



KANSAS CORPORATION COMMISSION 1160045  
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.

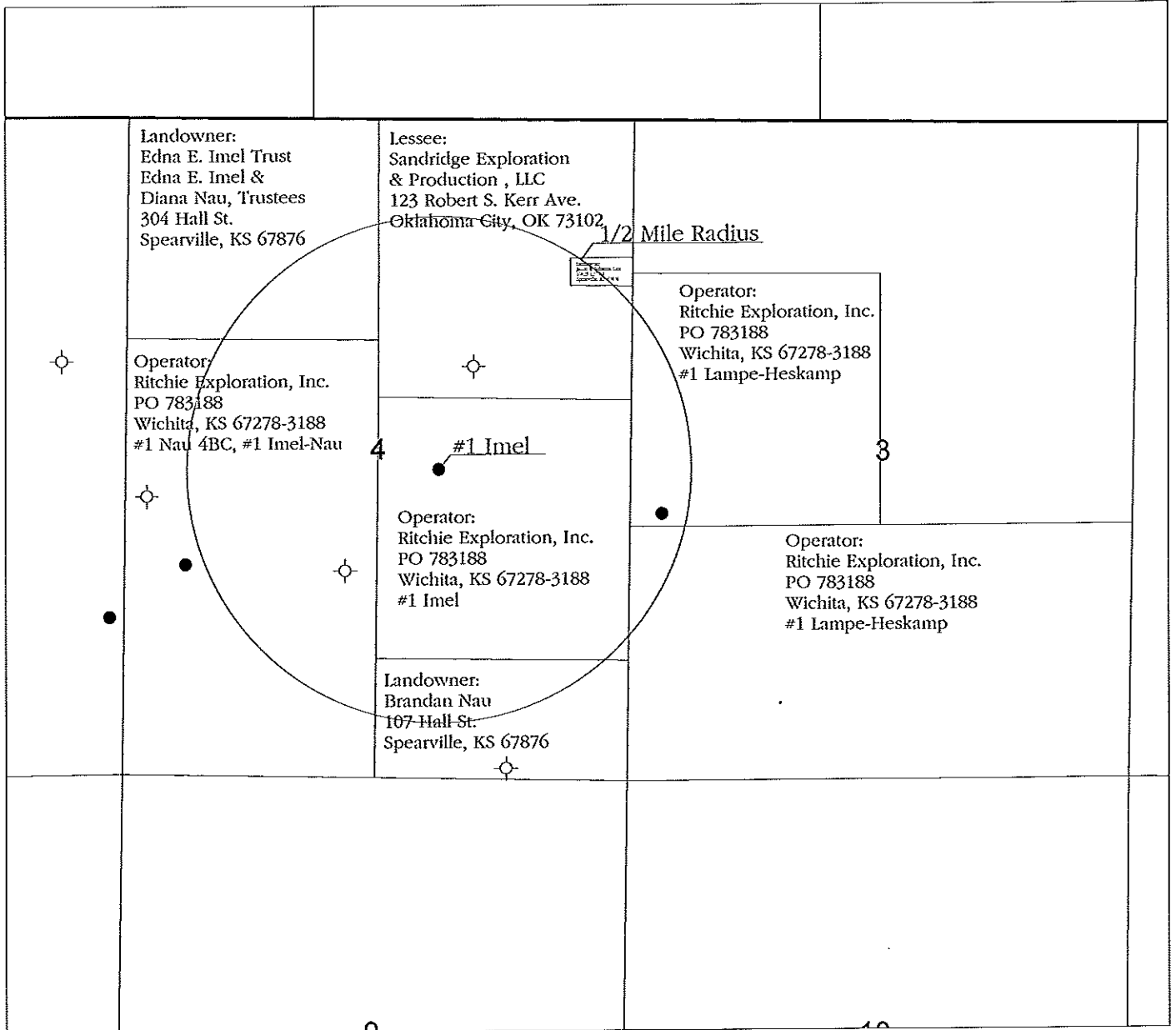
Submitted Electronically

**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.*

R 22 W

T  
26  
S



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



**RITCHIE**  
EXPLORATION, INC.  
Wichita, Kansas

**Application for  
Commingling of  
Production or Fluids**

**Applicant Well: #1 Imel**  
All Wells on Offsetting Leases within 1/2 Mile Radius  
Name and Address of Lessee of Record or Operator  
On Offsetting Leases

Ford County, Kansas

Prepared By: Justin Clegg	Scale: 1 : 20,000	Date: August 22, 2013
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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  
3217' FSL & 2000' FEL  
Section 4-26S-22W  
Ford Co., KS**

## Township 26 South, Range 22 West

Sec. 3: S. 40 ac. of Lt 3; S. 40 ac. of Lt 4; S/2NW/4	Ritchie Exploration, Inc. P.O. Box 783188 Wichita, KS 67278-3188	Operator: #1 Lampe-Heskamp
S/2	Ritchie Exploration, Inc.	Operator: #1 Lampe-Heskamp
Sec. 4: N. 140 ac. of W/2	Edna E. Imel Trust, u/a 5/2/2013 Edna E. Imel & Diana Nau, Trustees 304 Hall St. Spearville, KS 67876	Landowner
S. 280 ac. of W/2	Ritchie Exploration, Inc.	Operator: #1 Nau 4BC, #1 Imel-Nau
Lots 1 & 2, except a 4.1 acre tract in NE/4	Sandridge Exploration & Production, LLC 123 Robert S. Kerr Ave. Oklahoma City, OK 73102	Lessee
4.1 ac. tract in NE/4	Jason & Rebecca Lutz 10625 127 RD Spearville, KS 67876	Landowner
S/2NE/4; N/2SE/4	Ritchie Exploration, Inc.	Operator: #1 Imel
S/2SE/4	Brandan Nau 107 Hall St. Spearville, KS 67876	Landowner

**AFFIDAVIT**

STATE OF KANSAS        )  
                                  - SS.  
County of Sedgwick        )

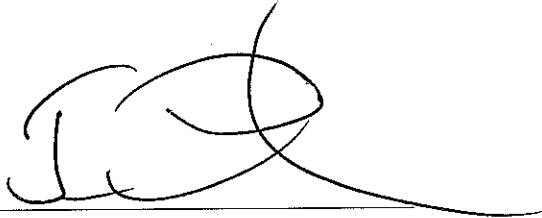
John Niernberger, of lawful age, being first duly sworn, deposes and saith: That he is Production Manager of Ritchie Exploration, County of Sedgwick, State of Kansas, and that notice was given to all lessee of record or operator within ½ mile radius of the Imel #1 well located in the County of Ford (see plat map attached). This notice included a letter and a copy of the Commingle Application (ACO-4). All notices were mailed on September 11, 2013.

made as aforesaid on the 11<sup>th</sup> of

**September** A.D. **2013**

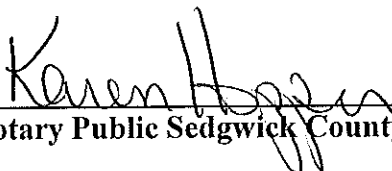
\_\_\_\_\_


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

**11<sup>th</sup> day of September 2013**

  
\_\_\_\_\_  
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 16th

September 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.

*Mark Fletchall*

Subscribed and sworn to before me this

16th day of September, 2013



*Jennifer Rae Bailey*  
Notary Public Sedgwick County, Kansas

Printer's Fee : \$89.20

**LEGAL PUBLICATION**  
PUBLISHED IN THE WICHITA EAGLE  
SEPTEMBER 16, 2013 (3265632)  
**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 Allamont, Cherokee, and Huck sources of supply for the #1 Imel well located approx. NW NW SE 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, Inc.  
PO Box 783188  
Wichita, KS 67278

Reference: 68716

Account: 114170

Case No. #1 Imel Well

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: 09/17/2013

TOTAL COST: \$ 33.80

FILED ON: 09/17/2013

AD SPACE: 6.5 inches

Witness my hand this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

SUBSCRIBED and Sworn to Before Me This \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_

Notary Public, Ford County, Kansas

(Published in the Dodge City Daily Globe Tuesday, September 17th, 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 Altamont, Cherokee, and Huck sources of supply for the #1 Imel well located approx. NW NW SE 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  
1xTues

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

Form ACO-1  
 June 2009  
**Form Must Be Typed**  
**Form must be Signed**  
**All blanks must be Filled**

OPERATOR: License # 4767  
 Name: Ritchie Exploration, Inc.  
 Address 1: P.O. Box 783188  
 Address 2: \_\_\_\_\_  
 City: Wichita State: KS Zip: 67278 + 3188  
 Contact Person: John Niernberger  
 Phone: (316) 691-9500  
 CONTRACTOR: License # 30606  
 Name: Murfin Drilling Co., Inc.  
 Wellsite Geologist: Adam Eldani  
 Purchaser: NCRA

Designate Type of Completion:

- New Well     Re-Entry     Workover
- Oil     WSW     SWD     SIOW  
 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  
 Conv. to GSW  
 Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
 Commingled    Permit #: \_\_\_\_\_  
 Dual Completion    Permit #: \_\_\_\_\_  
 SWD    Permit #: \_\_\_\_\_  
 ENHR    Permit #: \_\_\_\_\_  
 GSW    Permit #: \_\_\_\_\_

<u>10/12/11</u>	<u>10/22/11</u>	<u>10/22/11</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 057-20756-00-00  
 Spot Description: Irregular section  
 \_\_\_\_\_ Sec. 4 Twp. 26 S. R. 22  East  West  
3,217 Feet from  North /  South Line of Section  
2,000 Feet from  East /  West Line of Section  
 Footages Calculated from Nearest Outside Section Corner:  
 NE     NW     SE     SW  
 County: Ford  
 Lease Name: Imel Well #: 1  
 Field Name: \_\_\_\_\_  
 Producing Formation: Marmaton & Penn Basal Lime  
 Elevation: Ground: 2399 Kelly Bushing: 2410  
 Total Depth: 5000 Plug Back Total Depth: 4956  
 Amount of Surface Pipe Set and Cemented at: 347 Feet  
 Multiple Stage Cementing Collar Used?  Yes  No  
 If yes, show depth set: 1460 Feet  
 If Alternate II completion, cement circulated from: 1460  
 feet depth to: surface w/ 300 sx cmt.

**Drilling Fluid Management Plan**

(Data must be collected from the Reserve Pit)

Chloride content: 24400 ppm Fluid volume: 1000 bbls  
 Dewatering method used: evaporation  
 Location of fluid disposal if hauled offsite: \_\_\_\_\_  
 Operator Name: \_\_\_\_\_  
 Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_  
 Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West  
 County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**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.

**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.

Signature: [Signature]  
 Title: Production Manager Date: 1/30/12

**KCC Office Use ONLY**

- Letter of Confidentiality Received  
 Date: \_\_\_\_\_  
 Confidential Release Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
 UIC Distribution  
 ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Operator Name: Ritchie Exploration, Inc. Lease Name: Imel 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 complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

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 Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run: Dual Induction Log Compensated Density/Neutron 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	12-1/4	8-5/8	23	347	common	250	3%cc, 2% gel
Production	7-7/8	4-1/2	10.5	5003	AA-2	200	10% salt, 5% W-60, 5% x gilsonite

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 <i>(Amount and Kind of Material Used)</i>	Depth
4	4793'-4801', 4837'-4847', 4831'-4834', 4821'-4825', 4816.5'-4819.5', 4809.5'-4814.5' (11/18/11)	2500 gallons 15% NE	
4	4675.5' - 4682.5' (11/18/11)	500 gallons 15% NE	

TUBING RECORD: Size: <u>2-3/8"</u> Set At: <u>4923'</u> Packer At:		Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Date of First, Resumed Production, SWD or ENHR. <u>12/5/11</u>		Producing Method: <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. <u>40.25</u>	Gas Mcf <u>0</u>	Water Bbls. <u>0</u> Gas-Oil Ratio <u>0</u> Gravity <u>30.0</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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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**#1 Imel**  
3217' FSL & 2000' FEL  
Irregular Section 4-26S-22W  
Ford County, Kansas  
API# 15-057-20756-0000  
Elevation: GL: 2399', KB: 2410'

Sample Tops			Ref. Well
Anhydrite	1487'	+923	-9
B/Anhydrite	1512'	+898	-7
Stotler	3480'	-1070	-3
Heebner	4101'	-1691	-5
Lansing	4207'	-1797	+2
Muncie Shale	4378'	-1968	+1
Stark Shale	4487'	-2077	Flat
Hush. Shale	4544'	-2134	+3
BKC	4584'	-2174	+1
Marmaton	4586'	-2176	+1
Altamont	4634'	-2224	+3
Pawnee	4716	-2306	-2
Fort Scott	4747'	-2337	-2
Cherokee Shale	4766'	-2356	-2
Atoka Shale	4845'	-2435	-2
Mississippian	4872'	-2462	-7
RTD	5000'	-2590	

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

Sam Brownback, Governor

October 2 , 2013

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

RE: Approved Commingling CO091309  
Imel 1, Sec.4-T26S-R22W, Ford County  
API No. 15-057-20756-00-00

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 September 26, 2013, 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	
Altamont	7.09	0.00	0.00	4675-4682
Cherokee	1.72	0.00	0.00	4799-4834
Huck	1.32	0.00	0.00	4837-4847
Total Estimated Current Production	10.13	0.00	0.00	

Based upon the depth of the Huck 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 CO091309 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