



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:

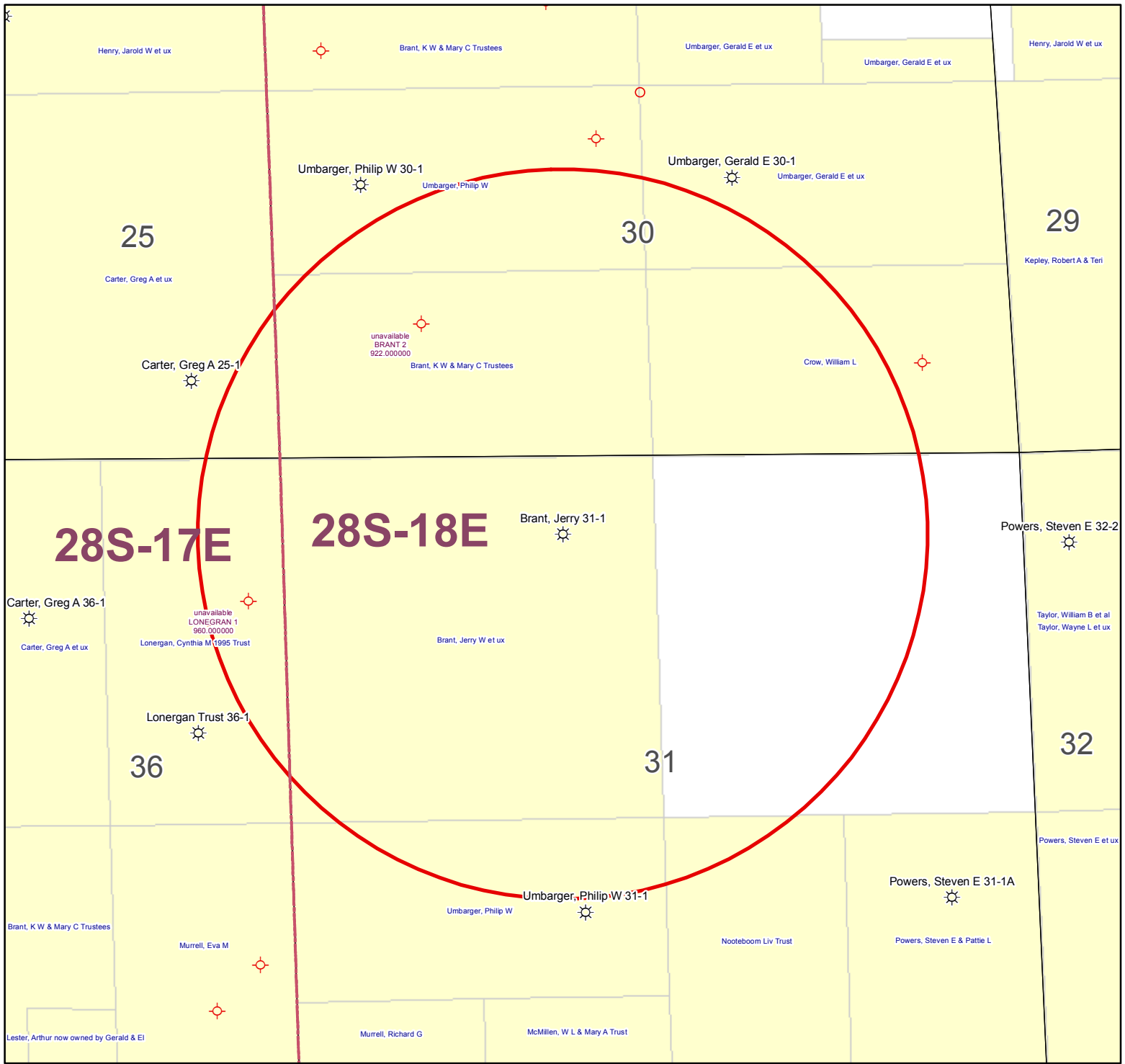
- 7. Well construction diagram of subject well.
- 8. Any available water chemistry data demonstrating the compatibility of the fluids to be commingled.

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

Brant, Jerry 31-1
 31-28S-18E
 1" = 1,000'

Operator Name: Quest Cherokee, LLC Lease Name: Brant, Jerry W. Well #: 31-1
 Sec. 31 Twp. 28 S. R. 18 East West County: Neosho

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)

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

List All E. Logs Run:

Comp. Density/Neutron Log
 Dual Induction Log
 Gamma Ray/Neutron Log

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	11"	8-5/8"	20#	21.3	"A"	6	
Production	6-3/4"	4-1/2"	10.5#	1107	"A"	140	

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
___ Perforate				
___ Protect Casing				
___ Plug Back TD				
___ 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	649-653/662-667/732-734/754-757/794-796/1051-1056	
		400gal 15%HCL w/ 26 bbls 2%kcl water, 538bbls 2%kcl, biocide, 12100# 20/40 sand	794-796/754-757	
			732-734	
		400gel 15% acid w/ 55bbls 2%kcl water, 300bbls, no gel, 2%kcl, biocide, 52sks 20/40 sand	1051-1056	

TUBING RECORD	Size <u>2-3/8"</u>	Set At <u>1064.92</u>	Packer At <u>n/a</u>	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumerd Production, SWD or Enhr. <u>3/15/06</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>n/a</u>	Gas Mcf <u>19mcf</u>	Water Bbls. <u>30bbls</u>	Gas-Oil Ratio _____ Gravity _____

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

METHOD OF COMPLETION Open Hole Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval _____

RECEIVED
 KANSAS CORPORATION COMMISSION
 APR 13 2006

	A	B	C	D	E	F	G	H	I	J	K	
1	Produced Fluids #		1	2	3	4	5		Click here to run SSP 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				Click
9	Field		CBM	CBM	Bartles	Bartles	Bartles	calculations.				
10	Na ⁺	(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 ⁺ (if not known =0)	(mg/l)						0.00	Saturation Index values			
12	Mg ²⁺	(mg/l)	1,096.00	872.00	1,200.00	953.00	858.00	995.91	Calcite			
13	Ca ²⁺	(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 ²⁺	(mg/l)						0.00	Barite			
15	Ba ²⁺	(mg/l)						0.00				
16	Fe ²⁺	(mg/l)	40.00	21.00	18.00	82.00	90.00	50.21	Halite			
17	Zn ²⁺	(mg/l)						0.00	-1.77	-1.80	-0.03	
18	Pb ²⁺	(mg/l)						0.00	Gypsum			
19	Cl ⁻	(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 ₄ ²⁻	(mg/l)	1.00	1.00	8.00	1.00	1.00	2.40	Hemihydrate			
21	F ⁻	(mg/l)						0.00	-3.96	-3.90	0.06	
22	Br ⁻	(mg/l)						0.00	Anhydrite			
23	SiO ₂	(mg/l) SiO ₂						0.00	-3.47	-3.36	0.12	
24	HCO ₃ Alkalinity**	(mg/l as HCO ₃)	190.00	234.00	259.00	268.00	254.00	241.03	Celestite			
25	CO ₃ Alkalinity	(mg/l as CO ₃)										
26	Carboxylic acids**	(mg/l)						0.00	Iron Sulfide			
27	Ammonia	(mg/L) NH ₃						0.00	-0.16	-0.22	-0.06	
28	Borate	(mg/L) H ₃ BO ₃						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 ₂ Gas Analysis	(%)	19.97	18.76	22.41	35.53	33.79	26.16				
32	H ₂ S Gas Analysis***	(%)	0.0289	0.0292	0.0296	0.0306	0.0151	0.0269	Iron Carbonate			
33	Total H ₂ Saq	(mgH ₂ S/l)	1.00	1.00	1.00	1.00	0.50	0.90	-0.74	-0.51	0.23	
34	pH _i 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 ₂ %+Alk, 1-pH+Alk, 2-CO ₂ %+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 ⁺ (Strong acid) [†]	(N)										
51	OH ⁻ (Strong base) [†]	(N)										
52	Quality Control Checks at STP:											
53	H ₂ S Gas	(%)										
54	Total H ₂ Saq (STP)	(mgH ₂ S/l)										
55	pH Calculated	(pH)										
56	PCO ₂ Calculated	(%)										
57	Alkalinity Cacluated	(mg/l) as HCO ₃										
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 ³	100	ft ³	3,531			
65	If No, inhibitor # is:	4	#	4	DTPMP	m ³	100	bb(42 US gal)	629			
66	If you select Mixed,			5	PPCA	MPa	1,000	psia	145,074			
67	1 st inhibitor # is:	1	#	6	SPA	Bar	496	psia	7,194			
68	% of 1 st inhibitor is:	50	%	7	HEDP	Torr	10,000	psia	193			
69	2 nd 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 ₂ 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

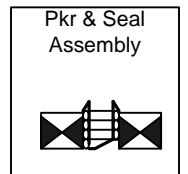
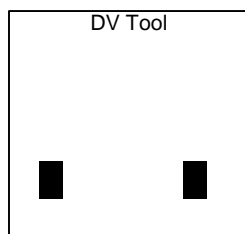
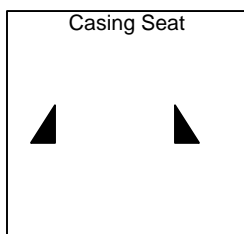
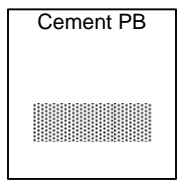
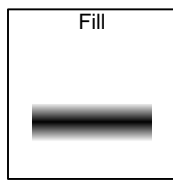
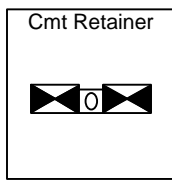
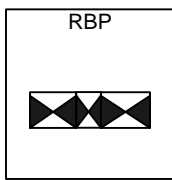
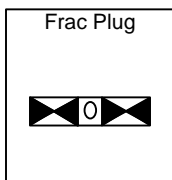
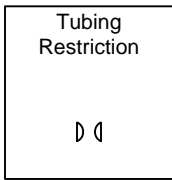
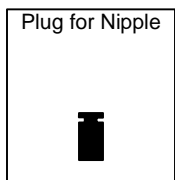
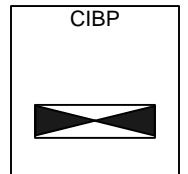
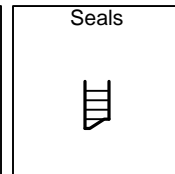
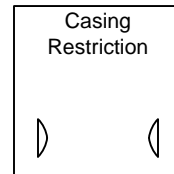
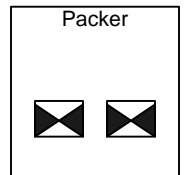
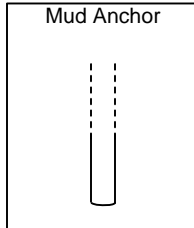
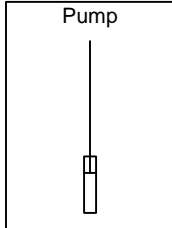
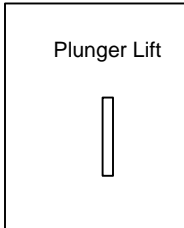
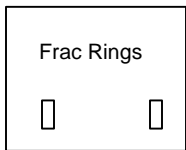
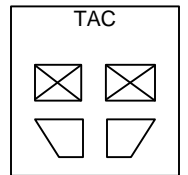
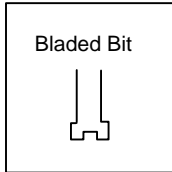
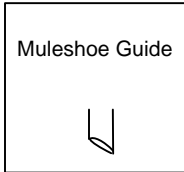
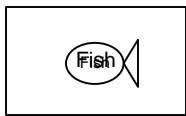
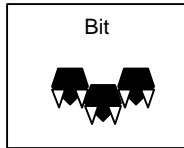
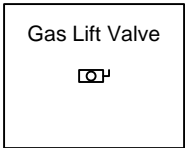
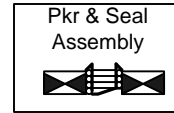
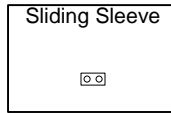
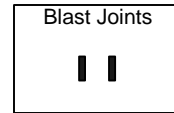
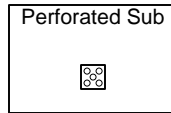
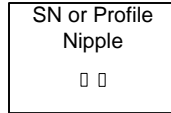
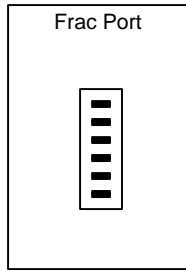
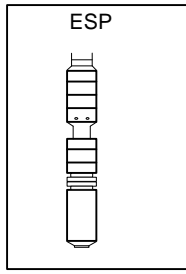
Calcite	N/A	N/A	N/A	N/A	N/A	N/A
Gypsum	N/A	N/A	N/A	N/A	N/A	N/A
Hemihydrate	N/A	N/A	N/A	N/A	N/A	N/A
Anhydrite	N/A	N/A	N/A	N/A	N/A	N/A
Barite	N/A	N/A	N/A	N/A	N/A	N/A
Celestite	N/A	N/A	N/A	N/A	N/A	N/A

POSTROCK



LEGEND

PostRock®



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 **Brant, Jerry W 31-1** located in **Neosho County, Kansas**.

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

You, and each of you, are hereby notified that **Postrock Midcontinent Production, LLC** has filed an application to commingle the **Riverton, Fleming, Croweburg, Bevier, Mulky, Summit and Tucker** producing formations at the **Brant, Jerry W 31-1**, located in the **SW NE NE NW, S31-T28S-R18E, Approximately 564 FNL & 2027 FWL, Neosho 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

Affidavit of Publication

STATE OF KANSAS, NEOSHO COUNTY, ss:
Rhonda Howerter, being first duly sworn, deposes and says: That *she* is *Classified Manager* of *THE CHANUTE TRIBUNE*, a daily newspaper printed in the State of Kansas, and published in and of general circulation in Neosho County, Kansas, with a general paid circulation on a daily basis in Neosho County, Kansas, and that said newspaper is not a trade, religious or fraternal publication.

Said newspaper is a daily published at least weekly 50 times a year: has been so published continuously and uninterruptedly in said county and state for a period of more than five years prior to the first publication of said notice; and has been admitted at the post office of Chanute, in said county as second class matter.

That the attached notice is a true copy thereof and was published in the regular and entire issue of said newspaper for 1 consecutive time, the first publication thereof being made as aforesaid on the 19 day of July 2012, with subsequent publications being made on the following dates:

_____, 2012 _____, 2012
_____, 2012 _____, 2012

Rhonda Howerter

Subscribed and sworn to and before me this 19 day of July, 2012

[Signature]
Notary Public

My commission expires: January 9, 2015
Printer's Fee \$ 70.14
Affidavit, Notary's Fee \$ 3.00
Additional Copies \$ _____
Total Publication Fees \$ 73.14

SHANNA L. GUIOT
Notary Public - State of Kansas
My Appt. Expires 1-9-15

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 - weeks, that the first publication of said notice was

made as aforesaid on the 20th of

July 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.

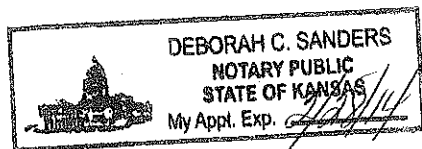
Mark Fletchall

Subscribed and sworn to before me this

20th day of July, 2012

Deborah C. Sanders
Notary Public Sedgwick County, Kansas

Printers Fee: \$139.60



LEGAL PUBLICATION
PUBLISHED IN THE WICHITA EAGLE
JULY 20, 2012 (3197125)
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 **Brant, Jerry W 31-1** located in **Neosho 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 **Riverton, Fleming, Croweburg, Bevier, Mulky, Summit and Tucker** producing formations at the **Brant, Jerry W 31-1**, located in the **SW NE NE NW, S31-T285-R18E, Approximately 564 FNL & 2027 FWL, Neosho 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

Affidavit of Notice Served

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

Well Name: BRANT, JERRY W 31-1 Legal Location: SWNENENW S31-T28S-R18E

The undersigned hereby certifies that he / she is a duly authorized agent for the applicant, and that on the day 24th 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)
BRANT FAMILY TRUST	2840 HWY 47, THAYER, KS 66776

I further attest that notice of the filing of this application was published in the THE CHANUTE TRIBUNE, the official county publication of NEOSHO county. A copy of the affidavit of this publication is attached.

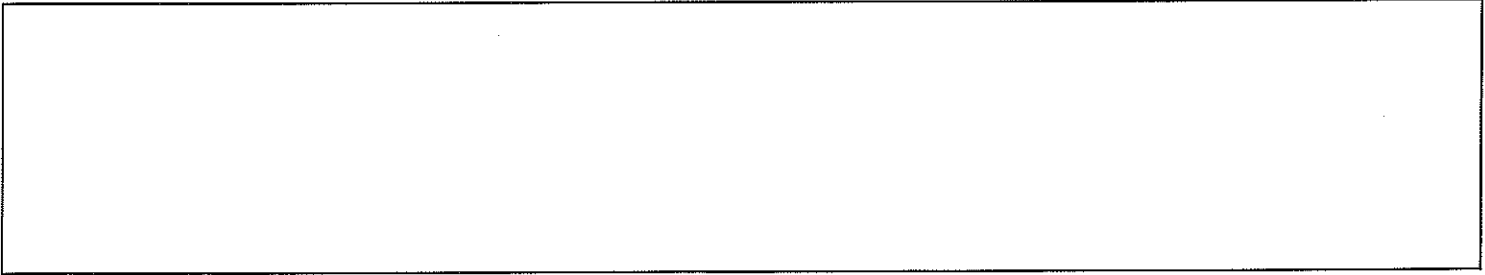
Signed this 24th day of AUGUST, 2012

Chad E. M...
Applicant or Duly Authorized Agent

Subscribed and sworn to before me this 24th day of AUGUST, 2012



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



BRANT, JERRY W 31-1

31-28S-18E

NE4

BRANT FAMILY TRUST
2840 HWY 47
THAYER, KS 66776

September 11, 2012

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

RE: Approved Commingling CO081228
Brant, Jerry W. 31-1, Sec. 31-T28S-R18E, Neosho County
API No. 15-133-26324-00-00

Dear Mr. Edwards:

Your Application for Commingling (ACO-4) for the above described well, received by the KCC on August 27, 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 CO081228 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