

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.



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1277357
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

CONFIDENTIAL WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 4767

Name: Ritchie Exploration, Inc.

Address 1: 8100 E 22ND ST N # 700

Address 2: BOX 783188

City: WICHITA State: KS Zip: 67278 + 3188

Contact Person: Peter Fiorini

Phone: (316) 691-9500

CONTRACTOR: License # 6426

Name: Express Well Service & Supply Inc

Wellsite Geologist: Mike Engelbrecht

Purchaser: CHS

Designate Type of Completion:

- New Well
- Re-Entry
- Workover
- Oil
- WSW
- SWD
- SIOW
- Gas
- D&A
- ENHR
- SIGW
- OG
- GSW
- Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic
- Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: Ritchie Exploration, Inc.

Well Name: Baker 31C

Original Comp. Date: 11/29/2014 Original Total Depth: 4784

- Deepening
- Re-perf.
- Conv. to ENHR
- Conv. to SWD
- Plug Back
- Conv. to GSW
- Conv. to Producer
- Commingled
- Permit #: _____
- Dual Completion
- Permit #: _____
- SWD
- Permit #: _____
- ENHR
- Permit #: _____
- GSW
- Permit #: _____

<u>12/14/2015</u>	<u>12/14/2015</u>	<u>12/18/2015</u>
Spud Date or	Date Reached TD	Completion Date or
Recompletion Date		Recompletion Date

API No. 15 - 15-109-21372-00-01

Spot Description: 140°N & 90°W of

E2 SE SW Sec. 31 Twp. 15 S. R. 34 East West

800 Feet from North / South Line of Section

1890 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE
- NW
- SE
- SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: Logan

Lease Name: Baker 31C Well #: 1

Field Name: _____

Producing Formation: LKC/Fort Scott

Elevation: Ground: 3044 Kelly Bushing: 3049

Total Vertical Depth: 4784 Plug Back Total Depth: 4741

Amount of Surface Pipe Set and Cemented at: 218 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: 2370 Feet

If Alternate II completion, cement circulated from: 0

feet depth to: 2370 w/ 400 sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

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: 01/14/2016

Confidential Release Date: _____

Wireline Log Received

Geologist Report Received

UIC Distribution

ALT I II III Approved by: NAOMI JAMES Date: 01/14/2016

1277357

Operator Name: Ritchie Exploration, Inc. Lease Name: Baker 31C Well #: 1
 Sec. 31 Twp. 15 S. R. 34 East West County: Logan

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 Yes No
(Attach Additional Sheets)
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No
 Electric Log Run Yes No
 List All E. Logs Run:

Log Formation (Top), Depth and Datum Sample
 Name Attached Top Attached Datum Attached

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
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	12.25	8.625	23	218	Common	170	2% gel, 3% cc
Production	7.875	4.5	10.5	4767	OWC	225	10% sac. 2% gel. 1% CO-31.5% g/sccr

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing	-			
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> 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 *(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	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth
	4122-4130	500 Gal 15% NE	

TUBING RECORD: Size: <u>2.375</u> Set At: <u>4706</u> Packer At: <u> </u> Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Date of First, Resumed Production, SWD or ENHR. <u>12/18/2015</u>	Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> <u> </u>
Estimated Production Per 24 Hours	Oil Bbls. <u>8.31</u> Gas Mcf <u> </u> Water Bbls. <u>.08</u> Gas-Oil Ratio <u> </u> Gravity <u>25</u>

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input checked="" type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> <u> </u>	PRODUCTION INTERVAL: <u> </u>
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Form	ACO1 - Well Completion
Operator	Ritchie Exploration, Inc.
Well Name	Baker 31C 1
Doc ID	1277357

Tops

Name	Top	Datum
Anhydrite	2367	+682
B/Anhydrite	2385	+664
Stotler	3490	-441
Heebner	3855	-806
Toronto	3870	-821
Lansing	3902	-853
Muncie Shale	4070	-1021
Stark	4164	-1115
Hush	4211	-1162
BKC	4259	-1210
Marmaton	4281	-1232
Altamont	4314	-1265
Pawnee	4392	-1343
Myrick	4432	-1383
Fort Scott	4446	-1397
Cherokee Shale	4472	-1423
Johnson	4554	1505
Morrow Shale	4608	-1559
Mississippian	4645	-1596

APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS

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

**#1 Baker 31C
800' FSL & 1890' FEL
Section 31-15S-34W
Logan Co., KS**

**Township 15 South, Range 34 West
*Logan Co., KS***

Sec. 31:	NE/4	Melvin Baker 950 E County Road I Marienthal, KS 67863	Mineral Owner
		CoBank, FCB PO Box 2940 Wichita, KS 67201-2940	Mineral Owner
	W/2, SE/4	Ritchie Exploration, Inc. PO Box 783188 Wichita, KS 67278-3188	Operator: #1 Baker 31C, #1 Baker 31CD Unit, #1 Baker 31D
		Melvin Baker	Mineral Owner
		CoBank, FCB	Mineral Owner

**Township 15 South, Range 35 West
*Logan Co., KS***

Sec. 36:	SE/4	Ritchie Exploration, Inc.	Lessee
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**Township 16 South, Range 35 West
*Wichita Co., KS***

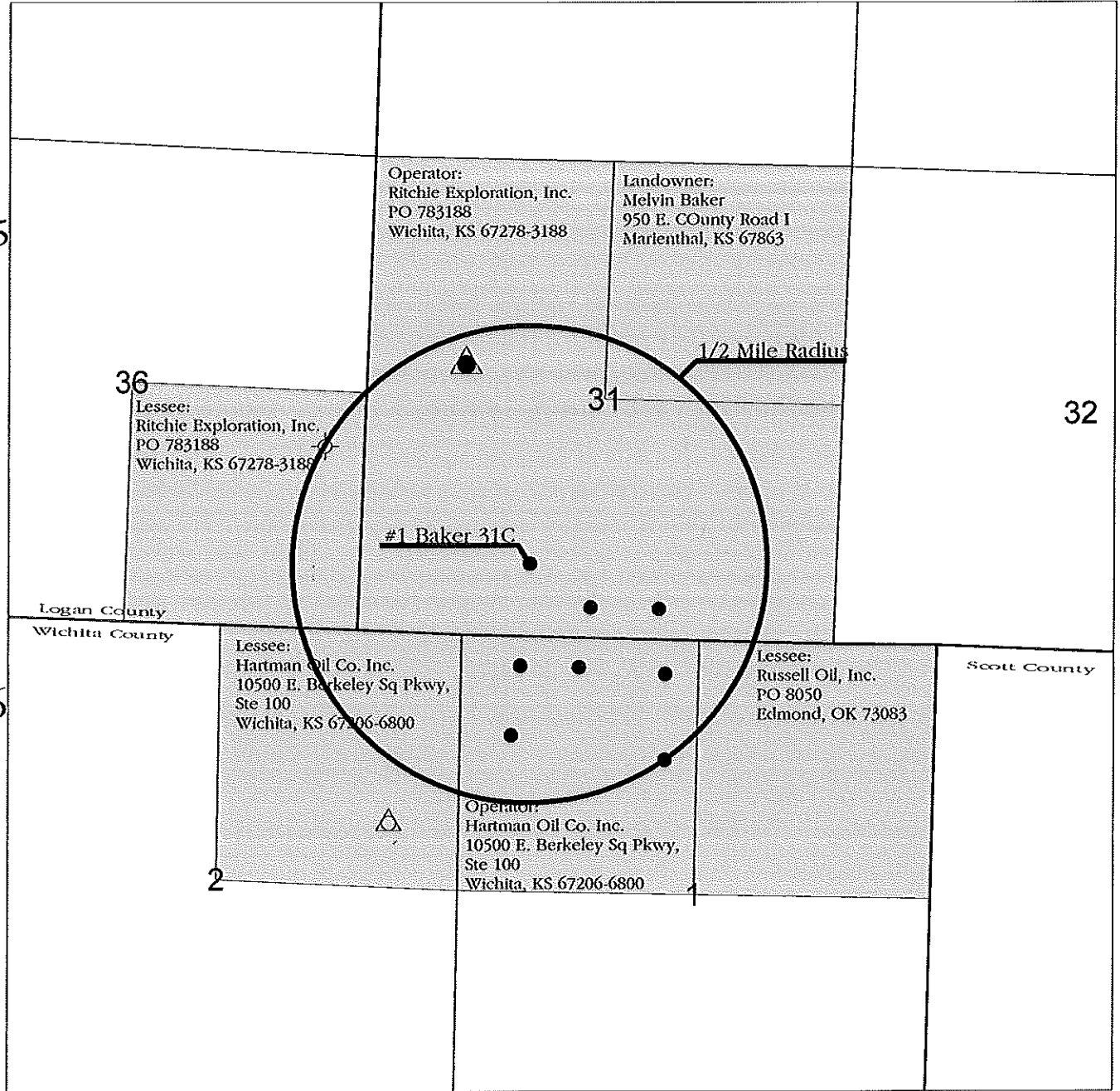
Sec. 1:	NE/4	Russell Oil Inc. PO Box 8050 Edmond, OK 73083	Lessee
	NW/4	Hartman Oil Company, Inc. 10500 E. Berkeley Sq. Pkwy, Ste. 100 Wichita, KS 67206-6800	Operator: Rose #1-1, Rose #2-1, Rose #3-1, Rose #4-1, Rose #5-1
Sec. 2:	NE/4	Hartman Oil Company, Inc.	Lessee

R 35 W

R 34 W


T 15 S

T 16 S



Legend

- Oil Well
- ⊗ Dry and Abandoned Well
- △ Service Well
- ⊘ Abandoned Location



RITCHIE
EXPLORATION, INC.
Wichita, Kansas

Application for
Commingling of
Production or Fluids

Applicant Well: #1 Baker 31C
All Wells on Offsetting Leases within 1/2 Mile Radius
Name and Address of Lessee of Record or Operator
On Offsetting Leases

Logan, Wichita, Scott Counties, Kansas

Prepared By: Justin Clegg	Scale: 1 : 21,120	Date: November 16, 2017
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AFFIDAVIT

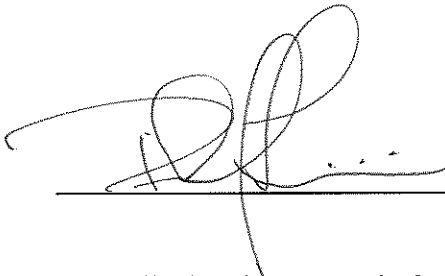
STATE OF KANSAS)
 - SS.
County of Sedgwick)

Peter Fiorini, of lawful age, being first duly sworn, deposeth and saith: That he is Geologist/Production Manager 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 Baker 31C #1 well located in the County of Logan (see attached plat map). This notice included a letter regarding the Commingle Application. All notices were mailed on December 21, 2017.

made as aforesaid on the 21st of

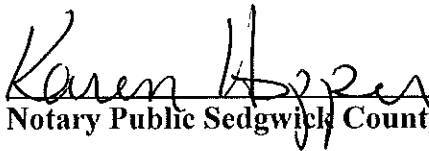
December A.D. 2017

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

21st day of December 2017



Notary Public Sedgwick County, Kansas





LEGAL PROOF OF PUBLICATION

Account #	Ad Number	Identification	PO	Amount	Cols	Lines
453699	0003426434	Published in the Wichita Eagle December 8, 2017		\$135.80	1	37

Attention: karen hopper

RITCHIE EXPLORATION INC
P O BOX 783188
WICHITA, KS 672783188

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

1 Insertions

Beginning issue of: 12/08/2017

Ending issue of: 12/08/2017

STATE OF KANSAS)

.SS

County of Sedgwick)

LEGAL PUBLICATION

Published in the Wichita Eagle
December 8, 2017 (3474434)

LEGAL NOTICE

You, and each of you, are hereby notified that Ritchie Exploration, Inc. has filed an application to commence the commencing of production from the Fort Scott and Lansing/Kansas City sources of supply for the #1 Baker 31C well located approx. E1/2 SE SW of Section 31-15S-34W, Logan 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
Wichita, KS 67278-3188
(316) 691-9550

Dale Seiwert, 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 from 12/8/2017 to 12/08/2017.

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

Dale Seiwert

(Signature of Principal Clerk)

DATED: 12/7/2017

Notary Public Sedgwick County, Kansas

JENNIFER RAE BAILEY
Notary Public - State of Kansas
My Appt. Expires 6/14/2021

Proof of Publication

State of Kansas,
County of Logan, ss:

_____ of lawful age, being duly sworn upon oath states that he/she is the editor of **THE OAKLEY GRAPHIC**.

THAT said newspaper has been published at least weekly 50 times a year and has been so published for at least five years prior to the first publication of the attached notice.

THAT said newspaper was entered as second class matter at the post office of its publication;

THAT said newspaper has a general paid circulation on a daily, weekly, monthly, or yearly basis in LOGAN County, Kansas and is NOT a trade, religious or fraternal publication and has been printed and published in LOGAN County, Kansas.

THE ATTACHED was published on the following dates in a regular issue of said newspaper:

1st Publication was made on the 13 day of Dec, 2017

2nd Publication was made on the _____ day of _____, 20 _____

3rd Publication was made on the _____ day of _____, 20 _____

4th Publication was made on the _____ day of _____, 20 _____

5th Publication was made on the _____ day of _____, 20 _____

6th Publication was made on the _____ day of _____, 20 _____

Publication fee \$ 4680

Affidavit, Notary's Fees \$ _____

Additional Copies _____ @ _____ \$ _____

Total Publication Fee \$ 4680

Dawn Wendel
(Signed)

Witness my hand this 13 day of Dec, 2017

SUBSCRIBED and SWORN to before me this 13

day of Dec, 2017.

Shelley C Anderson
(Notary Public)

My commission expires 2-7-2018

SHELLEY C. ANDERSON
Notary Public - State of Kansas
Exp. 2/7/2018



(First published in the Oakley Graphic December 13, 2017)

You, and each of you, are hereby notified that Ritchie Exploration, Inc. has filed an application to commence the commingling of production from the Fort Scott and Lansing/Kansas City sources of supply for the #1 Baker 31C well located approx. E/2 SE SW of Section 31-15S-34W, Logan 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
Wichita, KS 67278-3188
(316) 691-9500

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



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

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

Sam Brownback, Governor

January 5, 2018

Peter Fiorini
Ritchie Exploration, Inc.
P.O. Box 783188
Wichita, KS 67278-3188

RE: Approved Commingling CO121702
Baker 31C 1
API No. 15-109-21372-00-01

Dear Mr. Fiorini:

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 Fort Scott 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