

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION Form ACO-4 Form must be typed March 2009

APPLICATION FOR COMMINGLING OF

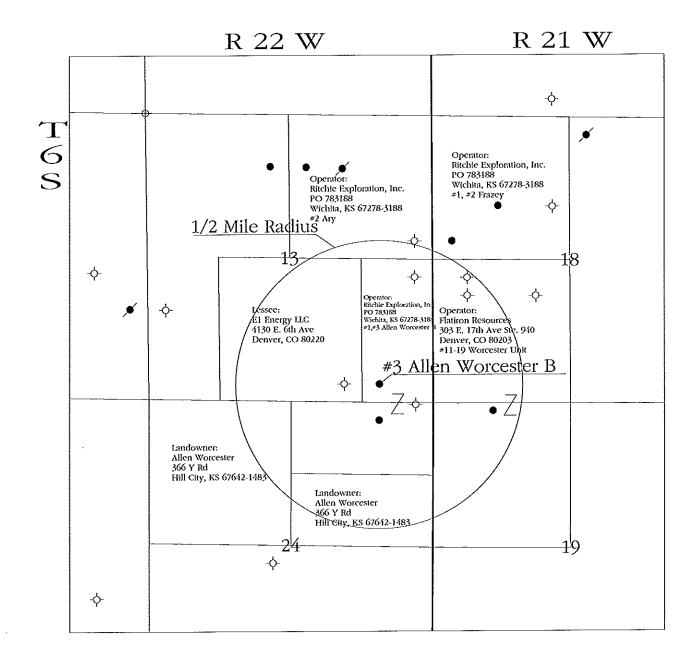
Commingling ID #

PRODUCTION (K.A.R. 82-3-123) OR FLUIDS (K.A.R. 82-3-123a)

OPERAT	TOR: License #						
Name:_							
Address	1:	S. R Bec Twp S. R []East []					
Address	2:		Feet from	North / South Line of Section			
City:	State: Zip:+		Feet from E	ast / 🗌 West Line of Section			
Contact	Person:	County:					
Phone:	()	Lease Name:	W	ell #:			
		the second set of					
<u> </u>	Name and upper and lower limit of each production interval to	Ū.	(-)				
	Formation:						
	Formation:	Υ.	,				
	Formation:		,				
	Formation:						
	Formation:	(Per	fs):				
2.	Estimated amount of fluid production to be commingled from e	each interval:					
	Formation:	BOPD:	MCFPD:	BWPD:			
	Formation:	BOPD:	MCFPD:	BWPD:			
	Formation:	BOPD:	MCFPD:	BWPD:			
	Formation:	BOPD:	MCFPD:	BWPD:			
	Formation:			BWPD:			
□ 3. □ 4.	Plat map showing the location of the subject well, all other well the subject well, and for each well the names and addresses of Signed certificate showing service of the application and affida	of the lessee of record or	operator.	ases within a 1/2 mile radius of			
For Con	nmingling 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 Con	nmingling of FLUIDS ONLY, include the following:						
7.	Well construction diagram of subject well.						
8.	Any available water chemistry data demonstrating the compati	ibility of the fluids to be c	commingled.				
current in mingling	VIT: I am the affiant and hereby certify that to the best of my nformation, knowledge and personal belief, this request for com- is true and proper and I have no information or knowledge, which sistent with the information supplied in this application.		Submitted Electro	nically			
	C Office Use Only		ith K.A.R. 82-3-135b and must	est in the application. Protests must be be filed wihin 15 days of publication o			
15-Dav	y Periods Ends:						

Date: _

Approved By:





٩.

APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS

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

#3 Allen Worcester B 335' FSL & 985' FEL Section 13-6S-22W Graham Co., KS

Township 6 South, Range 21 West

Sec. 18:	NW/4	Ritchie Exploration, Inc. P.O. Box 783188 Wichita, KS 67278-3188	Operator: #1 Frazey, #2 Frazey
	SW/4	Flatirons Resources, LLC 303 E. 17 th Ave., Ste. 940 Denver, CO 80203	Operator: Worcester Unit #11-19
Sec. 19:	NW/4	Flatirons Resources, LLC	Operator: Worcester Unit #11-19
<u>Township 6</u>	South, Range 2	22 West	
Sec. 13:	NE/4	Ritchie Exploration, Inc.	Operator: #2 Ary
	E/2SE/4	Ritchie Exploration, Inc.	Operator: #3 Allen Worcester B
	E/2SW/4, W/2SE/4	E 1 Energy LLC. 4130 E. 6 th Ave. Denver, CO 80220	Lessee
Sec. 24:	N/2NE/4	Ritchie Exploration, Inc.	Operator: #1 Allen Worcester B
	S/2NE/4	Allen & Pauline Worcester Irr. Trust; Jessie Lea Williams Est.; Merlyn & Josie Worcester 3166 Y RD Hill City, KS 67642-1483	Landowners
	NW/4	Allen Worcester 3166 Y RD Hill City, KS 67642-1483	Landowner

First Published In The Hill City Times, Wednesday, June 12, 2013;

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 Toronto sources of supply for the #3 Allen Worcester B well located approx. SW SE SE of Section 13-6S-22W, Graham 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, de Physica

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 50-1

AFFIDAVIT OF PUBLICATION State of Kansas, County of Graham, ss:

JIM LOGBACK, of lawful age, being duly sworn, upon oath states that he is publisher of THE HILL CITY TIMES;

THAT said newspaper has been published weekly at least fifty (50) times a year and has been published at least five (5) years in Graham County, Kansas prior to the first publication of the attached notice;

THAT said newspaper has a general PAID circulation in GRAHAM COUNTY, KANSAS, and is NOT a trade, religious or fraternal publication.

THAT said newspaper is PRINTED IN KANSAS and PUBLISHED in GRAHAM COUNTY, KANSAS, and entered as second class mail matter at the post office of its publication in HILL CITY, KANSAS;

THAT, a notice of which the attached is a true and correct copy,

was published in a regular issue of said	newspaper for consecutive
weeks commencing with the issue of	JUNO 12 20R
	for the
Publication Fee	5
Affidavits @ 75¢ \$	SUBSCRIBED and sworn
Extra Copies @ 50¢ \$	to before me this
TOTAL LEGAL FEE 23 R	day of
	··
My commission expires	Notary Public
	·

AFFIDAVIT

\ - SS.

STATE OF KANSAS 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 13th of

June A.D. 2013, 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.

Flotchall

Subscribed and sworn to before me this

13th day of June, 2013

/	
A	PENNY L. CASE
-23-3-	
<u> </u>	Notary Public-State of Kansas
My Ap	ot. Expires \ /28 /20/4-

Notary Public Sedgwick County, Kansas

LEGAL PUBLICATION PUBLISHED IN THE WICHITA EAGLE JUNE 13, 2013 (3250779) LEGAL NOTICE You, and each of you, are hereby notified that Ritchle Exoloration, Inc. has filed an application to commence the commingting of production from the Lansing-Kanasa City and Toronto sources of supply for the #3 Allen Worcester B-well localed approx. SW SE SE of Section 13-85-22W, Grham County, Kanasa. 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 Kanasa 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 pollule the natural resources of the state of Kanasa. It no protests are received, this application may be granted through a summary proceeding. If wild protests are received, this mailer will be set for hearing. All persons interested or concerned shall take molice of the foresoing and shall govern themselves accordingly. RITCHIE EXPLORATION, INC PO. Boy 78188 Wichia, KS 6728-3188 (16) 691-990

Printer's Fee : \$91.60

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 ½ mile radius of the Allen Worcester B #3 well located in the County of Graham (see attached plat map). This notice included a letter and a copy of the Commingle Application (ACO-4). All notices were mailed on June 7, 2013.

made as aforesaid on the $7^{\underline{th}}$ of

June A.D. 2013

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

7th day of June 2013

ounty, Kansas

KAREN HOPPER NOTARY PUBLIC-STATE OF KANSAS INV APPT. EXPIRES 3-8-15

, JANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

t

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No. 15
Name: Ritchie Exploration, Inc.	Spot Description: _5' N & 5' W of
Address 1:P.O. Box 783188	<u>SW_SE_SE</u> <u>Sec. 13</u> Twp. <u>6</u> <u>S.</u> R. <u>22</u> East West
Address 2:	335 Feet from D North / South Line of Section
City: Wichita State: KS _ Zip: 67278 + 3188	985 Feet from 🔽 East / 🗌 West Line of Section
Contact Person: John Niernberger	Footages Calculated from Nearest Outside Section Corner:
Phone: (<u>316</u>) <u>691-9500</u>	□ NE □ NW ☑ SE □ SW
00575	County: Graham
MIM Drilling HC	Lease Name:Allen Worcester B Well #: 3
Wellsite Geologist: Jeff Christian	Field Name:
Purchaser: NCRA	Producing Formation: Toronto & LKC
Designate Type of Completion:	Elevation: Ground: 2302 Kelly Bushing: 2307
Vew Well Re-Entry Workover	Total Depth: 3860 Plug Back Total Depth: 3834'
🖸 oii 🔲 wsw 🔲 swd 🔲 siow	Amount of Surface Pipe Set and Cemented at: 219 Feet
Gas D&A ENHR SIGW	Multiple Stage Cementing Collar Used? 🛛 Yes 🗌 No
OG GSW Temp. Abd.	If yes, show depth set:Feet
CM (Coal Bed Methane)	If Alternate II completion, cement circulated from: 1937
Cathodic Other (Core, Expl., etc.):	feet depth to: surface w/ 300 sx cmt.
If Workover/Re-entry: Old Well Info as follows:	
Operator:	Drilling Fluid Management Plan
Well Name:	(Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth:	Chloride content: 17000 ppm Fluid volume: 1100 bbls
Deepening Re-perf. Conv. to ENHR Conv. to SWD	Dewatering method used: evaporation
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. R [] East [] West
ENHR Permit #:	
GSW Permit #:	County: Permit #:
2/23/11 3/3/11 3/3/11	
Spud Date or Date Reached TD Completion Date or Recompletion Date	
INSTRUCTIONS: An original and two copies of this form shall be filed with Kansas 67202, within 120 days of the spud date, recompletion, workover or co of side two of this form will be held confidential for a period of 12 months if req tiality in excess of 12 months). One copy of all wireline logs and geologist we BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 for	onversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information uested in writing and submitted with the form (see rule 82-3-107 for confiden- Il report shall be attached with this form. ALL CEMENTING TICKETS MUST
AFFIDAVIT	KCC Office Use ONLY

Title: Production Manager Date: 5/26/11							

KCC Office Use O	NLY
Letter of Confidentiality Received	
Date:	
Confidential Release Date:	
Wireline Log Received	
Geologist Report Received	
UIC Distribution	
ALT IIIII III Approved by:	Date:

.

Side Two

ł

ŧ

Operator Name: Ritchie Exploration, Inc.	Lease Name: Allen Worcester B	_Well #:3
Sec. <u>13</u> Twp. <u>6</u> S. R. <u>22</u> East 🖌 West	County: Graham	

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 Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken	🗸 Yes	No .	Log	Formation (Top), Dep	Formation (Top), Depth and Datum	
(Attach Additional Sheets) Samples Sent to Geological Survey Cores Taken Electric Log Run Electric Log Submitted Electronically (If no, Submit Copy)	 ✓ Yes ✓ Yes ✓ Yes ✓ Yes ✓ Yes 	□ No ☑ No □ No ☑ No	Name	SEE ATTACHED	Тор	Datum
List All E. Logs Run: Radiation Guard Log						
		CASING RECORD	✓ New	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	12-1/4	8-5/8	23	219	common	150	3% cc, 2% gel			
Production	7-7/8	4-1/2	10.5	3858	60/40 Poz	160	10% sal, 2% gel & 3/4% CD31			

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Protect Casing				
Plug Off Zone				

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 Meterial Used) Depth			Depth	
4	3708' - 3709.5', 36	99' - 3702'	' (3/29/11))		1000 ga	allons 15% NE & 15 so	bluble perf-ball-sealers (3/30/11	
4 3539' - 3541' (3/29/11)						500 g	allons 15% NE (3	/30/11)	
	-								
TUBING RECORD:	Size: 2-3/8"	Set At: 3817'		Packer	At:	Liner Ru		/] No	1
Date of First, Resumed 5/2/11	Production, SWD or ENH		Producing Me	ihod: ☑ Pump	olng 🗌	Gas Lift	Other (Explain)		
Estimated Production Oil Bbls. Per 24 Hours 8.19		bls.	Gas	Mcf	Wate 2	er .04	Bbis.	Gas-Oil Ratio	Gravity 34.7
DISPOSITI			METHOD (OF COMPLE	TION:		PRODUCTION INTER	VAL:	
Vented Sold Used on Lease			in Hole	Perf.	Uually		Commingled (Submit ACO-4)		

Mall to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Other (Specify)

(If vented, Submit ACO-18.)

#3 Allen Worcester B
335' FSL & 985' FEL
5' N & 5' W of SW SE SE Section 13-6S-22W
Graham County, Kansas
API# 15-065-23718-0000
Elevation: GL: 2302', KB: 2307'

EXPLORATION, INC. Wichita, Kansas

t

Samula Tana			Ref. Well
Sample Tops	10.60		
Anhydrite	1963'	+344	-1
B/Anhydrite	1995'	+312	flat
Topeka	3312'	-1005	-3
Heebner	3511'	-1204	+1
Toronto	3542'	-1235	-3
Lansing	3560'	-1253	-3
Muncie Shale	3666'	-1359	+1
BKC	3743'	-1436	+4
Conglomerate	3782'	-1475	+7
Arbuckle	3836'	-1529	+11
RTD	3860'	-1553	

· 1



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

Mark Sievers, Chairman Thomas E. Wright, Commissioner Shari Feist Albrecht, Commissioner Sam Brownback, Governor

July 1, 2013

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

RE: Approved Commingling CO061304 Allen Worcester B 3, Sec.13-T6S-R22W, Graham County API No. 15-065-23718-00-00

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. This application, which was received by the KCC on June 17, 2013, concerns approval to simultaneously produce from the following sources of supply through the same tubing string in the same wellbore:

	Estimated Current Production			
Source of Supply	BOPD	MCFPD	BWPD	Perf Depth
Toronto	0.51	0.00	0.82	3539-3541
LKC-I/J	1.54	0.00	1.22	3699-3709
Total Estimated Current Production	2.05	0.00	2.04	

Based upon the depth of the LKC formation perforations, total oil production shall not exceed 100 BOPD and total gas production shall not exceed 50% of the absolute open flow (AOF).

Commingling ID number CO061304 has been assigned to this approved application. Use this number for well completion reports (ACO-1) and other correspondence that may concern this approved commingling.

Sincerely,

Rick Hestermann Production Department