

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-4
Form must be typed
March 2009

APPLICATION FOR COMMINGLING OF PRODUCTION (K.A.R. 82-3-123) OR FLUIDS (K.A.R. 82-3-123a) *Commingling ID #* _____

OPERATOR: License # _____ API No. 15 - _____
Name: _____ Spot Description: _____
Address 1: _____ - - - - - Sec. _____ Twp. _____ S. R. _____ East West
Address 2: _____ Feet from North / South Line of Section
City: _____ State: _____ Zip: _____ + _____ Feet from East / West Line of Section
Contact Person: _____ County: _____
Phone: (_____) _____ Lease Name: _____ 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 each interval:
Formation: _____ BOPD: _____ MCFPD: _____ BWPD: _____
Formation: _____ BOPD: _____ MCFPD: _____ BWPD: _____
Formation: _____ BOPD: _____ MCFPD: _____ BWPD: _____
Formation: _____ BOPD: _____ MCFPD: _____ BWPD: _____
Formation: _____ BOPD: _____ MCFPD: _____ BWPD: _____

3. Plat map showing the location of the subject well, all other wells on the subject lease, and all wells on offsetting leases within a 1/2 mile radius of the subject well, and for each well the names and addresses of the lessee of record or operator.

4. Signed certificate showing service of the application and affidavit of publication as required in K.A.R. 82-3-135a.

For Commingling 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 Commingling of FLUIDS ONLY, include the following:

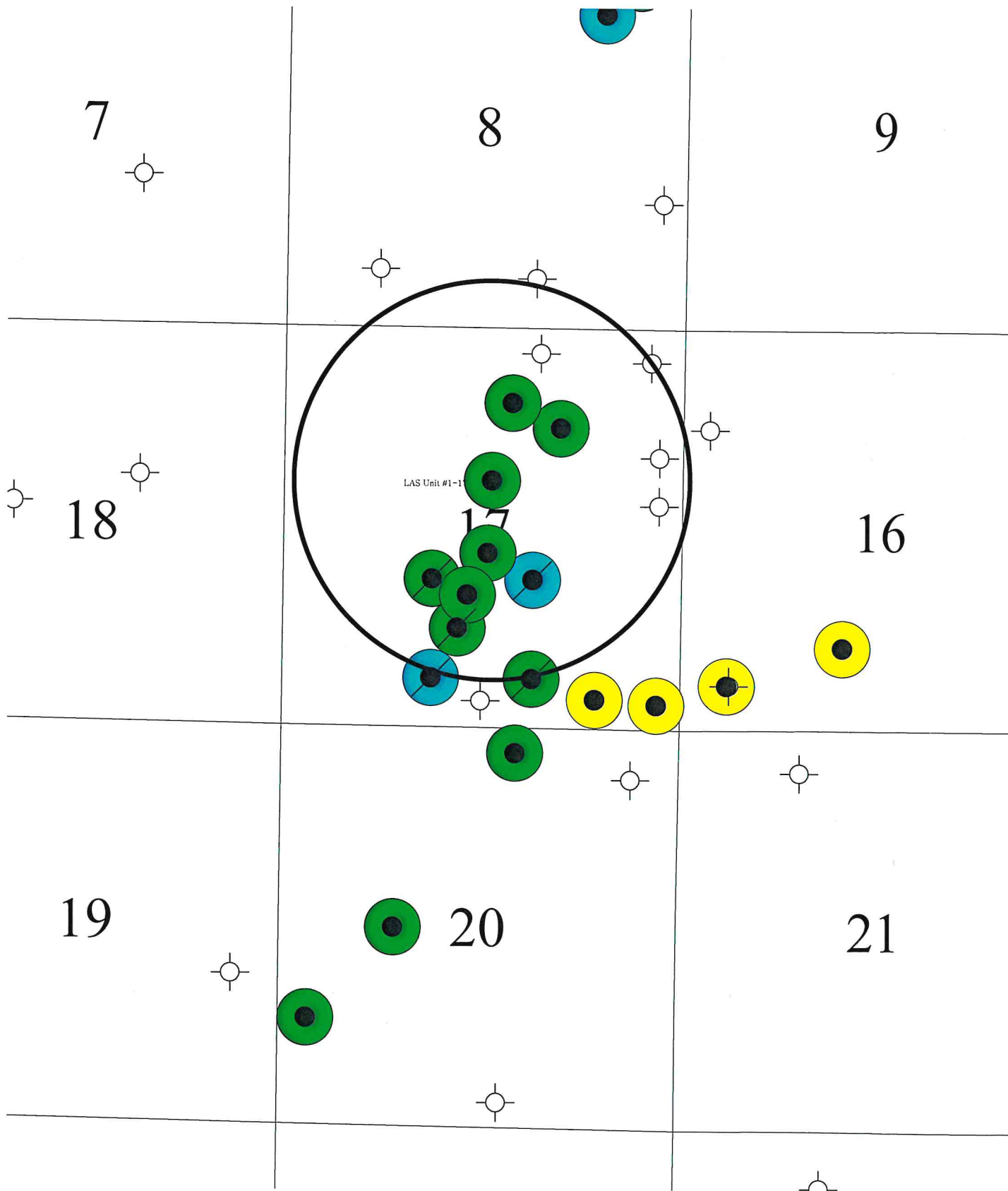
- 7. Well construction diagram of subject well.
- 8. Any available water chemistry data demonstrating the compatibility of the fluids to be commingled.

AFFIDAVIT: I am the affiant and hereby certify that to the best of my current information, knowledge and personal belief, this request for commingling is true and proper and I have no information or knowledge, which is inconsistent with the information supplied in this application.

Submitted Electronically

KCC Office Use Only
 Denied Approved
15-Day Periods Ends: _____
Approved By: _____ Date: _____

Protests may be filed by any party having a valid interest in the application. Protests must be in writing and comply with K.A.R. 82-3-135b and must be filed within 15 days of publication of the notice of application.



LAS UNIT #1-17



DRILLING COMPANY, INC.
WICHITA, KANSAS

**ATTACHMENT TO ACO-4
APPLICATION FOR COMMINGLING OF PRODUCTION**

**Signed Certificate of Notice to Offset Operators and Unleased Mineral Holders
Mull Drilling Company, Inc.
LAS Unit #1-17
SW/4 NE/4 Section 17-17S-23W
Ness County, Kansas
API No. 15-135-24722-00-01**

Names and addresses of each operator or lessee of record and each unleased mineral owner within one half mile of the subject well:

Section 8: SW/4

Larry & Melba Snodgrass
21554 State HWY 4
Ransom, KS 67572

Earl Kay Snodgrass
9224 W Westport Street
Wichita, KS 67212

Lonnie Lang
133 3rd Street
Wakeeney, KS 67672

Moe Lang
1064 CR 360
Pawnee Rock, KS 67567

Gary D. Lang
420 S Seventh
Wakeeney, KS 67672

Section 8: SW/4 & Section 16: N/2

David L. Albers; Wilber Albers Trust:
Randy Lynn Albers Supplemental Trust
30077 240 Road
Brownell, KS 67521

Reni Jo Potter-Wood
13800 Plymouth Crossing Drive
Edmond, OK 73013

Steven L. Albers
14931 E 63rd Street S
Derby, KS 67037

Mull Drilling Company, Inc's LAS Unit #1-17
SW/4 NE/4 Section 17-17S-23W
Ness County, Kansas
Page 2

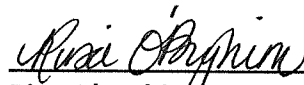
Section 17: All

Mull Drilling Company, Inc.

Copy of the ACO-4 was mailed to the above listed companies/individuals on January 14, 2021.

Signed this 14th day of January, 2021.

MULL DRILLING COMPANY, INC.



Risa O'Bryhim
Production Technician

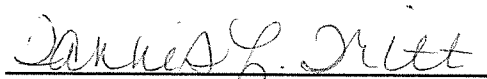
STATE OF KANSAS

ACKNOWLEDGEMENT FOR INDIVIDUAL

COUNTY OF SEDGWICK

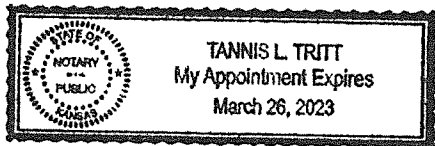
Before me, the undersigned, a Notary Public, within and for said county and state, on this 14th day of January, 2021, personally appeared Risa O'Bryhim, Production Technician of Mull Drilling Company, Inc., to me personally known to be the identical person who executed the within and foregoing Certificate of Service Form and acknowledged to me that she executed the same as her free and voluntary act and deed for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year last above written.



Tannis L. Tritt, Notary Public

My commission expires: 3.26.2023



First published in the Ness County News, Thursday, January 21, 2021. -11

BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS NOTICE OF FILING APPLICATION

Re: Mull Drilling Company, Inc. - Application for order to permit commingling of production of the LAS Unit #1-17, located in Ness County, Kansas.

To: All Oil & Gas Producers, Unleased Mineral Interest Owners, Landowners, and all persons whosoever concerned.

You, and each of you, are hereby notified that Mull Drilling Company, Inc. has filed an application to commingle production of the LKC and Mississippi formations on the LAS Unit #1-17, located SW/4 NE/4 17-17S-23W, Ness County, Kansas.

Any persons who object to or protest this application shall be required to file their objections or protests with the Conservation Division of the State Corporation Commission of the State of Kansas within fifteen (15) days from the date of the publication. These protests shall be filed 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. If no protests are received, this application may be granted through a summary proceeding. If valid protests are received, this matter will be set for hearing.

STATE OF KANSAS, COUNTY OF NESS, ss:

Jerry Clarke, being first duly sworn, Deposes and says: that he is Publisher of Ness County News, a weekly newspaper, published and printed in Ness City, State of Kansas, and published in and of general circulation in Ness County, Kansas, with a general paid circulation on a weekly basis in Ness County, Kansas, and that said newspaper is not a trade, religious or fraternal publication.

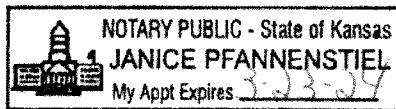
Said newspaper is a weekly published at least 50 times a year; has been so published continuously and uninterruptedly in said county and state for a period of more than five years prior to the first publication of said notice; and has been admitted at the post office of Ness City, in said County as second 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 3 consecutive weeks, the first publication thereof being made as aforesaid on the 21st day of January, 2021, with subsequent publications being made on the following dates:

_____, 20____, _____, 20____
_____, 20____, _____, 20____
_____, 20____, _____, 20____

_____, Jerry Clarke, editor

Subscribed and sworn to before me this 21st day of January, 20 21



Janice Pfannenstiel, Notary Public.

Publication Fee \$ 42.64

Additional Copies @ 10 \$ _____

Total Publication Fees \$ 42.64

Filed this _____ day of _____, 20____.

Attached Proof Of Publication approved this _____ day of _____, 20____

District Magistrate Judge

Filed this _____ day of _____, 20____.

Clerk of the District Court.

Attached Proof Of Publication approved this _____ day of _____, 20____

Judge Twenty-fourth Judicial District.

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

Mull Drilling Company, Inc. 1700 N. Waterfront Parkway, Building 1200 Wichita, KS 67206 316-264-6366



AFFIDAVIT OF PUBLICATION

Account #	Ad Number	Identification	PO	Amount	Cols	Depth
453877	0004857712	BEFORE THE STATE CORPORATION COMMISS	LAS Unit #1-17	\$241.80	1	4.00 In

Attention: Risa O'Bryhim

MULL DRILLING COMPANY, INC.
 1700 N. WATERFRONT PKWY, BUILDING 1200
 WICHITA, KS 67206

**BEFORE THE STATE CORPORATION
 COMMISSION OF THE STATE OF KANSAS
 NOTICE OF FILING APPLICATION**

Re: Mull Drilling Company, Inc. - Application for order to permit commingling of production of the LAS Unit #1-17, located in Ness County, Kansas.

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Mull Drilling Company, Inc.
 1700 N. Waterfront Parkway,
 Building 1200
 Wichita, KS 67206
 316-264-6366

In The STATE OF KANSAS
 In and for the County of Sedgwick
AFFIDAVIT OF PUBLICATION

1 Insertions

Beginning issue of: 01/22/2021

Ending issue of: 01/22/2021

STATE OF KANSAS)

.SS

County of Sedgwick)

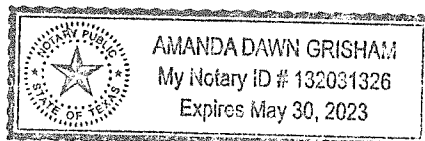
VICTORIA RODELA, of lawful age, being first duly sworn, deposes and saith: That he is Record Clerk of The Wichita Eagle, a daily newspaper published in the City of Wichita, County of Sedgwick, State of Kansas, and having a general paid circulation on a daily basis in said County, which said newspaper 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 from 1/22/2021 to 01/22/2021.

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

V Rodela

Signature of Principal Clerk

DATED: 1/22/2021



Amanda Grisham

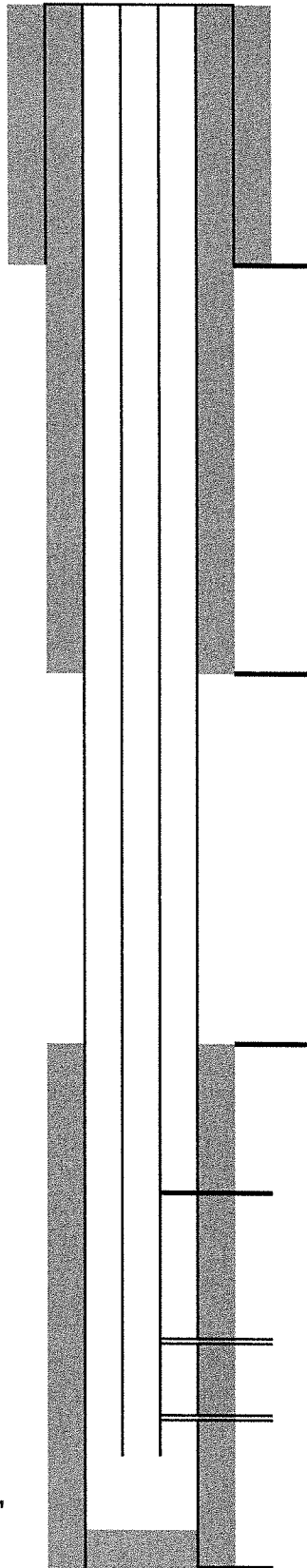
Notary Public Dallas County, Texas

Extra charge for lost or duplicate affidavits.
 Legal document please do not destroy!



DRILLING COMPANY, INC.
WICHITA, KANSAS

Proposed Wellbore Configuration



Date:	<u>11/12/2020</u>
Well Name:	<u>LAS Unit #1-17</u>
Location:	<u>2018' FNL & 2564' FEL</u>
	<u>Section 17-T16S-R23W</u>
County:	<u>Ness</u>
State:	<u>KS</u>
API:	<u>15-135-24722</u>
KB:	<u>2473'</u>
GL:	<u>2468'</u>
Spud Date:	<u>11/26/2007</u>

8-5/8" Surface Casing
Set at 209'. Cmt to
Surface w/160 sks.

Port Collar at 1812'
Cmt to surface with 170 sks. SMD

TOC @ 3864' (CBL 12/17/07)

2-7/8" tubing set at ~4450'

Lansing-Kansas City Perfs @ 4071'-4089'

Mississippi Perfs @ 4454'-4475'

PBTD: 4474'
RTD: 4540'

5-1/2", 14# casing set at 4575".
Cmt with 150 sks. 50/50 Pozmix



DownHole SAT Rx

FORMATION WATER CHEMISTRY INPUT

Mull Drilling
LAS 1-17
Wellhead - *Lansing - Kansas City Produced Water*

Pro-Stim Chemicals
Troy Pelton

Report Date: 01-24-2017 Sampled: 01-04-2017
Sample #: 1521 at 1644

CATIONS

Calcium (as Ca)	6960
Magnesium (as Mg)	1021
Barium (as Ba)	0.00
Strontium (as Sr)	0.00
Sodium (as Na)	51105
Potassium (as K)	0.00
Lithium (as Li)	0.00
Ammonia (as NH ₃)	0.00
Aluminum (as Al)	0.00
Iron (as Fe)	66.00
Manganese (as Mn)	0.490
Zinc (as Zn)	0.00
Lead (as Pb)	0.00

ANIONS

Chloride (as Cl)	93750
Sulfate (as SO ₄)	1200
Bromine (as Br)	0.00
Dissolved CO ₂ (as CO ₂)	12.71
Bicarbonate (as HCO ₃)	360.00
Carbonate (as CO ₃)	0.00
Oxalic acid (as C ₂ O ₄)	0.00
Silica (as SiO ₂)	0.00
Phosphate (as PO ₄)	0.00
H ₂ S (as H ₂ S)	20.37
Fluoride (as F)	0.00
Nitrate (as NO ₃)	0.00
Boron (as B)	0.00

PARAMETERS

Calculated T.D.S.	150127
Molar Conductivity	228610
Resistivity	4.37
Sp.Gr.(g/mL)	1.10
Pressure(psia)	0.460
pCO ₂ (psia)	0.102
pH ₂ S(atm)	0.00342
Temperature (°F)	71.00
pH	6.02

All anions & cations are in mg/l (CO₂ in MEq/L)

FRENCH CREEK SOFTWARE, INC.
1220 VALLEY FORGE ROAD, BUILDING 21, VALLEY FORGE, PA 19460



Company: Mull Drilling
 Source : wellhead
 Number : 11731

Location:
 Date Sampled:
 Salesman:
 Attention:

L.A.S. #1-17 - Mississippi
 July 15, 2009
 Randy Rodgers
 Dennis Pfeifer
Produced Water

ANALYSIS	mg/L	EQ. WT.	MEQ/L
1. pH	6.79		
2. Specific Gravity 60/60 F	1.027		
3. Hydrogen Sulfide	ND		
4. Carbon Dioxide	ND		
5. Dissolved Oxygen	ND		
6. Hydroxyl (OH ⁻)	0 /	17.0 =	0.00
7. Carbonate (CO ₃ ⁻²)	0 /	30.0 =	0.00
8. Bicarbonate (HCO ₃ ⁻)	1 /	61.1 =	0.02
9. Chloride (Cl ⁻)	21,995 /	35.5 =	619.58
10. Sulfate (SO ₄ ⁻²)	2,016 /	48.8 =	41.31
11. Calcium (Ca ⁺²)	941 /	20.1 =	46.81
12. Magnesium (Mg ⁺²)	484 /	12.2 =	39.65
13. Sodium (Na ⁺)	13,212 /	23.0 =	574.45
14. Barium (Ba ⁺²)	ND		
15. Total Iron (Fe)	1.80		
16. Manganese	0.40		
17. Strontium	ND		
18. Total Dissolved Solids	38,651		
19. Resistivity @ 75 °F (calculated)	0.21 /cm		
20. CaCO ₃ Saturation Index			
@ 80 °F	-2.9639		
@ 100 °F	-2.6139		
@ 120 °F	-2.3639		
@ 140 °F	-2.0239		
@ 160 °F	-1.7139		
21. CaSO ₄ Supersaturation Ratio			
@ 70 °F	0.5609		
@ 90 °F	0.5587		
@ 110 °F	0.5589		
@ 130 °F	0.5625		
@ 150 °F	0.5720		
Ratio Greater than 1 indicates Scale			

PROBABLE MINERAL COMPOSITION				
COMPOUND	EQ. WT.	X	MEQ/L	= mg/L
Ca(HCO ₃) ₂	81.04		0.02	2
CaSO ₄	68.07		41.31	2,812
CaCl ₂	55.50		5.48	304
Mg(HCO ₃) ₂	73.17		0.00	0
MgSO ₄	60.19		0.00	0
MgCl ₂	47.62		39.65	1,888
NaHCO ₃	84.00		0.00	0
NaSO ₄	71.03		0.00	0
NaCl	58.46		574.45	33,582

Zondra Pointer
 Analyst:

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



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

Andrew J. French, Chairperson
Dwight D. Keen, Commissioner
Susan K. Duffy, Commissioner

Laura Kelly, Governor

February 9, 2021

Mark Shreve
Mull Drilling Co., Inc.
1700 N Waterfront Pkwy, Bldg 1200
Wichita, KS 67206

RE: Approved Commingling CO022101
LAS Unit 2-17
API No. 15-135-24722-0001

Dear Mr. Shreve:

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

File form ACO-1 upon re-completion of the well to commingle.

Sincerely,

Rick Hestermann
Production Department