

Commingling ID #_

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

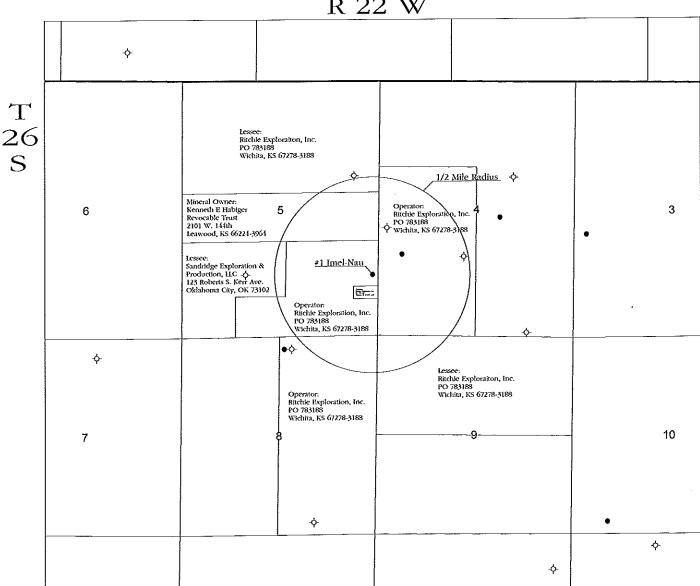
APPLICATION FOR COMMINGLING OF

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

OPERAT	OR: License #	API No. 1	5					
Name:		Spot Description:						
Address	1:	<u>-</u>	s	Sec 7	Гwр	S. R		East West
Address	2:			Feet from	m 🗌 M	North /	South	Line of Section
City:	State: Zip:+			Feet from	m 🗌 E	ast /	West	Line of Section
Contact I	Person:	County: _					_	
Phone:	()	Lease Na	me:		W	ell #:		
_								
□ 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 e							
	Formation:							
	Formation:	BOPD: _		MCFPD:			BWPD:	
	Formation:	BOPD: _		MCFPD:			BWPD:	
	Formation:	BOPD: _		MCFPD:			BWPD:	
	Formation:	BOPD: _		_ MCFPD:			BWPD:	
□ 3. □ 4.	Plat map showing the location of the subject well, all other we the subject well, and for each well the names and addresses of Signed certificate showing service of the application and affide	of the lessee of rec	ord or operate	or.	Ū	ases withi	n a 1/2 r	mile radius of
<u> </u>	Signed certificate showing service of the application and anida			N.A.N. 02 C	1000.			
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 compat	tibility of the fluids t	o be commin	aled.				
	, ,	· · · , · · · · · · · · · · · · · · · · · · ·		0				
current ir mingling	/IT: I am the affiant and hereby certify that to the best of my formation, knowledge and personal belief, this request for comis true and proper and I have no information or knowledge, which istent with the information supplied in this application.		Subi	mitted E	lectro	nically		
KCC	Office Use Only							Protests must be
De	nied Approved	in writing and co. the notice of app		R. 82-3-135b	and must	be filed wil	nin 15 dag	ys of publication of
15-Day	Periods Ends:							

Date: _

Approved By:





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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 Imel-Nau 1635' FSL & 147' FEL Section 5-26S-22W Ford Co., KS

Township 26 South, Range 22 West

Sec. 4:	S. 280 acres of W/2	Ritchie Exploration, Inc. P.O. Box 783188 Wichita, KS 67278-3188	Operator: #1 Imel-Nau, #1 Nau 4BC
Sec. 5:	Lots 1-4	Ritchie Exploration, Inc.	Lessee
	S/2N/2	Kenneth E. Habiger & Cynthia A. Habiger, Co-Trustees of the Kenneth E. Habiger Revocable Living Trust, dated 2/19/99, as restated 3/24/04 2101 W. 144 th St. Leawood, KS 66224-3964	Mineral Owners
	SESW, SE, except N/2NESESE	Ritchie Exploration, Inc.	Operator: #1 Imel-Nau
	N/2NESESE	Ritchie Exploration, Inc.	Operator: #1 Imel-Nau
	N/2SW, SWSW	SandRidge Exploration & Production, LLC 123 Robert S. Kerr Ave. Oklahoma City, OK 73102	Lessee
Sec. 8:	E/2	Ritchie Exploration, Inc.	Operator: #1 Imel 8AD-Nau
Sec. 9:	N/2	Ritchie Exploration, Inc.	Lessee

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 19th

July 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.

Fletchall

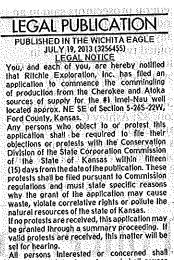
Subscribed and sworn to before me this

19th day of July, 2013

JENNIFER RAE BAILEY 面印度 Notary Public - State of Kansas My Appl, Expires

Notary Public Sedgwick County, Kansas

Printer's Fee : \$89.20



valid protests are reserved. set for hearing. All persons interested or concerned shall take notice of the foregoing and shall govern themselves accordingly. RITCHIE EXPLORATION, INC. D.O. But 783183

P.O. Box 783168 Wichita, KS 67278-3188 (316) 691-9500 Proof of Publication State of Kansas, Ford County, SS.

Dodge City Daily Globe

Ritchie Exploration, Inc. P.O. Box 783188 Wichita, KS 67278

Reference: 67100 Account: 114170

Case No. Application to Commingle

Ed O'Neal of lawful age, being duly sworn upon oath, states that he is the Circulation Manager of the DODGE CITY DAILY GLOBE.

THAT said newspaper has been published at least weekly fifty (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 paper was entered as second-class mail matter at the post office of its publication;

THAT said paper has a general paid circulation on a daily, or weekly, or yearly basis in FORD COUNTY KANSAS, and is NOT a trade, religious or fraternal publication and has been PRINTED and published in FORD COUNTY, KANSAS.

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

(Sign)

PUBLISHED ON: 07/19/2013

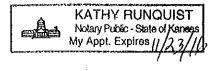
TOTAL COST: \$32.50

FILED ON: 07/19/2013

AD SPACE: 6.25 inches

Witness my hand this // day of 1. 20 l day of SUBSCRIBED and Sworn to Before Me This

Notary Public, Hord County, Kansas



(Published in the Dodge City Daily Globe Friday, July 19th, 2013) 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 Cherokee and Atoka sources of supply for the #1 Imel-Nau well located approx. NE SE of Section 5-26S-22W, Ford 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 Com-These protests mission 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 1xFri

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 Imel-Nau #1 well located in the County of Ford (see plat map attached). This notice included a letter and a copy of the Commingle Application (ACO-4). All notices were mailed on July 16, 2013.

made as aforesaid on the 16^{th} of

July 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

16th day of July 2013

Notary Public Sedgwick County, Kansas

KAREN HOPPER NOTARY PUBLIC-STATE OF KANSAS

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

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Form ACO-4 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			
Ditable Exploration Inc.	Spot Description: irregular section			
	Sec. 5 Twp. 26 S. R. 22 ☐ East 🗹 West			
	1,635 Feet from North / South Line of Section			
Address 2: City: Wichita State: KSZip: 67278 _+ 3188	147 Feet from			
	Footages Calculated from Nearest Outside Section Corner:			
Confact Person: Peter Fiorini				
Phone: (<u>316</u>) <u>691-9500</u>	County: Ford			
CONTRACTOR: License # 5929	Lease Name: Well #:			
Name: Duke Drilling Co., Inc.				
Wellsite Geologist: Adam Eldani	Field Name:			
Purchaser: NCRA	Producing Formation: Cherokee & Atoka			
Designate Type of Completion:	Elevation: Ground: 2411 Kelly Bushing: 2423			
🖌 New Well 🗌 Re-Entry 🗌 Workover	Total Depth: 4967 Plug Back Total Depth: 4937			
🔽 OII 🗌 WSW 🗍 SWD 🗌 SIOW	Amount of Surface Pipe Set and Cemented at: 384 Feet			
Gas D&A ENHR SIGW	Multiple Stage Cementing Collar Used? 📝 Yes 🗌 No			
GG GSW Temp. Abd.	If yes, show depth set:Feet			
CM (Coal Bed Methane)	If Alternate II completion, cement circulated from: surface			
Cathodic Other (Core, Expl., etc.):	feet depth to: <u>1448</u> w/ 250 sx cmt.			
If Workover/Re-entry: Old Well Info as follows:				
Operator:	Drilling Fiuld Management Plan			
Well Name:	(Data must be collected from the Reserve Pit)			
Original Comp. Date: Original Total Depth:	Chloride content: 9200 ppm Fluid volume: 1200 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 #:	Quarter Sec. Twp. S. R. East West			
ENHR Permit #:	County: Permit #:			
GSW Permit #:				
5/11/11 5/22/11 5/22/11				
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	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			
I am the affiant and I hereby certify that all requirements of the statules, rules and r	egu-			
lations promulgated to regulate the pil and gas industry have been fully complied	with			
and the statements herein are complete and correct to the best of my knowledge	Confidential Release Date:			
HAR	Wireline Log Received			
Signature:	Geologist Report Received			
Title: Development/Production Geologist Date: 9/8/11	ALT I III Approved by: Date:			

Side	Two
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Operator Name: Ritchie Exploration, Inc.	Lease Name: Imel-Nau	Well #:
Sec. 5 Twp.26 S. R. 22 East V West	County: Ford	

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), Depth and Datum		Sample
(Attach Additional Sheets) Samples Sent to Geological Survey	✓ Yes	No	Name		Тор	Datum
Cores Taken Electric Log Run Electric Log Submitted Electronically (If no, Submit Copy)	☐ Yes Yes Yes Yes	✓ No No No		SEE ATTACHED		
List All E. Logs Run:						
Dual Induction Log Compensated Density/Neutron Lo	g			<u> </u>]

		CASIN	IG RECORD 🛛 📝	New 🗌 Usedi			
		Report all strings s	et-conductor, surface,	intermediate, produ	ction, etc.		• · · · · · · · · · · · · · · · · · · ·
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Welght Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12-1/4	8-5/8	23	384	common	250	3% cc, 2% gel
Production	7-7/8	5-1/2	15.5	4962	ASC	210	10% set, 2% gel & 5%'st gilsonit

ADDITIONAL CEMENTING / SQUEEZE RECORD

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

Shots Per Foot	Shots Per Foot PERFORATION RECO Specify Footage of			RD - Bridge Plugs Set/Type f Each Interval Perforated			Acld, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)			
4	4838.5' - 4843.	5', 4846.5'	6.5' - 4859.5'(Cherokee) 6/3/11		500 gallons 15% NE (6/6/11), 500 gallons 15% NE (6/8/11)			11)		
4	4852' - 4855' (/	Atoka) 6/7/	7/11		500 gallons 15% NE (6/8/11)					
4 4810' - 4813', 4823.5'-4826.5			5',4830.5'-483	3.5'(Cherok	kee) 6/9/11					
		<u> </u>					<u>.</u>			
TUBING RECORD:	Size:	Set A 4909'	t:	Packe	r At:	Liner Ru	in:	✓ No		
Date of First, Resume 6/16/11	d Production, SWD or	ENHR.	Producing M	·····	ping	Gas Lift	Other (Expla	in)		
Estimated Production Per 24 Hours	0il 47.96	Bbis.	Gas	Mcf	Wat		Bbis.	Gas-Oli Ratio	Gravity 30.04	
Disposit	ION OF GAS:			METHOD	OF COMPLI	ETION:		PRODUCTION INT	ERVAL:	

DISPOSITION OF GAS:		METHOD	PRODUCTION INTERVAL:		
Vented Sold Used on Lease	🗌 Open Hole	Perf.	Uualiy Comp. (Submit ACO-5)	Commingled (Submit ACO-4)	
(if vented, Submit ACO-18.)	Other (Specify)			

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

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I.



1635' FSL & 147' FEL Irregular Section 5-26S-22W Ford County, Kansas API# 15-057-20727-0000 Elevation: 2411' GL: 2423' KB

EXPLORATION, INC. Wichita, Kansas

			Ref.
Sample Tops			Well
Anhydrite	1485'	+938	+4
B/Anhydrite	1516'	+907	+2
Stotler	3486'	-1063	+1
Heebner	4104'	-1681	+5
Lansing	4217'	-1794	+2
Muncie Shale	4397'	-1974	+2
Stark Shale	4497'	-2074	flat
BKC	4593'	-2170	+2
Altamont	4642'	-2219	+5
Pawnee	4721'	-2298	+2
Fort Scott	4752'	-2329	+3
Cherokee Shale	4770 '	-2347	+5
Atoka Shale	4848'	-2425	+2
Mississippian	4872'	-2449	-3
RTD	4967'	-2544	



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

August 20, 2013

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

RE: Approved Commingling CO081303 Imel-Nau #1, Sec.5-T26S-R22W, Ford County API No. 15-057-20727-00-00

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 August 20, 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
Cherokee	8.83	0.00	0.00	4838-4849
Atoka	1.56	0.00	0.00	4852-4855
Total Estimated Current Production	10.39	0.00	0.00	

Based upon the depth of the Atoka formation perforations, total oil production shall not exceed 200 BOPD and total gas production shall not exceed 50% of the absolute open flow (AOF).

Commingling ID number CO081303 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