

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1093841

Form ACO-4 Form must be typed March 2009

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

OPERAT	OR: License #	API No. 15					
Name:_		Spot Description: Sec Twp S. R EastWest					
Address	1:						
Address	2:		Feet from No	orth / South Line of Section			
City:	State: Zip:+		Feet from Ea	ast / West Line of Section			
Contact	Person:	County:					
Phone:	()	Lease Name:	We	II #:			
1.	Name and upper and lower limit of each production interval to be co	ů .					
	Formation:	(Perfs): _					
	Formation:	(Perfs): _					
	Formation:	(Perfs):					
	Formation:	(Perfs): _					
	Formation:	(Perfs): _					
2.	Estimated amount of fluid production to be commingled from each i						
	Formation:			BWPD:			
	Formation:			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 well, and for each well the names and addresses of the	•	•	ses within a 1/2 mile radius of			
4.	Signed certificate showing service of the application and affidavit of	publication as required i	n K.A.R. 82-3-135a.				
For Con	nmingling of PRODUCTION ONLY, include the following:						
<u> </u>	Wireline log of subject well. Previously Filed with ACO-1:	No					
☐ 6.	Complete Form ACO-1 (Well Completion form) for the subject well.						
For Con	nmingling of FLUIDS ONLY, include the following:						
	Well construction diagram of subject well.						
8.	Any available water chemistry data demonstrating the compatibility	of the fluids to be commi	ngled.				
current ir mingling	/IT: I am the affiant and hereby certify that to the best of my information, knowledge and personal belief, this request for comistrue and proper and I have no information or knowledge, which istent with the information supplied in this application.	Sul	omitted Electror	nically			

KCC Office Use Only

☐ Denied ☐ Approved

Date: _

15-Day Periods Ends: __

Approved By:

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.

-	Α	В	С	D	Е	F	G	Н	1		K
1	Produced Fluids #	В	1	2	3	4	5	11	•	<u> </u>	
	Parameters	Units	Input	Input	Input	Input	Input		Click he	re	Click
3	Select the brines	Select fluid		Ī		V	Ī	Mixed brine:	to run SS	-	
4	Sample ID	by checking						Cell H28 is	to ruii oc	•	Click
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	Goal Seek	SSP	
8	Location		#34-1	#4-1	#5-4	#1	#2	mixed brines	0.00		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
11	K ⁺ (if not known =0)	(mg/l)						0.00	Saturation Index	values	(Final-Initial)
	Mg ²⁺	(mg/l)	1,096.00	872.00	1,200.00	953.00	858.00	995.91		lcite	
	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
	Sr ²⁺		1,050.00	2,432.00	2,044.00	1720.00	1740.00				0.13
	Ba ²⁺	(mg/l)						0.00	Ба	rite	
.,		(mg/l)						0.00			
	Fe ²⁺	(mg/l)	40.00	21.00	18.00	82.00	90.00	50.21		lite	
	Zn ²⁺	(mg/l)						0.00	-1.77	-1.80	-0.03
18	Pb ²⁺	(mg/l)						0.00	Gyp	sum	
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	Hemil	ıydrate	
21	F.	(mg/l)						0.00	-3.96	-3.90	0.06
	Br'	(mg/l)						0.00		ydrite	
	SiO2	(mg/l) SiO2						0.00	-3.47	-3.36	0.12
_	HCO3 Alkalinity**	(mg/l as HCO3)	190.00	234.00	259.00	268.00	254.00	241.03		estite	0,12
	CO3 Alkalinity	(mg/l as CO3)	170.00	434.00	237,00	200.00	234.00	241.03	Cen		
_	Carboxylic acids**	(mg/l)						0.00	Inor 6	Sulfide	
27	Ammonia	(mg/L) NH3						0.00	-0.16	-0.22	-0.06
											-0.00
	Borate	(mg/L) H3BO3						0.00	Zinc	Sulfide	
	TDS (Measured)	(mg/l)	4.040	4.0=4				72781	~		
	Calc. Density (STP) CO ₂ Gas Analysis	(g/ml)	1.038 19.97	1.051 18.76	1.050 22.41	1.048 35.53	1.045	1.047	Calcium	fluoride	
	- ,	(%)		0.0292			33.79	26.16	I C.	-l	
	H ₂ S Gas Analysis*** Total H2Saq	(%)	0.0289	1.00	0.0296	0.0306	0.0151 0.50	0.0269	-0.74	rbonate -0.51	0.23
_	_	(mgH2S/l)	1.00 5.67	5.76	1.00 5.72	1.00 5.54	5.55	5.63		eeded (mg/L)	0.23
34	pH, measured (STP)	pH 0-CO2%+Alk,	5.07	5./0	5.72	5.54	5.55	5.03	Calcite	NTMP	
	Choose one option								Calcite	NIMI	
35	to calculate SI?	2-CO2%+pH	0	0	0	0	0				
36	Gas/day(thousand cf/day)	(Mcf/D)						0	0.00	0.00	
	Oil/Day	(B/D)	0	0	1	1	1	4	Barite	BHPMP	
	Water/Day	(B/D)	100	100	100	100	100	500	0.00	0.00	
	For mixed brines, enter val			mag in Calle (H	(40 H42)						
-	Initial T			`		44.0	40.0	(Enter H40-H43)		Н	
		(F)	66.0	71.0	70.0	41.0	49.0	60.0	5.69	5.60	1
	Final T	(F) (F)	66.0 66.0	71.0 71.0	70.0 70.0	41.0	49.0	60.0 89.0	5.69 Viscosity (5.60 CentiPoise)	
42	Final T Initial P	(F) (F) (psia)	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0	5.69 Viscosity (1.196	5.60 CentiPoise) 0.826	
42 43	Final T Initial P Final P	(F) (F) (psia) (psia)	66.0 66.0	71.0 71.0	70.0 70.0	41.0	49.0	60.0 89.0	5.69 Viscosity (1.196 Heat Capaci	5.60 CentiPoise) 0.826 ty (cal/ml/ ⁰ C)	
42 43 44	Final T Initial P Final P Use TP on Calcite sheet?	(F) (F) (psia) (psia) I-Yes;0-No	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0 120.0	5.69 Viscosity (1.196 Heat Capaci 0.955	5.60 CentiPoise) 0.826 ty (cal/ml/ ⁰ C) 0.959	
42 43 44 45	Final T Initial P Final P	(F) (F) (psia) (psia)	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0	5.69 Viscosity (1.196 Heat Capaci 0.955	5.60 CentiPoise) 0.826 ty (cal/ml/ ⁰ C)	
42 43 44 45 46	Final T Initial P Final P Use TP on Calcite sheet? API Oil Grav.	(F) (F) (psia) (psia) I-Yes;0-No API grav.	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0 120.0	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor no	5.60 CentiPoise) 0.826 ty (cal/ml/ ⁰ C) 0.959 eeded (mg/L)	
42 43 44 45 46 47 48	Final T Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day	(F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav.	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0 120.0 30.00 0.60	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49	Final T Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier	(F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D)	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0 120.0 30.00 0.60	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00	
42 43 44 45 46 47 48 49 50	Final T 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) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D)	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0 120.0 30.00 0.60	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51	Final T 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) †	(F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N)	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0 120.0 30.00 0.60	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51	Final T 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	(F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP:	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0 120.0 30.00 0.60	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53	Final T 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) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP:	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0 120.0 30.00 0.60	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54	Final T Initial P Final P Use TP on Calcite sheet? API Oil Grav. API Oil 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) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I)	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0 120.0 30.00 0.60	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55	Final T 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) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/l) (pH)	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0 120.0 30.00 0.60	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	Final T Initial P Final P Use TP on Calcite sheet? API Oil Grav. API Oil 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) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I)	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0 120.0 30.00 0.60	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58	Final T Initial P Final P Use TP on Calcite sheet? API Oil 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 ECations=	(F) (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)	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0 120.0 30.00 0.60	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP	
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	Final T 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 H ₂ Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated SCations= EAnions=	(F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/l) as HCO3 (equiv./I) (equiv./I)	66.0 66.0 25.0	71.0 71.0 25.0	70.0 70.0 25.0	41.0 25.0	49.0 25.0	60.0 89.0 25.0 120.0 30.00 0.60	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (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	Final T 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 ECations= ECations= Calc TDS=	(F) (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)	66.0 66.0 25.0 25.0	71.0 71.0 25.0 25.0	70.0 70.0 25.0 25.0	41.0 25.0 25.0	49.0 25.0 25.0	60.0 89.0 25.0 120.0 30.00 0.60 0	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (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	Final T 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 \$\textit{\Sigma}\$ (STP) Exhions= \$\textit{\Sigma}\$ (STD)= Inhibitor Selection	(F) (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	66.0 66.0 25.0 25.0 0 0	71.0 71.0 25.0 25.0	70.0 70.0 25.0 25.0	41.0 25.0 25.0	49.0 25.0 25.0	60.0 89.0 25.0 120.0 30.00 0 0	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (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	Final T 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 ECations= EAnions= Calc TDS= Inhibitor Selection Protection Time	(F) (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)	66.0 66.0 25.0 25.0	71.0 71.0 25.0 25.0	70.0 70.0 25.0 25.0	41.0 25.0 25.0 Unit Converter	49.0 25.0 25.0	60.0 89.0 25.0 120.0 30.00 0.60 0	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (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	Final T Initial P Final P Use TP on Calcite sheet? API Oil 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 \$\textstyle \text{Calcite}\$ acid \$\text{Lacite}\$ acid \$\text	(F) (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	66.0 66.0 25.0 25.0 0 0	71.0 71.0 25.0 25.0 4 1 1 2	70.0 70.0 25.0 25.0 Inhibitor NTMP BHPMP	41.0 25.0 25.0 Unit Converter From Unit	49.0 25.0 25.0 25.0 (From metric Value 80	60.0 89.0 25.0 120.0 30.00 0.60 0	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (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	Final T 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 2Cations= £Anions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you?	(F) (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	66.0 66.0 25.0 25.0 0 0 0	# 1 2 3	Inhibitor NTMP BHPMP PAA	Unit Converter From Unit C m³	49.0 25.0 25.0 25.0 (From metric Value 80 100	60.0 89.0 25.0 120.0 30.00 0.60 0	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 Value 176 3,531	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (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	Final T Initial P Final P Use TP on Calcite sheet? API Oil 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 \$\textstyle \text{Calcite}\$ acid \$\text{Lacite}\$ acid \$\text	(F) (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	66.0 66.0 25.0 25.0 0 0	71.0 71.0 25.0 25.0 4 1 1 2	70.0 70.0 25.0 25.0 Inhibitor NTMP BHPMP	41.0 25.0 25.0 Unit Converter From Unit	49.0 25.0 25.0 25.0 (From metric Value 80	60.0 89.0 25.0 120.0 30.00 0.60 0	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (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	Final T 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 H ₂ Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated \$\mathbb{\text{Catluated}}\$ Alkalinity Caclulated \$\mathbb{\text{Catluated}}\$ Eanions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you? If No, inhibitor # is:	(F) (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	66.0 66.0 25.0 25.0 0 0 0	71.0 71.0 25.0 25.0 1 1 1 2 3 4	Inhibitor NTMP BHPMP PAA DTPMP	Unit Converter From Unit °C m³ m³ MPa	49.0 25.0 25.0 25.0 (From metric Value 80 100 1,000	60.0 89.0 25.0 120.0 30.00 0.60 0 0 To Unit °F ft³ bbl(42 US gal) psia	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 145,074	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (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	Final T 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 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) (F) (Psia) (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 1 4	0 0 0 Unit min 1-Yes;0-No #	## 1 2 3 4 5 6	Inhibitor NTMP BHPMP PAA DTPMP PPCA SPA	Unit Converter From Unit C m MPa Bar	49.0 25.0 25.0 25.0 	60.0 89.0 25.0 120.0 30.00 0.60 0 0 To Unit "F ft ³ bbl(42 US gal) psia	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 145,074 7,194	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP	
42 44 45 46 47 48 49 50 51 52 53 54 55 56 60 61 62 63 64 65 66 67 68	Final T 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 H ₂ Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated Alkalinity Caclulated ECations= EAnions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you? If No, inhibitor # is: If you select Mixed,	(F) (F) (Psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/l) as HCO3 (equiv./I) (equiv./I) (mg/l) Input 120 1 4 1 50	0 0 0 Unit min 1-Yes;0-No #	## 1 2 3 4 4 5 6 6 7	Inhibitor NTMP BHPMP PAA DTPMP PPCA SPA HEDP	Unit Converte From Unit C m³ m³ MPa Bar Torr	49.0 25.0 25.0 25.0 25.0 Value 80 100 1,000 496 10,000	60.0 89.0 25.0 120.0 30.00 0.60 0 0 To Unit °F ft³ bbl(42 US gal) psia psia psia	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 145,074 7,194 193	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP	
42 44 45 46 47 48 49 50 51 52 53 54 55 56 60 61 62 63 64 65 66 67 68 69	Final T 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) * OH* (Strong base) * Ouality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated ECations= EAnions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you? If No, inhibitor # is: If you select Mixed, 1st inhibitor is: % of 1st inhibitor is:	(F) (F) (Psia) (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 1 4	0 0 0 0 Unit min 1-Yes;0-No # # %	## 1 2 3 4 5 6	Inhibitor NTMP BHPMP PAA DTPMP PPCA SPA	Unit Converter From Unit C m MPa Bar	49.0 25.0 25.0 25.0 	60.0 89.0 25.0 120.0 30.00 0.60 0 0 To Unit "F ft ³ bbl(42 US gal) psia	5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 145,074 7,194	5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (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
Brine 3: Clinesmith 5-4
Brine 4: Clinesmith 1
Brine 5: Clinesmith 2

			Ratio			
	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
Celestite	N/A	N/A	N/A	N/A	N/A	N/A

CONFIDENTIAL

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

ORIGINAL

214-10

Form ACO-1 September 1999 Form Must Be Typed

WELL COMPLETION FORM

WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License #	API No. 15 - 15-133-27254-0000
Name: Quest Cherokee, LLC	County: Neosho
Address: 211 W. 14th Street	NE_NW Sec. 33 Twp. 27 S. R. 19
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	660 feet from S /(N)(circle one) Line of Section
Purchaser: Bluestem Pipeline, LLC	1980 feet from E (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
	Lease Name: Meyer, Don L. Well #: 33-1
Contractor: Name: TXD	Field Name: Cherokee Basin CBM
License: 33837	Producing Formation: Multiple
Wellsite Geologist: Ken Recoy	Elevation: Ground: 895 Kelly Bushing: n/a
Designate Type of Completion:	Total Depth: 1005 Plug Back Total Depth: 980
New Well Re-Entry Workover	
Oil SWD SIOW Temp. Abd.	Amount of Surface Pipe Set and Cemented at 22 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 980
Operator:	feet depth to surface w/ 140 sx cmt.
Well Name:	Drilling Fluid Management Plan AH II NJ 6-809
Original Comp. Date: Original Total Depth:	(Data must be collected from the Reserve Pit)
Deepening Re-perf Conv. to Enhr./SWD	Chloride content ppm Fluid volume bbls
Plug BackPlug Back Total Depth	Dewatering method used
Commingled Docket No	
Dual Completion Docket No	Location of fluid disposal if hauled offsite:
	Operator Name:
Other (SWD or Enhr.?) Docket No.	Lease Name: License No.:
11-2-07	- Quarter Sec Twp S. R East West
Spud Date or Date Reached TD Completion Date or Recompletion Date	County: Docket No.:
•	
Kansas 67202, within 120 days of the spud date, recompletion, work	with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, keeper or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. of 12 months if requested in writing and submitted with the form (see rule 82-3-ogs and geologist well report shall be attached with this form. ALL CEMENTING ells. Submit CP-111 form with all temporarily abandoned wells.
All requirements of the statutes, rules and regulations promulgated to recherein are complete and correct to the best of my knowledge.	gulate the oil and gas industry have been fully complied with and the statements
O(1)	KCC Office Use ONLY
Signature: Junior Coordinator 2/14/09	
Title: New Well Development Coordinator Date: 2/14/08	Letter of Confidentiality Received
Subscribed and sworn to before me this 14 day of	If Denied, Yes Date: RECEIVED
20 06.	Wireline Log Received KANSAS CORPORATION COMMISSIO
Notary Public: Devra Klauman	Geologist Report Received FEB 2 0 2008
0	,
	ERRA KLAUMAN CONSERVATION DIVISION WICHITA, KS
My Appt. Ex	pires 8-4-2010

ORIGINAL

Side Two

Operator Name: Qu	est Che	rokee, Ll	_C		Leas	e Name:_	Meyer, Don	<u></u>	Well #: 33-1	ļ. _f .	3 1 1 2017
Sec. 33 Twp. 2				West	Coun	ty: Neosh	0		1		THE STATE OF
INSTRUCTIONS: S tested, time tool ope temperature, fluid red Electric Wireline Log	n and clo covery, ar	sed, flowir	ng and shut es if gas to	in pressures, surface test, a	whether a long with	shut-in pre	essure reached	l static level, hydr	ostatic pressure	es, bottoi	m hole
Drill Stem Tests Take			· _ Ye	es 🗌 No		✓ L	-	tion (Top), Depth			Sample
Samples Sent to Geological Survey Cores Taken Yes No Electric Log Run (Submit Copy)				es No		Nam See	e attached		Тор	ſ	Oatum (
List All E. Logs Run: Compensated Dual Inductio	d Dens	sity Neu	itron Log		RECORD		ew ∐Used				
		· · · · · · · · · · · · · · · · · · ·				surface, int	ermediate, produ	- 		T	
Purpose of String	s	Size Hole Drilled		e Casing (In O.D.)		eight s. / Ft.	Setting Depth	Type of Cement	# Sacks Used		and Percent dditives
Surface	12-1	/4	8-5/8"		22		22	"A"	5		
Production	6-3/4	4-772	4-1/2		10.5		980	"A"	140		
Purpose:	То	Depth op Bottom	Туре	ADDITIONAL of Cement	T	TING / SQI	UEEZE RECOR		Percent Additives		
Protect Casing Plug Back TD Plug Off Zone											
Shots Per Foot				RD - Bridge Plu Each Interval Pe)e		acture, Shot, Ceme Amount and Kind of N		rd	Depth
4	870-87	72/817-8 ⁻	19/812-81	4			500gal 15%HCLw/ 50t	ibls 2%kd water, 604bbls water	r w/ 2% KCL, Blockle, 4600	# 20/40 sand	870-872/817-819
4	725-72	27/700_7	11/610_61	2/575-578/5	552-554		400cal 15%HCl w/ 57/	iblis 2%kcl water, 571bbts wate	rwi 2% KCI. Blocke 4400	## 20/40 sand	812-814
	720 72			2010 0101	JOE 001			<u> </u>	610-612/5		552-554
4	472-47	76/461-40	65				400gal 15%HCLw/ 49t	obis 2%kci water, 683bbis wate			472-476/461-465
TUBING RECORD 2-	Size 3/8"		Set At 899.10f		Packe n/a	r At	Liner Run	Yes V	0		
Date of First, Resume 2-4-08	rd Producti	ion, SWD or	Enhr.	Producing Me	thod	Flowin	ng 📝 Pum	ping Gas L	Lift Oth	er (Explain)
Estimated Production Per 24 Hours		Oil n/a	Bbls.	Gas 0.0 mcf	Mcf	0.0 t		Bbls.	Gas-Oil Ratio		Gravity
Disposition of Gas Vented Sold (If vented, S	Use	ed on Lease	COMPLETIO	ON · Open Hole Other (Spec		erf.	Production Int	erval Commingled			
randra de la cale	** *	1		1 12 23	JAUX.	Curyratol Saryratol		•		•	
		:		·	hip-BP III J. P Corns Josephic Wing i		and a series	an dispersion	ø.		

QUEST Resource Corporation



11-5-07

FOREMAN /

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

DON

TIME

CONFIDENTIAL FEB 1 4 2008

TRUCK

KCC

TICKET NUMBER 2559

FIELD TICKET REF #

TRUCK

TOWNSHIP

27

SECTION

33

TRAILER

FOREMAN Joe

RANGE

19

COUNTY

EMPLOYEE

625050

TIME

TREATMENT REPORT & FIELD TICKET CEMENT

WELL NAME & NUMBER

33-1

LESS

OPERATOR	IN	OUT	LUNCH	#	#	HOURS	SIGNATURE		
Joe	12:45	5:00		903427	· ·	4.25	ye Renchal		
Tim	12.11	5:00		903197		4.25	In any		
MANERICK		4:00		903600		3.25	120		
Darriel		5:15		931420		4.5	Doniel		
on lacotio	N						No driver		
		I							
JOB TYPE Lang	tring HOLE	SIZE6	3/4	HOLE DEPTH <u>//00</u>	CASII	NG SIZE & WEIGHT	4/2 10.5		
CASING DEPTH	79.94 DRILL	PIPE		TUBING	OTHE	R			
CASING DEPTH 979-94 DRILL PIPE TUBING OTHER SLURRY WEIGHT 14-2 SLURRY VOL WATER gal/sk CEMENT LEFT in CASING O									
DISPLACEMENT_	15.62 DISPLA	ACEMENT P	PSI	VIIX PSI	RATE	4ppm			
DEM ÀBKS.									
INSTAILED CO	ement head	RAN 2	sks al 4	10 661 dye + 1	5K ad 9	140 5K5 0+	Shoe		
tue to su	face. Flu	sh sum	D. Puna	winer alua	to bottom a	+ setfloat	shoe is		
24E 10 30	714417 7 10	J. T. POIN	p	12 prop	1.25				
									
	B								
	979		1-+ 4/2	Casing			:		
		6	Central	izers					
			4/2 Floo	1 5hae					
ACCOUNT	QUANTITY or I	UNITS	<u> </u>	DESCRIPTION OF SEF	RVICES OR PRODUC	OT .	TOTAL AMOUNT		
CODE	. 1, 2:	= h.	Foreman Pickup						
903427	4. 2	5 hr	Cement Pump Truc	·k					
903600	3.2		Bulk Truck						
1104		O SK	Portland Cement						
1124)	50/50 POZ Blend C	Dement Boss	185 31a	43			
1126			OWC - Blend Cem		iper plug				
1110	2	6 SK	Gilsonite		1 1 2		RECEIVED		
1107	1.5		Flo-Seal			KANSAS	CORPORATION COMMISSION		
1118	6		Premium Gel						
1215A	1	al	KCL			F	EB 2 0 2008		
1111B		354	Sodium Silicate	Calchloride			CALL DIVISION		
1123	700	العوم	City Water			CC	NSERVATION DIVISION WICHITA, KS		
903140		.5 hz	Transport Truck						
9521152		h./	Transport Trailer						
931420	4	: h/	80 Vac						

11-FEB. 18. 2008510:55AMREY WEST FORK-ARKANA 817-546-3001

NU. /94/ Fr. 0)

CONFIDENTIAL FEB 1 4 2008

TXD SERVICES

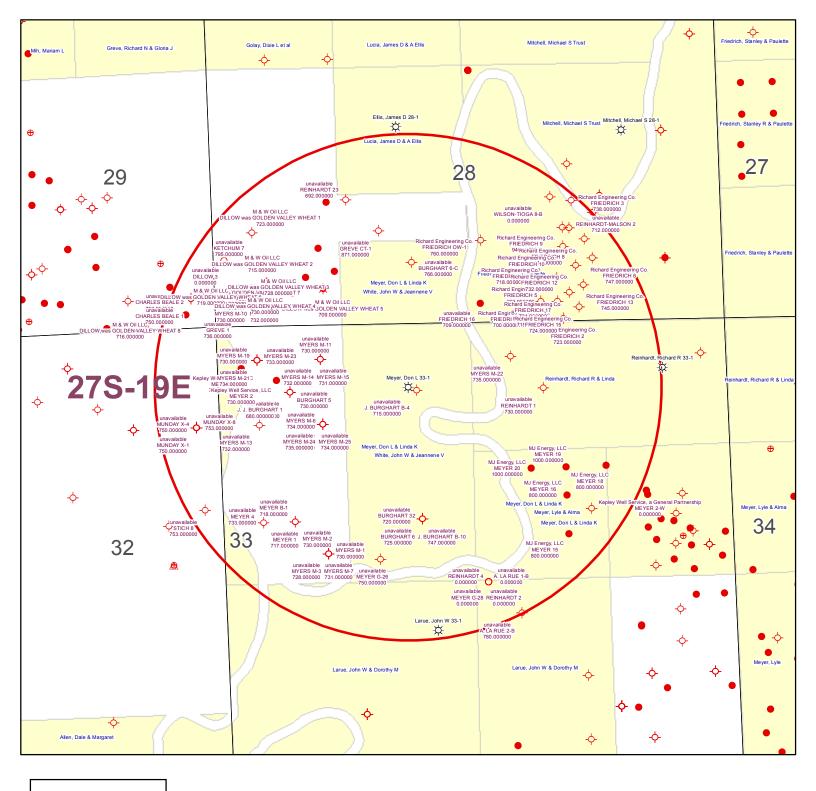
DRILLERS LOG KCC

TXD SERVICES

राज ह	101		5. 33	1. 27	R. 19	GAS TESTS:		
(PT#	133-27254		County:	Neosho		498	7 - 1/2"	
	895'		Location:	Kansas		591	10 - 3/4"	44.
-16 V p.o	030	L`				522'	19 - 3/4"	61.
perator	Quest Che	rokes II C				715'	3 - 3/4"	24.
		ay Ave., Suit	e 300			839'	5 - 1/2"	14.
						901'	3 - 1/2"	10.
		City, OK. 73		14 B		932'	slight blow	
VELL#	33-1		Lease Name:	Meyer, Doi		1005°	slight blow	
cotage locatio	n		tt. from the			1005	Slight Diow	
			it, from the		line	· · · · · · · · · · · · · · · · · · ·		
Orilling Contrac	tor:		TXD SERV	ICES LP				
Spud Date:	NA		Geologist:					تسنيب ٺ
Date Comp:	11-4-07		Total Depth:	1005'				
xact Spot Loc	ation	NE NW						
Casing Rec		1	Rig Time					
		Production						
Size Hole		6-3/4"						
Size Casing	8-5/8"	4-1/2"			······································			
	24#	10-1/2#					***************************************	
Welght	22'	10-1/2#						
Setting Depth	122			<u> </u>				
Type Cement								
Sacks	<u> </u>		WELL LOG					
					D.	Formation	Top	Bum.
Formation	Тор		Formation	Тор	Btm.		838	87
top soil	0		lime	439		shale		84
shale/river grav			b.shate	459		coal/b.shale	872	8
lime	33		ime	462		sand	880	
shale/river grav	38		coal	466		shale	887	8
lime :	50	82	lime	467		coal	898	9
coal	82		coal	490		shale	900	
lime	83		lime	491		lime/mississ	903	10
sand/shale	106	121	sand/shale	499				1
shale i	121	238	b.shale	558	560		<u> </u>	
coal	238	240	shale	560	583			
sand/shale	240		coal	583	584			1
lime	270		sand	584	616			
sand	295		coal	616	618			
shale	321		shate	618	711			<u> </u>
lime	353		coal	711	713			
coal	363		shale	713	734			
shale	36		coal	734	737	1		
lime	374		sand/shale	737				1
b.shale	387		shale	79			1	
shale:	389		coal	829			 	1
2024	42		shale	83			1	
coal	431		coal	834		شخف والمساور براسين فالم		1
		J. 730				-,	1	

RECEIVED KANSAS CORPORATION COMMISSION

FEB 2 0 2008



KGS STATUS

- DA/PA
- EOR
- **⇔** GAS
- △ INJ/SWD
- OIL
- **♦** OIL/GAS
- OTHER

Meyer, Don L 33-1 33-27S-19E 1" = 1,000'

POSTROCK



Current Completion

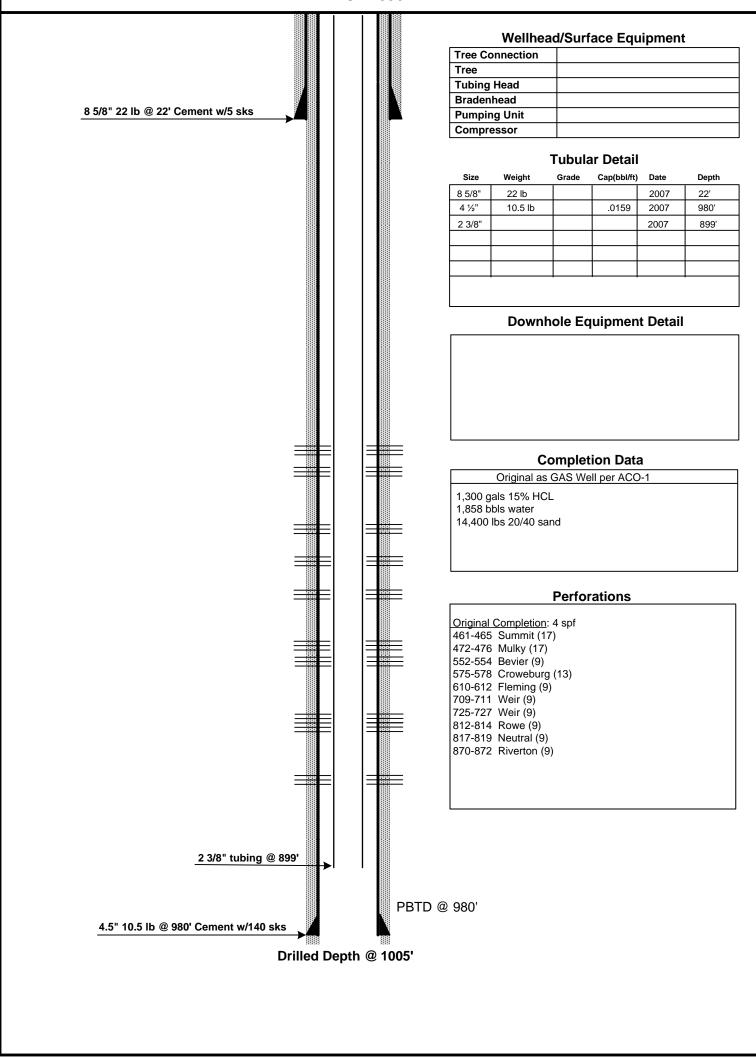
WELL : Meyer, Don L 33-1 **FIELD** : Cherokee Basin

SPUD DATE: 11/2/2007 COMP. Date: 11/5/2007 API: 15-133-27254-00-00

STATE : Kansas **COUNTY** : Neosho

LOCATION: 33-27S-19E (NE,NW)

ELEVATION: 895'



PREPARED BY: POSTROCK APPROVED BY: _

DATE: Sept, 2012

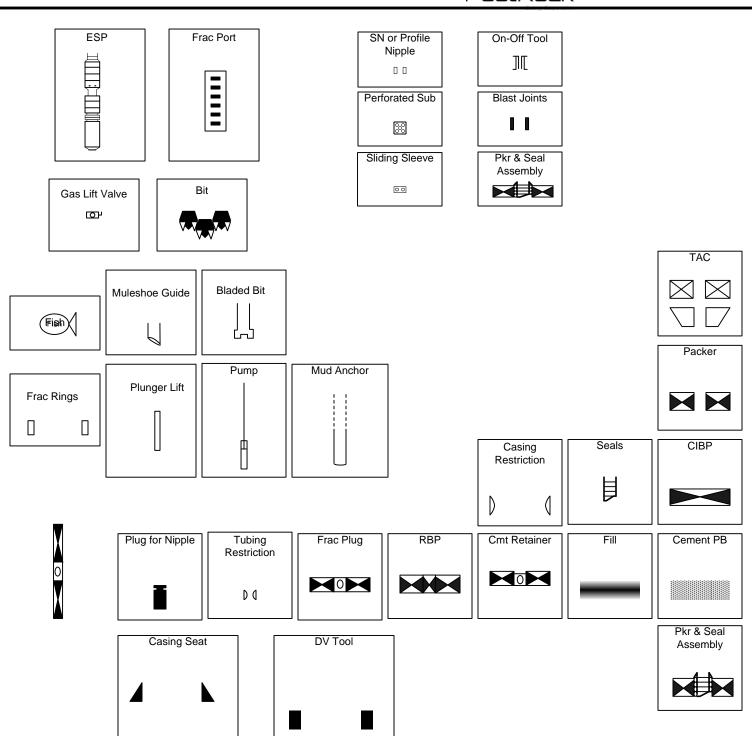
DATE:_

POSTROCK



LEGEND

PostRock[®]



MEYER, DON L 33-1

R & LOWER LIMIT OF EACH PRODUC	CHON INTERVAL TO BE (COMMINING	LED			
WEIR	(PERFS):	709 -	711			
WEIR	(PERFS):	725 -	727			
ROWE	(PERFS):	812 -	814			
NEUTRAL	(PERFS):	817 -	819			
RIVERTON	(PERFS):	870 -	872			
CATTLEMAN	(PERFS):	642 -	646			
CATTLEMAN	(PERFS):	678 -	674			
CATTLEMAN	(PERFS):	689 -	691			
	(PERFS):					
	(PERFS):		·			
	(PERFS):		·			
	(PERFS):		·			
MOUNT OF FLUID PRODUCTION TO	BE COMMINGLED FROM	1 EACH INT	ERVAL			
MOUNT OF FLUID PRODUCTION TO WEIR	BE COMMINGLED FROM BOPD:	1 EACH INT 0	ERVAL MCFPD:	1.16	BWPD:	4.2
				1.16 1.16	BWPD:	4.2
WEIR	BOPD:	0	MCFPD:			
WEIR WEIR	BOPD:	0	MCFPD:	1.16	BWPD:	4.2
WEIR WEIR ROWE	BOPD: BOPD:	0 0 0	MCFPD:MCFPD:	1.16 1.16	BWPD: BWPD:	4.2
WEIR WEIR ROWE NEUTRAL	BOPD: BOPD: BOPD:	0 0 0 0	MCFPD:	1.16 1.16 1.16	BWPD: BWPD: BWPD:	4.2 4.2 4.2
WEIR WEIR ROWE NEUTRAL RIVERTON	BOPD: BOPD: BOPD: BOPD:	0 0 0 0 0	MCFPD: MCFPD: MCFPD: MCFPD:	1.16 1.16 1.16 1.16	BWPD: BWPD: BWPD: BWPD:	4.2 4.2 4.2 4.2
WEIR WEIR ROWE NEUTRAL RIVERTON CATTLEMAN	BOPD: BOPD: BOPD: BOPD: BOPD:	0 0 0 0 0 0	MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD:	1.16 1.16 1.16 1.16 0	BWPD: BWPD: BWPD: BWPD:	4.2 4.2 4.2 4.2 6.67
WEIR WEIR ROWE NEUTRAL RIVERTON CATTLEMAN	BOPD: BOPD: BOPD: BOPD: BOPD: BOPD: BOPD:	0 0 0 0 0 0 1	MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD:	1.16 1.16 1.16 1.16 0	BWPD: BWPD: BWPD: BWPD: BWPD:	4.2 4.2 4.2 4.2 6.67 6.67
WEIR WEIR ROWE NEUTRAL RIVERTON CATTLEMAN CATTLEMAN	BOPD: BOPD: BOPD: BOPD: BOPD: BOPD: BOPD: BOPD:	0 0 0 0 0 0 1	MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD:	1.16 1.16 1.16 1.16 0	BWPD: BWPD: BWPD: BWPD: BWPD: BWPD:	4.2 4.2 4.2 4.2 6.67 6.67
WEIR WEIR ROWE NEUTRAL RIVERTON CATTLEMAN CATTLEMAN CATTLEMAN 0	BOPD:	0 0 0 0 0 0 1	MCFPD:	1.16 1.16 1.16 1.16 0	BWPD: BWPD: BWPD: BWPD: BWPD: BWPD: BWPD:	4.2 4.2 4.2 4.2 6.67 6.67
	WEIR WEIR ROWE NEUTRAL RIVERTON CATTLEMAN CATTLEMAN	WEIR (PERFS): WEIR (PERFS): ROWE (PERFS): NEUTRAL (PERFS): RIVERTON (PERFS): CATTLEMAN (PERFS): CATTLEMAN (PERFS): CATTLEMAN (PERFS): (PERFS): (PERFS): (PERFS): (PERFS):	WEIR (PERFS): 709 - WEIR (PERFS): 725 - ROWE (PERFS): 812 - NEUTRAL (PERFS): 817 - RIVERTON (PERFS): 870 - CATTLEMAN (PERFS): 642 - CATTLEMAN (PERFS): 678 - CATTLEMAN (PERFS): - (PERFS): - - (PERFS): - - (PERFS): - - (PERFS): - -	WEIR (PERFS): 725 - 727 ROWE (PERFS): 812 - 814 NEUTRAL (PERFS): 817 - 819 RIVERTON (PERFS): 870 - 872 CATTLEMAN (PERFS): 642 - 646 CATTLEMAN (PERFS): 678 - 674 CATTLEMAN (PERFS): - 691 (PERFS): - - (PERFS): - (PERFS): - - -	WEIR (PERFS): 709 - 711 WEIR (PERFS): 725 - 727 ROWE (PERFS): 812 - 814 NEUTRAL (PERFS): 817 - 819 RIVERTON (PERFS): 870 - 872 CATTLEMAN (PERFS): 642 - 646 CATTLEMAN (PERFS): 678 - 674 CATTLEMAN (PERFS): - 691 (PERFS): - - (PERFS): - (PERFS): - - -	WEIR (PERFS): 709 - 711 WEIR (PERFS): 725 - 727 ROWE (PERFS): 812 - 814 NEUTRAL (PERFS): 817 - 819 RIVERTON (PERFS): 870 - 872 CATTLEMAN (PERFS): 642 - 646 CATTLEMAN (PERFS): 678 - 674 CATTLEMAN (PERFS): - 691 (PERFS): - - (PERFS): - (PERFS): - - -

MEYER, DON L 33-1-APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS

Offset Operators, Unleased Mineral Owners and Landown (Altach additional sheets if necessary)		
Name:	Legal Description of Leasehold:	
SEE ATTACHED		
hereby certify that the statements made herein are true and corre	act to the best of my knowledge and belief.	
	Lexy Morris	
	Applicant or Duly Authorized Abent	
Subscribed a	and sworn before me this day of OCTOBER	2012
	α : α α .	
JENNIFER R. BEAL	Gennefer & Deal	
SEAL SEAL WIT COMMINICOLOTY EARTHEO	Notary Public	
7-20-2016	My Commission Expires: July 20, 2014	
	•	

LEGAL LOCATION	SPOT	CURR_OPERA
S28-T27S-R19E	SW SE SW SE	Bird Energy, Inc.
S33-T27S-R19E	SE NE SW NE	Kepley Well Service, a General Partnership
S33-T27S-R19E	SW NW NW NW	Kepley Well Service, LLC
S33-T27S-R19E	NW NW NW	Kepley Well Service, LLC
S28-T27S-R19E	NE NE SW SW	M & W Oil LLC
S28-T27S-R19E	NE SW SW	M & W Oil LLC
S28-T27S-R19E	NE SE SW SW	M & W Oil LLC
S28-T27S-R19E	SE SW SW	M & W Oil LLC
S28-T27S-R19E	NW SE SW SW	M & W Oil LLC
S28-T27S-R19E	SW SW SW	M & W Oil LLC
S28-T27S-R19E	NW SE SW SW	M & W Oil LLC
S29-T27S-R19E	SW SE SE SE	M & W Oil LLC
S33-T27S-R19E	NW SE SW NE	MJ Energy, LLC
S33-T27S-R19E	SW NE SW NE	MJ Energy, LLC
S33-T27S-R19E	NE NE SW NE	MJ Energy, LLC
S33-T27S-R19E	NW NE SW NE	MJ Energy, LLC
S33-T27S-R19E	NE NW SW NE	MJ Energy, LLC
S28-T27S-R19E	SW NE SW SE	Richard Engineering Co.
S28-T27S-R19E	SW NE SW SE	Richard Engineering Co.
S28-T27S-R19E	NE SE SW SE	Richard Engineering Co.
S28-T27S-R19E	NE SE SW SE	Richard Engineering Co.
S28-T27S-R19E	SE SE SW SE	Richard Engineering Co.
S28-T27S-R19E	SW SE SW SE	Richard Engineering Co.
S28-T27S-R19E	SW SE SW SE	Richard Engineering Co.
S28-T27S-R19E	NE NE SW SE	Richard Engineering Co.
S28-T27S-R19E	SW SE SW SE	Richard Engineering Co.
S28-T27S-R19E	NW SE SW SE	Richard Engineering Co.
S28-T27S-R19E	SE NE SW SE	Richard Engineering Co.
S28-T27S-R19E	SE NE SW SE	Richard Engineering Co.
S28-T27S-R19E	NW NE SW SE	Richard Engineering Co.
S28-T27S-R19E	SW NW SW SE	Richard Engineering Co.

MEYER, DON L 33-1

28-27S-19E

trt in SE4 SW4

Roland L & M'Lee A McClay

20200 Liberty Rd Chanute, KS 66720

W2SW4

Harry D Wheat & Betty Jo Wheat

1128 Money Ave Augusta, K 67010

29-27S-19E

trt in SE4

Harry D Wheat & Betty Jo Wheat

1128 Money Ave Augusta, K 67010

32-27S-19E

E2 NE4

Frank & Geneva Living Trust

C/O Paul Stich 7335 140th Rd Chanute, KS 66720

33-27S-19E

W2 NW lying E of Draw Creek

John W & Dorothy M. LaRue

11400 190th Rd Chanute, KS 66720

	The state of the s
Affidavit of Notice Served	
Re: Application for: APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS ACO-4	
Well Name: MEYER, DON L 33-1	Legal Location: NENW S33-T27S-R19E
The undersigned hereby certificates that he / she is a duly authorized agent	for the applicant, and that on the day 11TH of OCTOBER ,
, 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)
BIRD ENERGY, INC	2020 THOMPSON, PO BOX 1612, DODGE CITY, KS 67801
KEPLEY WELL SERVICE, A GENERAL PARTNERSHIP	19245 FORD RD, CHANUTE, KS 66720
KEPLEY WELL SERVICE, LLC	19245 FORD RD, CHANUTE, KS 66720
M & W OIL, LLC	PO BOX 22, HAMILTON, KS 66853
MJ ENERGY, LLC	3570 E 12TH AVE, STE 205, DENVER, CO 80206
RICHARD ENGINEERING CO	1228 S STUEBEN, CHANUTE, KS 66720
SEE ATTACHED	
I further attest that notice of the filing of this application was published in the of NEOSHO	THE CHANUTE TRIBUNE , the official county publication county. A copy of the affidavit of this publication is attached.
e e tal	
. (Applicant of Duly Milhorized Agent Defore me this
7-20-20/6	Jennifu R Beal My Commission Expires: July 20, 20/4

MEYER, DON L 33-1

28-27S-19E

trt in SE4 SW4

Roland L & M'Lee A McClay

20200 Liberty Rd

Chanute, KS 66720

W2SW4

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33-27S-19E

W2 NW lying E of Draw Creek

John W & Dorothy M. LaRue

11400 190th Rd Chanute, KS 66720

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 Meyer, Don L 33-1 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, Bevier, Croweburg, Fleming, Weir, Rowe, Neutral, Riverton and Cattleman producing formations at the Meyer, Don L 33-1, located in the NE NW, S33-T27S-R19E, Approximately 660 FNL & 1981 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 ACCOM-PANY 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.



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 (3211701) BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

NOTICE OF FILING APPLICATION
RE: In the Matter of Postrock Midconlinent
Production, LLC Application for
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Don L 33-1 located in Neosho County,

Kansas.
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Approximately 660 FNL & 1981 FWL, Reosho Counly Kansas.

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Gas commission.

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210 Park Avenue, Suite 2750 Oklahoma City, Oklahoma 73102 (405) 669-7704 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

October 30, 2012

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

RE: Approved Commingling CO101206

Meyer, Don L. 33-1, Sec. 33-T27S-R19E, Neosho County

API No. 15-133-27254-00-00

Dear Mr. Edwards:

Your Application for Commingling (ACO-4) for the above described well, received by the KCC on October 16, 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 CO101206 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