

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1093852

Form ACO-4 Form must be typed March 2009

APPLICATION FOR COMMINGLING OF Commingling ID # CO101218 PRODUCTION (K.A.R. 82-3-123) OR FLUIDS (K.A.R. 82-3-123a)

OPERATOR: License # 33343	API No. 1515-133-27110-00-00
Name: PostRock Midcontinent Production LLC	Spot Description:
Address 1: Oklahoma Tower	SE NW NE SE Sec. 19 Twp. 27 S. R. 19 East West
Address 2: 210 Park Ave, Ste 2750	2108 Feet from North / 🗹 South Line of Section
City: OKLAHOMA CITY State: OK Zip: 73102 +	
Contact Person: CLARK EDWARDS	County: Neosho
Phone: (620) 432-4200	Lease Name: RENSING, LLOYD E. Well #: 19-1
,	
 Name and upper and lower limit of each production interval to 	be commingled:
Formation: SUMMIT	(Perfs): 575-579
Formation: MULKY	(Perfs): 587-591
Formation: CROWEBURG	(Perfs): 675-678
Formation: FLEMING	(Perfs): 711-713
Formation: WEIR	(Perfs): 818-820
2. Estimated amount of fluid production to be commingled from e	each interval:
Formation: SUMMIT	BOPD: $\frac{0}{0}$ MCFPD: $\frac{4.8}{4.8}$ BWPD: $\frac{11.6}{11.6}$
Formation: MULKY	BOPD: MCFPD: BWPD:
Formation: CROWEBURG	BOPD: $\frac{0}{0}$ MCFPD: $\frac{4.8}{10}$ BWPD: $\frac{11.6}{11.6}$
Formation: FLEMING	BOPD: 0 MCFPD: 4.8 BWPD: 11.6
Formation: WEIR	BOPD: 0 MCFPD: 4.8 BWPD: 11.6
 In the subject well, all other well the subject well, all other well the subject well, and for each well the names and addresses of the subject well. In the subject well, and for each well the names and addresses of the subject well, and for each well the names and addresses of the subject well, all other well the subject well. In the subject well th	
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	
<u>V</u>	
For Commingling of FLUIDS ONLY, include the following:	
7. Well construction diagram of subject well.	
8. Any available water chemistry data demonstrating the compat	ibility 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	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 wihin 15 days of publication of the notice of application.
Rick Hestermann 11/08/2012	

Rice

1	Α	В	С	D	E	F	G	Н		J	K
-	Produced Fluids #		1	2	3	4	5				Click
2	Parameters	Units	Input	Input	Input	Input	Input		Click he	re	CIICK
3	Select the brines	Select fluid	7	7		P		Mixed brine:	to run S	SP	Click
4	Sample ID	by checking				25	Laboration of the Control	Cell H28 is			CIICK
5	Date	the box(es),	3/19/2012	3/4/2012	3/14/2012	1/20/2012	1/20/2012	STP calc. pH.			eu 1
7	Operator Well Name	Row 3	PostRock Ward Feed	PostRock Ward Feed	PostRock Clinesmith	PostRock Clinesmith	PostRock Clinesmith	Cells H35-38 are used in			Click
8	Location		#34-1	#4-1	#5-4	#1	#2	mixed brines	Goal Seek		
9	Field		CBM	CBM	Bartles	Bartles	Bartles	calculations.			Click
10	Na ⁺	(ma/l)*	19,433.00	27,381.00	26,534.00	25689.00	24220.00	24654.20	Initial(BH)	Final(WH)	
_		(mg/l)*	19,433.00	27,381.00	20,554.00	25009.00	24220.00		THE COLUMN TWO IS NOT THE OWNER.		SI/SR
11	K ⁺ (if not known =0)	(mg/l)							Saturation Index		(Final-Initia
12	Mg ²⁺	(mg/l)	1,096.00	872.00	1,200.00	953.00	858.00	995.91	Ca	lcite	
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	Ba	rite	S. Ask
15	Ba ²⁺	(mg/l)						0.00			
16	Fe ²⁺	(mg/l)	40.00	21.00	18.00	82.00	90.00	50.21	H	alite	
	Zn ²⁺	(mg/l)						0.00	-1.77	-1.80	-0.03
_	Pb ²⁺							0.00		osum	
19	CI	(mg/l)	36,299.00	48,965.00	47,874.00	45632.00	43147.00	44388.44	-3.19	-3.18	0.00
_	SO ₄ ² ·	(mg/l)		1.00	8.00	1.00	1.00	2.40		hydrate	0.00
20	E.	(mg/l)	1.00	1.00	8.00	1.00	1.00				0.00
21		(mg/l)			1,4 4 1			0.00	-3.96	-3.90	0.06
22	Br	(mg/l)	17					0.00		ydrite	
23	SiO2	(mg/l) SiO2						0.00	-3.47	-3.36	0.12
24	HCO3 Alkalinity**	(mg/l as HCO3)	190.00	234.00	259.00	268.00	254.00	241.03	Cel	estite	119 (19)
25	CO3 Alkalinity	(mg/l as CO3)									
26	Carboxylic acids**	(mg/l)						0.00	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Sulfide	12.11
27	Ammonia	(mg/L) NH3						0.00	-0.16	-0.22	-0.06
28	Borate	(mg/L) H3BO3						0.00	Zinc	Sulfide	MAG II
29	TDS (Measured)	(mg/l)						72781	A PROPERTY		
30	Calc. Density (STP)	(g/ml)	1.038	1.051	1.050	1.048	1.045	1.047	Calciun	fluoride	
31	CO ₂ Gas Analysis	(%)	19.97	18.76	22.41	35.53	33.79	26.16		STATE OF STATE	
32	H ₂ S Gas Analysis***	(%)	0.0289	0.0292	0.0296	0.0306	0.0151	0.0269		arbonate	
33	Total H2Saq	(mgH2S/l)	1.00	1.00	1.00		0.50	0.90	-0.74	-0.51	0.23
34	pH, measured (STP)	pН	5.67	5.76	5.72	5.54	5.55	5.63	in the second section of the second	eeded (mg/L)	
	Choose one option	0-CO2%+Alk,	100						Calcite	NTMP	11111
35	to calculate SI?		0		0						
36	Gas/day(thousand cf/day)	(Mcf/D)	- 0					0	0.00	0.00	
	Oil/Day	(B/D)	0	0	1	1	1	4	Barite	ВНРМР	1
38	Water/Day	(B/D)	100	100	100	100	100	500	0.00	0.00]
39	For mixed brines, enter val							(Enter H40-H43)		Н	
40	Initial T	(F)	66.0	71.0	70.0 70.0		49.0	60.0	5.69	5,60	4
						41.0	49.0	89.0		(CentiPoise)	1
_	Final T	(F)	66.0	71.0		25.0		25.0			
42	Initial P	(F) (psia)	25.0	25.0	25.0		25.0	25.0	1.196	0.826	4
42 43	Initial P Final P	(F) (psia) (psia)					25.0 25.0	25.0 120.0	Heat Capac	ity (cal/ml/ ⁰ C)	1
42 43 44	Initial P Final P Use TP on Calcite sheet?	(F) (psia) (psia) 1-Yes;0-No	25.0	25.0	25.0			120.0	Heat Capac 0.955	ity (cal/ml/ ⁰ C) 0.959	
42 43 44 45	Initial P Final P Use TP on Calcite sheet? API Oil Grav.	(F) (psia) (psia) 1-Yes;0-No API grav.	25.0	25.0	25.0			120.0 30.00	Heat Capac 0.955 Inhibitor n	ity (cal/ml/°C) 0.959 eeded (mg/L)	
42 43 44 45 46	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav.	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav.	25.0	25.0	25.0			120.0	Heat Capac 0.955	ity (cal/ml/ ⁰ C) 0.959	
42 43 44 45 46 47	Initial P Final P Use TP on Calcite sheet? API Oil Grav.	(F) (psia) (psia) 1-Yes;0-No API grav.	25.0	25.0	25.0			120.0 30.00	Heat Capac 0.955 Inhibitor n Gypsum	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP	
42 43 44 45 46 47 48	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D)	25.0 25.0	25.0	25.0			30.00 0.60	Heat Capac 0.955 Inhibitor n Gypsum 0.00	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00	
42 43 44 45 46 47 48 49	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D)	25.0 25.0	25.0	25.0			30.00 0.60	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D)	25.0 25.0	25.0	25.0			30.00 0.60	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) *	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N)	25.0 25.0	25.0	25.0			30.00 0.60	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) * OH' (Strong base) * Quality Control Checks at H ₂ S Gas	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%)	25.0 25.0	25.0	25.0			30.00 0.60	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) † OH' (Strong base) † Quality Control Checks at H ₂ S Gas Total H2Saq (STP)	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I)	25.0 25.0	25.0	25.0			30.00 0.60	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) * OH' (Strong base) * Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/l) (pH)	25.0 25.0	25.0	25.0			30.00 0.60	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) * OH (Strong base) * Quality Control Checks at H ₂ S Cas Total H2Saq (STP) pH Calculated PCO2 Calculated	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) (STP: (%) (mgH2S/I) (pH) (%)	25.0 25.0	25.0	25.0			30.00 0.60	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H' (Strong acid) † OH' (Strong base) † Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/l) (pH)	25.0 25.0	25.0	25.0			30.00 0.60	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) * OH (Strong base) * Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Cactulated ECations= EAnions=	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3	25.0 25.0	25.0	25.0			30.00 0.60	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	Initial P Final P Use TP on Calcite sheet? API Oil Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) * Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated Alkalinity Caclulated Alkalinity Caclulated EXAnions= EXAnions= Calc TDS=	(F) (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I)	25.0 25.0 0 0	25.0 25.0	25.0 25.0	25.0	25.0	30,00 0.60 0	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H' (Strong acid) † OH' (Strong base) † Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated Alkalinity Caclulated Alkalinity Caclulated EAnions= EAnions= Calc TDS= Inhibitor Selection	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) Input	25.0 25.0 0 0	25.0 25.0	25.0 25.0	25.0	25.0	120.0 30.00 0.60 0 0	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite 0.00	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) † OH* (Strong base) † Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated EXAIONS= EXAIONS= Calc TDS= Inhibitor Selection Protection Time	(F) (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I)	25.0 25.0 0 0	25.0 25.0	25.0 25.0 Inhibitor	Unit Converte	25.0	120.0 30,00 0.60 0 0 to English) To Unit	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite 0.00	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) † OH* (Strong base) † Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated EXAIONS= EXAIONS= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) Input 120	25.0 25.0 0 0	25.0 25.0 # 1 2	25.0 25.0 Inhibitor NTMP BHPMP	Unit Converte From Unit	25.0 r (From metric Value 80	120.0 30,00 0.60 0 0 to English) To Unit °F	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite 0.00 Value 176	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) † OH* (Strong base) † Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated PCO2 Calculated Alkalimity Caclulated EAnions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you?	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) Input 120	25.0 25.0 0 0 0 Unit min	# 1 2 3	Inhibitor NTMP BHPMP PAA	Unit Converte From Unit	r (From metric Value 80 100	120.0 30,00 0.60 0 0 to English) To Unit °F ft³	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite 0.00 Value 176 3,531	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65	Initial P Final P Use TP on Calcite sheet? API Oil Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) † Oul (Strong base) † Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated Alkalinity Caclulated Alkalinity Caclulated ECations= EAnions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you? If No, inhibitor # is:	(F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) Input 120	25.0 25.0 0 0	# # 1 2 3 4	25.0 25.0 Inhibitor NTMP BHPMP PAA DTPMP	Unit Converte From Unit Or C m 3 m 3	r (From metric Value 80 100	120.0 30,00 0.60 0 0 10 10 10 10 10 10 10 10 10 10 10 1	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 60 61 62 63 64 65 66	Initial P Final P Use TP on Calcite sheet? API Oil Grav. MeOH/Day MEG/Day Conc. Multiplier H' (Strong acid) † Oul (Strong acid) † Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated EXAIONS= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you? If No, inhibitor # is: If you select Mixed,	(F) (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) Input 120 1 4	25.0 25.0 0 0 0	# 1 2 3 4 5 5	25.0 25.0 25.0 Inhibitor NTMP BHPMP PAA DTPMP PPCA	Unit Converte From Unit OC m³ m³ MPa	25.0 r (From metric Value 80 100 100 1,000	120.0 30,00 0.60 0 0 0 To Unit "F ft" bbl(42 US gal) psia	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 145,074	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 60 61 62 63 64 65 66 67	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H' (Strong acid) † Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated ECations= Zanions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you? If No, inhibitor # is: If you select Mixed, 1st inhibitor # is:	(F) (psia) (psia) (1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) Input 120 1 4	25.0 25.0 0 0 0	# 1 1 2 2 3 3 4 4 5 5 6 6	Inhibitor NTMP BHPMP PAA DTPMP PPCA SPA	Unit Converte From Unit °C m³ m³ MPa Bar	25.0 Fr (From metric Value 80 100 100 1,000 496	120.0 30.00 0.60 0 0 0 10 10 10 10 10 10 10 10 10 10 10	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 145,074 7,194	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H' (Strong acid) † OH' (Strong acid) † OH' (Strong base) † Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated EXations= EXanions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you? If No, inhibitor fi si: If you select Mixed, 1st inhibitor is: % of 1st inhibitor is:	(F) (psia) (psia) (1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) Input 120 1 4 1 50	25.0 25.0 0 0 0 1-Yes;0-No #	# 1 2 3 4 4 5 6 7	Inhibitor NTMP BHPMP PAA DTPMP PPCA SPA HEDP	Unit Converte From Unit °C m³ m³ MPa Bar Torr	25.0 F (From metric Value 80 100 1,000 496 10,000	120.0 30.00 0.60 0 0 0 To Unit Fr ft³ bbl(42 US gal) psia psia psia	Value 176 3,531 629 145,074 7,194 193	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67	Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H' (Strong acid) † OH' (Strong base) † Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Cactulated ECations= EAnions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you? If No, inhibitor for you? If you select Mixed, 1st inhibitor # is: % of 1st inhibitor is: 2nd inhibitor is: 2nd inhibitor is: 2nd inhibitor is:	(F) (psia) (psia) (1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) Input 120 1 4	25.0 25.0 0 0 0	# 1 1 2 2 3 3 4 4 5 5 6 6	Inhibitor NTMP BHPMP PAA DTPMP PPCA SPA	Unit Converte From Unit °C m³ m³ MPa Bar	25.0 Fr (From metric Value 80 100 100 1,000 496	120.0 30.00 0.60 0 0 0 10 10 10 10 10 10 10 10 10 10 10	Heat Capac 0.955 Inhibitor n Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 145,074 7,194	ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP	

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

N/A

Celestite

Brine 3: Clinesmith 5-4 Brine 4: Clinesmith 1 Brine 5: Clinesmith 2

			Ratio			T
	20%	20%	20%	20%	20	
Component (mg/L)	Brine 1	Brine 2	Brine 3	Brine 4	Brine 5	Mixed Brine
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

N/A

N/A

N/A

N/A

N/A

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION



WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 33344	API No. 15 - 133-27110-0000
Name: Quest Cherokee, LLC	County: Neosho
Address: 211 W. 14th Street	sesec19
City/State/Zip: Chanute, KS 66720	1980 feet from S N (circle one) Line of Section
Purchaser: Bluestem Pipeline, LLC	854 feet from W (circle one) Line of Section
Operator Contact Person: Jennifer R. Ammann	Footages Calculated from Nearest Outside Section Corner:
Phone: (620_) 431-9500	(circle one) NE (SE) NW SW
Contractor: Name: Michael	Lease Name: Rensing, Lloyd E. Well #: 19-1
License: 33783	Field Name: Cherokee Basin CBM
Wellsite Geologist: Ken Recoy	Producing Formation: multiple
	Elevation: Ground: 965 Kelly Bushing: n/a
Designate Type of Completion:	
New Well Re-Entry Workover	Total Depth: 1113 Plug Back Total Depth: 1102
Oil SWD SIOWTemp. Abd.	Amount of Surface Pipe Set and Cemented at 21.5 Feet
Gas ENHR SIGW	Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
Dry Other (Core, WSW, Expl., Cathodic, etc)	If yes, show depth setFeet
If Workover/Re-entry: Old Well Info as follows:	If Alternate II completion, cement circulated from 1102
Operator:	feet depth to surface w/ 150 sx cmt.
Well Name:	Drilling Fluid Management Plan
Original Comp. Date: Original Total Depth:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit) 1-1898
Deepening Re-perf Conv. to Enhr./SWD	Chloride content ppm Fluid volume bbls
Plug Back Plug Back Total Depth	Dewatering method used
Commingled Docket No.	Location of fluid disposal if hauled offsite:
Dual Completion Docket No	
Other (SWD or Enhr.?) Docket No	Operator Name:
9/10/07 9/11/07 9/20/07	Lease Name: License No.:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East West
Recompletion Date Recompletion Date	County: Docket No.:
INSTRUCTIONS: An original and two copies of this form shall be filed with Kansas 67202, within 120 days of the spud date, recompletion, workove Information of side two of this form will be held confidential for a period of 13 107 for confidentiality in excess of 12 months). One copy of all wireline logs of TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells.	or or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. 2 months if requested in writing and submitted with the form (see rule 82-3- and geologist well report shall be attached with this form. ALL CEMENTING
All requirements of the statutes, rules and regulations promulgated to regular herein are complete and correct to the best of my knowledge.	te the oil and gas industry have been fully complied with and the statements
Q in RA	KCC Office Use ONLY
Signature: Genefic B. Ammann	NOO OTHER USE ONLY
Title: New Well Development Coordinator Date: 1/7/08	Letter of Confidentiality Received
Subscribed and sworn to before me this the day of your	If Denied, Yes Date: RECEIVED
20_08	Wireline Log Received ANSAS CORPORATION COMMISSION
	Geologist Report Received
Notary Public: Sarva Alauman	UIC Distribution JAN 1 0 2008
Date Commission Expires: 8-4-2010 TER	RA KLAUMAN CONSERVATION DIVISION
I H. ILN	Public - State of Kansas
My Appt. Expire	8-4-2010

Operator Namė: Qu	est Cherokee, LL	.C		Leas	e Name:	Rensing, Lloyd	E.	Well #: 19-1		201111112
Sec. 19 Twp. 2		✓ East			ty: Neosh			1/	-	
INSTRUCTIONS: S tested, time tool ope temperature, fluid re Electric Wireline Log	n and closed, flowin covery, and flow rate	g and shut-ines if gas to su	pressures urface test,	, whether s along with	shut in pre	essure reached	static level, hydr	rostatic pressure	es, botto	m hole
Drill Stem Tests Take		Yes	□No		⊘ L	og Forma	tion (Top), Depth	and Datum		Sample
Samples Sent to Ge	ological Survey	Yes	No		Nam See	e attached		Тор	1	Datum
Cores Taken Electric Log Run (Submit Copy)		Yes Yes	_							
List All E. Logs Run:										
Compensated Dual Induction	d Density Neu n Log	tron Log		114						
		Report		RECORD	_	ew Used	ction. etc.			
Purpose of String	Size Hole Drilled	Size	Casing n O.D.)	We	eight s. / Ft.	Setting Depth	Type of Cement	# Sacks Used		and Percent
Surface	12-1/4	8-5/8*		22		21.5	"A"	5	1 7.0	
Production	6-3/4	4-1/2		10.5	- 4	1102	"A"	150		
			ADDITIONA	L CEMENT	ING / SQL	JEEZE RECOR	D			
Purpose: Perforate	Depth Top Bottom	Type of	Cement	#Sack	s Used	La de la companya de	Type and	Percent Additives	-1.	
Protect Casing Plug Back TD				-			-		Ų	
Plug Off Zone										
Shots Per Foot	PERFORAT	ION RECORD	- Bridge Plu	ugs Set/Type	e	Acid, Fr	acture, Shot, Ceme	nt Squeeze Recor	d	
		Foctage of Ea	ch Interval Pe	erforated		·	Amount and Kind of N			Depth
4	818-820/711-713/6	675-678			· ·	300ga! 15%HCLw/ 43 t	oblis Z%kcl water, 549bbis water	w w/ 2% KCL, Biocide, 5700	# 20/40 mand	818-820/711-713
	FAZ FA4/FZF FZA									675-678
4	587-591/575-579					300gal 15%HCLW/ 53 t	obls 2%kcl water, 530bbls water	rw/ 2% KCL, Blodde, 6300	F 20/40 send	587-591/575-579
	11	// // // // // // // // // // // // //	-		2		-			
TUBING RECORD	Size 3/8"	Set At 875		Packer n/a	At	Liner Run	Yes N	0	, ,	
Date of First, Resumer 12/28/07	rd Production, SWD or	Enhr.	Producing Me	ethod	Flowin	g 📝 Pump	oing Gas L	ift Othe	er (Explain)
Estimated Production Per 24 Hours	Oil	Bbis.	Gas	Mcf	Wate		Bbls.	Gas-Oil Ratio		Gravity
Disposition of Gas	n/a METHOD OF	COMPLETION	5mcf	l z	56.5b	Production Inte	erval			
				[7] p	-r 🗀 r	Dually Comp.				
Uvented ✓ Sold (If vented, Sold	Used on Lease ubmit ACO-18.)		Open Hole Other (Spe		m. 🔟 '	Juany Comp.	Commingled			

Michael Drilling, LLC P.O. Box 402 lola; KS 66749 620-365-2755

091107

Company:

Quest Cherokee LI.C

Address:

9520 North May Ave, Suite 300

Oklahoma City, Oklahoma 73120

Ordered By: Donnie Meyers

Date:

09/11/07

Lease: Rensing, Lloyd E.

County: Neosho

Well#: 19-1

API#:

15-133-27110-00-00

Drilling Log

FEET	DESCRIPTION	FEET	DESCRIPTION
0-22	Overburden	587-590	Black Shale and Coal
22-50	Shale	590-653	Sandy Shale
50-115	Lime	610	Gas Test 20# at 3/4" Choke
115-125	Shale	653-654	Coal
125-130	Lime	654-664	Shale
130-140	Sand Sandy Shale	664-666	Lime
140-200	Lime	666-668	Coal
200-250	Sand Sandy Shale	668-700	Shale
250-310	Sandy Shale	700-702	Coal
310-318	Sand	702-722	Sandy Shale
318-353	Sandy Shale	722-724	Coal
353-385	Lime	724-758	Sand
385-470	Sandy Shale	758-760	Coal
470-474	Lime	760-792	Sand
474-477	Coal	792-793	Coal
477-510	Lime	793-812	Sandy Shale
510-513	Black Shale	812-813	Coal
513-550	Sandy Shale	813-865	Shale
550-551	Coal	865-867	Coal
551-573	Lime	867-915	Sandy Shale
560	Gas Test 0# at 1/4" Choke	915-975	Sand
573-580	Black Shale	960	Gas Test 20# at 3/4" Choke
580-587	Lime	975-978	Coal
583	Gas Test 0# at 1/4" Choke	978-996	Shale KANSAS CORPORATION COMMISSION

0	0	-	1	07
	4	1		u /

Michael Drilling, LLC P.O. Box 402 Iola, KS 66749 620-365-2755

Company:	Quest Cherokee I.I.C	Date: 09/11/07	
Address:	9520 North May Ave, Suite 300	Lease: Rensing, Lloyd E.	
	Oklahoma City, Oklahoma 73120	County: Neosho	
Ordered By	Donnie Meyers	Well#: 19-1	

Drilling Log

FEET	DESCRIPTION	PEET	DESCRIPTION
980	Gas Test 20# at 3/4" Choke		
996-1110	Mississippi Lime		
010	Gas Test 20# at 3/4" Choke		M+P
1110	Gas Test 20# at 3/4" Choke	7.0	
1110	ID		
	Surface 22'		
•			
-			
	- 1		BEARING
			RECEIVED KANSAS CORPORATION CO
			JAN 10 2000



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

TICKET NUMBER 2478

RANGE

COUNTY

FIELD TICKET REF #

FOREMAN / Tree

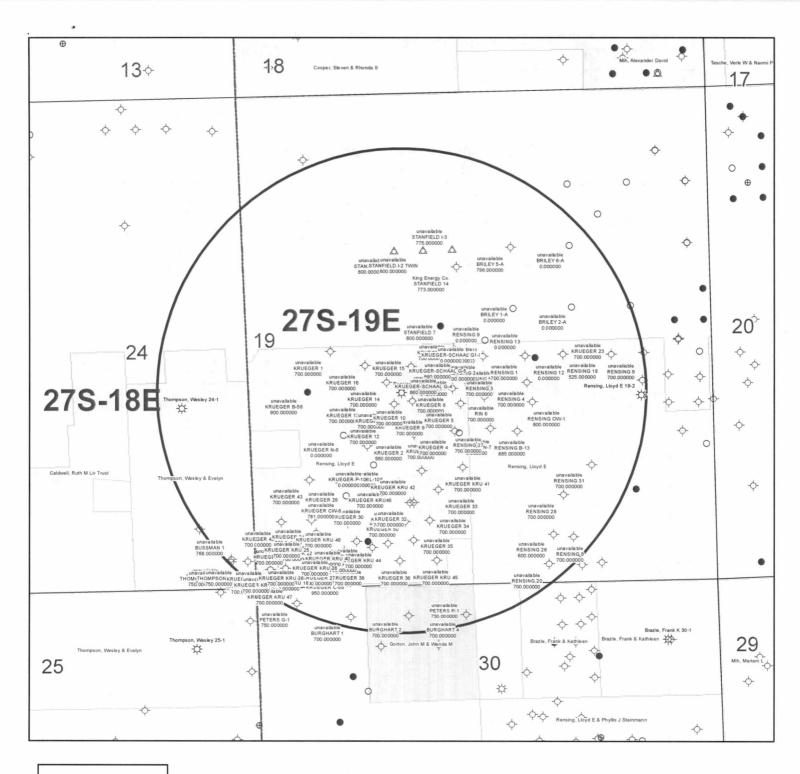
SECTION TOWNSHIP

623540

TREATMENT REPORT

WELL NAME & NUMBER

9-20-01	Kensing	1 Hoy	0 17	-	119	2110	NO
FOREMAN / OPERATOR	TIME	TIME	LESS LUNCH	TRUCK #	TRAILER #	TRUCK	EMPLOYEE SIGNATURE
Jue	7:00	10:15		9031127		3.25	you Blouge
MANGRICK	7:00	1	**	903177		1	Mar K
Tyles	- 7:00			903600		1	2
Tour &	6:45					3.5	The lake
DANSiel	6:45	1		931420		3.5	7 0
					10	- 1	
						NG SIZE & WEIGHT	
						R	
SLURRY WEIGHT_	14.5 SLURRY	/ VOL	V	VATER gal/sk	CEMI	ENT LEFT IN CASING	6_0
DISPLACEMENT_	7.5 / DISPLA	CEMENT PSI		MIX PSI	RATE	-4ppm	
REMARKS:							
INSTAIL O	coment hou	1800 B	2 srs cal	+ 11pp gal	pt 150 S	KS of cemer	IT TO get dy
To surface.	Tlushpump	· Pumpe	1. Prolo	ato bottom	+ 5.c+ flo	is of comer	
	1 1		1 1	a 1			
		1 h h	, 1				
		Š.	vn =			1	
						7	
	1101.	82	F+ 472 (Casina	1 - 2		
		6 (central:	7085	4		
			1/2 Flor				
ACCOUNT							TOTAL
ACCOUNT CODE	. QUANTITY or UI	NITS		DESCRIPTION OF SE	RVICES OR PRODUC	T	AMOUNT
903477	3.25	hr For	reman Pickup				
903197	1	hr Ce	ment Pump Truck	<			
903600	1	17.7	lk Truck	~			
1104	140	23~	rtland Cement				
1124		1 50	50 POZ Blend G	oment Balle	5 3 3	•2	
1126	A .	1 -OV	VC - Blend Ceme	ont			
1110	15	SK Gil	sonite				
1107	1.5	SIC Flo	-Seal				
1118	ے	SIC Pro	emium Gel			RECEIVED	
1215A	100	₹ KC	L			INSAS CORPORATION C	OMMISSION
1111B	7-	3 < K So	dium Silicate	Colcharid		IAM 10 con	
1123	7(x)	coc (Cit	y Water			JAN 1 0 200	18
903414	3.5 h	2_ -	insport Truck			CONSERVATION DIV	1.80
932170	3.5 h/	-	insport Trailer			WICHITA HO	
931420	3.5	۲، (80	Vac				



KGS STATUS

- → DA/PA
- ⊕ EOR
- ☆ GAS
- △ INJ/SWD
- OIL
- **☀** OIL/GAS
- o OTHER

Rensing, Lloyd E 19-1 19-27S-19E 1" = 1,000'

POSTROCK



Current Completion

SPUD DATE: 9/10/2007

WELL

: Rensing, Lloyd E 19-1

FIELD

: Cherokee Basin

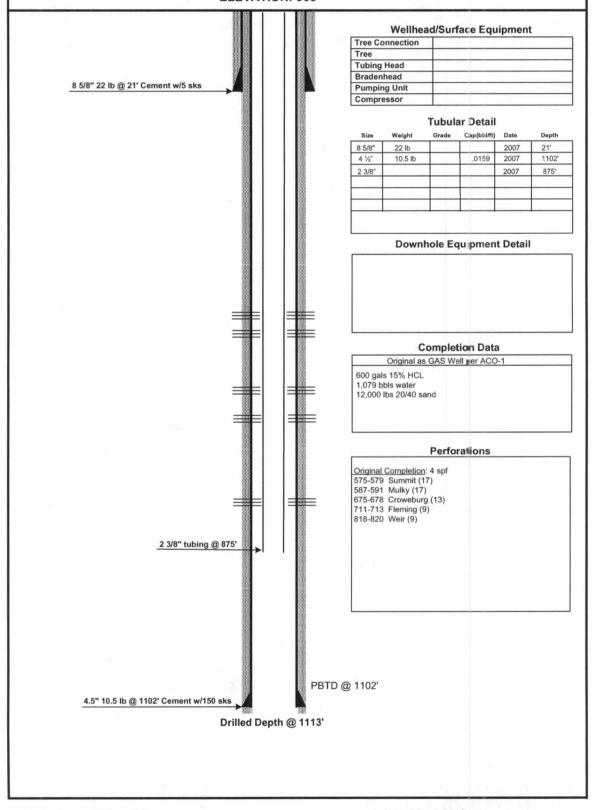
STATE COUNTY : Kansas

: Neosho

COMP. Date: 9/20/2007 API: 15-133-27110-00-00

0 275 10E (NE SE)

LOCATION: 19-27S-19E (NE,SE) ELEVATION: 965'



PREPARED BY: POSTROCK

APPROVED BY: ___

DATE: Sept, 2012

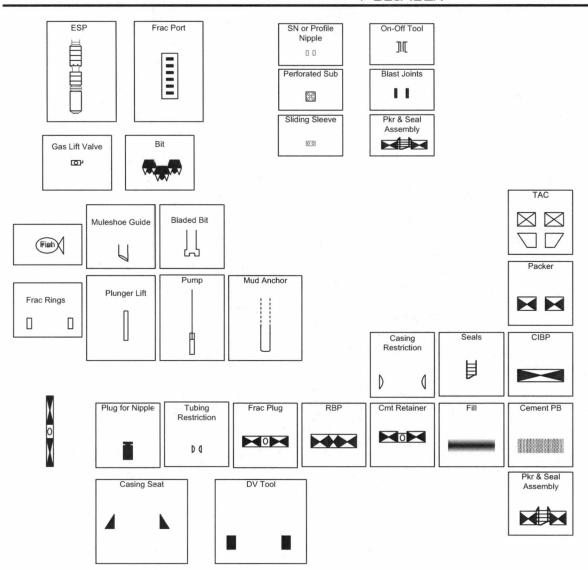
DATE:_

POSTROCK



LEGEND

PostRock



1 NAME & UPPE	R & LOWER LIMIT OF EACH PROD	OUCTION INTER	VAL TO BE COMMIN	IGLED			
FORMATION:	CATTLEMAN	(F	PERFS): 742	2 - 7	46		
FORMATION:	CATTLEMAN	(F	PERFS): 790) - 79	96		
FORMATION:		(F	PERFS):				
FORMATION:		(F	PERFS):	-			
FORMATION:	3.	(F	PERFS):	-	100		
FORMATION:		(F	PERFS):				
FORMATION:		(F	PERFS):				
FORMATION:		(F	PERFS):	-	- ·		
FORMATION:		(F	PERFS):	-			
FORMATION:		(F	PERFS):	-			
FORMATION:		(F	PERFS):	-	1 11 14 0		
FORMATION:		(F	PERFS):	-			
2 ESTIMATED AN FORMATION:	MOUNT OF FLUID PRODUCTION T CATTLEMAN		GLED FROM EACH IN OPD: 1.5		0	BWPD:	10
FORMATION:	CATTLEMAN	- В	OPD: 1.5	MCFPD:	0	BWPD:	10
FORMATION:	- (<u>.</u> В	OPD:	MCFPD:		BWPD:	
FORMATION:		<u></u> В	OPD:	MCFPD:		BWPD:	
FORMATION:		<u> В</u>	OPD:	MCFPD:		BWPD:	
FORMATION:		0 B	OPD:	MCFPD:		BWPD:	
FORMATION:		0 В	OPD:	MCFPD:		BWPD:	
FORMATION:		<u>Э</u> В	OPD:	MCFPD:		BWPD:	
FORMATION:		0 В	OPD:	MCFPD:		BWPD:	
FORMATION:) В	OPD:	MCFPD:		BWPD:	
FORMATION:		0 В	OPD:	MCFPD:		BWPD:	
FORMATION:		<u>о</u> в	OPD:	MCFPD:	-	BWPD:	7

BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS NOTICE OF FILING APPLICATION

Driven my and it

RE: In the Matter of Postrock Midcontinent Production, LLC Application for Commingling of Production in the Rensing, Lloyd E 19-1 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 Summit, Mulky, Croweburg, Fleming, Weir and Cattleman producing formations at the Rensing, Lloyd E 19-1, located in the SE NW NE SE, S19-T275-R19E, Approximately 2108 FSL & 854 FEL, 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 ACCOM-PANY ALL APPLICATIONS

Affidavit of Publication 🐝

arrana mer

1000

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 a published in the regular and entire issue of said apper for, the first published being made as aforesaid on the	newspa- plication day of
, 2012	, 2012
, 2012	, 2012
Rhonda Houert	
Subscribed and sworn to and before me this	an Public
My commission expires: January 9, 2015	
Printer's Fee	
Affidavit, Notary's Fee \$ 3.00	
Additional Copies\$	
Total Publication Fees \$ 73.14	



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 11th of

October 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.

Subscribed and sworn to before me this

11th day of October, 2012

PENNY L. CASE Notary Public -State of Kansas My Appt. Expires

Notary Public Sedgwick County, Kansas

Printer's Fee: \$132.40

LEGAL PUBLICATION

PUBLISHED IN THE WICHITA EAGLE
OCTOBER 11, 2012 (321) (688)
BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF CANSAS

OF THE STATE OF CANSAS

NOTICE OF FILING APPLICATION

RE: In ... Ihe. Maller. Of ... Postrock. Midconlinent
Production, LLC Application for Commingling
of Production in ... Ihe. Rossing. Lloyd. E. 19-1
located in Neosine County. Kansas.

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

Interest Owners, Landowners, and all persons whomever concerned.
You, and each of you, are hereby notified that Postrock Midcontinen. Production, LLC has alled an application o commingle the Summit, Mulky, Croweburg, Flennins, Welr and Cattleman producing formallons at the Rensing, Lidyd E. 19-1, located in the SE NW NE SE, S19-T27S-R19E, Epproximately 2108 FSL & 854 FEL. 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 of Kansas within fifteen (15) days from the date of this publication. These protests shall be filled 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 the selfice of the proposite and shall govern

resources of the State of Kansas.

All persons interested or concerned shall lake notice of the foregoing and shall govern themselves accordingly. All person and/or companies wishing to protest this application are required to title 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 behalt.

Postrock Midcontinent Production, LLC 210 Park Avenue, Suite 2150 Oklahoma City, Oklahoma 73102 (405) 660-7704

	Re: Application Well Name The undersigned here 2012 Note: A copy of this	on for: APPLICATION FOR COMMING. ne: RENSING, LLOYD E 19-1 reby certificates that he / she is a duly authorized	Legal Location: SENWNESE S19-T27S-R19E
Well Name: RENSING, LLOYD E 19-1 Logal Location: SENWNESE \$19-T275-R19E The undersigned hereby certificates that he / she is a duly authorized agent for the applicant, and that on the day Land of OCTOBER 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) KING ENERGY CO 2 TIMBER DR, IOLA, KS 66749	Well Nam The undersigned he 2012 Note: A copy of this	ne: RENSING, LLOYD E 19-1 reby certificates that he / she is a duly authorized	Legal Location: SENWNESE S19-T27S-R19E
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	2012 Note: A copy of this		agent for the applicant, and that on the day
	2012 Note: A copy of this		
KING ENERGY CO 2 TIMBER DR, IOLA, KS 66749 I further attest that notice of the filing of this application was published in the THE CHANUTE TRIBUNE , the official county public			enced above was delivered or mailed to the following parties:
KING ENERGY CO 2 TIMBER DR, IOLA, KS 66749 I further attest that notice of the filing of this application was published in the THE CHANUTE TRIBUNE , the official county public	Name	affidavit must be served as a part of the applicati	on.
I further attest that notice of the filing of this application was published in the THE CHANUTE TRIBUNE , the official county public			Address (Attach additional sheets if necessary)
NECOLIO	KING ENE	RGY CO	2 TIMBER DR, IOLA, KS 66749
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of NEOSHO county. A copy of the affidavit of this publication is attached.		otice of the filing of this application was published	in the THE CHANUTE TRIBUNE , the official county public
			county. A copy of the affidavit of this publication is attached.
Signed this	Signed this <u>24</u>	day of OCTOBER	
111511	•		(11511
Applicant or Duly Authorized Agent			CONT. PRODUCE AND
Subscribed and sworn to before me this 24 th day of OCTOBER 2012	حصم	Subscribed and swo	orn to before me this 24 th day of OCTOBER . 2012
JENNIFER R. BEAL OFFICIAL MY COMMISSION EXPIRES Notary Public R. Beal Notary Public Notary Public	OFFICIA SEAL		Aunifer R. Beal
My Commission Expires:	W. San Mill	1-20-2016	My Commission Expires: Suly 20, 2016
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19-27S-19E

NE4 less

Michael Watts & Barbara A Watts

21350 Jackson Rd Chanute, KS 66720

NW4 lcss

Kynta Lou Leonard

PO Box 309

Cripple Creek, CO 80813

trct in NW

Matthew & Jennifer Richard 20155 Harper Rd Chanute, KS 66720

SW less

Elliott Family Revocable Inter Vivos Trust

19730 Irving Rd Chanute, KS 66720

trct in SW

Daniel R Saubers 21300 Irving Rd Chanute, KS 66720

trct in SW

Robert R. Sr. & Earla Allen

9450 210th Rd Chanute, KS 66720

30-27S-19E

trot in E2NWNW David & Sarah Cadwallader

10625 210th Rd Chanute, KS 66720

Trets in NWNW

Eruc J. Tincher 20970 Irving Rd Chanute, KS 66720

Glenn Wrestler Rev. Trust 4680 S Santa Fe Chanute, KS 66720

Dennis E & Nadine M. Peters

9075 210th Rd Chanute, KS 66720

RWD#7 PO Box 179 Chanute, KS 66720

Tret in NW4NE4 Guy E. & Cinthia Catterson 9555 210th Rd

Chanute, KS 66720

24-27S-18E

tracts in NE

N2 SE4

Michael Watts & Barbara A Watts

21350 Jackson Rd Chanute, KS 66720

USD #413

315 W 35th Chanute, KS 66720

Bryant E. Bryant 8900 Hwy 39 Chanute, KS 66720

Harry D Fenton 120 E Chapel St Rockton, IL 61072

Kraig E. Follmer 8805 Hwy 39 Chanute, KS 66720

RENSING, LLOYD E 19-1-APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS

t Operators, Unleased Mineral Owners and Landowners a h additional sheets if necessary)			
Name:		Legal Description of Leaseho	old:
ATTACHED			
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by certify that the statements made herein are true and correct to	the best of my knowledge and belie	f.	
	1110		
	and of		
	Applicant or Duly Authorized A		
Subscribed and s	worn before me this 24th	day of OCTOBER	2012
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JENNIFER R. BEAL	Generale	July 20, 2014	
SEAL SEAL SEAL SEAL SEAL SEAL SEAL SEAL	Notary Public		
7-20-2014	My Commission Expires:	July 20, 2014	0
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H.			

LEGAL LOCATION

SPOT

CURR_OPERA

S19-T27S-R19E

SE NE SE NW

King Energy Co.

19-27S-19E

NE4 less Michael Watts & Barbara A Watts

21350 Jackson Rd Chanute, KS 66720

NW4 less Kynta Lou Leonard

PO Box 309

Cripple Creek, CO 80813

tret in NW Matthew & Jennifer Richard

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Kraig E. Follmer 8805 Hwy 39 Chanute, KS 66720 Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita. KS 67202-3802



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Sam Brownback, Governor

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

November 8, 2012

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

RE: Approved Commingling CO101218

Rensing, Lloyd E. 19-1, Sec. 19-T27S-R19E, Neosho County

API No. 15-133-27110-00-00

Dear Mr. Edwards:

Your Application for Commingling (ACO-4) for the above described well, received by the KCC on October 26, 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 Weir 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 CO101218 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