

## KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1257851

Form ACO-4 Form must be typed March 2009

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

Name:   Spot Description:   Spot Description:	OPERA	TOR: License #	API No. 15		_
Address 2:	Name:_		Spot Description:		_
County:	Address	1:	<u>-</u>	Sec Twp S. R	st
Countact Person:    County:	Address	2:		Feet from North / South Line of Section	n
Lease Name:   Well #:	City:	State: Zip:+		Feet from East / West Line of Section	n
□ 1. Name and upper and lower limit of each production interval to be commingled:	Contact	Person:	County:		_
Formation: (Perfs):  2. Estimated amount of fluid production to be commingled from each interval: Formation: BOPD: MCFPD: BWPD: Formatio	Phone:	()	Lease Name:	Well #:	_
Formation: (Perfs):  2. Estimated amount of fluid production to be commingled from each interval: Formation: BOPD: MCFPD: BWPD: Formatio					
Formation:	□ 1.	·	•		
Formation:			, ,		
Formation:			,		
Formation: (Perfs):  2. Estimated amount of fluid production to be commingled from each interval: 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 ACC-1: Yes No  6. Complete Form ACC-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.  Submitted Electronically			, ,		
2. Estimated amount of fluid production to be commingled from each interval:  Formation: BOPD: MCFPD: BWPD:  BOPD: MCFPD:			, ,		
Formation: BOPD: MCFPD: BWPD: Formation: BOPD: MCFPD: BWPD: BWPD: BOPD: MCFPD: BWPD: BWPD: BOPD: MCFPD: BWPD: BWPD		Formation:	(Perfs):	):	_
Formation: BOPD: MCFPD: BWPD: Formation: BOPD: MCFPD: BWPD: Formation: BOPD: MCFPD: BWPD: BWPD: Formation: BOPD: MCFPD: BWPD: BWPD: Formation: BOPD: MCFPD: BWPD: BWPD: BWPD: BOPD: MCFPD: BWPD: BWPD: BWPD: BOPD: MCFPD: BWPD:	<u> </u>	Estimated amount of fluid production to be commingled from each in	nterval:		
Formation:		Formation:	BOPD:	MCFPD: BWPD:	
Formation:		Formation:	BOPD:	MCFPD: BWPD:	
Formation:		Formation:	BOPD:	MCFPD: BWPD:	
<ul> <li>□ 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.</li> <li>□ 4. Signed certificate showing service of the application and affidavit of publication as required in K.A.R. 82-3-135a.</li> <li>For Commingling of PRODUCTION ONLY, include the following:</li> <li>□ 5. Wireline log of subject well. Previously Filed with ACO-1: □ Yes □ No</li> <li>□ 6. Complete Form ACO-1 (Well Completion form) for the subject well.</li> <li>For Commingling of FLUIDS ONLY, include the following:</li> <li>□ 7. Well construction diagram of subject well.</li> <li>□ 8. Any available water chemistry data demonstrating the compatibility of the fluids to be commingled.</li> <li>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</li> </ul>		Formation:	BOPD:	MCFPD: BWPD:	
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  Submitted Electronically		Formation:	BOPD:	MCFPD: BWPD:	
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  Submitted Electronically					
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	□ 3.	,	•	· ·	
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		the subject well, and for each well the hames and addresses of the f	essee of record of of	perator.	
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	4.	Signed certificate showing service of the application and affidavit of	publication as require	red in K.A.R. 82-3-135a.	
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	For Cor	mminuling of PPODLICTION ONLY include the following:			
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		_	□ No		
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	_		NO		
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	0.	Complete Form ACO-1 (Well Completion form) for the 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  Submitted Electronically	For Cor	nmingling of FLUIDS ONLY, include the following:			
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  Submitted Electronically	7.	Well construction diagram of subject well.			
current information, knowledge and personal belief, this request for commingling is true and proper and I have no information or knowledge, which	8.	Any available water chemistry data demonstrating the compatibility of	of the fluids to be con	mmingled.	
	current i mingling	nformation, knowledge and personal belief, this request for comistrue and proper and I have no information or knowledge, which	S	Submitted Electronically	

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 wihin 15 days of publication of the notice of application.

Date: \_

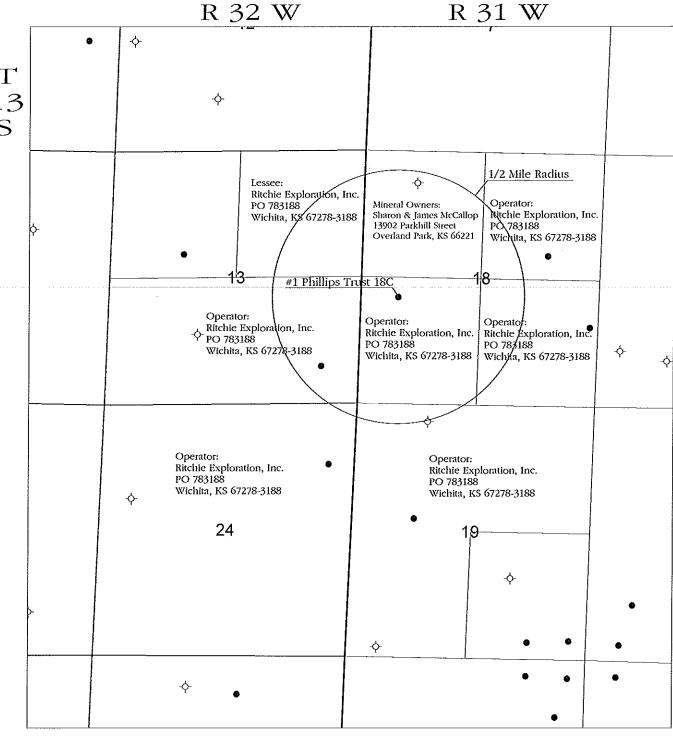
**KCC Office Use Only** 

15-Day Periods Ends: \_\_

Approved

Denied

Approved By:





Oil Well

-♦ Dry and Abandoned Well



### APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS

# Operator, Lessee or Unleased Mineral Owner within a ½ mile radius of Ritchie Exploration, Inc.'s

### #1 Phillips Trust 18C 2215' FSL & 780' FWL Section 18-13S-31W Gove Co., KS

#### Township 13 South, Range 31 West

Gove County, Kansas

Sec. 18:

NE/4

Ritchie Exploration, Inc.

P.O. Box 783188

Wichita, KS 67278-3188

NW/4

Sharon & James McCallop

13902 Parkhill Street Overland Park, KS 66221

SW/4

Ritchie Exploration, Inc.

Operator: #1 Phillips Trust 18C

SE/4

Ritchie Exploration, Inc.

Operator: #1 Phillips-Ottley

Operator: #1 Wray 18A

Mineral Owners

Sec. 19:

N/2, SW/4

Ritchie Exploration, Inc.

Operator: #1 Campbell 19ABC

### Township 13 South, Range 32 West

Logan County, Kansas

Sec. 13:

NE/4

Ritchie Exploration, Inc.

Lessee

S/2

Ritchie Exploration, Inc.

Operator: #2 Eaton 13CD

Sec. 24:

ALL

Ritchie Exploration, Inc.

Operator: #1 Eaton Trust

#### **AFFIDAVIT**

STATE OF KANSAS	)	
	-	SS
County of Sedgwick	)	

Peter Fiorini, of lawful age, being first duly sworn, deposeth and saith: That he is Development/Production Geologist of Ritchie Exploration, County of Sedgwick, State of Kansas, and that notice was given to all lessee of record or operator within ½ mile radius of the Phillips Trust 18C #1 well located in the County of Gove (see attached plat map). This notice included an application for Commingling of Production (ACO-4) and a letter. All notices were mailed on June 24, 2015.

made as aforesaid on the 24th of

June A.D. 2015

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

Subscribed and sworn to before me this

24th day of June 2015

Notary Public Sedgwick County, Kansas

#### 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  $29^{th}$  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

29th day of June, 2015

RACHEL M. WILSON MY COMMISSION EXPIRES June 15, 2016

Notary Public Sedgwick County, Kansas

Printers Fee: \$125.60

Published in The Wichila Eagle
June 29, 2015 (3334530)

LEGAL NOTICE
You, and each of you, are hereby notified that Ritchle Exploration, Inc. has filed an application to commence the commingling of production from the Lansing-Kansas City and Johnson sources of supply for the #1 Phillips Trust 18C well located approx. N/2 NW SW of Section 18-135-31W. Gove 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 Organization 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. It valid protests are received, this matter will be set for hearing.

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

RICHIE EXPLORATION, INC. P.O. Box 783188

Wichita, KS 67278-3188

(316) 691-9500

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

dove county, as.
<u>Roxanne Broeckelman</u> , being first duly sworn, deposes and
says: That <u>she</u> is
co-publisher 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 <u>1st</u> day
of July , 2015 , with subsequent publications being made on the following dates:
Printer's Fee\$ 7.60
Additional Copies \$
Affidavit Fees\$ 2.00
Total Publication Fees .\$ 19.60 XXXXXIII FANACAMAM
Subscribed and sworn to before me
this 1st day of
July , 2015
Genda L. Gerr
Notery Public  My commission expires:

January 8, 2017

LEGAL ADVERTISING
(Published in the Gove County Advocate, Quinter, KS, Wed., July 1, 2015 - 11)
LEGAL NOTICE

You, and each of you, are hereby notified that Ritchie Exploration, Inc. has filed an application to commence the commingling of production from the Lansing-Kansas City and Johnson sources of supply for the #1 Phillips Trust 18C well located approx. N/2 NW SW of Section 18-13S-31W, Gove 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.

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

RITCHIE EXPLORATION, INC. P.O. Box 783188 Wichila, KS 67278-3188 (316) 691-9500

LINDA L. ZERR
NOTARY PUBLIC
STATE OF KANSAS
My Appl. Exp. 4-8-30/7



#### Kansas Corporation Commission OIL & GAS CONSERVATION DIVISION CONFIDENTIAL

1156589

Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

### **WELL COMPLETION FORM**

**WELL HISTORY - DESCRIPTION OF WELL & LEASE** 

OPERATOR: License # 4767	API No. 15 - 15-063-21969-00-01
Name: Ritchie Exploration, Inc.	Spot Description: 95'S & 120'E of N2NWSW
Address 1: 8100 E 22ND ST N # 700	SW NE_NW_SW Sec 18 Twp 13 S. R 31 East West
Address 2: BOX 783188	2215 Feet from North / South Line of Section
City: WICHITA State: KS Zip: 67278 + 3188	780 Feet from East / 🗹 West Line of Section
Contact Person: John Niernberger	Footages Calculated from Nearest Outside Section Corner:
Phone: ( 316 ) 691-9500	□ne □nw □se ☑sw
CONTRACTOR: License #6426	County: Gove
Name: Express Well Service & Supply Inc	Lease Name: Phillips Trust 18C Well #: 1
Wellsite Geologist: Peter Fiorini	Field Name:
Purchaser: NCRA	Producing Formation: Johnson & LKC
Designate Type of Completion:	Elevation: Ground: 2957 Kelly Bushing: 2966
New Well ☐ Re-Entry ✓ Workover	Total Depth: 4725 Plug Back Total Depth: 4702
✓ OII □ WSW □ SWD □ SIOW	Amount of Surface Pipe Set and Cemented at: 224 Feet
☐ Gas ☐ D&A ☐ ENHR ☐ SIGW	Multiple Stage Cementing Collar Used?   ✓ Yes   No
☐ OG ☐ GSW ☐ Temp. Abd.	If yes, show depth set: 2440 Feet
CM (Coal Bed Methane)	If Alternate II completion, cement circulated from: 2440
Cathodic Other (Core, Expl., etc.):	feet depth to: 0 w/ 325 sx cmt.
If Workover/Re-entry: Old Well Info as follows:	Tota dopin to.
Operator: Ritchie Exploration, Inc.	
Well Name: Phillips Trust 18C #1	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: 02/19/2012 Original Total Depth: 4725	
☐ Deepening ☑ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD	Chloride content:ppm Fluid volume:bbls
Conv. to GSW	Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #:	Operator Name:
Dual Completion Permit #:	Lease Name: License #:
SWD Permit #:	QuarterSecTwpS. REast West
ENHR Permit #:	
GSW Permit #:	County: Permit #:
07/22/2013 07/22/2013 07/29/2013	
Spud Date or Date Reached TD Completion Date or Recompletion Date  Recompletion Date	

#### **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
✓ Letter of Confidentiality Received  Date: 08/28/2013
Confidential Release Date:
☐ Wireline Log Received
Geologist Report Received
UIC Distribution  ALT I I III Approved by: NAOMI JAMES Date: 08/29/2013

Side Two



Phillips Trust 18C Operator Name: Ritchie Exploration, Inc. Lease Name: . Sec. 18 Twp.13 S. R. 31 ☐ East West County: Gove INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wireline Logs surveyed. Attach final geological well site report. Formation (Top), Depth and Datum ✓ Sample Log Drill Stem Tests Taken Yes **V** No (Attach Additional Sheets) Name Top Datum Yes **V** No Samples Sent to Geological Survey Attached Attached Attached ✓ No ☐ Yes Cores Taken Yes Yes **✓** No Electric Log Run Electric Log Submitted Electronically Yes No (If no, Submit Copy) List All E. Logs Run: CASING RECORD ✓ New Used Report all strings set-conductor, surface, intermediate, production, etc. Weight Lbs. / Ft. Type and Percent Size Hole Size Casing Setting Type of Cement # Sacks Purpose of String Set (In O.D.) Depth Used Additives Drilled 12,25 8.625 23 224 Common 175 3%cc&2%gel Surface 4723 OWC 225 10%salt,2%gel Production 7.875 5.5 15.5 ADDITIONAL CEMENTING / SQUEEZE RECORD Purpose: Deoth Type of Cement # Sacks Used Type and Percent Additives Top Bottom Perforate \_ Protect Casing Plug Back TD . Plug Off Zone Acid, Fracture, Shot, Cement Squeeze Record PERFORATION RECORD - Bridge Plugs Set/Type Shots Per Foot Depth Specify Footage of Each Interval Perforated (Amount and Kind of Malerial Used) 4037.5-4040.5 500 Gals 15% NE 4 500 Gals 15% NE 4247-4250 TUBING RECORD: Size: Set At: Packer At: Liner Run: Yes **√** No 2.375 4684 Date of First, Resumed Production, SWD or ENHR. Producing Method: Gas Lift ✓ Pumping Other (Explain) Flowing 07/29/2013 Water Bbis. Gas-Oil Ratio Gravity Estimated Production Oil Bbls. Gas Mcf Per 24 Hours 6.68 25.05 25 PRODUCTION INTERVAL: DISPOSITION OF GAS: METHOD OF COMPLETION: ✓ Perf. Dually Comp. ✓ Commingled Open Hole Vented Sold Used on Lease (Submit ACO-5) (Submit ACO-4) (If vented, Submit ACO-18.) Other (Specify)

Form	ACO1 - Well Completion	
Operator	Ritchie Exploration, Inc.	
Well Name	Phillips/Trust 18C 1	
Doc ID	1156589	

### Tops

Name:	Top and sure speciments	Datum
Anhydrite	2465	+525
B/Anhydrite	2485	+503
Heebner	3964	-986
Lansing	4003	-1037
Muncie Shale	4150	-1184
Stark Shale	4236	-1270
Hush	4272	-1306
BKC	4306	-1340
Altamont	4346	-1380
Pawnee	4435	-1469
Myrick	4470	-1504
Fort Scott	4486	-1520
Cherokee Shale	4514	-1548
Johnson	4558	-1592
Morrow Sand	4594	-1628
Mississippian	4612	-1646

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



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

Sam Brownback, Governor

Shari Feist Albrecht, Chair Jay Scott Emler, Commissioner Pat Apple, Commissioner

July 16, 2015

John Niernberger Ritchie Exploration, Inc. P.O. Box 783188 Wichita, KS 67278-3188

RE: Approved Commingling CO071504 Phillips Trust 18C 1 API No. 15-063-21969-00-01

Dear Mr. Niernberger:

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 Johnson 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