



**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:**

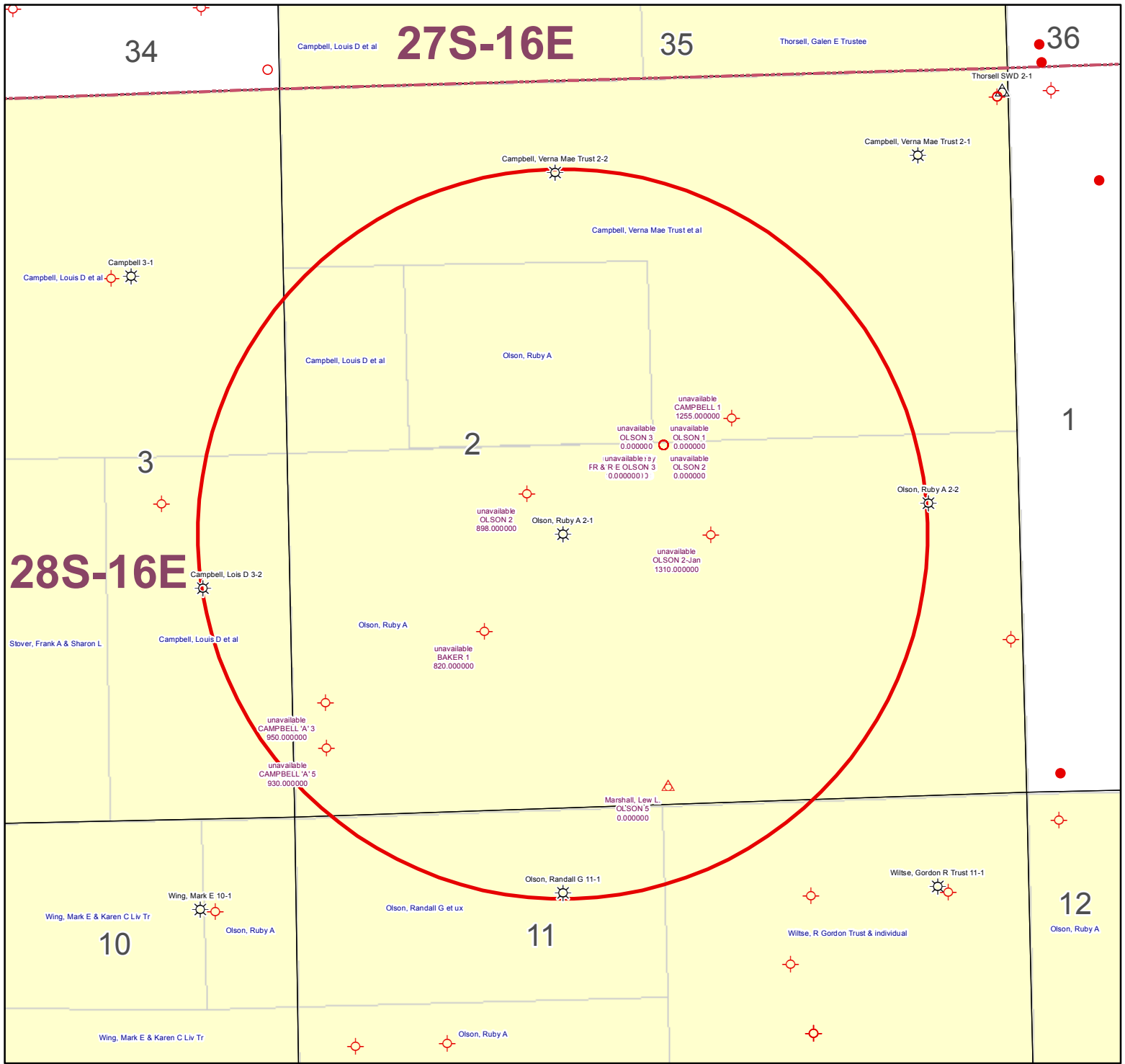
- 7. Well construction diagram of subject well.
- 8. Any available water chemistry data demonstrating the compatibility of the fluids to be commingled.

**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.*



**KGS STATUS**

	DA/PA
	EOR
	GAS
	INJ/SWD
	OIL
	OIL/GAS
	OTHER

Olson, Ruby A 2-1  
 2-28S-16E  
 1" = 1,000'

	A	B	C	D	E	F	G	H	I	J	K	
1	Produced Fluids #		1	2	3	4	5		<a href="#">Click here to run SSP</a>  Goal Seek SSP		Click	
2	Parameters	Units	Input	Input	Input	Input	Input					Click
3	Select the brines	Select fluid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Mixed brine:				
4	Sample ID	by checking						Cell H28 is				
5	Date	the box(es),	3/19/2012	3/4/2012	3/14/2012	1/20/2012	1/20/2012	STP calc. pH.				
6	Operator	Row 3	PostRock	PostRock	PostRock	PostRock	PostRock	Cells H35-38				Click
7	Well Name		Ward Feed	Ward Feed	Clinesmith	Clinesmith	Clinesmith	are used in				Click
8	Location		#34-1	#4-1	#5-4	#1	#2	mixed brines				
9	Field		CBM	CBM	Bartles	Bartles	Bartles	calculations.				
10	Na <sup>+</sup>	(mg/l)*	19,433.00	27,381.00	26,534.00	25689.00	24220.00	24654.20	Initial(BH)	Final(WH)	SI/SR (Final-Initial)	
11	K <sup>+</sup> (if not known =0)	(mg/l)						0.00	Saturation Index values			
12	Mg <sup>2+</sup>	(mg/l)	1,096.00	872.00	1,200.00	953.00	858.00	995.91	Calcite			
13	Ca <sup>2+</sup>	(mg/l)	1,836.00	2,452.00	2,044.00	1920.00	1948.00	2040.23	-0.73	-0.60	0.13	
14	Sr <sup>2+</sup>	(mg/l)						0.00	Barite			
15	Ba <sup>2+</sup>	(mg/l)						0.00				
16	Fe <sup>2+</sup>	(mg/l)	40.00	21.00	18.00	82.00	90.00	50.21	Halite			
17	Zn <sup>2+</sup>	(mg/l)						0.00	-1.77	-1.80	-0.03	
18	Pb <sup>2+</sup>	(mg/l)						0.00	Gypsum			
19	Cl <sup>-</sup>	(mg/l)	36,299.00	48,965.00	47,874.00	45632.00	43147.00	44388.44	-3.19	-3.18	0.00	
20	SO <sub>4</sub> <sup>2-</sup>	(mg/l)	1.00	1.00	8.00	1.00	1.00	2.40	Hemihydrate			
21	F <sup>-</sup>	(mg/l)						0.00	-3.96	-3.90	0.06	
22	Br <sup>-</sup>	(mg/l)						0.00	Anhydrite			
23	SiO <sub>2</sub>	(mg/l) SiO <sub>2</sub>						0.00	-3.47	-3.36	0.12	
24	HCO <sub>3</sub> Alkalinity**	(mg/l as HCO <sub>3</sub> )	190.00	234.00	259.00	268.00	254.00	241.03	Celestite			
25	CO <sub>3</sub> Alkalinity	(mg/l as CO <sub>3</sub> )										
26	Carboxylic acids**	(mg/l)						0.00	Iron Sulfide			
27	Ammonia	(mg/L) NH <sub>3</sub>						0.00	-0.16	-0.22	-0.06	
28	Borate	(mg/L) H <sub>3</sub> BO <sub>3</sub>						0.00	Zinc Sulfide			
29	TDS (Measured)	(mg/l)						72781				
30	Calc. Density (STP)	(g/ml)	1.038	1.051	1.050	1.048	1.045	1.047	Calcium fluoride			
31	CO <sub>2</sub> Gas Analysis	(%)	19.97	18.76	22.41	35.53	33.79	26.16				
32	H <sub>2</sub> S Gas Analysis***	(%)	0.0289	0.0292	0.0296	0.0306	0.0151	0.0269	Iron Carbonate			
33	Total H <sub>2</sub> Saq	(mgH <sub>2</sub> S/l)	1.00	1.00	1.00	1.00	0.50	0.90	-0.74	-0.51	0.23	
34	pH <sub>i</sub> measured (STP)	pH	5.67	5.76	5.72	5.54	5.55	5.63	Inhibitor needed (mg/L)			
35	Choose one option to calculate SI?	0-CO <sub>2</sub> %+Alk, 1-pH+Alk, 2-CO <sub>2</sub> %+pH	0	0	0	0	0	0	Calcite	NTMP		
36	Gas/day(thousand cf/day)	(Mc/D)						0	0.00	0.00		
37	Oil/Day	(B/D)	0	0	1	1	1	4	Barite	BHPMP		
38	Water/Day	(B/D)	100	100	100	100	100	500	0.00	0.00		
39	For mixed brines, enter values for temperatures and pressures in Cells (H40-H43)								(Enter H40-H43)			
40	Initial T	(F)	66.0	71.0	70.0	41.0	49.0	60.0	5.69	5.60		
41	Final T	(F)	66.0	71.0	70.0	41.0	49.0	89.0	Viscosity (CentiPoise)			
42	Initial P	(psia)	25.0	25.0	25.0	25.0	25.0	25.0	1.196	0.826		
43	Final P	(psia)	25.0	25.0	25.0	25.0	25.0	120.0	Heat Capacity (cal/ml/°C)			
44	Use TP on Calcite sheet?	1-Yes;0-No							0.955	0.959		
45	API Oil Grav.	API grav.						30.00	Inhibitor needed (mg/L)			
46	Gas Sp.Grav.	Sp.Grav.						0.60	Gypsum	HDTMP		
47	MeOH/Day	(B/D)	0					0	0.00	0.00		
48	MEG/Day	(B/D)	0					0	Anhydrite	HDTMP		
49	Conc. Multiplier								0.00	0.00		
50	H <sup>+</sup> (Strong acid) †	(N)										
51	OH <sup>-</sup> (Strong base) †	(N)										
52	Quality Control Checks at STP:											
53	H <sub>2</sub> S Gas	(%)										
54	Total H <sub>2</sub> Saq (STP)	(mgH <sub>2</sub> S/l)										
55	pH Calculated	(pH)										
56	PCO <sub>2</sub> Calculated	(%)										
57	Alkalinity Cacluated	(mg/l) as HCO <sub>3</sub>										
58	ΣCations=	(equiv./l)										
59	ΣAnions=	(equiv./l)										
60	Calc TDS=	(mg/l)										
61	Inhibitor Selection	Input	Unit	#	Inhibitor	Unit Converter (From metric to English)						
62	Protection Time	120	min	1	NTMP	From Unit	Value	To Unit	Value			
63	Have ScaleSoftPitzer			2	BHPMP	°C	80	°F	176			
64	pick inhibitor for you?	1	1-Yes;0-No	3	PAA	m <sup>3</sup>	100	ft <sup>3</sup>	3,531			
65	If No, inhibitor # is:	4	#	4	DTPMP	m <sup>3</sup>	100	bb(42 US gal)	629			
66	If you select Mixed,			5	PPCA	MPa	1,000	psia	145,074			
67	1 <sup>st</sup> inhibitor # is:	1	#	6	SPA	Bar	496	psia	7,194			
68	% of 1 <sup>st</sup> inhibitor is:	50	%	7	HEDP	Torr	10,000	psia	193			
69	2 <sup>nd</sup> inhibitor # is:	2	#	8	HDTMP	Gal	10,000	bb(42 US gal)	238			
70	Display act. coeffs?	0	1-Yes;0-No	9	Average	Liters	10,000	bb(42 US gal)	63			
71				10	Mixed							

## Saturation Index Calculations

*Champion Technologies, Inc.*  
(Based on the Tomson-Oddo Model)

**Brine 1:** Ward Feed Yard 34-1

**Brine 2:** Ward Feed Yard 4-1

**Brine 3:** Clinesmith 5-4

**Brine 4:** Clinesmith 1

**Brine 5:** Clinesmith 2

Component (mg/L)	Ratio					Mixed Brine
	20% Brine 1	20% Brine 2	20% Brine 3	20% Brine 4	20 Brine 5	
Calcium	1836	2452	2044	1920	1948	1952
Magnesium	1096	872	1200	953	858	865
Barium	0	0	0	0	0	0
Strontium	0	0	0	0	0	0
Bicarbonate	190	234	259	268	254	253
Sulfate	1	1	8	1	1	1
Chloride	36299	48965	47874	45632	43147	43206
CO <sub>2</sub> in Brine	246	220	264	422	405	401
Ionic Strength	1.12	1.48	1.46	1.38	1.31	1.31
Temperature (°F)	89	89	89	89	89	89
Pressure (psia)	50	50	120	120	120	119

### Saturation Index

Calcite	-1.71	-1.41	-1.48	-1.68	-1.69	-1.69
Gypsum	-3.71	-3.64	-2.82	-3.73	-3.72	-3.69
Hemihydrate	-3.70	-3.65	-2.83	-3.74	-3.71	-3.69
Anhydrite	-3.89	-3.79	-2.97	-3.89	-3.88	-3.85
Barite	N/A	N/A	N/A	N/A	N/A	N/A
Celestite	N/A	N/A	N/A	N/A	N/A	N/A

### PTB

Calcite	N/A	N/A	N/A	N/A	N/A	N/A
Gypsum	N/A	N/A	N/A	N/A	N/A	N/A
Hemihydrate	N/A	N/A	N/A	N/A	N/A	N/A
Anhydrite	N/A	N/A	N/A	N/A	N/A	N/A
Barite	N/A	N/A	N/A	N/A	N/A	N/A
Celestite	N/A	N/A	N/A	N/A	N/A	N/A

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

ORIGINAL

Form ACO-1  
September 1999  
Form Must Be Typed

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 33344  
Name: Quest Cherokee, LLC  
Address: 211 W. 14th Street  
City/State/Zip: Chanute, KS 66720  
Purchaser: Bluestem Pipeline, LLC  
Operator Contact Person: Jennifer R. Ammann  
Phone: (620) 431-9500  
Contractor: Name: MOKAT  
License: 5831  
Wellsite Geologist: Ken Recoy

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>5/30/06</u>	<u>5/31/06</u>	<u>6/9/06</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 205-26587-00-00  
County: Wilson  
\_\_\_\_\_ ne sw Sec. 2 Twp. 28 S. R. 16  East  West  
1980 feet from S N (circle one) Line of Section  
1980 feet from E W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:  
(circle one) NE SE NW SW  
Lease Name: Olson, Ruby A. Well #: 2-1  
Field Name: Cherokee Basin CBM  
Producing Formation: Multiple  
Elevation: Ground: 1040 Kelly Bushing: n/a  
Total Depth: 1313 Plug Back Total Depth: 1308.54  
Amount of Surface Pipe Set and Cemented at 21' 7" Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set \_\_\_\_\_ Feet  
If Alternate II completion, cement circulated from 1308.54  
feet depth to surface w/ 141 Alt 2 - Dlg - 11/25/08 sx cmt.

**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: RECEIVED  
**KANSAS CORPORATION COMMISSION**  
Lease Name: \_\_\_\_\_ License No.: \_\_\_\_\_  
Quarter \_\_\_\_\_ Sec. 27 S. R. \_\_\_\_\_  East  West  
County: \_\_\_\_\_ Docket No.: \_\_\_\_\_  
**CONSERVATION DIVISION  
WICHITA, KS**

**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: Jennifer R. Ammann  
Title: New Well Development Coordinator Date: 9/26/06  
Subscribed and sworn to before me this 26<sup>th</sup> day of September,  
2006.  
Notary Public: Denise V. Vennemman  
Date Commission Expires: 7-1-08

DENISE V. VENNEMAN  
NOTARY PUBLIC  
STATE OF KANSAS  
MY APPT. EXPIRES 7-1-08

**KCC Office Use ONLY**  
 Letter of Confidentiality Received  
If Denied, Yes  Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
 UIC Distribution

Operator Name: Quest Cherokee, LLC Lease Name: Olson, Ruby A. Well #: 2-1  
 Sec. 2 Twp. 28 S. R. 16  East  West County: Wilson

**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 <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" 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 <i>(Submit Copy)</i>  List All E. Logs Run:  <b>Dual Induction Log</b> <b>Compensated Density/Neutron Log</b> <b>Gamma Ray CCL</b>	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum See attached
---	--

CASING RECORD <input 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"	20	21' 7"	"A"	4	
Production	6-3/4	4-1/2	10.5#	1308.54	"A"	141	

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	1216-1218	100gal 15%HCLw/ 10 bbls 2%kcl water, 151bbls water w/ 2% KCL, Blockde, 1800# 20/40 sand	1216-1218
4	1071-1073/962-964/926-929/909-911	400gal 15%HCLw/ 29 bbls 2%kcl water, 320bbls water w/ 2% KCL, Blockde, 8000# 20/40 sand	1071-1073/962-964 926-929/909-911
4	850-854/835-839	400gal 15%HCLw/ 28 bbls 2%kcl water, 521bbls water w/ 2% KCL, Blockde, 13000# 30/70 sand	850-854/835-839

TUBING RECORD		Size	Set At	Packer At	Liner Run	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		2-3/8"	1240	n/a		
Date of First, Resumerd Production, SWD or Enhr.			Producing Method			
8/29/06			<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	
	n/a	3.3mcf	77bbls			

Disposition of Gas	METHOD OF COMPLETION	Production Interval
<input type="checkbox"/> Vented <input checked="" type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify) _____	

Air Drilling  
Specialist  
Oil and Gas Wells



**M.O.K.A.T. DRILLING**  
Office Phone: (620) 879-5377



P.O. Box 590  
Caney, KS 67333

Operator <b>QUEST CHEROKEE</b>		Well No. <b>2-1</b>	Lease <b>RUBY OLSON</b>	Loc.	1/4	1/4	1/4	Sec. <b>2</b>	Twp. <b>28</b>	Rge. <b>16</b>		
County <b>WILSON</b>		State <b>KS</b>	Type/Well	Depth <b>1313'</b>	Hours	Date Started <b>5/30/06</b>	Date Completed <b>5/31/06</b>					
Job No.	Casing Used <b>21' 7" 8 5/8"</b>	Bit Record				Coring Record						
Driller <b>HUNEYCUTT</b>	Cement Used <b>4</b>	Bit No.	Type	size	From	To	Bit No.	type	Size	From	To	% Rec.
Driller	Rig No. <b>2</b>			<b>6 3/4"</b>								
Driller	Hammer No.											

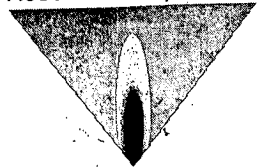
**Formation Record**

From	To	Formation	From	To	Formation	From	To	Formation	From	To	Formation
0	8	OVERBURDEN	672	674	SHALE	1028	1052	SAND (WATER)			
8	19	LIME	674	681	SAND (WATER)	1052	1053	COAL (WEIR)			
19	125	SHALE	681	716	SHALE/SAND	1053	1071	SANDY SHALE			
125	146	LIME	716	730	SAND (WATER)	1071	1072	COAL			
146	271	SHALE	730	734	SHALE	1072	1202	SAND (WATER)			
271	281	LIME	734	735	COAL	1202	1211	SHALE			
281	296	SAND (WATER)	735	750	SHALE	1211	1214	COAL (RIVERTON)			
296	301	LIME	750	754	LIME (PAWNEE)	1214	1228	SHALE			
301	309	SHALE	754	756	COAL	1228	1313	LIME (MISSISSIPPI)			
309	314	SAND			TOO MUCH WATER TO TEST						
314	318	LIME	756	780	LIME			T.D. 1313'			
318	351	SHALE	780	782	COAL						
351	401	LIME	782	814	SHALE / SAND						
401	406	SHALE	814	816	COAL (OSWEGO)						
406	432	LIME	816	835	LIME						
432	441	SHALE	835	837	COAL (SUMMIT)						
441	451	LIME	837	850	LIME						
451	461	SAND	850	852	COAL (MULKEY)						
461	476	LIME	852	874	SAND (WATER)						
476	491	SHALE	874	913	SHALE						
491	533	LIME	913	915	COAL (BEVIER)						
533	556	SHALE	915	930	SHALE						
556	562	SANDY SHALE	930	933	COAL						
562	583	LIME (BLACK ?)	933	934	COAL (CROWBERG)						
583	591	SAND	934	962	SHALE/SAND						
591	614	SANDY SHALE	962	963	COAL						
614	623	LIME	963	981	SHALE/SAND						
623	628	SHALE	981	982	COAL (MINERAL)						
628	652	LIME	981	1018	SANDY SHALE						
652	668	SHALE	1018	1019	COAL (TEBO)						
668	672	SAND (WATER)	1019	1028	SANDY SHALE						

RECEIVED  
 KANSAS CORPORATION COMMISSION  
 SEP 27 2006  
 CONSERVATION DIVISION  
 WICHITA KS

# QUEST

Resource Corporation



211 W. 14TH STREET,  
CHANUTE, KS 66720  
620-431-9500

TICKET NUMBER **1547**

FIELD TICKET REF # \_\_\_\_\_

FOREMAN Joe/Craig

### TREATMENT REPORT & FIELD TICKET CEMENT

DATE	WELL NAME & NUMBER		SECTION	TOWNSHIP	RANGE	COUNTY	
6-9-06	OLSON Ruby 2-1		2	28	16	WL	
FOREMAN / OPERATOR	TIME IN	TIME OUT	LESS LUNCH	TRUCK #	TRAILER #	TRUCK HOURS	EMPLOYEE SIGNATURE
Joe B Craig C	11:45	3:00		903388		3.25	<i>[Signature]</i>
Tim A.				903255			<i>[Signature]</i>
Robert W.				903206			<i>[Signature]</i>
David G.				902139	932452		<i>[Signature]</i>
Larry M.				931420			<i>[Signature]</i>
Russel A.				Extra			<i>[Signature]</i>

JOB TYPE longstring HOLE SIZE 6 3/4 HOLE DEPTH 1313 CASING SIZE & WEIGHT 2 1/2 x 10.5  
 CASING DEPTH 1308.54 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 14.5 SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING \_\_\_\_\_  
 DISPLACEMENT 20.86 DISPLACEMENT-PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE 4.0 bpm

REMARKS:

Ran 2 sacks of prem gel and swept to surface. Installed cement head, pumped 2 sacks of gel, 14 barrels of dye and \_\_\_\_\_ sacks of cement to gel dye to surface. Flushed pump pumped wiper plug to bottom; set float shoe.

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION OF SERVICES OR PRODUCT	TOTAL AMOUNT
	1308.54	1308.54 Ft 4 1/2" Casing	
	6	Centralizers	
	1	4 1/2" Casing Clamp	
931310	3 hr	Casing tractor	
607253	3 hr	Casing trailer	
903388	3.25 hr	Foreman Pickup	
903255	3.25 hr	Cement Pump Truck	
903206	3.25 hr	Bulk Truck	
1104	141 sk	Portland Cement	
1124	1 sk	50/50 POZ Blend Cement	
1126	2 sk	OWC - Blend Cement	
1110	15 sk	Gilsonite	
1107	1 sk	Flo-Seal	
1118	4 sk	Premium Gel	
1215A	1 gal	KCL	
1111B	3 sk	Sodium Silicate	
1123	7000 gals	City Water	
903139	3.25 hr	Transport Truck	
932452	3.25 hr	Transport Trailer	
931420	3.25 hr	80 Vac	
Revin 4513		4 1/2 float shoe	

**RECEIVED**  
**KANSAS CORPORATION COMMISSION**  
**SEP 27 2006**  
**CONSERVATION DIVISION**  
**WICHITA, KS**

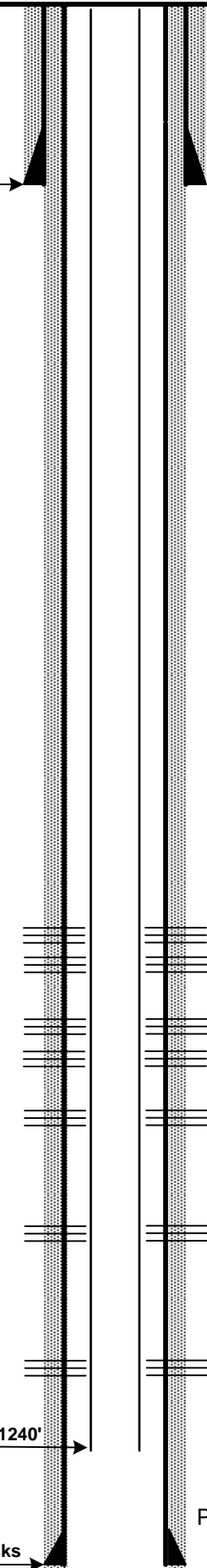


WELL : Olson, Ruby A 2-1  
 FIELD : Cherokee Basin  
 STATE : Kansas  
 COUNTY : Wilson

SPUD DATE : 5/30/2006  
 COMP. Date : 6/9/2006  
 API: 15-205-26587-00-00

LOCATION: 2-28S-16E (NE,SW)  
 ELEVATION: 1040'

8 5/8" 20 lb @ 21' Cement w/4 sks



2 3/8" tubing @ 1240'

4.5" 10.5 lb @ 1308' Cement w/141 sks

Drilled Depth @ 1313'

PBSD @ 1308'

**Wellhead/Surface Equipment**

Tree Connection	
Tree	
Tubing Head	
Bradenhead	
Pumping Unit	
Compressor	

**Tubular Detail**

Size	Weight	Grade	Cap(bbl/ft)	Date	Depth
8 5/8"	20 lb			2006	21'
4 1/2"	10.5 lb		.0159	2006	1308'
2 3/8"				2006	1240"

**Downhole Equipment Detail**


**Completion Data**

Original as GAS Well per ACO-1
900 gals 15% HCL
992 bbls water
22,800 lbs 20/40 sand

**Perforations**

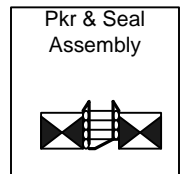
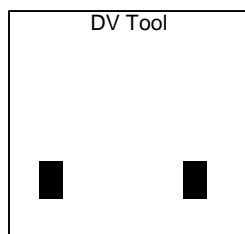
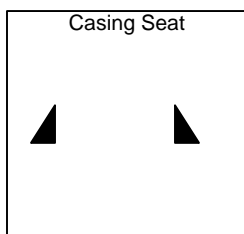
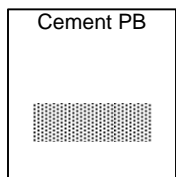
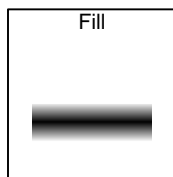
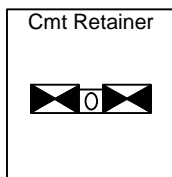
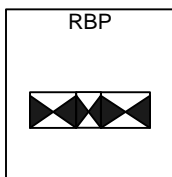
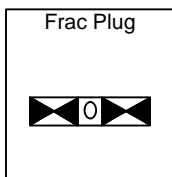
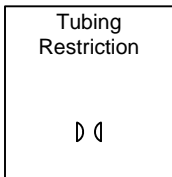
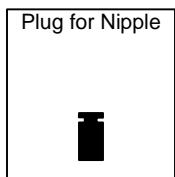
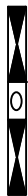
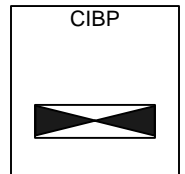
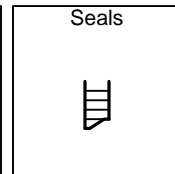
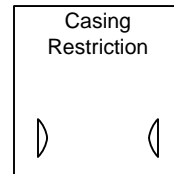
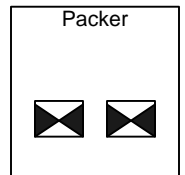
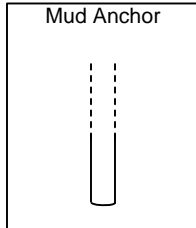
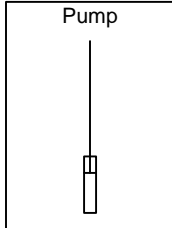
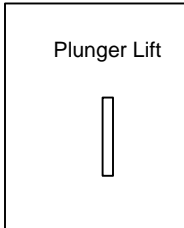
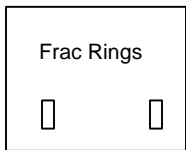
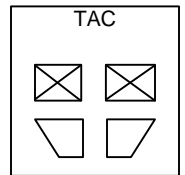
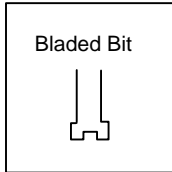
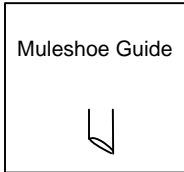
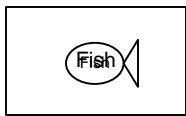
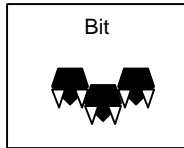
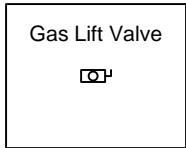
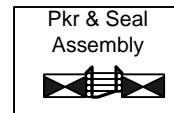
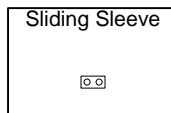
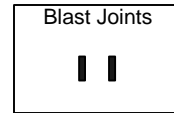
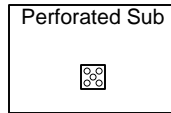
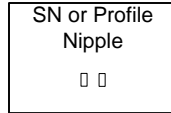
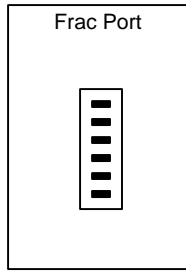
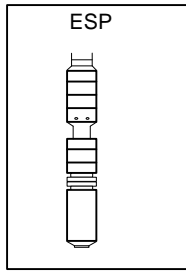
Original Completion: 4 spf
835-839 Summit (17)
850-854 Mulky (17)
909-911 Bevier (9)
926-929 Croweburg (13)
962-964 Fleming (9)
1071-1073 Weir (9)
1216-1218 Riverton

# POSTROCK



## LEGEND

PostRock®





**Affidavit of Notice Served**

Re: Application for: APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS ACO-4

Well Name: OLSON, RUBY A 2-1 Legal Location: NWSENE SW S2-T28S-R16E

The undersigned hereby certifies that he / she is a duly authorized agent for the applicant, and that on the day 14<sup>th</sup> of AUGUST, 2012, a true and correct copy of the application referenced above was delivered or mailed to the following parties:

*Note: A copy of this affidavit must be served as a part of the application.*

Name	Address (Attach additional sheets if necessary)
MARSHALL, LEW L	314 E 1ST, PO BOX 306, EUREKA, KS 67045
QUAD ENERGY	210 EAST COTTONWOOD, INDEPENDENCE, KS 67301

I further attest that notice of the filing of this application was published in the WILSON COUNTY CITIZEN, the official county publication of WILSON county. A copy of the affidavit of this publication is attached.

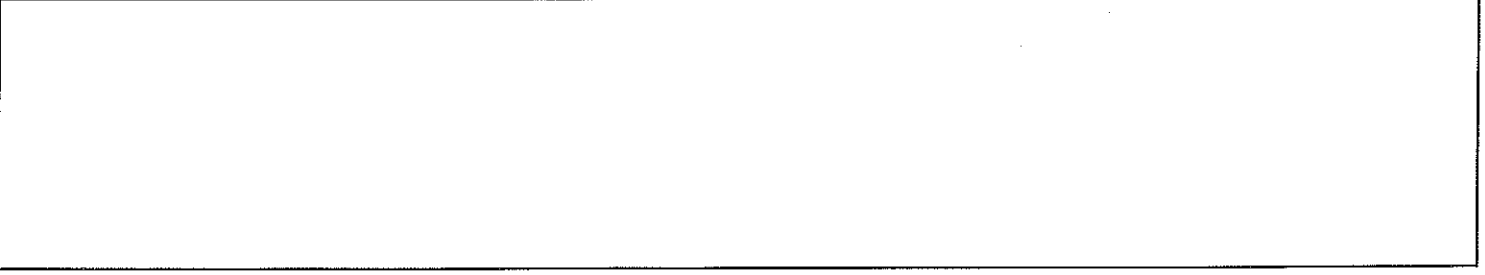
Signed this 14<sup>th</sup> day of AUGUST, 2012

Jess L Morris  
Applicant or Duly Authorized Agent

Subscribed and sworn to before me this 14<sup>th</sup> day of AUGUST, 2012



Jennifer R Beal  
Notary Public  
My Commission Expires: July 20, 2016



OLSON, RUBY A 2-1 - APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS



**Offset Operators, Unleased Mineral Owners and Landowners acreage**  
(Attach additional sheets if necessary)


Name:

Legal Description of Leasehold:

SEE ATTACHED

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
---	---

I hereby certify that the statements made herein are true and correct to the best of my knowledge and belief.

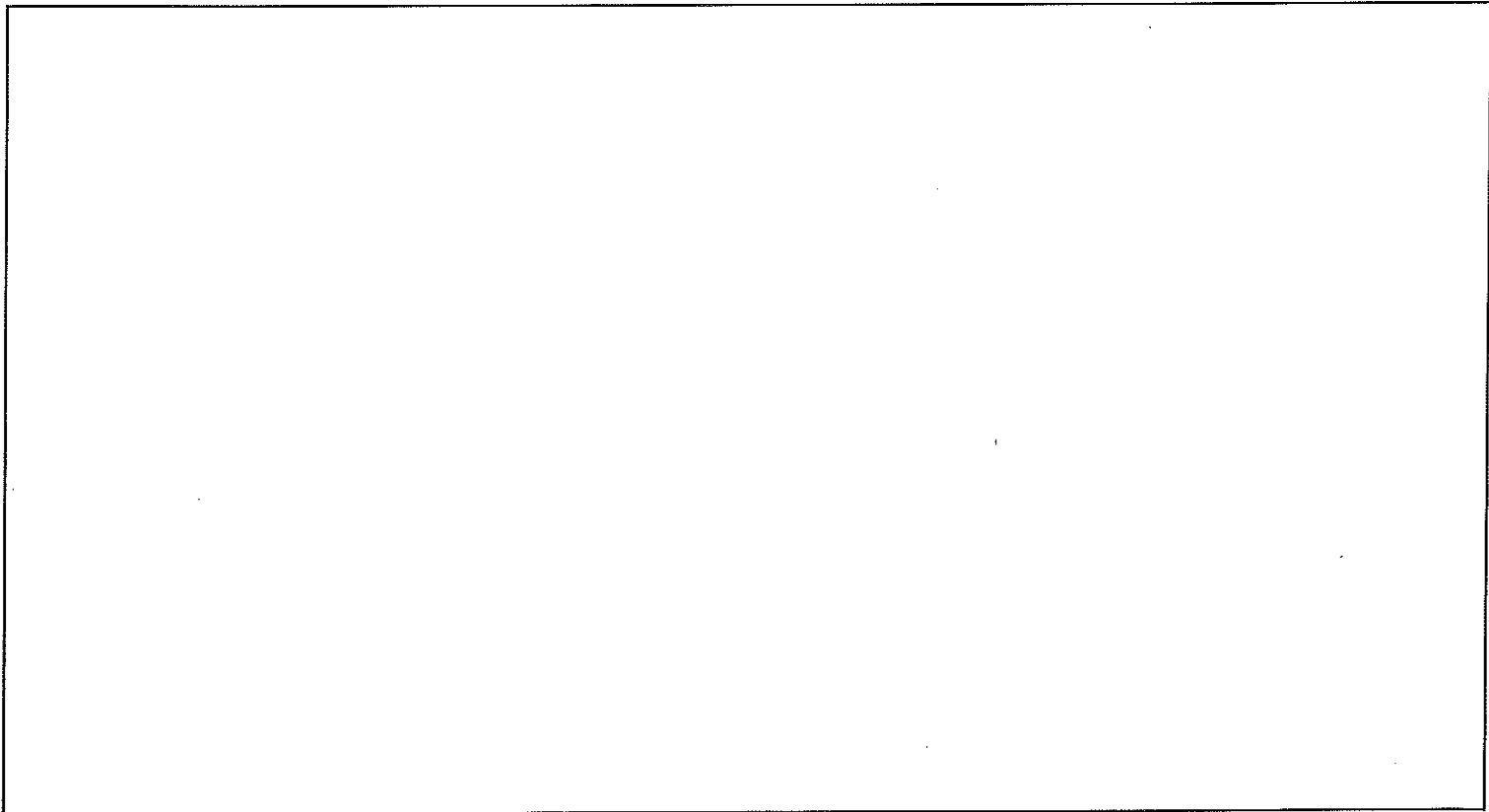
  
\_\_\_\_\_  
Applicant or Duly Authorized Agent

Subscribed and sworn before me this 14<sup>th</sup> day of AUGUST, 2012



  
\_\_\_\_\_  
Notary Public

My Commission Expires: July 20, 2016



**OLSON, RUBY A 2-1**

<b>LEGAL LOCATION</b>	<b>SPOT</b>	<b>CURR_OPERA</b>
S2-T28S-R16E	SE SE SE SW	Marshall, Lew L.
S2-T28S-R16E		Quad Energy

**AFFIDAVIT**

STATE OF KANSAS \
- SS.
County of Sedgwick /

Mark Fletchall, of lawful age, being first duly sworn, depose 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 17th of

August A.D. 2012, with

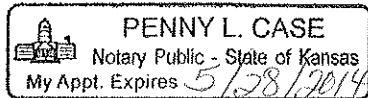
subsequent publications being made on the following dates:

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

17th day of August, 2012



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

Printer's Fee : \$139.60

**LEGAL PUBLICATION**  
PUBLISHED IN THE WICHITA EAGLE  
AUGUST 17, 2012 (3201715)  
BEFORE THE STATE CORPORATION  
COMMISSION OF THE STATE OF KANSAS  
**NOTICE OF FILING APPLICATION**  
RE: In the Matter of Postrock Midcontinent  
Production, LLC Application for  
Commingle of Production in the Olson,  
Ruby A 2-1 located in Wilson County,  
Kansas.  
TO: All Oil & Gas Producers, Unleased Mineral  
Interest Owners, Landowners, and all  
persons whomsoever concerned.  
You, and each of you, are hereby notified  
that Postrock Midcontinent Production,  
LLC has filed an application to commingle  
the Summit, Mulky, Bevier, Croweburg,  
Fleming, Welr, Riverton and Bartlesville  
producing formations at the Olson, Ruby A 2-1,  
located in the NWSNESW, S2-T285-R16E,  
Approximately 1979 FNL & 1981 FWL, Wilson  
County, Kansas.  
Any persons who object to or protest  
this application shall be required to file their  
objections or protest with the Conservation  
Division of the State Corporation Commission  
of the State of Kansas within fifteen (15)  
days from the date of this publication. These  
protests shall be filed pursuant to Commission  
regulations and must state specific reasons  
why granting the application may cause waste,  
violate correlative rights or pollute the natural  
resources of the State of Kansas.  
All persons interested or concerned shall  
take notice of the foregoing and shall govern  
themselves accordingly. All person and/or  
companies wishing to protest this application  
are required to file a written protest with the  
Conservation Division of the Kansas Oil and  
Gas Commission.  
Upon the receipt of any protest, the  
Commission will convene a hearing and  
protestants will be expected to enter an  
appearance either through proper legal  
counsel or as individuals, appearing on their  
own behalf.  
Postrock Midcontinent Production, LLC  
210 Park Avenue, Suite 2750  
Oklahoma City, Oklahoma 73102  
(405) 660-7704  
**A COPY OF THE AFFIDAVIT OF  
PUBLICATION MUST ACCOMPANY ALL  
APPLICATIONS**

PROOF OF PUBLICATION

STATE OF KANSAS  
Wilson County - SS

JOSEPH S. and RITA M. RELPH, of lawful age, being duly sworn upon oath that they are the Owners and Publishers of the WILSON COUNTY CITIZEN:

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 newspaper is a general circulation on a daily, or weekly, or monthly, or yearly basis in;

WILSON COUNTY, KANSAS and is NOT a trade, religious or fraternal publication and has been PRINTED and PUBLISHED in Wilson County, Kansas.

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

1st publication was made on the 16th day of August, 2012

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\_\_\_\_\_

TOTAL PUBLICATION FEE: \$ 39<sup>73</sup>

(Signed) Joseph S. Relph

Subscribed and sworn to before me, this 17th day of August, 2012

Rita M. Relph (Notary Public)

My commission expires Aug. 30, 2014

(Published in the Wilson County Citizen on Thursday, August 16, 2012.)

BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

NOTICE OF FILING APPLICATION

RE: In the Matter of Postrock Midcontinent Production, LLC Application for Commingling of Production in the Olson, Ruby A 2-1 located in Wilson County, Kansas.

TO: All Oil & Gas Producers, Unleased Mineral Interest Owners, Landowners, and all persons whomsoever concerned.

You, and each of you, are hereby notified that Postrock Midcontinent Production, LLC has filed an application to commingle the Summit, Mulky, Bevier, Croweburg, Fleming, Weir, Riverton and Bartlesville producing formations at the Olson, Ruby A 2-1, located in the NWSNESW, S2-T28S-R16E, Approximately 1979 FNL & 1981 FWL, Wilson County, Kansas.

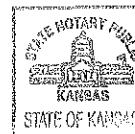
Any persons who object to or protest this application shall be required to file their objections or protest with the Conservation Division of the State Corporation Commission of the State of Kansas within fifteen (15) days from the date of this publication. These protests shall be filed pursuant to Commission regulations and must state specific reasons why granting the application may cause waste, violate correlative rights or pollute the natural resources of the State of Kansas.

All persons interested or concerned shall take notice of the foregoing and shall govern themselves accordingly. All person and/or companies wishing to protest this application are required to file a written protest with the Conservation Division of the Kansas Oil and Gas Commission.

Upon the receipt of any protest, the Commission will convene a hearing and protestants will be expected to enter an appearance either through proper legal counsel or as individuals, appearing on their own behalf.

Postrock Midcontinent Production, LLC  
210 Park Avenue, Suite 2750  
Oklahoma City, Oklahoma 73102  
(405) 660-7704  
52 1 cpy.

pd  
8/23/12  
mr



Rita M. Relph  
NOTARY PUBLIC  
State of Kansas

My Commission Expires



September 4, 2012

Clark Edwards  
PostRock Midcontinent Production LLC  
Oklahoma Tower  
210 Park Ave, Ste 2750  
Oklahoma City, OK 73102

RE: Approved Commingling CO081225  
Olson, Ruby A. 2-1, Sec. 2-T28S-R16E, Wilson County  
API No. 15-205-26587-00-00

Dear Mr. Edwards:

Your Application for Commingling (ACO-4) for the above described well, received by the KCC on August 24, 2012, 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 Riverton formation perforations, total oil production shall not exceed 100 BOPD and total gas production shall not exceed 50% of the absolute open flow (AOF).

**File form ACO-1 upon re-completion of the well to commingle.**

Commingling ID number CO081225 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