



**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.

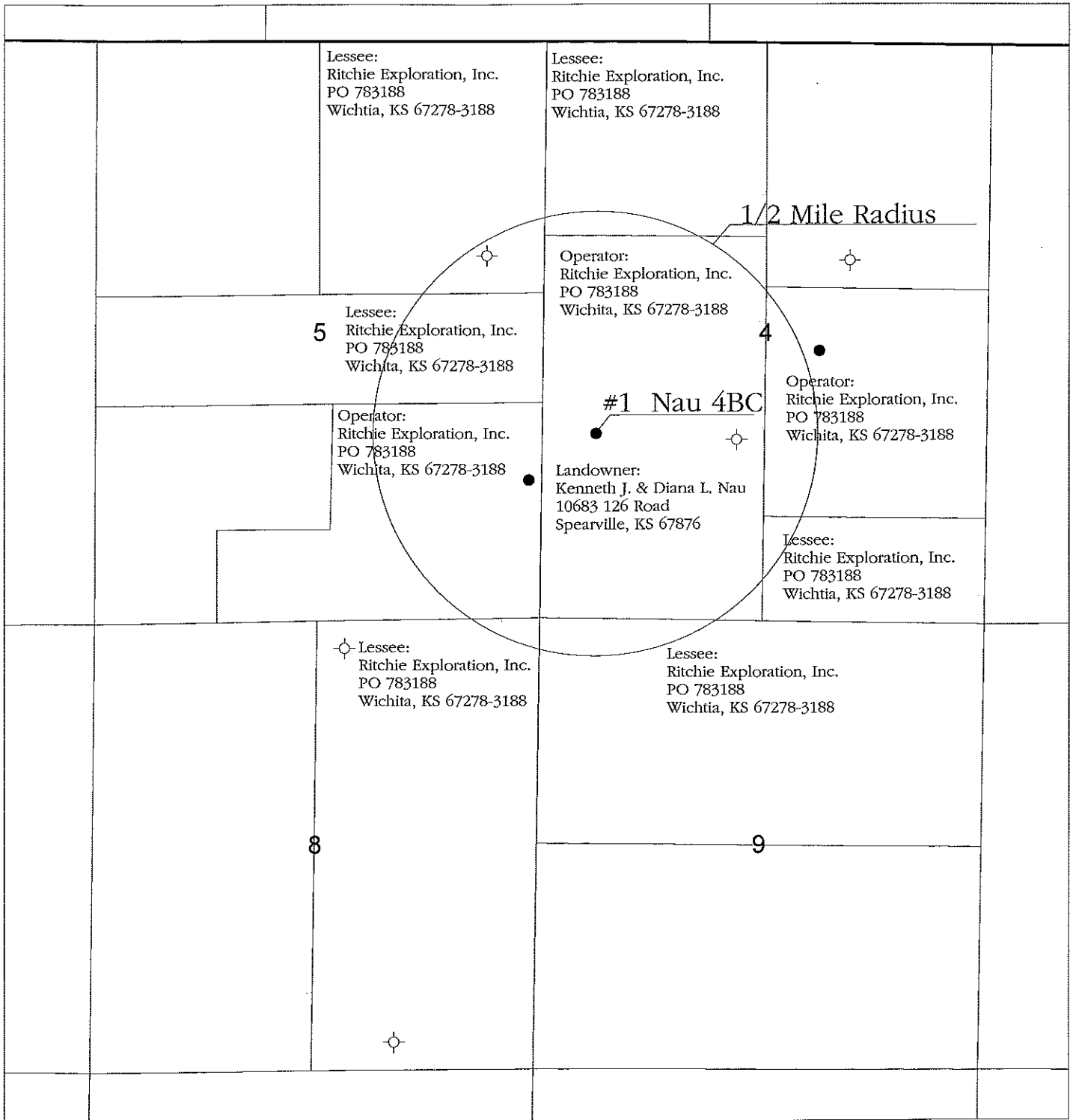
**Submitted Electronically**

**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 22 W

T  
26  
S



- Legend**
- Oil Well
  - ⊕ Dry and Abandoned Well

 <p><b>RITCHIE</b> EXPLORATION, INC. Wichita, Kansas</p>	<p><b>Application for Commingling of Production or Fluids</b></p>	
	<p><b>Applicant Well: #1 Nau 4BC</b> All Wells on Offsetting Leases within 1/2 Mile Radius Name and Address of Lessee of Record or Operator On Offsetting Leases</p>	
<p>Ford County, Kansas</p>		
Prepared By: Justin Clegg	Scale: 1 : 20,500	Date: March 13, 2012

# APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS

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

**#1 Nau 4BC  
2190' FSL & 640' FWL  
Section 4-26S-22W  
Ford Co., KS**

## Township 26 South, Range 22 West

Sec. 4:	N/2SE/4; S/2NE/4	Ritchie Exploration, Inc.	Operator: #1 Imel
	N. 140 ac. of the W/2	Ritchie Exploration, Inc.	Lessee
	S/2SE/4	Ritchie Exploration, Inc.	Lessee
	S. 280 ac. of the W/2	Ritchie Exploration, Inc.  Kenneth J. & Diana L. Nau 10683 126 Road Spearville, KS 67876	Operator: #1 Nau 4BC  Mineral Owners
Sec. 5:	Lts. 1-4	Ritchie Exploration, Inc.	Lessee
	S/2N/2;	Ritchie Exploration, Inc.	Lessee
	SE/4SW/4; SE/4	Ritchie Exploration, Inc.	Operator: #1 Imel-Nau
Sec. 8:	E/2	Ritchie Exploration, Inc.	Lessee
Sec. 9:	NW/4	Ritchie Exploration, Inc.	Lessee

**AFFIDAVIT**

STATE OF KANSAS            )  
  - SS.  
County of Sedgwick         )

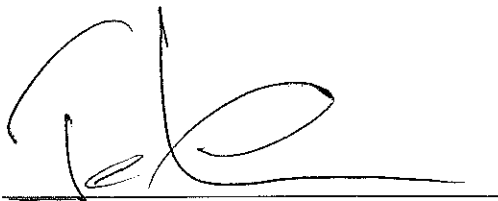
John Niernberger, of lawful age, being first duly sworn, deposeth and saith: That he is Production Manager of Ritchie Exploration, County of Sedgwick, State of Kansas, and that notice was given to all lessee of record or operator within ½ mile radius of the Nau 4BC #1 well located in the County of Ford (see plat map attached). This notice included a letter and a copy of the Commingle Application (ACO-4). All notices were mailed on March 22, 2012.

made as aforesaid on the 22<sup>nd</sup> of

**March A.D. 2012**

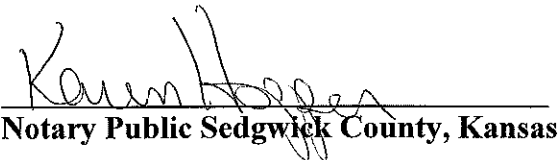
\_\_\_\_\_

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

**22<sup>nd</sup> day of March 2012**



Notary Public Sedgwick County, Kansas

**KAREN HOPPER**  
**NOTARY PUBLIC-STATE OF KANSAS**  
**MY APPT. EXPIRES 3.8.15**

**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 28th of

March A.D. 2012, with

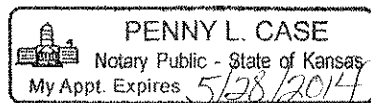
subsequent publications being made on the following dates:

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

28th day of March, 2012



*Penny L. Case*
Notary Public Sedgwick County, Kansas

Printer's Fee : \$89.20

**LEGAL PUBLICATION**

PUBLISHED IN THE WICHITA EAGLE
MARCH 28, 2012 (3175908)

**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 Lime and Altamont B sources of supply for the #1 Nau 4BC well located approx. N/2 NW SW of Section 4-26S-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 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

Proof of Publication  
State of Kansas, Ford County, SS.

Dodge City Daily Globe

Ritchie Exploration  
PO Box 783188  
Wichita, KS 67278

Reference: 70967                      Account:

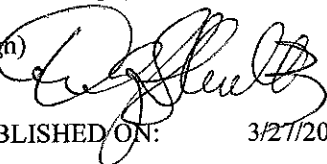
Emily Shultz, of lawful age, being duly sworn upon oath, states that she is the General Manager of the DODGE CITY DAILY GLOBE.

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:                      3/27/2012

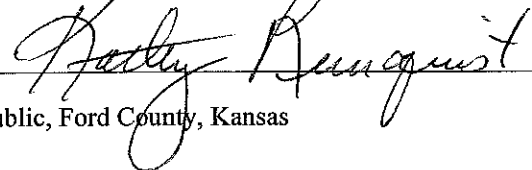
TOTAL COST:                        \$24.70

FILED ON:                            3/27/2012

AD SPACE:                          4.75 Inches

Witness my hand this 27 day of Mar, 2012

SUBSCRIBED and Sworn to Before Me This 27 day of Mar, 2012

  
\_\_\_\_\_  
Notary Public, Ford County, Kansas

**005 PUBLIC NOTICES/  
LEGAL NOTICES**

(First Published in the Dodge City Daily Globe, Tuesday, March 27, 2012)

**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 Lime and Allamont B sources of supply for the #1 Nau BC well located approx. N/2 NW SW of Section 4-26S-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 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

  
KATHY RUNQUIST  
Notary Public - State of Kansas  
My Appt. Expires 11/23/12

**KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE**

Form ACO-1  
September 1999  
Form Must Be Typed

Operator: License # 4767  
 Name: Ritchie Exploration, Inc.  
 Address: P.O. Box 783188  
 City/State/Zip: Wichita, KS 67278-3188  
 Purchaser: NCRA  
 Operator Contact Person: John Niernberger  
 Phone: (316) 691-9500  
 Contractor: Name: Duke Drilling Co., Inc.  
 License: 5929  
 Wellsite Geologist: Jeff Christian

Designate Type of Completion:

New Well     Re-Entry     Workover  
 Oil     SWD     SLOW     Temp. Abd.  
 Gas     ENHR     SIGW  
 Dry     Other (Core, WSW, Expl., Cathodic, 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./SWD  
 Plug Back \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
 Commingled    Docket No. \_\_\_\_\_  
 Dual Completion    Docket No. \_\_\_\_\_  
 Other (SWD or Enhr.?)    Docket No. \_\_\_\_\_

<u>3/2/10</u>	<u>3/13/10</u>	<u>3/14/10</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 057-20667-00-00  
 County: Ford  
 approx N/2 NW SW Sec. 4 Twp. 26 S. R. 22  East  West  
2190 feet from S / N (circle one) Line of Section  
640 feet from E / W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:

(circle one) NE SE NW SW  
 Lease Name: Nau 4BC Well #: 1

Field Name: \_\_\_\_\_  
 Producing Formation: Altamont & Cherokee  
 Elevation: Ground: 2404 Kelly Bushing: 2416  
 Total Depth: 4965 Plug Back Total Depth: 4942  
 Amount of Surface Pipe Set and Cemented at 377 Feet  
 Multiple Stage Cementing Collar Used?  Yes  No  
 If yes, show depth set 1454 Feet  
 If Alternate II completion, cement circulated from 1454  
 feet depth to surface w/ 175 sx cmt.

**Drilling Fluid Management Plan**

(Data must be collected from the Reserve Pit)

Chloride content 28000 ppm Fluid volume 1200 bbls  
 Dewatering method used evaporation

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_  
 Lease Name: \_\_\_\_\_ License No.: \_\_\_\_\_  
 Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West  
 County: \_\_\_\_\_ Docket No.: \_\_\_\_\_

**INSTRUCTIONS:** An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

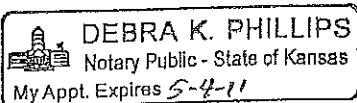
All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: \_\_\_\_\_  
 Title: Production Manager Date: 6/22/10

Subscribed and sworn to before me this 22<sup>nd</sup> day of June,  
2010.

Notary Public: Debra K Phillips

Date Commission Expires: 5-4-11

  
**DEBRA K. PHILLIPS**  
 Notary Public - State of Kansas  
 My Appt. Expires 5-4-11

**KCC Office Use ONLY**

Letter of Confidentiality Received  
 If Denied, Yes  Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
 UIC Distribution

Operator Name: Ritchie Exploration, Inc. Lease Name: Nau 4BC Well #: 1  
 Sec. 4 Twp. 26 S. R. 22  East  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 copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

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  
 (Submit Copy)

List All E. Logs Run:

Dual Induction Log  
 Compensated Density/Neutron Log

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

SEE ATTACHED

CASING RECORD <input type="checkbox"/> New <input checked="" 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	12-1/4	8-5/8	24	377	Common	200	3%cc, 2% gel
Production	7-7/8	5-1/2	15.5	4962	ASC	210	10% salt, 2% gel & 5# per sack flo-seal

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				

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	4838.5' - 4841.5' (Lower Cherokee Lime 3/31/10)	500 gallons 15% NE	
4	4671' - 4678' (Altamont B 3/31/10)	500 gallons 15% NE	

TUBING RECORD		Size	Set At	Packer At	Liner Run
		2-7/8	4924'		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumerd Production, SWD or Enhr.			Producing Method		
4/23/10			<input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)		
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	174.24		0		30.6

Disposition of Gas  Vented  Sold  Used on Lease (If vented, Submit ACO-18.)

METHOD OF COMPLETION  Open Hole  Perf.  Dually Comp.  Commingled

Production Interval  Other (Specify) \_\_\_\_\_





**#1 Nau 4BC**

2190' FSL & 640' FWL

120' S & 20' W of N/2 NW SW Section 4-26S-22W

Ford County, Kansas

API# 15-057-20667-0000

Elevation: 2404' GL: 2416' KB

<u>Sample Tops</u>			<u>Ref.</u> <u>Well</u>
Heebner	4101'	-1685	+1
Lansing	4209'	-1793	+6
Lansing "C"	4244'	-1828	+4
Muncie Shale	4385'	-1969	flat
Lansing "H"	4399'	-1983	+4
Lansing "I"	4426'	-2010	-2
Lansing "J"	4443'	-2027	-3
Stark Shale	4492'	-2076	+1
Lansing "K"	4496'	-2080	+1
Hush.	4548'	-2132	+5
Lansing "L"	4558'	-2142	+7
BKC	4585'	-2169	+6
Altamont	4640'	-2224	+3
Pawnee	4717'	-2301	+3
Fort Scott	4748'	-2332	+3
Cherokee Shale	4767'	-2351	+3
Lower Cherokee	4802'	-2386	+3
Atoka	4847'	-2432	+1
Mississippian	4868'	-2452	+3
RTD	4965'	-2549	

June 4, 2012

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

RE: Approved Commingling CO051208  
Nau 4BC 1, Sec.4-T26S-R22W, Ford County  
API No. 15-057-20667-00-00

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 May 31, 2012, concerns approval to simultaneously produce from the following sources of supply through the same tubing string in the same wellbore:

Source of Supply	Estimated Current Production			Perf Depth
	BOPD	MCFPD	BWPD	
Cherokee Lime	8.35	0	0	4838-4841
Altamont B	6.61	0	0	4671-4678
Total Estimated Current Production	14.96	0	0	

Based upon the depth of the Cherokee Lime 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 CO051208 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