

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)

OPERAT	OR: License #	API No. 15		
Name:_		Spot Description: _		
Address	1:		_ Sec Twp	_S. R Bast West
Address	2:		Feet from No	orth / South Line of Section
City:			Feet from Ea	ast / West Line of Section
Contact F	Person:	County:		
Phone:	()	Lease Name:	We	II #:
1.	Name and upper and lower limit of each production interval to	be commingled:		
	Formation:	(Perfs):		
2.	Estimated amount of fluid production to be commingled from e			
	Formation:			BWPD:
	Formation:			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 well the subject well, and for each well the names and addresses of Signed certificate showing service of the application and affida	of the lessee of record or ope	erator.	ses within a 1/2 mile radius of
For Com	nmingling 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	_		
For Com	nmingling of FLUIDS ONLY, include the following:			
7.	Well construction diagram of subject well.			
8.	Any available water chemistry data demonstrating the compati	ibility of the fluids to be com-	mingled.	
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 comistrue and proper and I have no information or knowledge, which istent with the information supplied in this application.	Sı	ubmitted Electror	nically
	Office Use Only			st in the application. Protests must be the filed wihin 15 days of publication of

Date: _

Denied Approved 15-Day Periods Ends: __

Approved By:

-	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 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 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 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

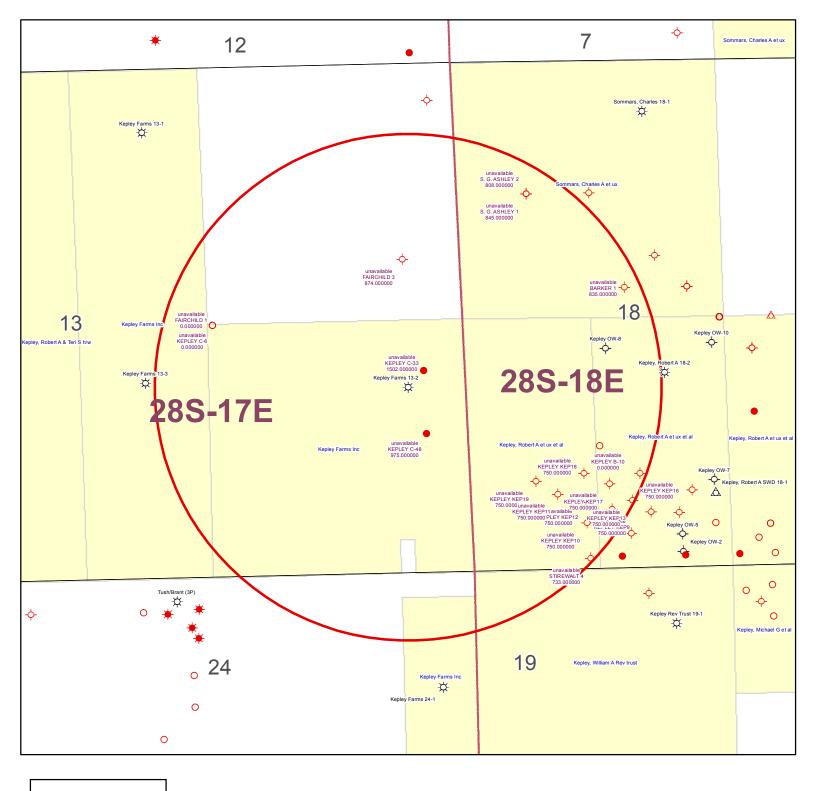
			Ratio			
	20%	20%	20%	20%	20	
Component (mg/L)	Brine 1	Brine 2	Brine 3	Brine 4	Brine 5	Mixed Brine
Calcium	1836	2452	2044	1920	1948	1952
Magnesium	1096	872	1200	953	858	865
Barium	0	0	0	0	0	0
Strontium	0	0	0	0	0	0
Bicarbonate	190	234	259	268	254	253
Sulfate	1	1	8	1	1	1
Chloride	36299	48965	47874	45632	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



KGS STATUS

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

Kepley Farms 13-2 13-28S-17E 1" = 1,000'

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

Form ACO-1 September 1999 Form Must Be Typed

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 33344	API No. 15 - 133-26435-00-00
Name: Quest Cherokee, LLC	County: Neosho
Address: 211 W. 14th Street	c _ ne _ se _ Sec. 13 _ Twp. 28 _ S. R. 17 _ V East _ West
<i>CO</i>	1980 feet from (S) / N (circle one) Line of Section
Bluestem Pipeline LLC	660 feet from (E) W (circle one) Line of Section
Operator Contact Person: Gary Laswell	Footages Calculated from Nearest Outside Section Corner:
Phone: (620) 431-9500	(circle one) NE SE NW SW
AD &) & M	Lease Name: Kepley Farms Well #: 13-2
License: 5831	Field Name: Cherokee Basin CBM
Wellsite Geologist: Ken Recoy	Producing Formation: Multiple
<u> </u>	Elevation: Ground: 965 Kelly Bushing: n/a
Designate Type of Completion: ∠ New Well Re-Entry Workover	Total Depth: 1139 Plug Back Total Depth: 1133.76
·	Amount of Surface Pipe Set and Cemented at 21.6 Feet
Oil SWD SIOW Temp. Abd.	
✓ Gas SIGW	Multiple Stage Cementing Collar Used?
Dry Other (Core, WSW, Expl., Cathodic, etc)	If yes, show depth set Feet
If Workover/Re-entry: Old Well Info as follows:	If Alternate II completion, cement circulated from 1133.76
Operator:	feet depth to surface w/ 130 sx cmt.
Well Name:	Drilling Fluid Management Plan
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 Back Plug Back Total Depth	Dewatering method used
Commingled Docket No	Location of fluid disposal if hauled offsite:
Dual Completion Docket No	·
Other (SWD or Enhr.?) Docket No	Operator Name:
2/23/06 2/27/06 3/6/06	Lease Name: License No.:
Spud Date or Date Reached TD Completion Date or	Quarter Sec. Twp. S. R. East West
Recompletion Date Recompletion Date	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 regula herein are complete and correct to the best of my knowledge.	ate the oil and gas industry have been fully complied with and the statements
Signatura I'm (mary)	KCC Office Use ONLY
Signature	ROC Office use ONLY
Title: Head of Opérations Date: 6/22/06	Letter of Confidentiality Received
Subscribed and sworn to before me this 22 day of	If Denied, Yes Date:
20_06.	Wireline Log Received
Notary Public: Dennife K. almmann	Geologist Report Received
D 1 20 200 TO	
Date Commission Expires: Tylly (X) 2007	Notary Public - State of Kansas
My A	Appt. Expires 7-30-09

Operator Name: Qu	est Cherokee, LL	.C		Lease	e Name:.	Kepley Farm	S	Well #:13-2	2	·
Sec. 13 Twp.			West	Count	y: _Neos	ho				
INSTRUCTIONS: Stested, time tool operature, fluid re Electric Wireline Log	en and closed, flowin covery, and flow rate	g and shut-i es if gas to s	n pressures, urface test, a	whether s long with	hut-in pr	essure reached	static level, hyd	rostatic pressur	es, botto	om hole
Drill Stem Tests Take		_ Yes	s 🗹 No		∑ L	og Format	tion (Top), Depth	and Datum		Sample
Samples Sent to Ge	ological Survey	☐ Yes	s ✓ No		Nam See	ne Attached		Тор		Datum
Cores Taken Electric Log Run (Submit Copy)		☐ Yes ✓ Yes	_							
List All E. Logs Run:										
Comp. Density Dual Induction Gamma Ray N	Log									
		Report		RECORD		ew Used ermediate, produc	ction, etc.			
Purpose of String	Size Hole Drilled	Size	Casing In O.D.)	We	ight , / Ft,	Setting Depth	Type of Cement	# Sacks Used		and Fercent Additives
Surface	12-1/4"	8-5/8"	····	20#	.,, .	21.6	"A"	4		
Production	6-3/4"	4-1/2		10.5#		1133.76	"A"	130		
			ADDITIONAL	CEMENT	ING / SQI	UEEZE RECOR	D		<u> </u>	
Purpose: Perforate Protect Casing Plug Back TD	Depth Top Bottom		f Cement	#Sacks				Percent Additives		
Plug Off Zone										
Shots Per Foot			- Bridge Plug ch Interval Per)		acture, Shot, Ceme mount and Kind of N		d	Depth
4	1049-1052/995-	997/787-7	89/749-752	2/729-73	1	400gal 15% HCL w/ 27 t	obls 2% kcl water, 402bbls wat	er w/ 2% KCL, Blocide 7700	# 30/70 sand	1049-' 052/995-997
4	662-666/650-65	4				400gal 15% HCL w/ 40 b	bis 2% kcl water, 470bbis wate	or w/ 2% KCL, Biocide 10400	# 30/70 sand	787-789/749-752
									•	729-731
						400gal 15% HCL w/ 33 b	bits 2% lccl wetter, 600bbits water	r w/ 2% KCL, Biocide 10950	# 30/70 sand	662-666/650-654
TUBING RECORD 2-	Size 3/8"	Set At 1078	ſ	Packer /	At	Liner Run	Yes V	0		
Date of First, Resumer 3/20/06	rd Production, SWD or I	Enhr.	Producing Met	hod	Flowin	g 📝 Pump	ing Gas L	ift Othe	er (Explain	1)
Estimated Production Per 24 Hours	Oil	Bbls.		Mcf	Wate		Bbls.	Gas-Oil Ratio		G avity
Disposition of Gas	n/a METHOD OF 0		24.8mcf		143.	7bbls Production Inte	nyal			
Vented Sold	Used on Lease	JOINITE HON	Open Hole	√ Perl	f.	Production Inte	rvai Commingled			
	ubmit ACO-18.)		Other (Speci							



DATE: 02/27/2006

		Data	from Driller	's Log		MOKAT I	Prilling R	ig #2.
WELL NAME	Kepley Farms	SECTION:	13	REPORT	≱ :	SPUD DAT	E:	2/23/200
WELL#:	13-2	TWP:	285	DEPTH:	1139			
FIELD:	Cherokee Basin	RANGE:	17E	PBTD:				
COUNTY:	Neosho	ELEVATION:	965	FOOTAGE	1980	FT FROM	South	LINE
	Kansas	API#:	15-133-26435-00-00			FT FROM	×	LINE
	терионо		15-155-20155-00-00		uuu		NE SE	
ACTIVITY DES		th, drilled to TD 1139 ft. or	ı 02/27/2006.					
GAS SHOWS:		Gas Measurement			Net Gas / C	omments		
Mulberry Coal		0 mcf/day @		FT. *				
exington Shale		3 mcf/day @		FT. *		rom this area		
Summit Shale &		6 mcf/day @	645-654			rom this area		
Mulky Shale & C	Coal	7 mcf/day @	660-663		1 mcf/day f	rom this area	. Gas test	at 670 ft.
Bevier Coal		7 mcf/day @	724-725					
endigris Limes		7 mcf/day @	742-746	S FT.				
roweburg Shale	e & Coal	7 mcf/day @	748-752					
leming Coal		7 mcf/day @	775-777					
Veir Coal		7 mcf/day @	840-842					
Bartlesville Sand	<u> </u>	7 mcf/day @		FT. *				
lowe Coal		7 mcf/day @	990-992					
leutral Coal		7 mcf/day @	996-998		GCS. Gas	Test at 1014	ft.	
Riverton Coal		7 mcf/day @	1048-1051					
Mississippi		7 mcf/day @	Top at 1056	FT.		Test at 1064		
TD: 1139 ft.					GCS. Gas	Test at 1139	ft.	
Zone not ident	ifiable from D	riller's hand written notes.	·					
	Formation T	ops and Casing Recommen	dation made with	out benefit of	viewing ope	n-hole logs fi	rst.	
Surface Casing (a) 21.6 ft.	***************************************						
Surface Casing S	Size: 8 5/8"				·			
OTHER COMM	ENTS: Infor	mation in this Report was t	aken directly from	m the Driller's	hand writte	n notes. All c	lepths	
& orifice checks	reflect what t	he driller recorded during	drilling activities	Zones listed	below are fy	i only.		

Pavnee Limeston								
Osvvego Limeston	ie 625-645							
If the Zone abov	e has no foota	ges listed, the Zone was no	t identifiable fron	n the Driller's	Notes.			
CASING RECO	MMENDATE	ONS. D	/ Cement to surl	foce				-
LASING RECU	WINENDAIL	Ono: Kun casing	; / Cement to surf	ace				
		ort. Thank You!	-i-4 CDC #4630	(C20) 205 020	2 C-II - KD			
On Site Represe	ntative:	Ken Recoy, Senior Geole	gist, CPG #4630	(020) 303-920	o Cell. KKe	coy@qrcp.ne	<u> </u>	

RECEIVED KANSAS CORPORATION COMMISSION JUN 2 3 2006

CONSERVATION DIVISION WICHITA, KS



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

TICKET NUMBER	1	3	1	8
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FIELD TICKET REF #

FOREMAN Joe

TREATMENT REPORT & FIELD TICKET CEMENT

DAIE		WELLIN	AME & NUMBER	1		SECTION	TOWNSHIP	HANG	E COUNTY
3-6.06	KePley	Far	ances 1	132		2/03	28	18	NO
FOREMAN / OPERATOR	TIME	TIME	LESS LUNCH	TRUCK #		TRAILER, #	TRUCI HOUR		EMPLOYEE SIGNATURE
Jue. B	6:45	11.15		903388		,	4.5		we Blocker
Ptim A	7:015	11:15		963255			4.5		Layer
1 USSex	7:00	11:15		903206		•	4.25	I .	hi 24
david. c	7.00	11:15		903296	93	322152	4.25		Saul Ibura.
LEGN. H	7:00	11.15		931500			-/. 2·	5),	Seen Alxon
MANERICKO	6:15	11:15		1 extra			1 5	1	1200
JOB TYPE - CHIA STE		SIZE <u>63/4</u>	н	IOLE DEPTH//	39	CASI	NG SIZE & W	EIGHT_	41/2 10.5
CASING DEPTH 1133			т	UBING		OTHE	:R		
SLURRY WEIGHT 15	SLURR	Y VOL	W	VATER gal/sk		CEME	ENT LEFT in	CASING_	0
DISPLACEMENT_18.	<u>ଃ</u> DISPLA	ACEMENT PSI	N	MIX PSI		RATE	46p	\sim	
REMARKS:							'		
RAN 2515	oven: act	Swigt to	Suffere	· Installed	Co	ment h	ead PA	~ 15	k preminel
followed be	12 bhl	due of	140 =	5K5 ofcemen	14	to get	due to	50 Ac	re Hustin
Duma . Por	o Plus +	a botton	+ so-	1-(1ca+ 5/	ne.		7 -		
Port	** 		1		1.6				
	•								
							RECEIVE	ח	
	112	3.76 7	1 4/2 Ca	< 1 A IC.			RPORATION		SION

	1123.76	F1 41/2 Casing KANSAS CORPORATION COMMISS	ION
	5	Centralizera JUN 2 3 2006	
	1	H/2 Casina Clamo	
931300	2.25 hr		
T53	2.25 hr	Casing troiler	
ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION OF SERVICES OR PRODUCT	TOTAL AMOUNT
903388	4.5 hr	Foreman Pickup	
903255	4.5 hr 4.5 hr	Cement Pump Truck	
903206	4.25 hr	Bulk Truck	
1104	130 SK	Portland Cement	
1124	2	50/50 POZ Blend Cement From BAMMes 312" At 3"	
1126		OWC - Blend Cement -1/2 wiper Plug	
1110	/号 SK	Gilsonite	
1107	0.55K	FIO-Seal OUT GF STOCK	
1118	35K	Premium Gel	
1215A	lacil	KCL	
1111B	3 5K	Sodium Silicate Colohovide	
1123	7000 go 1	City Water	
903296	4.25 hr	Transport Truck	
932452	4.25 hr	Transport Trailer	
931500	4.35 hr	80 Vac	
Ravin 4513		41/2 Float Shoe	

POSTROCK



Current Completion

: Kepley Farms 13-2 **WELL FIELD** : Cherokee Basin

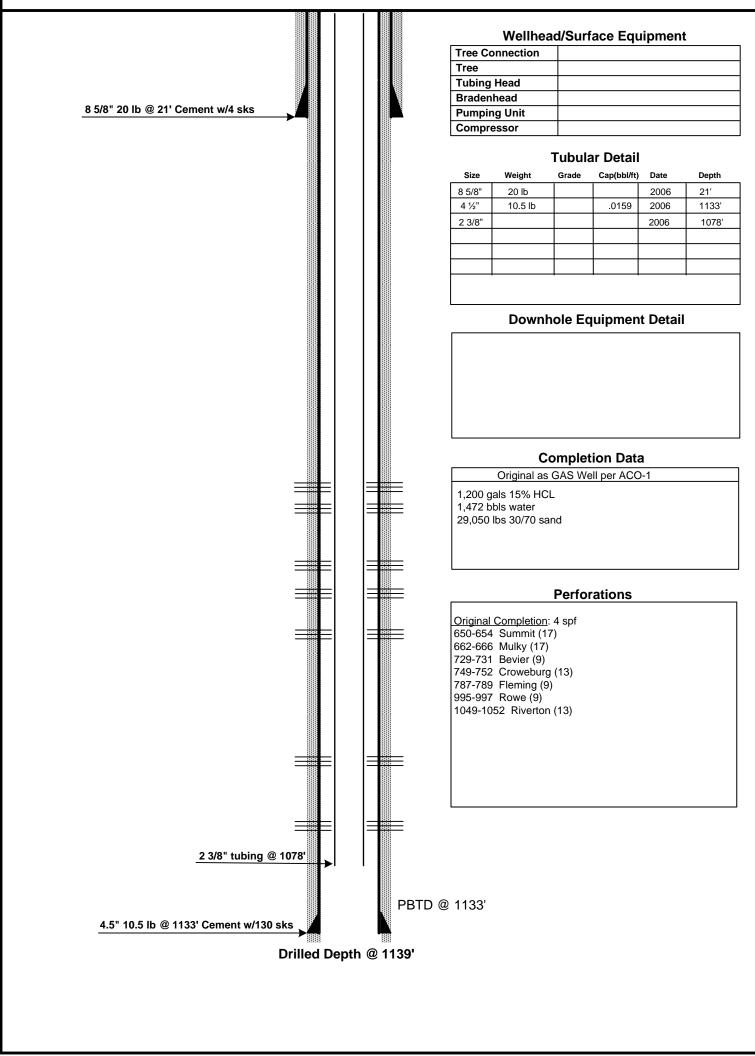
COMP. Date: 3/6/2006 API: 15-133-26435-00-00

SPUD DATE: 2/23/2006

STATE : Kansas **COUNTY** : Neosho

LOCATION: 13-28S-17E (NE,SE)

ELEVATION: 965'



PREPARED BY: POSTROCK

APPROVED BY: _

DATE: Dec, 2012

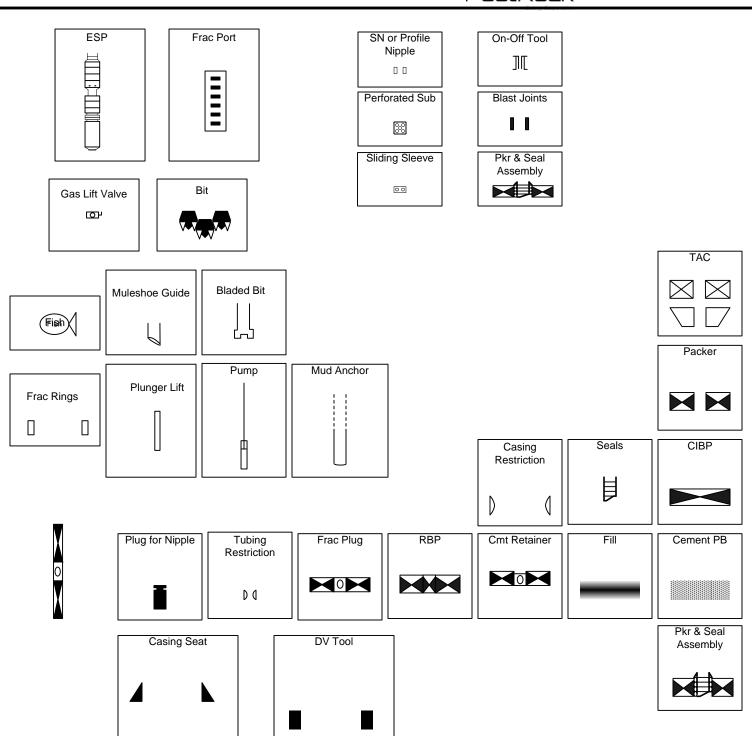
DATE:_

POSTROCK



LEGEND

PostRock[®]



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

RE:In the Matter of Postrock Midcontinent Production, LLC Application for Commingling of Production in the Kepley Farms 13-2 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, Rowe, Riverton and Cattleman producing formations at the Kepley Farms 13-2, located in the NW SE NE SE, S13-T28S-R17E, Approximately 1931 FSL & 597 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

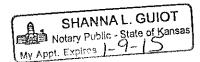
A COPY OF THE AFFIDAVIT OF PUBLICATION MUST ACCOMPANY ALL APPLICATIONS

Affidavit of Publication

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.

Notary Public



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 17th of

January A.D. 2013, 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

17th day of January, 2013

PENNY L Notary Public - State of My Appt. Expires

Notary Public Sedgwick County, Kansas

Printer's Fee : \$132.40

PUBLISHED IN THE WICHITA EAGLEJANUARY 17, 2013 (3227084)
BEFORE THE STATE CORPORATION
COMMISSION OF THE STATE OF KANSAS

NOTICE OF FILING APPLICATION
RE: In the Maller of Postrock Midconlinent
Production, LLC Application for
Commission of Production in the Keptey
Farms 13-2 located in Neosho County,

Commingling of Production in the Kenery Farms 13-2 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, Rowe, Riverton and Cartileman producing formalions at the Kepley Farms 13-2, located in the NW SE NE SE.513-1785-R17E, Approximately 1931 FSL & 597 FEL, Neosho County, Kansas.

Any persons who object to or protest hits applications or protest with the Conservation Division of the State Corporation Commission of the State Corporation Commission of the State of Konsas within fillieen (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 accordinally. 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.

Own Denair.
Postrock Midcontinent Production, LLC
210 Park Avenue, Suite 2750
Oklahoma City, Oklahoma 73102
(405) 660-7704

KEPLEY FARMS 13-2

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Application for: APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS ACO-4 Well Name: KEPLEY FARMS 13-2 Legal Location: NWSENESE S13-T28S-R17E the undersigned hereby certificates that he / she is a duty authorized agent for the application, and that on the day Story of FEBRUARY 2013 a true and correct copy of the application referenced above was delivered or mailed to the following parties: **Received of the application of the application.** Name Address (Atlach additional sheets if necessary) SEE ATTACHED **The attest that notice of the filing of this application was published in the CHANUTE TRIBUNE NEOSHO County: A copy of the affidavit of this publication is attached. **The objection of the affidavit of this publication is attached.** Application of the affidavit of this publication is attached. **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application of the affidavit of this publication is attached.** **Application o	Hiiida	vit of Notice Served	
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KEPLEY FARMS 13-2

13-28S-17E

NE/4

Legacy Farms LLC ½ minerals
PO Box 5
Chanute, KS 66720
Kepley Enterprises LLC ½ minerals term
3035 160th Rd
Chanute, KS 66720

Tract in SE/4 SE/4

Michael G. & Carla M. Kepley 2850 160th Rd Chanute, KS 66720

24-28S-17E

W/2 E/2 NE/4

Keith W Splane PO Box 198 Chanute, KS 66720

tract in E/2 E/2 NE/4

Legacy Farms LLC PO Box 5 Chanute, KS 66720

Trct in W2 NE less tracts

Peter John & Patricia Kay Smeed Living Trust 2605 160th Rd Chanute, KS 66720

Trct in W2 NE

Kenneth T. and Gretchen A. Brant Liv. Trust 2743 160th Rd Chanute, KS 66720

KEPLEY FARMS 13-2-APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS

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Name:	Legal Description of Leasehold:
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by certify that the statements made herein are true and correct to the	he best of my knowledge and belief.
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	Applicant or Duly Authorized Agent
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KEPLEY FARMS 13-2

13-28S-17E

NE/4

Legacy Farms LLC ½ minerals
PO Box 5
Chanute, KS 66720
Kepley Enterprises LLC ½ minerals term
3035 160th Rd
Chanute, KS 66720

Tract in SE/4 SE/4

Michael G. & Carla M. Kepley 2850 160th Rd Chanute, KS 66720

24-28S-17E

W/2 E/2 NE/4

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tract in E/2 E/2 NE/4

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Trct in W2 NE less tracts

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Trct in W2 NE

Kenneth T. and Gretchen A. Brant Liv. Trust 2743 160th Rd Chanute, KS 66720 Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



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

Sam Brownback, Governor

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

February 25, 2013

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

RE: Approved Commingling CO021305

Kepley Farms 13-2, Sec. 13-T28S-R17E, Neosho County

API No. 15-133-26435-00-00

Dear Mr. Edwards:

Your Application for Commingling (ACO-4) for the above described well, received by the KCC on February 11, 2013, 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 CO021305 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