

### 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)

OPERA	TOR: License #	API No. 15					
Name:_		Spot Description: _					
Address	31:		_ Sec Twp	_S. R East West			
Address	3 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:	Wel	II #:			
1.	Name and upper and lower limit of each production interval to	be commingled:					
	Formation:	(Perfs):					
	Formation:	(Perfs):					
	Formation:	(Perfs):					
	Formation:	(Perfs):					
	Formation:	(Perfs):					
2.	Estimated amount of fluid production to be commingled from e						
	Formation:			BWPD:			
	Formation:	BOPD:	MCFPD:	BWPD:			
	Formation:			BWPD:			
	Formation:	BOPD:	MCFPD:	BWPD:			
	Formation:	BOPD:	MCFPD:	BWPD:			
<ul><li>□ 3.</li><li>□ 4.</li></ul>	Plat map showing the location of the subject well, all other well the subject well, and for each well the names and addresses of Signed certificate showing service of the application and affide	of the lessee of record or ope	erator.	ses within a 1/2 mile radius of			
For Cor	mmingling 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	<del>_</del>					
0.	Complete Form 7000 F (World Completion Tollin) for the Subject	won.					
For Con	mmingling 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 com-	mingled.				
current in mingling	VIT: I am the affiant and hereby certify that to the best of my nformation, knowledge and personal belief, this request for compistrue and proper and I have no information or knowledge, which sistent with the information supplied in this application.	Sı	ubmitted Electron	nically			
KCC	C Office Use Only			it in the application. Protests must be te filed wihin 15 days of publication of			
∐ De	enied Approved	the notice of application.					

Date: \_

Approved By:

15-Day Periods Ends: \_\_

-	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.	<b>————</b>		
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 <sup>+</sup>	(mg/l)*	19,433.00	27,381.00	26,534.00	25689.00	24220.00	24654.20	Initial(BH)	Final(WH)	SI/SR
11	K <sup>+</sup> (if not known =0)	(mg/l)						0.00	Saturation Index	values	(Final-Initial)
	Mg <sup>2+</sup>	(mg/l)	1,096.00	872.00	1,200.00	953.00	858.00	995.91		lcite	
	Ca <sup>2+</sup>	(mg/l)	1,836.00	2,452.00	2,044.00	1920.00	1948.00	2040.23	-0.73	-0.60	0.13
	Sr <sup>2+</sup>		1,050.00	2,432.00	2,044.00	1720.00	1740.00				0.13
	Ba <sup>2+</sup>	(mg/l)						0.00	Ба	rite	
.,		(mg/l)						0.00			
	Fe <sup>2+</sup>	(mg/l)	40.00	21.00	18.00	82.00	90.00	50.21		lite	
	Zn <sup>2+</sup>	(mg/l)						0.00	-1.77	-1.80	-0.03
18	Pb <sup>2+</sup>	(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 <sub>4</sub> <sup>2-</sup>	(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 <sub>2</sub> 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 <sub>2</sub> 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/ <sup>0</sup> 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/ <sup>0</sup> 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/ <sup>0</sup> 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/ <sup>0</sup> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> S Gas Total H <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> 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 <sub>2</sub> S Gas Total H <sub>2</sub> Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated \$\mathbb{\textit{Z}}\text{Aligner}\text{Limits} = \mathbb{\text{Limits}} = \mathbb{L}\text{Inions}	(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 <sub>2</sub> 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  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 <sup>3</sup> 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 <sub>2</sub> S Gas Total H <sub>2</sub> 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 Converter 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 <sub>2</sub> 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 <sup>3</sup> 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 <sub>2</sub> in Brine	246	220	264	422	405	401
Ionic Strength	1.12	1.48	1.46	1.38	1.31	1.31
Temperature (°F)	89	89	89	89	89	89
Pressure (psia)	50	50	120	120	120	119

### **Saturation Index**

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

### PTB

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

# CONFIDENTIAL

### KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

September 1999
Form Must Be Typed

### **WELL COMPLETION FORM**

**WELL HISTORY - DESCRIPTION OF WELL & LEASE** 

Operator: License #	API No. 15 - <sup>133-26839-0000</sup>
Name: Quest Cherokee, LLC	County: Neosho
Address: 211 W. 14th Street	
City/State/Zip: Chanute, KS 66720	660 feet from S / N circle one) Line of Section
Purchaser: Bluestem Pipeline, LLC	660 feet from E/ W (circle one) Line of Section
Operator Contact Person: Jennifer R. Ammann	Footages Calculated from Nearest Outside Section Corner:
	(circle one) (NE) SE NW SW
, , , , , , , , , , , , , , , , , , ,	
License: 33837	Field Name: Cherokee Basin CBM
Contractor: Name: TXD  License: 33837  Wellsite Geologist: Ken Recoy	Producing Formation: Multiple
Designate Type of Completion:	Elevation: Ground: 992 Kelly Bushing: n/a
New Well Re-Entry Workover	Total Depth: 1024 Plug Back Total Depth: 1008.33
OilSWDSIOWTemp. Abd.	Amount of Surface Pipe Set and Cemented at 20 Feet
Gas ENHR SIGW	Multiple Stage Cementing Collar Used?
Dry Other (Core, WSW, Expl., Cathodic, etc)	If yes, show depth setFeet
Other (Core, WSW, Expl., Calnodic, etc)	If Alternate II completion, cement circulated from 1008.33
Operator:	feet depth to surface w/ 135 sx cmt.
Well Name:Original Total Depth:	Drilling Fluid Management Plan AHTINT 3 - 1808
	/ Land Machine Constitution with the Property of the Property
Deepening Re-perf Conv. to Enhr./SWD Plug Back Plug Back Total Depth	Chloride content ppm Fluid volume bbls
	Dewatering method used
Commingled Docket No.	Location of fluid disposal if hauled offsite:
Dual Completion Docket No	Operator Name:
Other (SWD or Enhr.?) Docket No	Lease Name:License No.:
5/22/07 5/26/07 5/29/07	Quarter Sec Twp S. R
Spud Date or Date Reached TD Completion Date or Recompletion Date	County: Docket No.:
	bosher to
Kansas 67202, within 120 days of the spud date, recompletion, workov Information of side two of this form will be held confidential for a period of	th the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, ver or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. 12 months if requested in writing and submitted with the form (see rule 82-3-s and geologist well report shall be attached with this form. ALL CEMENTING s. Submit CP-111 form with all temporarily abandoned wells.
All requirements of the statutes, rules and regulations promulgated to regul nerein are complete and correct to the best of my knowledge.	late the oil and gas industry have been fully complied with and the statements
Signature: Gennifer R. Ammann	KCC Office Use ONLY
Fitle: New Well Development Coordinator Date: 9/11/07	Letter of Confidentiality Received
Subscribed and sworn to before me this 11th day of Sockmble	/ If Denied, Yes Date:
20 07 .	Wireline Log Received RECEIVED
	Geologist Report Reciff@AS CORPORATION COMMISS
Notary Public: Dex ray Klauman	IIIC Distribution
Date Commission Expires: 8-4-2010 A. TERR	SEP 1 2 2007
Notary Publ	lic - State of Kansas CONSERVATION DIVISION
My Appt. Expires	8-4-2010 WICHITA, KS

### Side Two

Operator Name: Qu	est Cherokee, LL	<u>C</u>		Lease	Name:_	Naltermire Livi	ng Trust	Well #: <u>1-1</u>	ì
Sec Twp2			t 🗌 West		/: Neosh				<del></del>
INSTRUCTIONS: Si tested, time tool ope temperature, fluid red Electric Wireline Log	n and closed, flowing covery, and flow rate	g and shu s if gas to	t-in pressures, surface test, a	whether sh long with f	nut-in pre	ssure reached	static level, hydr	ostatic pressure	es, bottom hole
Drill Stem Tests Take		Y	es ☑ No		✓L	og Format	ion (Top), Depth	and Datum	Sample
Samples Sent to Ge	ological Survey	□ Y	es 🗹 No		Nam See	e attached		Тор	Datum
Cores Taken Electric Log Run (Submit Copy)		□ Y □ Y	es No						
List All E. Logs Run:									
Compensated Dual Induction Gamma Ray N		n Log							
		Bene	CASING ort all strings set-c		□ Ne	_	ction etc		
Purpose of String	Size Hole Drilled	Si	ze Casing	Wei	ght	Setting	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12-1/4	8-5/8"	t (In O.D.)	22	/ Ft.	Depth 20	"A"	5	Additives
Production	6-3/4	4-1/2		10.5		1008.33	"A"	135	
L		<u> </u>	ADDITIONAL	CEMENTII	NG / SQL	JEEZE RECOR	_	1	
Purpose:  Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Туре	of Cement	#Sacks	Used		Type and	Percent Additives	
Shots Per Foot			RD - Bridge Plug Each Interval Per		ee Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)				rd Depth
4	895-897					300gal 15%HCLw/ 33 b	bis 2%kci water, 497bbis wate	r w/ 2% KCL, Biocide, 5600	# 20/40 sand 895-897
4	637-639/609-612					300gal 15%HCLw/ 37 b	blis 2%kci water, 505bbls wate	r w/ 2% KCL, Biocide, 3300	# 20/40 sand 637-639/609-61
4	511-515/501-505					300gal 15%HCLw/ 32 b	bis 2%kci water, 758bbis wate	r w/ 2% KCL. Blocke, 7900	# 20/40 sand 511-515/501-50
TUBING RECORD	Size	Set At		Packer A	At	Liner Run			
	3/8" d Production, SWD or E	956 inhr.	Producing Meti	n/a  nod	Flowing	g Pump	∐Yes ✓ No		er <i>(Explain)</i>
Estimated Production Per 24 Hours	Oil n/a	Bbls.	Gas Omcf	Mcf	Wate			Gas-Oil Ratio	Gravity
Disposition of Gas	METHOD OF C	OMPLETION				Production Inte	erval		
Vented ✓ Sold (If vented, So	Used on Lease		Open Hole Other (Speci			Dually Comp.	Commingled	· · · · · · · · · · · · · · · · · · ·	



DATE

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



TICKET NUMBER 2210

FIELD TICKET REF #

SECTION TOWNSHIP RANGE

COUNTY

C20350

### TREATMENT REPORT & FIELD TICKET CEMENT

WELL NAME & NUMBER

5-29-07	Walter	nire	Liv. +vus	ST 1-1		١	קכ	19		NO
FOREMAN / OPERATOR	TIME	TIME OUT	LESS LUNCH	TRUCK #		TRAILER #		UCK URS		EMPLOYEE SIGNATURE
Joe B	6:45	9:40	5	903427			3		1	oe Blanka
MAVERICK . D	7:00	1		903197			2	75		1/2/1/20
Tyler . 6	7:00			903206			1		1	
Gary . C	7:00			931500			1		Mara.	
MOS directors	7:15	9:30	2	903139	9	32452	2.	25	M	Sarver
DIOB TYPE LUNCSTVING HOLE SIZE 6 3/4 HOLE DEPTH 1024 CASING SIZE & WEIGHT 4/2 10.5  CASING DEPTH 1008.33 DRILL PIPE TUBING OTHER  SLURRY WEIGHT 14.5 SLURRY VOL WATER GAL/SK CEMENT LEFT IN CASING D  DISPLACEMENT/6.08 DISPLACEMENT PSI MIX PSI RATE 4 DPM  REMARKS:  TNSTAILED CEMENT head Rest ISK get 4 10 bbl dye 4 135 SKS of  Cement to get dye to Surface. Flush pump. Pump wiper plug to be set floatshae										
	1008	· 33	ft 472 Centra 472 flax	Cosing Lizers Lizers						
ACCOUNT CODE	QUANTITY or I	UNITS		DESCRIPTION OF SI	ERVIC	CES OR PRODU	СТ			TOTAL AMOUNT
9021127	<del></del>	h.c	Foreman Pickup							
903197	2.75	hir	Cement Pump Truck	k .						
903206	2.75	hr	Bulk Truck							
1104		5 sk	Portland Cement						_	
1124			50/50 POZ Blend C						1	
1126			-OWC - Blend-Ceme	ant L11/2 W.	pe	a plua			-	
1110	/ 3	3 5K	Gilsonite		1	1 )				
1107		_SK	Flo-Seal						.   -	
1118		SI<	Premium Gel						-	
1215A	10	<u> </u>	KCL							
1111B		3 <u>5</u> K	Sodium Silicate	Colchlori	de	<del>-</del>		REC	EIVE	D 455
1123	7000	<u> </u>	City Water				KANSA	AS CORPOR	ATION	COMMISSION
903139	2.75		Transport Truck							ĵ
932452	2.25	170	Transport Trailer					SEP 1	4 2	JU/
931500	2.75	hr	80 Vac					FAVRERVACE	ION DI	VISION
Ravin 4513								WICH	TA, KS	



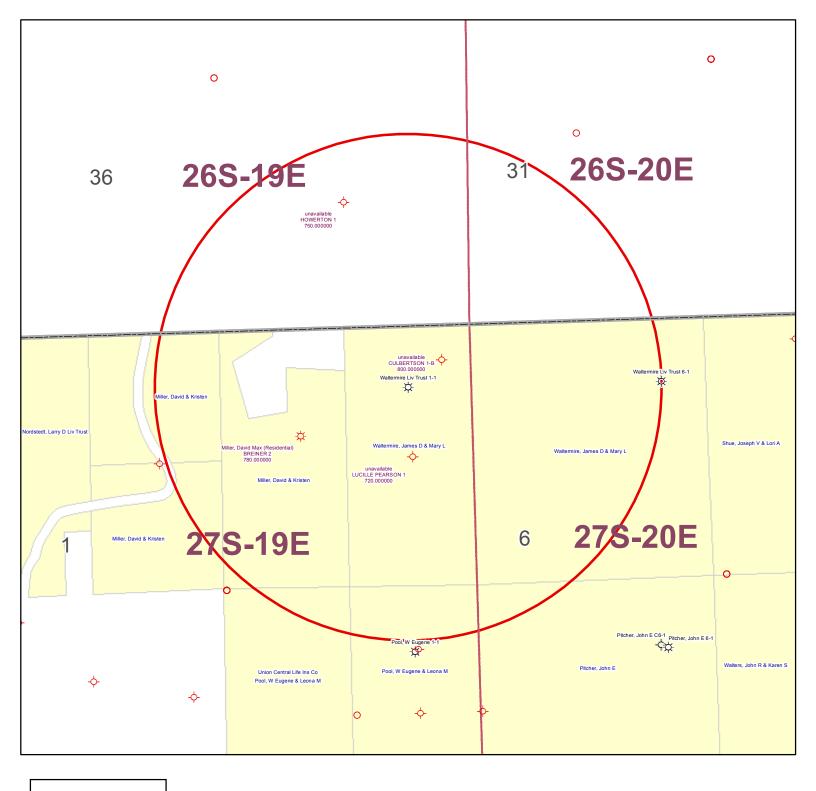
### TXD SERVICES LP DRILLERS LOG

### TXD SERVICES LP

RIG#	10	1	S. 1	Ť. 27	R.	19			TATAL COL
API#	133-2683	9	County:	Neosho			436'	no blow	
	Elev:	992'	Location	Kansas			467'	no blow	
					7.		498'	no blow	
Operator:	Quest Ch	erokee, LLC					529'	no blow	
Address:	9520 N. M	lay Ave, Suite	∋ 300	,			591'	no blow	·
	Oklahoma	a City, OK. 73	120	· · · · · · · · · · · · · · · · · · ·			622'	no blow	
Well#	1-1	<u>-</u>	Lease Name	Waltermi	ne Liv.	Trust	653'	no blow	·
Footage Local	tion	660	ft from the	N	Line		715'	no blow	
		660	ft from the	Ë	Line		746'	no blow	· · · · · · · · · · · · · · · · · · ·
<b>Drilling Contra</b>	ctor.	TXD	SERVICES	LP			808'	5 - 1"	57.7
Spud Date;	5/22/200	7	Geologist:				839'	2 - 3/4"	20
Date Comp:	5/26/200	7	Total Depth:	1025'			870'	no blow	
Exact spot Loc		NE NE					901'	slight blow	
							932'	6 - 1/2"	15.4
	Surface	Production		1 1 1 1 1 1 N 2 1 1 1 1 1 1 1 1 1 1 1 1		0 (1-12	1025'	GCS	
Size Hole	12-1/4"	6-3/4"				*			
Size Casing	8-5/8"	4-1/2"		. ~ (	n				
Weight	24#			W.			·		Acres Jan
Setting Depth	21'			P 0	1 <i>50</i> 3			*	
Type Cement	portland		.,,,,4	SEP 1	1810	vi i	····	- CA	2P 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Sacks				a nell	Jeg .		† · · · · · ·	~/	OPENA

State of the state of the state of			المراجع المراجع المراجع	Andrew Arts			The second	and the
Formation	Тор	Btm.	Formation	Тор	Btm.	Formation	Тор	Btm.
top soil	0	4	shale	432	433	coal	637	639
shale	4	25	b.shale	433		shale	639	
lime	25	50	lime	435		sand	657	666
shale	50	66	shale	442		shale	666	
lime	66	90	b.shale	443		coal	688	
shale	90	98	shale	445		sand	689	
lime	98	120	lime	460		shale	695	
shale	120	122	shale	471		b.shale	741	
b.shale	122	123	coal	480		shale	743	
shale	123	126	lime	481		sand	765	
lime	126	132	b.shale	502		coal	843	
sand	132	144	shale	504		sand	844	891
shale	144	287	coal	507		coal	891	892
b.shale	287	289	shale	508		shale	892	896
shale	289	309	lime	510		coal	896	897
lime	309	322	shale	514		shale	897	926
shale	322	340	b.shale	515		mississippi	926	1025
lime	340	350	shale	517	587	, , , , , , , , , , , , , , , , , , ,		
shale	350	414	coal	587	588			
lime	414		shale	588	607			
b.shale	416		b.shale	607	609	•		
coal	418		coal	609	610		-	
lime	419	432	shale	610				<del></del>
	812' added	water						

RECEIVED KANSAS CORPORATION COMMISSION



### **KGS STATUS**

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

Waltermire Liv Trust 1-1 1-27S-19E 1" = 1,000'

### **POSTROCK**



### **Current Completion**

SPUD DATE: 5/22/2007

COMP. Date: 5/29/2007 API: 15-133-26839-00-00

WELL : Waltermire Living Trust 1-1

FIELD : Cherokee Basin

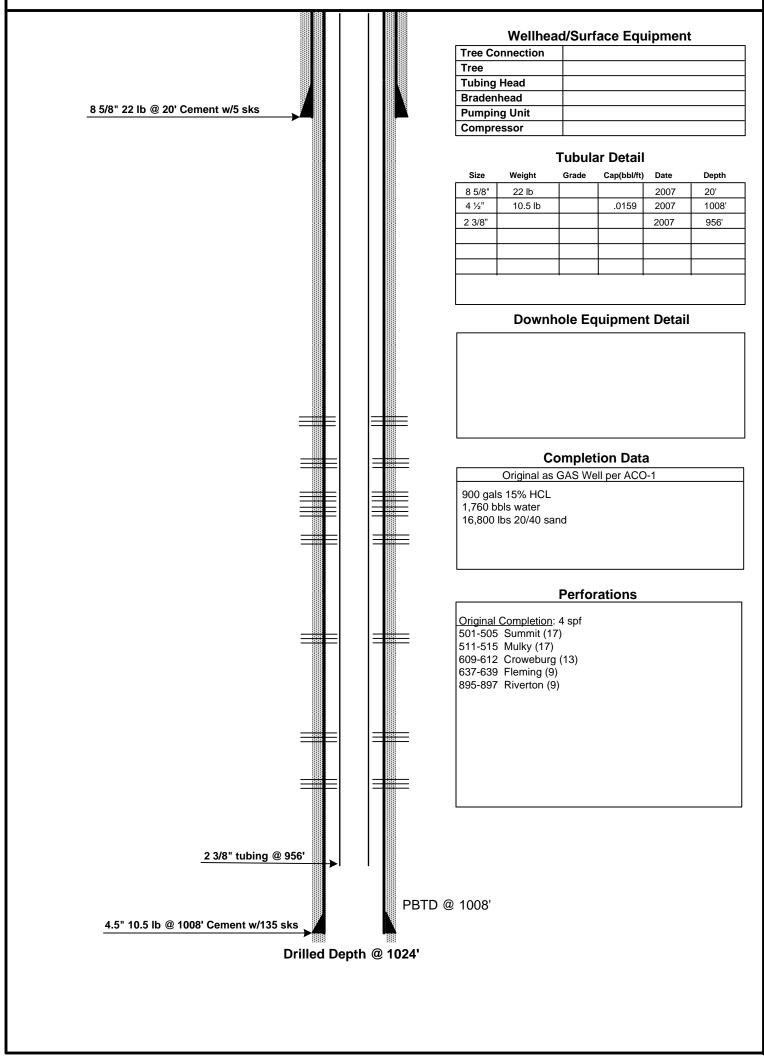
STATE : Kansas COUNTY : Neosho

PREPARED BY: POSTROCK

APPROVED BY: \_

: Neosho LOCATION: 1-27S-19E (NE,NE)

**ELEVATION: 992'** 



**DATE:** Oct, 2012

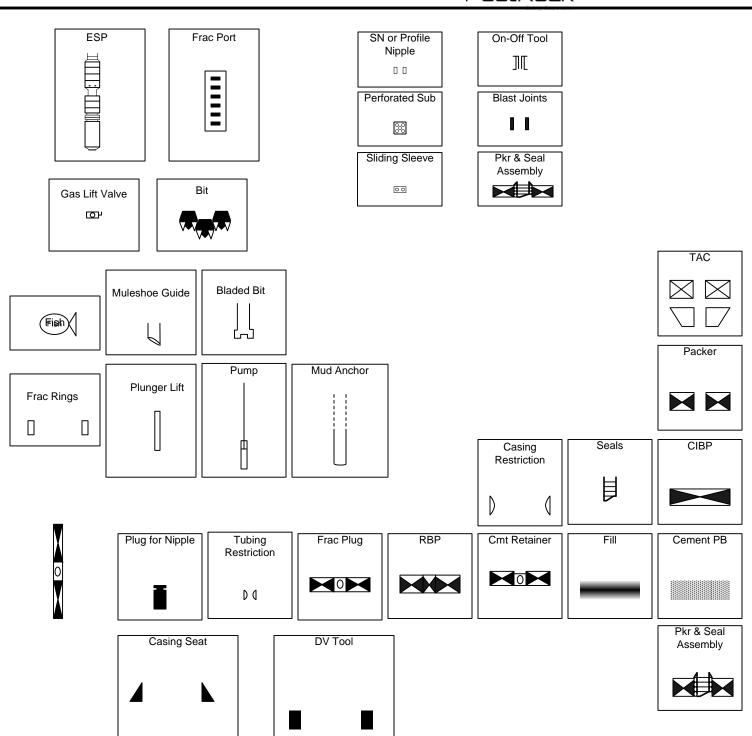
DATE:\_

## **POSTROCK**



### **LEGEND**

### PostRock<sup>®</sup>



FORMATION:	CATTLEMAN	(PERFS):	765 -	771		
FORMATION:	BARTLESVILLE	(PERFS):	796 -	- 800		
FORMATION:		(PERFS):				
FORMATION:		(PERFS):				
FORMATION:		(PERFS):				
FORMATION:		(PERFS):				
FORMATION:		(PERFS):				
FORMATION:		(PERFS):		- <u></u> _		
FORMATION:		(PERFS):				
FORMATION:		(PERFS):		- <u></u> _		
FORMATION:		(PERFS):				
FORMATION:		(PERFS):	-	-		
TOTAL VITAL TOTAL		(1 2 3).				
	MOUNT OF FLUID PRODUCTION TO CATTLEMAN	·	1 EACH INT	ERVAL MCFPD:	0 0 BWPD:	10
2 ESTIMATED A		BE COMMINGLED FROM			0 0 BWPD: 0 BWPD:	10 10
2 ESTIMATED AI FORMATION:	CATTLEMAN	BE COMMINGLED FROM	1.5	MCFPD:		
2 ESTIMATED AN FORMATION:	CATTLEMAN BARTLESVILLE	BE COMMINGLED FROM BOPD: BOPD:	1.5	MCFPD:	0 BWPD:	
2 ESTIMATED AI FORMATION: FORMATION: FORMATION:	CATTLEMAN BARTLESVILLE 0	BE COMMINGLED FROM BOPD: BOPD: BOPD:	1.5	MCFPD: MCFPD:	0 BWPD: BWPD:	
2 ESTIMATED AI FORMATION: FORMATION: FORMATION:	CATTLEMAN BARTLESVILLE 0 0	BE COMMINGLED FROM BOPD: BOPD: BOPD: BOPD:	1.5	MCFPD: MCFPD: MCFPD: MCFPD:	0 BWPD: BWPD: BWPD:	
2 ESTIMATED AI FORMATION: FORMATION: FORMATION: FORMATION:	CATTLEMAN BARTLESVILLE  0 0 0	BE COMMINGLED FROM BOPD: BOPD: BOPD: BOPD: BOPD: BOPD:	1.5	MCFPD: MCFPD: MCFPD: MCFPD: MCFPD:	0 BWPD: BWPD: BWPD: BWPD:	
2 ESTIMATED AI FORMATION: FORMATION: FORMATION: FORMATION: FORMATION:	CATTLEMAN BARTLESVILLE  0 0 0 0	BE COMMINGLED FROM BOPD: BOPD: BOPD: BOPD: BOPD: BOPD: BOPD:	1.5	MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD:	0 BWPD: BWPD: BWPD: BWPD: BWPD:	
2 ESTIMATED AI FORMATION: FORMATION: FORMATION: FORMATION: FORMATION: FORMATION:	CATTLEMAN BARTLESVILLE  0 0 0 0 0	BE COMMINGLED FROM BOPD: BOPD: BOPD: BOPD: BOPD: BOPD: BOPD: BOPD: BOPD:	1.5	MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD:	0 BWPD: BWPD: BWPD: BWPD: BWPD: BWPD:	
2 ESTIMATED AI FORMATION: FORMATION: FORMATION: FORMATION: FORMATION: FORMATION: FORMATION:	CATTLEMAN  BARTLESVILLE  0  0  0  0  0  0  0	BE COMMINGLED FROM BOPD:	1.5	MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD:	0 BWPD: BWPD: BWPD: BWPD: BWPD: BWPD: BWPD:	
2 ESTIMATED AI FORMATION:	CATTLEMAN  BARTLESVILLE  0 0 0 0 0 0 0 0 0 0	BE COMMINGLED FROM BOPD:	1.5	MCFPD:	0 BWPD: BWPD: BWPD: BWPD: BWPD: BWPD: BWPD: BWPD: BWPD:	

# WALTERMIRE LIVING TRUST 1-1-APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS Offset Operators, Unleased Mineral Owners and Landowners acreage (Attach additional sheets if necessary) Legal Description of Leasehold: SEE ATTACHED I hereby certify that the statements made herein are true and correct to the best of my knowledge and belief. Applicant or Duly Authorized Agent Subscribed and sworn before me this JENNIFER R. BEAL MY COMMISSION EXPIRES My Commission Expires:

LEGAL LOCATION SPOT CURR\_OPERA

S1-T27S-R19E SE NW NE Miller, David Max (Residential)

### NEOSHO

### <u>1-27S-19E</u>

tract in W2 NE

Christopher & Dixie Golay

14625 250th Rd Savonburg, KS 66772

ALLEN

### 36-26S-19E

S2 S&E of Big Creek

Loren Howerton

1776 900 St

Colony, KS 66015

SE4 N&W of Big Creek

SR Farm, LLC

5509 Golden Bear Dr Overland Park, KS 66223

### 31-26S-20E

SW4

Frank & Christine Hawkinson

3306 Alabama

Savonburg, KS 66772

Affidavit of Notice Served	
Re: Application for: APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS ACO-4	
Well Name: WALTERMIRE LIVING TRUST 1-1 Legal Location: SWNENENE S1-T27S-R19E	
The undersigned hereby certificates that he / she is a duly authorized agent for the applicant, and that on the day	
	,
, a due and concerces, or the application resistance desired or make a tractioning parties.	
Note: A copy of this affidavit must be served as a part of the application.	
Name Address (Attach additional sheets if necessary)	
MILLER, DAVID MAX (RESIDENTIAL) 14475 250TH RD, SAVONBURG	, KS 66772
SEE ATTACHED	
	icial county publication
of NEOSHO county. A copy of the affidavit of this publication is attached.	
Signed this	
Jess Maris	
Applicant or Duly Authorized Agent	
Subscribed and sworn to before me this day ofNOVEMBER	2012
Total D. Beal.	
JENNIFER R. BEAL MY COMMISSION EXPIRES  Notary Public  Notary Public	
7-20-2014 My Commission Expires: Quely 20, 2014	:

### **NEOSHO**

### 1-27S-19E

tract in W2 NE

Christopher & Dixie Golay

14625 250th Rd

Savonburg, KS 66772

ALLEN

### 36-26S-19E

S2 S&E of Big Creek

**Loren Howerton** 

1776 900 St

Colony, KS 66015

SE4 N&W of Big Creek

SR Farm, LLC

5509 Golden Bear Dr Overland Park, KS 66223

### 31-26S-20E

SW4

Frank & Christine Hawkinson

3306 Alabama

Savonburg, KS 66772

### **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 My Appt. Expires

Notary Public Sedgwick County, Kansas

Printer's Fee: \$134.80

### LEGAL PUBLICATION

PUBLISHED IN THE WICHITA EAGLE NOVEMBER 9, 2012 (3216878)
BEFORE THE STATE CORPORATION
COMMISSION

COMMISSION
OF THE STATE OF KANSAS
NOTICE OF FILING APPLICATION
RE: In the Matter of Postrock Midcontinent
Production, LLC Application for
Commission of Production in the
Waltermire Living Trust 1-1 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

persons whomever concerned.
You, and each of you, are hereby notified
that Postrock Midcontinent Production,
LLC has filed an application to commingle
the Symmit, Mulky, Croweburg, Fleming,
Riverton, Cattleman and Bartlesville producing
formations at the Waltermire Living Trust 1-1,
located in the SW NE NE, S1-7275-R19E,
Approximately 636 FNL & 657 FEL, Neosho
County, Kansas

Approximately 636 FNL & 657 FEL; Neosho County, Kansas.

Any persons who object to or profest fils application shall be required to file their objections or profest with the Conservation Division 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 profest this application are required to file a written profest with the Conservation Division of the Kansas Oil and Gas Commission.

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. appearance entire in rough potent regular consists or as individuals, appearing on their own behalf. Postrock Midcontinent Production, LLC 210 Park Avenue, Suite 2750 Oklahoma City, Oklahoma 73102 (405) 660-7704

## 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 Waltermire Living Trust 1-1 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, Riverton, Cattleman and Bartlesville producing formations at the Waltermire Living Trust 1-1, located in the SW NE NE NE, S1-T27S-R19E, Approximately 636 FNL & 657 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 ACCOMPANY ALL APPLICATIONS

## Affidavit of Publication A.

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 published in the regular and entire issue of sai per for consecutive, the first publications being made as aforesaid on the  November 2012, with subsequent publications being made lowing dates:	oublication day of
, 2012	, 2012
	. 2012
Phonda Howe	
Subscribed and sworn to and before me this	Notary Public
My commission expires: January 9, 2015	
Printer's Fee\$ 10.14  Affidavit, Notary's Fee\$ 3.00	_
Additional Copies\$  Total Publication Fees\$ 73.14	-

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 27, 2012

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

RE: Approved Commingling CO111207

Waltermire Living Trust 1-1 Sec. 1-T27S-R19E, Neosho County

API No. 15-133-26839-00-00

Dear Mr. Edwards:

Your Application for Commingling (ACO-4) for the above described well, received by the KCC on November 19, 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 CO111207 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