Gravity
DISPOSIT	ION OF G	ÁS:	[·	METHOD	OF COMPLI	TION:		PRODUCTION INTERN	VAL:
Vented Sol		lsed on Lease -18.)		Open Hole 🛛 Perf. 🗌 Dually		lly Comp. Commingled It ACO-5) (Submit ACO-4)		4039-4555		

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

ADDITIONAL CEMENTING / SQUEEZE RECORD

turing treatment on this well?
a field of the hedroedie freehening the states to second or

(If No, fill out Page	Three of the ACO-1
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Affidav	it of Notice Served			
Re:	Application for: ACO-4 Application for Commingling of	of Production of Flui	ds	
	Well Name: Abell Ranch B #1-31	Legal Location:	NW NW NW Sec.	31-12S-30W
The und	ersigned hereby certificates that he / she is a duly authorized agent fo	r the applicant, and that o	n the day 8th of	October
2015	, a true and correct copy of the application referenced ab	ove was delivered or mail	ed to the following parties:	
Note: A	copy of this affidavit must be served as a part of the application.			
	Name	Address (Attach	additional sheets if necessa	y)
		Covo County Advo	eete	
0	attest that notice of the filing of this application was published in the _			, the official county publication
of	Gove	county. A copy of the affic	lavit of this publication is a	ttached.
Signed	his day of October ,2	015	10	
		Km	mit Ven	~
	Ā	pplicant of Duly Authorize		
	Subscribed and sworn to b	efore me this8th	day of October	, 2015
	Notary Public - State of Kansas My Appt. Expires 5-2-200	Celisso	De Jeen	
		otary Public	5-7-101	0
	Μ	y Commission Expires: _	5000	/

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.

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

Page Three

Offset Operators, Unleased Mineral Owners and Landowners acreage (Attach additional sheets if necessary)			
Name:	Legal Description of Leasehold:		
Murfin Drilling Co., Inc.	Sec. 30, Sec. 31 in 12S-30W		
250 N. Water, Suite 300	E/2 Sec. 25, E/2 Sec. 36 in 12S-31W		
Wichita, KS 67202			
I hereby certify that the statements made herein are true and correct to the best of n	hy knowledge and belief.		
Applica	nt or Duly Authorized Agent		
Subscribed and sworn before	me this day of , 2015		
ALISSA B. TEVIS Notary Public - State of Kansas My Appt. Expires 5-2-3019 Notary I			
Contraction of the State of the	nmission Expires: <u>5-2-2019</u>		
Instructions:			
1. Fully complete application, including page 4 (plat map) showing subject w	vell and all known oil, gas and input wells, including wells being drilled, operators or unleased mineral rights owners of all lands within one-half mile.		

2. Attach some type of log (drillers log, electric log, etc.).

Show well numbers and elevations of producing formation tops.

- 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-p	ublisher	 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 **one** consecutive week(s), the first publication thereof being made as

aforesaid on the 24th day

of <u>June</u>, <u>2015</u>, with subsequent publications being made on the following dates:

.

Additional Copies\$____

Affidavit Fees	
Total Publication Fees	. <u>\$01.25</u>

- Holanned Dolcholman

Subscribed and sworn to before me

this <u>24th</u> day of

<u>June</u>, 2015

Notary Public My commission expires: January 8, 2017

LEGAL ADVERTISING

(Published in the Gove County Advocate, Quinter, KS, Wed., June 24, 2015 • 11)

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 Abell Ranch B #1-31, 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 LKC and the Mississippian at the Abell Ranch B #1-31 well located in the NW NW NW of Sec. 31-12S-30W, 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

LINDAL ZERR	7
NOTARY PUBLIC	ľ
STATE OF KANSAS	ł
My Appl. Exp. 1-8-2017	Ł

AFFIDAVIT

STATE OF KANSAS - SS.

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

made as aforesaid on the 22^{nd} of

June A.D. 2015 , with

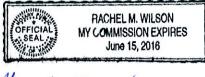
subsequent publications being made on the following dates:

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

Fletchall Jack

Subscribed and sworn to before me this

22nd day of June, 2015



otary Public Sedgwick County, Kansas

Printers Fee: \$142.60

LEGAL PUBLICATION

Published in The Wichila Eagle June 22, 2015 (3353659) BEFORE THE STATE CORPORATION COMMISION OF THE STATE OF KANSAS

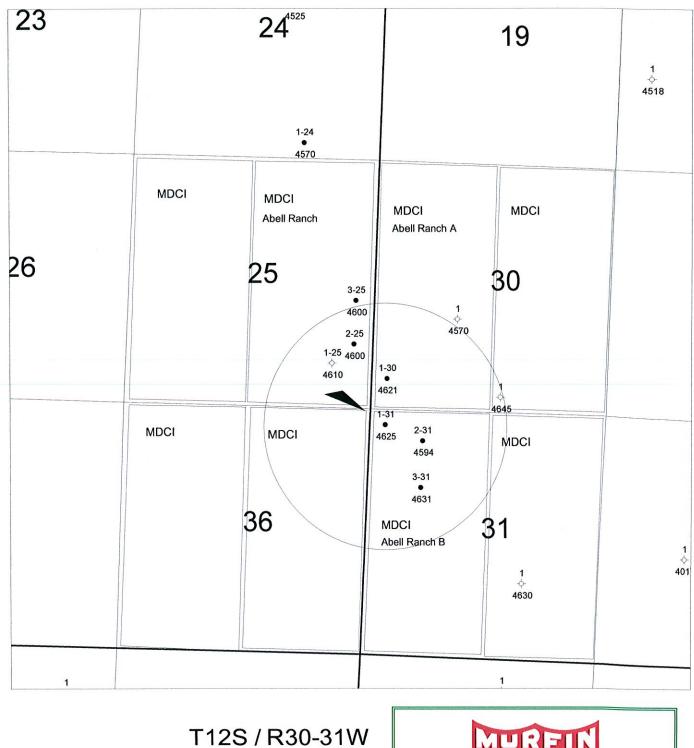
NOTICE OF FILING APPLICATION RE: Murfin Drilling Co., Inc.- Application for Commingling of Production on the Abell Ranch B #1-31, located in Gove County, Kansas.

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

ou, and each of you, are hereby notified

You, and each of you, are hereby notified that Murfin Drilling Company, Inc. has filed an application for Commingling of Production from the LKC and the Mississippian at the Abell Ranch B #1-31 well located in the NW NW NV of Sec. 31-12S-30W, Govee 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 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

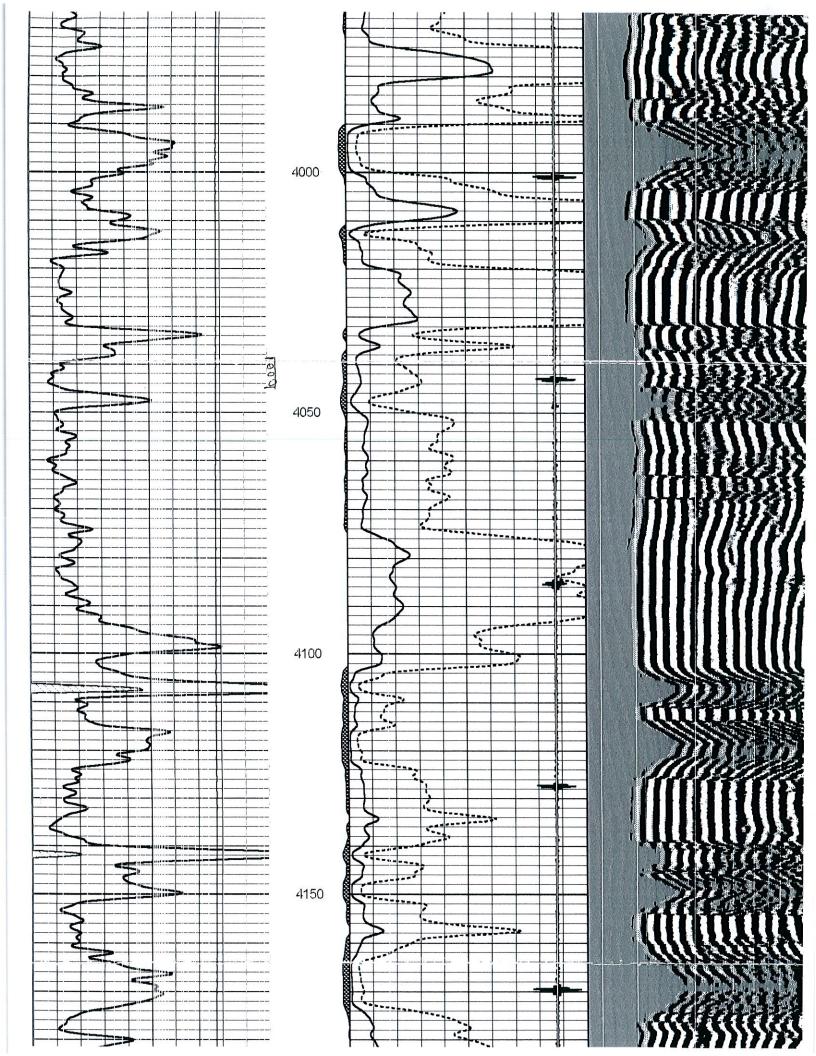


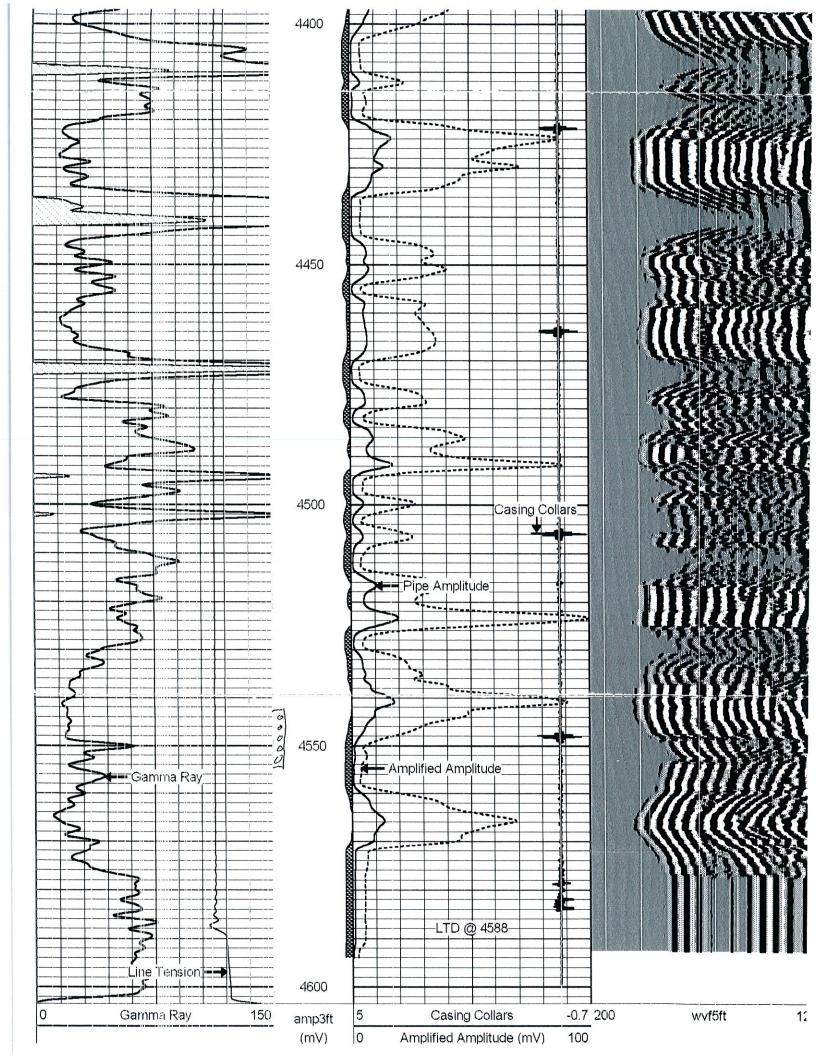
DRILLING COMPANY, INC Abell Ranch B #1-31 **Commingling App.** Sec. 31-12S-30W, Gove Co. KS Horizontal Scale: Author: 8 October, 2015 Contour Interval:

Date:

NEE		S	onic Cei	ment	
	n		Bond L		
inergy Servi	ices				
/ell	Murfin Drilling Company, Inc. Abell Ranch 'B' No. 1-31				
			State Ka	nsas	
	<u></u>			Other Services Mast Trailer	
n Gro om Kell	und Level y Bushing 1 y Bushing	Elevation 1 Ft. Above Pe	2896	Elevation K.B. 2907 D.F. G.L. 2896	
Operation	03-10 03-04 Prim	-2014 -2014 hary			
V Tool	45 4587 to	88 5 3300 9 T.D.		to @	
ement dmix		11 11 11			
/is.	Fi	ali			
nt Top	///	<u>32</u> // 4			
		5 Hays			
	ompany /ell ield ounty cation Sec: 31 Gro om Kell	ompany Murfin Drill /ell Abell Rand ield Wildcat ounty Gove cation 330' FNL & 3 Sec: 31 Twp: 12 o Ground Level 1 pm Kelly Bushing 1 From Kelly Bushing 1 From Kelly Bushing 1 On 03-10 03-10 Operation Prim 46 4587 to 5.5" V. Tool 1 1 ement 1// 1 //is. 1/// 1 ement 1// 1 //is. 1/// 1 ement 1// 1 //is. 1/// 1 mature 12 1 RBT 3- 3- iation 4 1	ompany Murfin Drilling Comp /ell Abell Ranch 'B' No. ield Wildcat ounty Gove cation 330' FNL & 330' FWL Sec: 31 Twp: 12 S Rge: o Ground Level Elevation Sec: 31 Twp: 12 S Rge: o Ground Level Elevation Sec: 31 Twp: 12 S Rge: o Ground Level Elevation Sec: 31 Twp: 12 S Rge: o Ground Level Elevation Sec: 31 Twp: 12 S Rge: Ome 03-04-2014 One 03-04-2014 Operation Primary 4625 4588 4587 to 3300 5.5" T.D. V. Tool IIIII IIII IIII ement IIII IIII IIII //// Water Full IIII //// IIII IIII IIII //// 3482 14 Top	ompany Murfin Drilling Company, Inc. Abell Ranch 'B' No. 1-31 ield Wildcat ounty Gove State Ka cation 330' FNL & 330' FWL Sec: 31 Twp: 12 S Rge: 30 W Ground Level Elevation 2896 Elevation 2896 Murfin Drilling Company, Inc. Sec: 31 Twp: 12 S Rge: 30 W Ground Level Elevation 2896 Inc. No. 1 Sec: 31 Twp: 12 S Rge: 30 W One One Inc. Inc. Num One One One Inc. Inc. One One One Inc. Inc. Inc. Operation Primary Inc. Inc. Inc. Inc. V. Tool Inc. Inc. Inc. Inc. Inc. V. Tool Inc. Inc. Inc. Inc. Inc. Water Full Inc. Inc. Inc. Inc. Inc. <	ompany Murfin Drilling Company, Inc. /ell Abell Ranch 'B' No. 1-31 ield Wildcat ounty Gove State Kansas cation 330' FNL & 330' FWL Sec: 31 Twp: 12 S Rge: 30 W Ground Level Elevation 2896 Mast Trailer Sec: 31 From Kelly Bushing 11 Ft. Above Perm. Datum One 03-10-2014 O3-04-2014 03-04-2014 Operation Primary 4587 to<3300 to 5.5" @ T.D. V. Tool 1//// IIII 1/// ement 1//// IIII 1/// V. Tool 1/// IIII 1/// Vitool 1//// IIII 1/// IIII 1/// <t< th=""></t<>

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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 CO101502 Abell Ranch 'B' 1-31 API No. 15-063-22177-00-00

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