



KANSAS CORPORATION COMMISSION 1243550
OIL & GAS CONSERVATION DIVISION

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)

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.

APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS

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

**#1 Cramer 8A
660' FNL & 2010' FEL
Section 8-17S-30W
Lane Co., KS**

Township 17 South, Range 30 West

Sec. 4:	SW/4, Less a Tract	Murfin Drilling Company, Inc. 250 N. Water, Suite 300 Wichita, KS 67202	Lessee
Sec. 5:	SW/4	Ritchie Exploration, Inc. PO Box 783188 Wichita, KS 67278-3188	Operator: #1 Wilkens 5C, #2 Wilkens 5C
	W/2SE/4	Ritchie Exploration, Inc.	Operator: #1 Wilkens 5D
	E/2SE/4	Steven R. & Debra J. Wilkens 443 Highland Place Monrovia, CA 91016	Landowner
Sec. 8:	NE/4	Ritchie Exploration, Inc.	Operator: #1 Cramer 8A
	NW/4, Less a Tract	Ritchie Exploration, Inc.	Operator: #1 Sharp Seed 8B
	SW/4	Freddy J. & Verla M. Vavra, Danny L. Vavra c/o Freddy J. Vavra 1519 Sixth Ave. Kearney, NE 68845-5801	Landowner
	SE/4, lying N. of M/P Railroad	Mark A. Cramer 116-1/2 W. Highway 4 Healy, KS 67850	Landowner
Sec. 9:	NW/4	York Brothers, a Partnership BY: DAY Farms, Inc.-Dwight A. York, Partner; and Forrest Valley, Inc.- Henry Forrest York, Partner 601 E. 11 th St. Scott City, KS 67871	Landowner

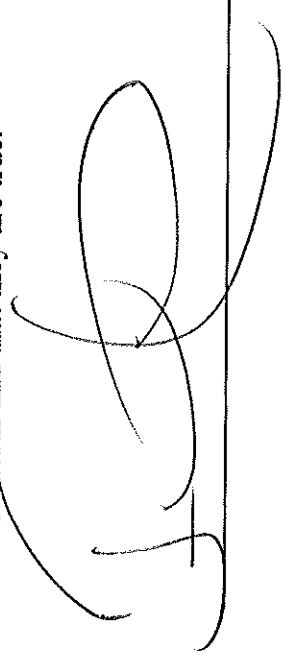
AFFIDAVIT

STATE OF KANSAS)
 - SS.
County of Sedgwick)

John Niernberger, 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 1/2 mile radius of the Cramer 8A #1 well located in the County of Lane (see attached plat map). This notice included a letter and a copy of the Commingle Application (ACO-4). All notices were mailed on February 11, 2015. made as aforesaid on the 15th of

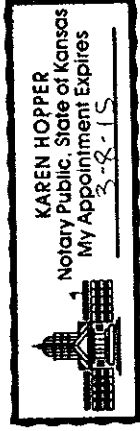
February A.D. 2015

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

15th day of February 2015



Karen Hopper
Notary Public Sedgwick County, Kansas

Proof of Publication

State of Kansas,
County of Lane, ss:

Mary Hartman

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

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 LANE County, Kansas and is NOT a trade, religious or fraternal publication and has been printed and published in LANE County, Kansas.

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

- 1st Publication was made on the 18 day of Feb, 2018
- 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 \$ 49.50
 Affidavit, Notary's Fees \$ _____
 Additional Copies @ _____ \$ _____
 Total Publication Fee \$ 49.50

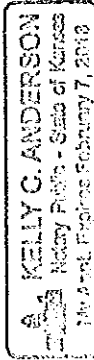
(Signed) Mary Hartman

Witness my hand this 18 day of Feb, 2018

SUBSCRIBED and SWORN to before me this ___ day of ___ 20__.

Kelly C. Anderson
(Notary Public)

My commission expires 2.7.2018



(First published in The Dighton Herald Wednesday, February 18, 2015)

LEGAL NOTICE

You, and each of you, are hereby notified that Ritchie Exploration, Inc. has filed an application to commence the commingling of the production from the Lansing-Kansas City, Johnson, and Altamont sources of supply for the #1 Cramer 8A well located approx. NW NE of Section 8-17S-30W, Lane 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.

R I T C H I E
EXPLORATION, INC.
P.O. Box 783188
Wichita, KS 67278-3188
(316) 691-9500

AFFIDAVIT

STATE OF KANSAS - SS.
County of Sedgwick /

Mark Fletchall, of lawful age, being first duly sworn, deposed and said: 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 19th of

February A.D. 2015, with

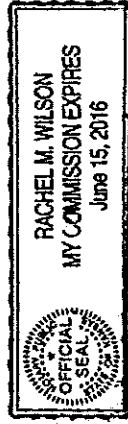
subsequent publications being made on the following dates:

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

Mark Fletchall

Subscribed and sworn to before me this

19th day of February, 2015



Rachel M. Wilson

Notary Public Sedgwick County, Kansas

Printers Fee: \$125.60

LEGAL PUBLICATION

Published in The Wichita Eagle
February 19, 2015 (3338098)

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, Johnson, and Alton sources of supply for the #1 Cramer SA well located approx. NW 1/4 of Section 8A-75-30W, Lane 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

Confidentiality Requested:

Yes No

NSAS CORPORATION COMMISSION / 1193354
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: John Niemberger
 Phone: (316) 691-9500
 CONTRACTOR: License # 34821
 Name: K & M Well Service Inc.
 Wellsite Geologist: Peter Fiorini
 Purchaser: Plains

API No. 15 - 15-101-21926-00-01
 Spot Description: 30' W OF C NWNE
 NW_SE_NW_NE Sec. 8 Twp. 17 S. R. 30 East West
685 Feet from North / South Line of Section
1956 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

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

Datum: NAD27 NAD83 WGS84

County: _____ Lane _____ Well #: 1

Lease Name: CRAMER 8A

Field Name: _____

Producing Formation: LKC, Altamont, Johnson

Elevation: Ground: 2876 Kelly Bushing: 2881

Total Vertical Depth: 4603 Plug Back Total Depth: 4554

Amount of Surface Pipe Set and Cemented at: 217 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: 2292 Feet

If Alternate II completion, cement circulated from: 2292

feet depth to: 0 w/ 400 sx cmt.

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: Ritchie Exploration, Inc.
 Well Name: Cramer 8A

Original Comp. Date: 6/6/2006 Original Total Depth: 4603
 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 #: _____

2/18/2014 02/18/2014 02/25/2014
 Spud Date or Date Reached TD Completion Date or
 Recompletion Date Recompletion Date

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.

KCC Office Use ONLY

Confidentiality Requested

Date: 03/13/2014

Confidential Release Date: _____

Wireline Log Received

Geologist Report Received

UIC Distribution

ALT I II III Approved by: NACMI JAMES Date: 03/13/2014

Submitted Electronically



1193354

Operator Name: Ritchie Exploration, Inc. Lease Name: CRAMER 8A Well #: 1
 Sec. 8 Twp. 17 S. R. 30 East West County: Lane

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

Samples Sent to Geological Survey Yes No
 Cores Taken Yes No
 Electric Log Run Yes No

List All E. Logs Run:

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./ Ft.	CASING RECORD			Type and Percent Additives
				<input type="checkbox"/> New	<input checked="" type="checkbox"/> Used	Report all strings set-conductor, surface, intermediate, production, etc.	
Surface	12.25	8.625	23	217	common	160	3%cc,2%gel
Production	7.875	4.5	10.5	4600	60/40 pozmix	235	6%gel, 1/4# flocele

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate				
___ 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 (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 (Amount and Kind of Material Used)	Depth
4	4513-4513	250 Gals 15% NE Acid	
4	4350-4353	250 Gals 15% NE Acid+Cla-Sta	
4	4019-4022	375 Gals 15% NE Acid+20 soluble perf ball sealers	
4	3932-3935	375 Gals 15% NE Acid+20 soluble per ball sealers	

TUBING RECORD: Size: 2.375 Set At: 4546 Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. 02/25/2014
 Producing Method: Flowing Pumping Gas Lift Other (Explain) _____

Estimated Production Per 24 Hours	Oil Bbls.	Water Bbls.	Gas Mcf	Gas-Oil Ratio	Gravity
	28.39	3.34			26

DISPOSITION OF GAS: Vented Sold Used on Lease (If vented, Submit ACO-18)

METHOD OF COMPLETION: Open Hole Perf. Dually Comp. Commingled (Submit ACO-5)

PRODUCTION INTERVAL: _____

Form	ACO1 - Well Completion
Operator	Ritchie Exploration, Inc.
Well Name	CRAMER 8A 1
Doc ID	1193354

Tops

	Top	Bottom
Anhydrite	2263	+618
B/Anhydrite	2284	+597
Heebner	3890	-1009
Lansing "A"	3928	-1047
Lansing "C"	3959	-1078
Lansing "E"	4006	-1125
Muncie Shale	4099	-1218
LKC "J"	4174	-1293
Stark Shale	4198	-1317
B/KC	4276	-1395
Altamont	4335	-1454
Fort Scott	4450	-1569
Cherokee Shale	4773	-1592
Johnson	4513	-1632
Mississippian	4544	-1663

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

March 9, 2015

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

RE: Approved Commingling CO021503
Cramer 8A 1
API No. 15-101-21926-00-01

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