

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

Form ACO-4 Form must be typed March 2009

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

OPERATOR: License #		API No. 15				
Name:		Spot Description:				
Address	1:		Se	ec Twp S. R.,	East West	
Address 2:				_ Feet from _ North / _	South Line of Section	
City: State: Zip:+				_ Feet from	West Line of Section	
Contact F	Person:	County:				
Phone:	()	Lease Nam	ne:	Well #:		
1.	Name and upper and lower limit of each production interval to be com	mingled:				
	Formation:		(Perfs):			
	Formation:		(Perfs):			
	Formation:		(Perfs):			
	Formation:		(Perfs):			
	Formation:		(Perfs):			
2.	Estimated amount of fluid production to be commingled from each inte					
	Formation:	BOPD:		_ MCFPD:	BWPD:	
	Formation:	BOPD:		_ MCFPD:	BWPD:	
	Formation:	BOPD:		_ MCFPD:	BWPD:	
	Formation:	BOPD:		_ MCFPD:	BWPD:	
	Formation:	BOPD:		MCFPD:	BWPD:	
□ 3.□ 4.	Plat map showing the location of the subject well, all other wells on the the subject well, and for each well the names and addresses of the less Signed certificate showing service of the application and affidavit of pu	ssee of reco	rd or operato	r.	in a 1/2 mile radius of	
		abilication ac	roquirou iiri	W.W. 02 0 100a.		
	mingling of PRODUCTION ONLY, include the following:	¬				
	Wireline log of subject well. Previously Filed with ACO-1: Yes	_] NO				
<u> </u>	Complete Form ACO-1 (Well Completion form) for the subject well.					
For Com	mingling 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 comming	led.		
current in mingling i	IT: I am the affiant and hereby certify that to the best of my formation, knowledge and personal belief, this request for comstrue and proper and I have no information or knowledge, which stent with the information supplied in this application.		Subn	nitted Electronically		

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. Denied Approved 15-Day Periods Ends: __

KCC Office Use Only

Approved By:

Date: _

-	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	
	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 PCO2 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 m³ m³ 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 m³ m³ 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

KANSAS CORPORATION COMMISSION ORIGINAL OIL & GAS CONSERVATION DIVISION

September 1999 Form Must Be Typed

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 33344	API No. 15 - 205-26538 -00-00
Name: Quest Cherokee, LLC	County: Wilson
Address: 211 W. 14th Street	<u>ne</u> -nw Sec. 26 Twp. 28 S. R. 16
City/State/Zip: Chanute, KS 66720	660 feet from S / (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
Contractor: Name: Show Me Drilling	Lease Name: Trichler, Wayne A. Well #. 26-1
License: 33746	Field Name: Cherokee Basin CBM
Wellsite Geologist: Ken Recoy	Producing Formation: Bartlesville
Designate Type of Completion:	Elevation: Ground: 890 Kelly Bushing: n/a
New Well Re-Entry Workover	Total Depth: 1120 Plug Back Total Depth: 1112.68
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 1112.68
Operator:	foot don'th to surface w/ 140
Well Name:	Alta-Dig-11/24/08
Original Comp. Date: Original Total Depth:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Deepening Re-perf Conv. to Enhr./SWD	Chloride contentppm Fluid volumebbls
Plug Back Plug Back Total Depth	Dewatering method used
Commingled Docket No	
Dual Completion Docket No	Location of fluid disposal if hauled offsite:
Other (SWD or Enhr.?) Docket No	Operator Name:
5/1/06 5/2/06 5/15/06	Lease Name: License No.:
Spud Date or Date Reached TD Completion Date or Recompletion Date	Quarter Sec Twp S. R East West County: Docket No.:
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 1	the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, er 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. Submit CP-111 form with all temporarily abandoned wells.
All requirements of the statutes, rules and regulations promulgated to regulations are complete and correct to the best of my knowledge.	ate the oil and gas industry have been fully complied with and the statements
is on the complete and correct to the best of the knowledge.	
Signature: Junnifer & Amniau	KCC Office Use ONLY
Fitle: New Well Development Coordinator Date: 8/29/06	Letter of Confidentiality Received
Subscribed and sworn to before me this 29 day of	If Denied, Yes Date: RECEIVED
20 <u>06</u> .	Wireline Log Receive ANSAS CORPORATION COMMISSION
Notary Public: Seva Klauman (A. T	ERRA KLAUMAN UIC Distribution AUG 3 0 2006
S I Note	ry Public - State of Kansas DIC Distribution CONSERVATION DIVISION WICHITA, KS

ORIGINAL

perator Name: Que	st Cherokee, LL	c			e: Trichler, Wa	yne A.	Well #: <u>26-1</u>	
c. 26 Twp. 28	S. R. <u>16</u>	✓ East	t	County: W	ilson			
sted, time tool open mperature, fluid reco	and closed, flowing overy, and flow rate:	nd base of formation and shut-in pressu is if gas to surface te inal geological wells	res, v st, al	whether shut-in long with final o	pressure reached	i static level, hydr	ostatic pressure	s, bottom hole
rill Stem Tests Taker	*. *	Yes 🗸 N	0	[Z Log Forma	tion (Top), Depth	and Datum	Sample
amples Sent to Geo		☐ Yes 🗹 N	0	1	lame ee attached		Тор	Datum
ores Taken		☐ Yes 🔽 N	0					
ectric Log Run (Submit Copy)		✓ Yes N						
st All E. Logs Run:		!						
Comp. Density Neut Gamma Ray Neutro Dual Induction Log		, ,	ì					
			1	RECORD [New Used			
			set-c		e, intermediate, prod	uction, etc. Type of	# Sacks	Type and Percent
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	1	Weight Lbs. / Ft.	Setting Depth	Cement	Used	Additives
Surface	12-1/4	8-5/8"	-	20#	22	"A"	4	
Production	6-3/4	4-1/2		10.5#	1112.68	"A"	140	
		ADDITIO	DNAL	CEMENTING	SQUEEZE RECO	RD		
Purpose: Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Type of Cemen	1	#Sacks Use	d	Type and	I Percent Additives	
Shots Per Foot		TION RECORD - Bridg Footage of Each Inter			Acid, I	Fracture, Shot, Ceme (Amount and Kind of		rd Depth
4	932-933				200gal 15	%HCLw/ 320 t	obls 2%kcl wa	ater 932-933
TUBING RECORD 2-	Size 3/8"	Set At 903.28		Packer At	Liner Run	Yes ✓ I	No	
Date of First, Resumer	rd Production, SWD or	Enhr. Producii	ng Me	1 —	flowing √ Pui	mping 🔲 Gas	Lift Oth	ner (Explain)
Estimated Production Per 24 Hours	oil n/a	Bbls. Gas		Mcf 3	Water 86.5bbls	Bbls.	Gas-Oil Ratio	Gravity
Disposition of Gas		COMPLETION			Production I			ų).
Vented ✓ Sold (If vented, S	Used on Lease ubmit ACO-18.)	Othe	Hole (Spe	TERITA (VIII)	Dually Comp.	Commingled		

SHOW ME DRILLING COMPANY

LOG SHEET Trichler, WAYNE LOCATION# NE - NW 26-28-16 F Well NO#

FROM

TO

NOTES

0	10	Clay
10	17	Weathered Shale
<u> </u>	35	Shale
35	3 <i>5</i> 37	Shale line water
37	120	1 Shale
120	138	line
37 120 138	290	Shale
230	365	lime
365	490	Shale
490	493	COAL
પવ3	- 199	lims
499	510	Shale
510	512	Coal
512	Sle	line
516	540	Shale
540	<u> 55</u> 5	Dans Line
555	557	COAL
<u>558</u>	<u>557</u> 57	lime
538	590	Coal
540	595	line
595	597	Coal
597	605	Shale
605	608	Coal
1008	620	Shale RECEIVED RECEIVED RECEIVED
1020	642	C C C C C C C C C C C C C C C C C C C
Le42	45	COA! 10 2000
645	<u>455</u>	5 hale JAN
<u>655</u>	lileo	Caal & Shale conservation Ks
660	6 10	Shale
70	712	Coal
712	784	lime

SHOW ME DRILLING COMPANY

LOG SHEET Trichler, WAYNE LOCATION # NF-NW 26-28-16-E

well NO# 26-1

FROM	TO	NOTES	
434	7.88	Shale	
738	791	COAL	
791	805	Shale	
805	807	Coal	
807	825	Shale	
825	828	COAL	
828	850	Shale	
320	852	COAL	
857	875	Shale	
875	380	Coal	
380	900	Shale	·
. 900	903	COAL	
903	930	Shale	
930	932	COAL Bi	g GAS
932	1065	Shale	7
1065	1120	Miss lime	
	70		
	NO SA	imple was Able	to be taken
			GAS Check
			<u> 550 - 0</u>
			600-0
			Le10-0
			1e20 - 0
		CEIVED COMMISSION	740-0
		CORPORATION	720-0
		KANSAS CORPORATION COMMISSION KANSAS CORPORATION TON DIVISION JAN 1 1 2008	800-0
		CONSERVATION DIVISION	920-0
		COLE. MICH.	340-0
			860-0
			930 - Lot's of
*			A 04 10 11 11



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

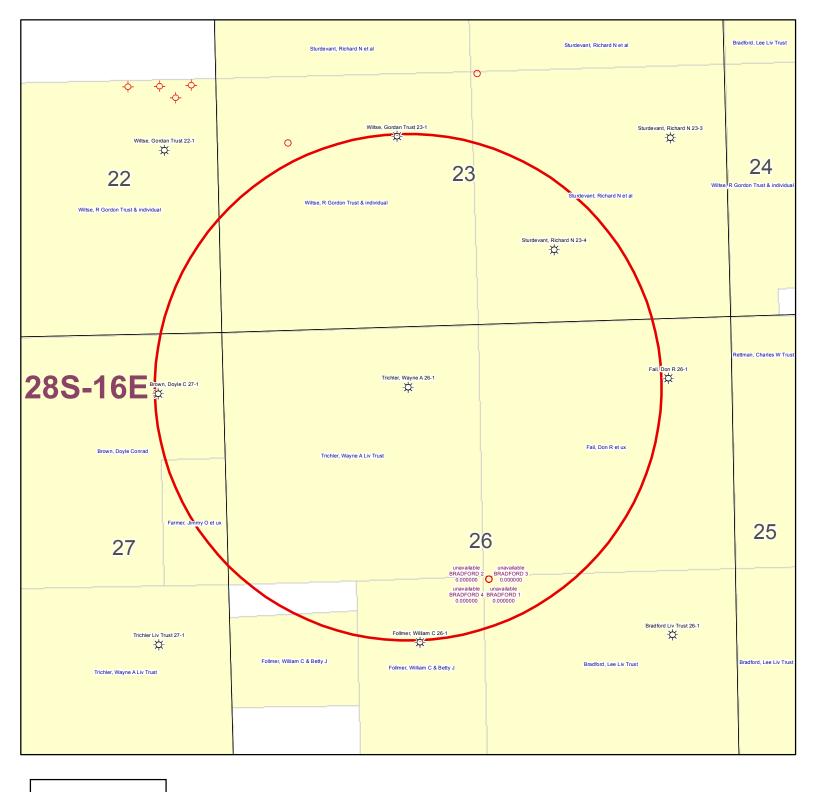
TICKET	NUMBER	1	4	8	4
	MOMPLI	-	┰	$\mathbf{\mathbf{\mathcal{C}}}$	

FIELD TICKET REF #

FOREMAN _ <u>つい</u>

TREATMENT REPORT & FIELD TICKET CEMENT

DATE 5-15-06 FOREMAN/ OPERATOR. G JOR R TIM. A RUBERT. CJ DAVID. C JCVSY. H MANEYICK, D JOB TYPE LUNGSTI	TRICHIER SIME OUT 7.15 7.00 1.15 6.30 7.00 7.15	L NAME & NUMBER Sille M N E LESS LUNCH	26-1 TRUCK # 903388 903255 903256		TOWNSHIP RAN 28 /6 TRUCK HOURS 6 C 25	
FOREMAN/ OPERATOR. G JOR ? T.M. A Rubert. UJ DAVID. C JCVIY. H MAYEVICK D	TIME IN OUT 7.15 7.00 7.00	LESS	TRUCK # 903388 903255	TRAILER	TRUCK HOURS G C · 25	EMPLOYEE SIGNATURE Crosy Ifra
Tim A Rubert . W DAVID . C JCVIY . H MAYEVICK D	TIME IN OUT 7.15 7.00 7.00	LESS	# 903388 903255		HOURS 6	SIGNATURE,
Too R. Tim. A Rubert. W DAVID. C Jevry. H MAYEVICK.D	7:15 7:00 1:15 6:30 7:00	LUNCH	903388 903255	#	C 25	Crontha
JOR R TIM. A Robert. W DAVID. C Jevsy. H MAYEVICK.D	7.00 1:15 6:30 7:00		903255		6.25	gor Blockout
DAVID. C Jevry H MAYEVICK D	6:30				6.75	
Rubert . W. DAVID C Jevry . H MANEYICK.D	7:00					and the past
DAVID. C Jerry H MANERICK.D			i Little Stronger		4.25	TO AMEDIA
Jersy H MAYERICK,D	17:15	7	Programme and	2 - 24/62	1	March Mar
MAYEVICKD			903/39	932452	- 6	William Denta
MAYEVICKD	6:30		903/06		6.75 6	tery france
JOB TYPE Langsti	6:45 V		1 Cx+va 1		1 0-5	H'/2 105
	HOLE SIZE 63		HOLE DEPTH		NG SIZE & WEIGHT	1/2 /0.5
CASING DEPTH 1112	2.68 DRILL PIPE	T	TUBING		R	
SLUBBY WEIGHT	15 SLURRY VOL	V	WATER gal/sk	CEME	ENT LEFT in CASING	G
DISPLACEMENT /7	74 DISPLACEMENT	·SI N	VIIX PSI	RATE	4 bpm	
MEINIAHRO:	prem gol Swept 12 bbl dye np. Pump wipe	to Surfi	ace. TNS+A	Hed Cement	- head RAI	V 25K5 gel
KAN & SKS P	12 July	d 160	5K5 of 12	ment tri s	+ due To	surface.
tollowed by	12 ppl dye	750	- 1 11 00	4 - 1	Flactsha	0
HUSh pul	np. Tump wipe	e plug	10 bottom	1 395	1 10001 3 116	
						
• .						
	1112 68	F1 41/2 C	casing			
	04	CONTrali	Zer<			
93/300	3 /1	Casing +				
607210	3 h/	Casina				
		3				TOTAL
ACCOUNT CODE	QUANTITY or UNITS		DESCRIPTION OF SE	ERVICES OR PRODUC	<u></u>	AMOUNT
	6:25 hr	Foreman Pickup				
903388	6.75 hr	Cement Pump Truc	ck			
903206	6.25 hr	Bulk Truck				
1104	140 SK	Portland Cement				
1124	, , , , , , , , , , , , , , , , , , , ,	50/50 POZ Blend (Cement			
1126,)	OWC - Blend Cerr	191 L	Nipor		
1110	15 SK	Gilsonite				
1107	1.5 SK	Flo-Seal		RECE	IVED COMMISSION	
1118	4 SK	Premium Gel		RECE KANSAS CORPORA	HOLE OSSETTION	
1215A	1901	KCL		AUG 3	0 2006	
1 1210/1 1	35K	Sedium Silicate	calchbride		ION DIVISION	
	, — — ·			CONSERVAT	IOM DIAISION	1
1111B	7000 cal	City Water		A DOLINGT	TA KS	
1111B 1123	7000gs1	City Water Transport Truck		MCF	ITA, KS	
1111B 1123 903139	7000 gal			MICE	ITA, KS	
1111B 1123	7000gs1	Transport Truck		AICF	ITA, KS	



KGS STATUS

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

Trichler, Wayne A 26-1 26-28S-16E 1" = 1,000'

POSTROCK



Current Completion

SPUD DATE: 5/1/2006

COMP. Date: 5/15/2006

WELL : Trichler, Wayne A 26-1

FIELD : Cherokee Basin

STATE : Kansas COUNTY : Wilson

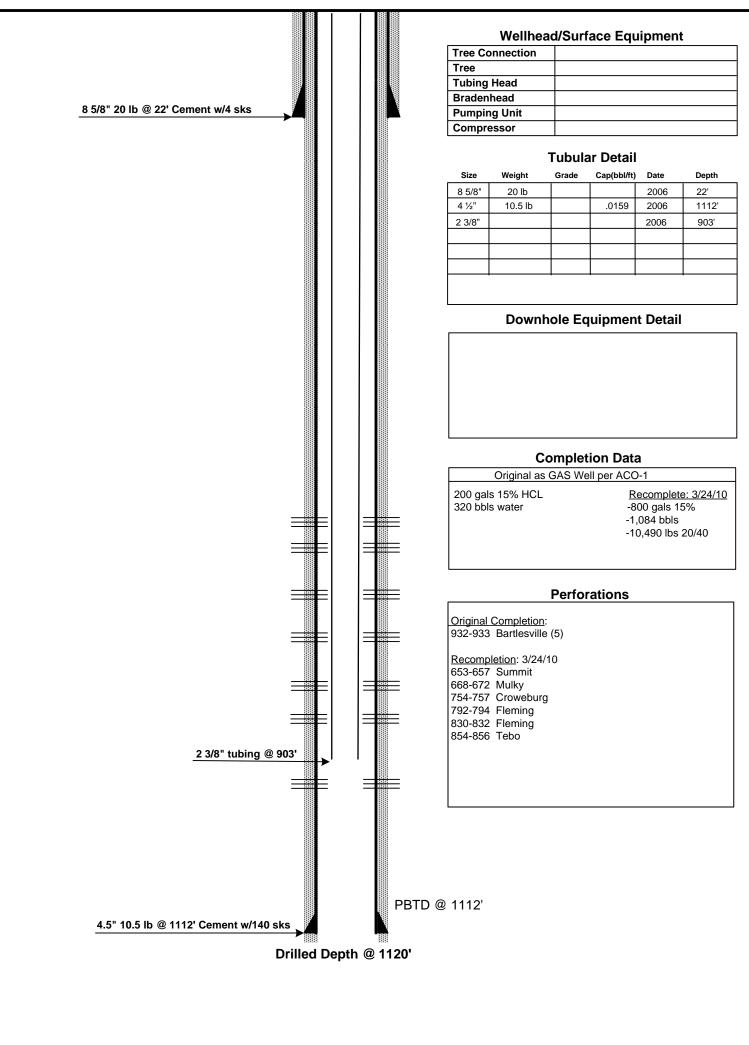
PREPARED BY: POSTROCK

APPROVED BY: _

API: 15-205-26538-00-00

LOCATION: 26-28S-16E (NE,NW)

ELEVATION: 890'



DATE: Oct, 2012

DATE:_

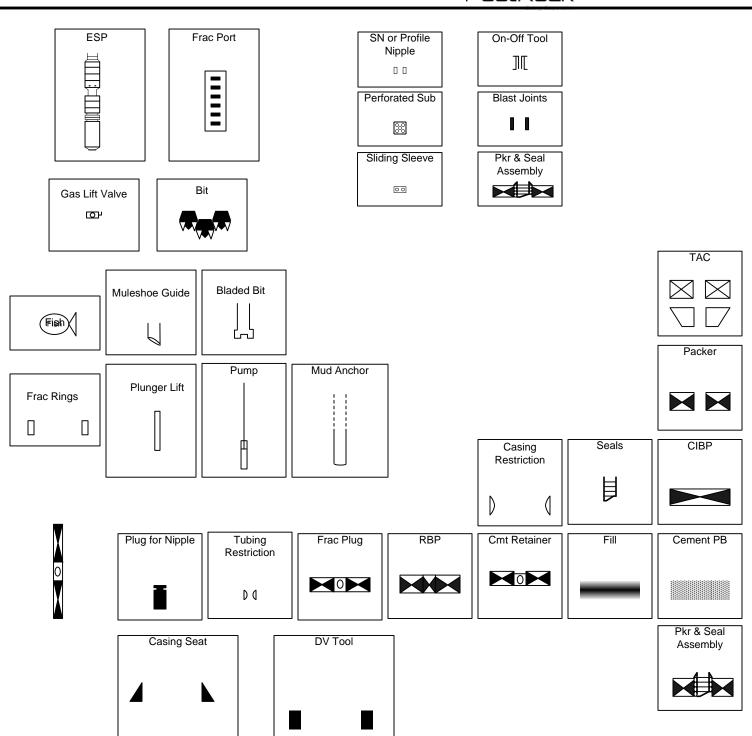


POSTROCK



LEGEND

PostRock[®]



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 9th of

November 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

9th day of November, 2012

PENNY L. CASE

Notary Public - State of Kansas

My Appt. Expires 5/28/2014

Notary Public Sedgwick County, Kansas

Printer's Fee : \$132.40

LEGAL PUBLICATION

PUBLISHED IN THE WICHITA EAGLE NOVEMBER 9, 2012 (3216880) BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

OF THE STATE OF KANSAS

NOTICE OF FILING APPLICATION

RE: In the Malter of Postrock Midcontinent

Production, LLC Application for Commingling of

Production in the Trichler, Wayne A 26-1 located

In Wilson County, Kensas

In Wilson 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 filled an application to commingle the Summit, Mulky, Croweburg, Fleming, Tebo and Bartlesville producing formations at the Trichler, Wayne A 26-1, located in the SE NW NE NW, S26-T28S-R16E, Approximately 631 FNL & 1926 FWL, Wilson County, Kansas.

Any persons who object to or protest this application shall be required to file their objections or profest 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 profests 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 tile 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

PROOF OF PUBLICATION

STATE OF KANSAS Wilson County - SS

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

THAT said newspaper has been published at least weekly fifty (50) times a year and has been so published for at least five years prior to the first publication of the attached notice:

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

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

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

0/1/2/

1st publication was made on the	day of
No	uember ₂₀ 12
2nd publication was made on the	day of
	. 20
3rd publication was made on the	day of
	. 20
4th publication was made on the	day of
	, 20
5th publication was made on the	day of
	. 20
6th publication was made on the	day of
	.20
TOTAL PUBLICATION FEE:	, .
(Signed) Joseph S. Ka	elph
Subscribed and sworn to before me, this	· (111 /
November	$\frac{1}{120}$
Rita M. E	elfu (Notary Public)
My commission expires dug	30 2014

Ü

(Published in the Wilson County Citizen on Thursday, November 8, 2012.)

BEFORE THE STATE CORPORATION
COMMISSION OF THE STATE OF KANSAS

NOTICE OF FILING APPLICATION

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Postrock Midcontinent Production, LLC 210 Park Avenue, Suite 2750 Oklahoma City, Oklahoma 73102 (405) 660-7704 76 1 cpy



TRICHLER, WAYNE A 26-1

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FORMATION:	TEBO	(PERFS):	854 -	856			
FORMATION:	BARTLESVILLE	(PERFS):	920 -	924			
FORMATION:	BARTLESVILLE	(PERFS):	932 -	936			
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TRICHLER, WAYNE A 26-1-APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS

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TRICHLER, WAYNE A 26-1

26-28S-16E

Tract in NW SW

Floyd Arthur & Margaret Jeanne Russell

14465 Scott Rd Altoona, KS 66710

fidavit of Notice Served	
: Application for: APPLICATION FOR COM	MINGLING OF PRODUCTION OR FLUIDS ACO-4
Well Name: TRICHLER, WAYNE A 26-1	Legal Location: SENWNENW S26-T28S-R16E
e undersigned hereby certificates that he / she is a duly autho	orized agent for the applicant, and that on the day 26TH of NOVEMBER
012 , a true and correct copy of the application	referenced above was delivered or mailed to the following parties:
te: A copy of this affidavit must be served as a part of the ap	plication.
Name	Address (Attach additional sheets if necessary)
EE ATTACHED	
ther attest that notice of the filing of this application was publ	ished in the THE WILSON COUNTY CITIZEN , the official county publicatio
WILSON	county. A copy of the affidavit of this publication is attached.
ned this 267H day of NOVEMBER	2012
	() as Morris
	Applicant or Duly Authorized Agent
Subscribed ar	nd sworn to before me this 27th day of NOVEMBER , 2012
	Quil. 2 Beals
JENNIFER R. BEAL	Notary Public Y. Seal My Commission Expires: Quely 20, 20/16
OFFICIAL MY COMMISSION EXPIRES	My Commission Expires:

TRICHLER, WAYNE A 26-1

26-28S-16E

Tract in NW SW

Floyd Arthur & Margaret Jeanne Russell

14465 Scott Rd Altoona, KS 66710 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

December 12, 2012

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

RE: Approved Commingling CO121207

Trichler, Wayne A. 26-1, Sec. 26-T28S-R16E, Wilson County

API No. 15-205-26538-00-00

Dear Mr. Edwards:

Your Application for Commingling (ACO-4) for the above described well, received by the KCC on December 10, 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 Bartlesville 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 CO121207 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