



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: _____

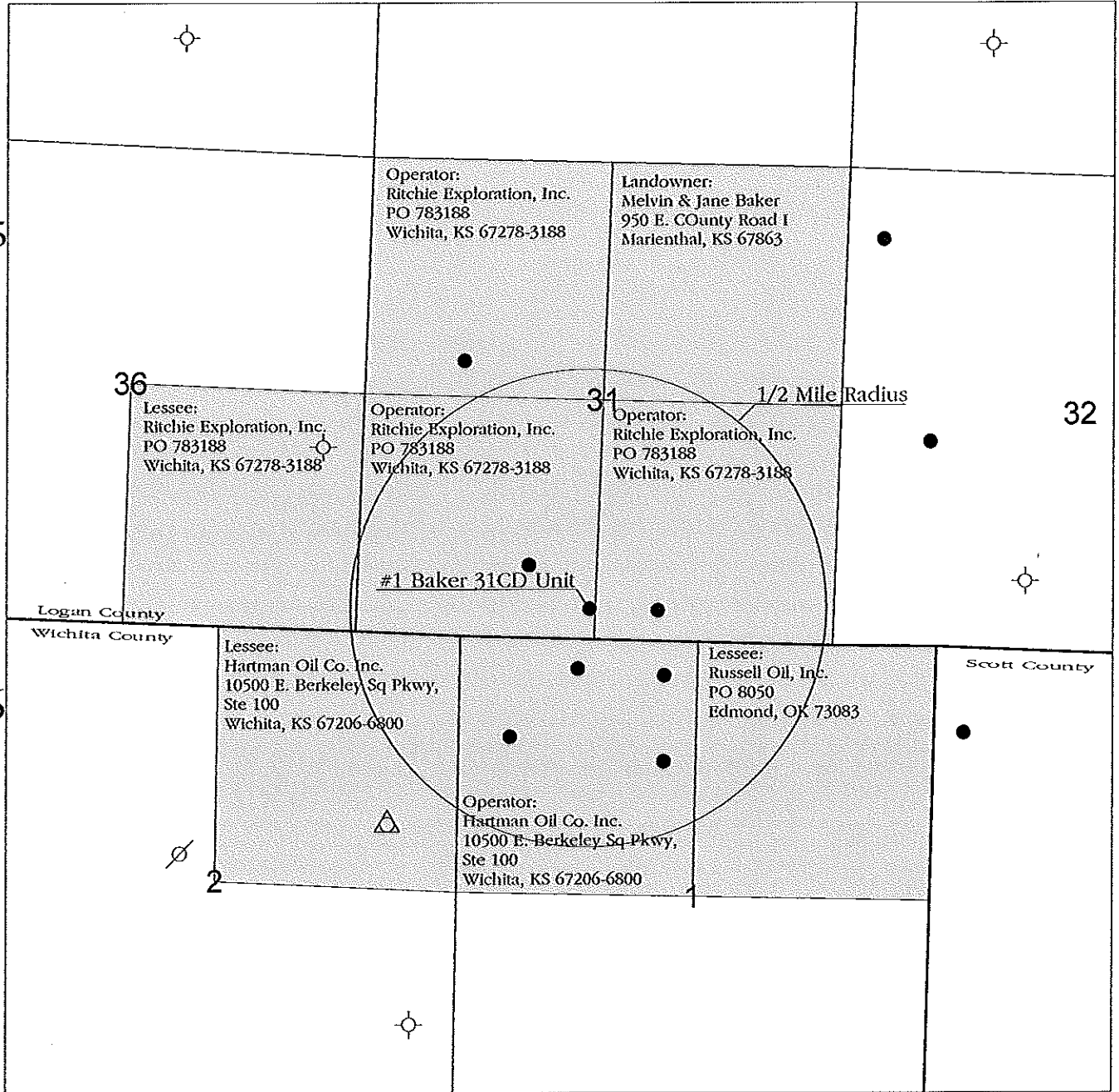
Protests may be filed by any party having a valid interest in the application. Protests must be in writing and comply with K.A.R. 82-3-135b and must be filed within 15 days of publication of the notice of application.

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
Commingle of
Production or Fluids

Applicant Well: #1 Baker 31CD Unit
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: June 27, 2016
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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 31CD Unit
335' FSL & 2580' FWL
Section 31-15S-34W
Logan Co., KS**

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

Sec. 31:	NE/4	Melvin & Jane Baker 950 E. County Road I Marienthal, KS 67863	Landowners
	NW/4	Ritchie Exploration, Inc. P.O. Box 783188 Wichita, KS 67278-3188	Operator: Baker 31B #1
	SW/4	Ritchie Exploration, Inc.	Operator: Baker 31CD Unit #1, Baker 31C #1
	SE/4	Ritchie Exploration, Inc.	Operator: Baker 31CD Unit #1, Baker 31D #1

**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
Sec. 2:	NE/4	Hartman Oil Company, Inc.	Lessee

AFFIDAVIT


STATE OF KANSAS)
 - SS.
County of Sedgwick)

Peter Fiorini, of lawful age, being first duly sworn, deposeth and saith: That he is 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 31CD Unit #1 well located in the County of Logan (see attached plat map). This notice included a letter and a copy of the Commingle Application (ACO-4). All notices were mailed on July 5, 2016.

made as aforesaid on the 5th of

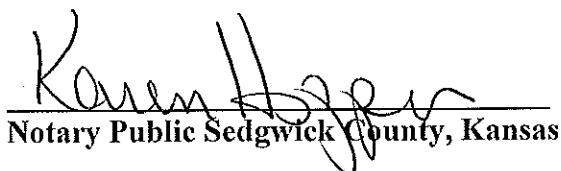
July A.D. 2016

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

5th day of July 2016


Notary Public Sedgwick County, Kansas



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 July, 20 16
- 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 \$ 51.30
 Affidavit, Notary's Fees \$ _____
 Additional Copies _____ @ _____ \$ _____
 Total Publication Fee \$ 51.30

Dawn Wendel
(Signed)

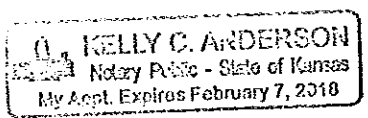
Witness my hand this 13 day of July, 20 16

SUBSCRIBED and SWORN to before me this 13

day of July, 20 16.

Kelly C Anderson
(Notary Public)

My commission expires 2-7-2018



Published in the Oakley
Graphic July 13, 2016
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 Toronto sources of supply for the #1 Baker 31CD Unit well located approx. S/2 S/2 S/2 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 correlativerights 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) 691-9506



LEGAL PROOF OF PUBLICATION

Account #	Ad Number	Identification	PO	Amount	Cols	Lines
453699	0002553787	Published in the Wichita Eagle July 9, 2016		\$129.00	1	35

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: 07/09/2016

Ending issue of: 07/09/2016

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 from 7/9/2016 to 07/09/2016.

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

Mark Fletchall

(Signature of Principal Clerk)

DATED: 7/11/2016

LEGAL PUBLICATION

Published in the Wichita Eagle
July 9, 2016 (2553787)

LEGAL NOTICE

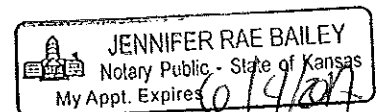
You, and each of you, are hereby notified that Ritchie Exploration, Inc. has filed an application to commence the commencing of production from the Lansing/Kansas City and Toronto sources of supply for the #1 Baker 31CO Unit well located approx. S1/2 S1/2 of Section 31-18S-31W, Logan County, Kansas.

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 deplete 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

Jennifer Rae Bailey
Notary Public Sedgwick County, Kansas



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1220849
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 # 33575
Name: WW Drilling, LLC
Wellsite Geologist: Mac Armstrong
Purchaser: NCRA

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SLOW
 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: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- 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 #: _____

05/22/2014 06/06/2014 06/06/2014
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 15-109-21294-00-00

Spot Description: 5'N & 60'W of

S2 S2 S2 Sec. 31 Twp. 15 S. R. 34 East West

335 Feet from North / South Line of Section

2580 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 31CD Unit Well #: 1

Field Name: _____

Producing Formation: Toronto & LKC "C/I"

Elevation: Ground: 3049 Kelly Bushing: 3054

Total Vertical Depth: 4780 Plug Back Total Depth: 4713

Amount of Surface Pipe Set and Cemented at: 219 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: 2357 Feet

If Alternate II completion, cement circulated from: 0

feet depth to: 2357 w/ 400 sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 9000 ppm Fluid volume: 900 bbls

Dewatering method used: Evaporated

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: 08/28/2014
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: NACMI JAMES Date: 08/29/2014

1220849

Operator Name: Ritchie Exploration, Inc. Lease Name: Baker 31CD Unit 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 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: Compensated Density/Neutron Log Dual Induction Log	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input checked="" type="checkbox"/> Sample Name Top Datum See Attached
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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	219	common	165	3% cc, 2% gel
Production	7.875	5.5	15.5	4765	OWC	200	10% sst, 2% gel, 1/4% CD-25 & 5 1/4%

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
4	4140' - 4149' (6/19/14)		
4	4130' - 4139' (6/27/14)		
4	3941' - 3944' (6/19/14)	500 gals 15% NE	
4	3872' - 3875.5' (6/19/14)	500 gals 15% NE	

TUBING RECORD:	Size: <u>2.875</u>	Set At: <u>4664</u>	Packer At:	Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR. <u>07/07/2014</u>	Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls. <u>195</u>	Gas Mcf	Water Bbls. <u>17.65</u>	Gas-Oil Ratio	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 type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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#1 Baker 31CD Unit
 335' FSL & 2580' FWL
 5'N & 60'W of S/2 S/2 S/2 Section 31-15S-34W
 Logan County, Kansas
 API# 15-109-21294-0000
 Elevation: 3049' GL*, 3054' KB
 *Original GL at 3046' raised 3' after building location.

Sample Tops			Ref. Well
Anhydrite	2367'	+687	+3
B/Anhydrite	2387'	+667	+1
Stotler	3494'	-440	-1
Heebner	3855'	-801	-1
Toronto	3871'	-817	flat
Lansing	3901'	-847	+1
Muncie Shale	4065'	-1011	+3
Stark Shale	4171'	-1117	-5
Hush	4217'	-1163	-4
BKC	4258'	-1204	-4
Marmaton	4283'	-1229	-6
Altamont	4313'	-1259	-3
Pawnee	4392'	-1338	-8
Myrick	4430'	-1376	-8
Fort Scott	4449'	-1395	-10
Cherokee	4479'	-1425	-13
Johnson	4556'	-1502	-9
Morrow	4607'	-1553	-13
Mississippian	4636'	-1582	-14
RTD	4780'	-1726	

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



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

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

Sam Brownback, Governor

July 28, 2016

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

RE: Approved Commingling CO071604
Baker 31CD Unit 1
API No. 15-109-21294-00-00

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 LKC-I 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