

#### KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1089875

Form ACO-4 Form must be typed March 2009

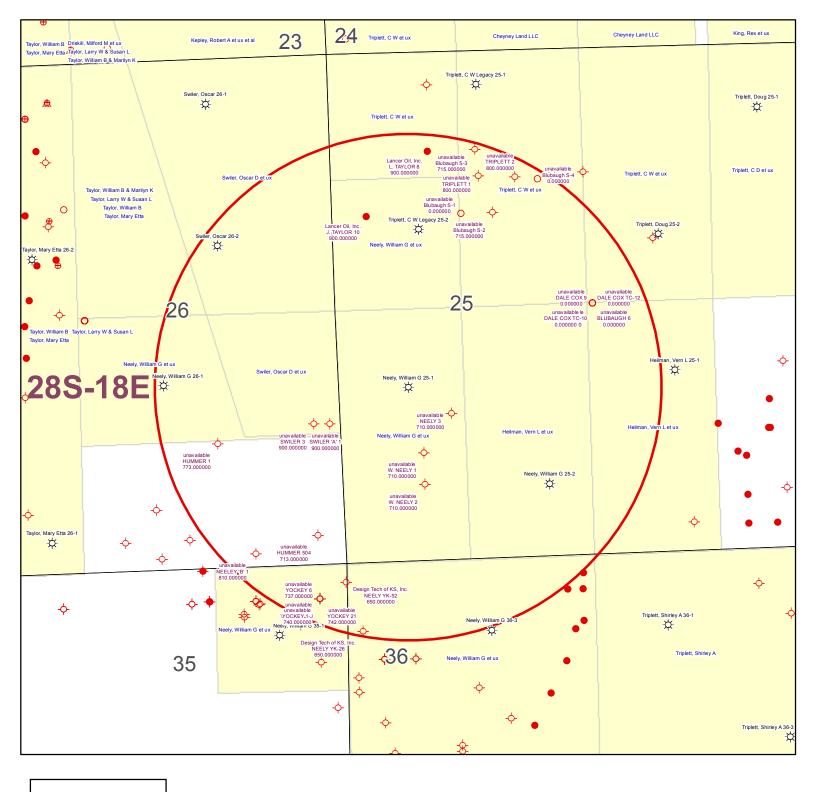
## APPLICATION FOR COMMINGLING OF Commingling ID # \_ PRODUCTION (K.A.R. 82-3-123) OR FLUIDS (K.A.R. 82-3-123a)

OPERAT	FOR: License #	API No. 15					
Name:_		Spot Description: _					
Address	1:		_ Sec Twp	S. R East West			
Address	2:		Feet from Nor	rth / South Line of Section			
City:	State: Zip:+		Feet from Eas	st / West Line of Section			
Contact	Person:	County:					
Phone:	()	Lease Name:	Well	#:			
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:	BOPD:	MCFPD:	BWPD:			
	Formation:	BOPD:	MCFPD:	BWPD:			
	Formation:	BOPD:	MCFPD:	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 affidation	of the lessee of record or ope	erator.	es within a 1/2 mile radius of			
For Con	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	_					
	Complete Form ACC-1 (Well Completion form) for the subject	wen.					
For Con	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	VIT: I am the affiant and hereby certify that to the best of my nformation, knowledge and personal belief, this request for comistrue and proper and I have no information or knowledge, which sistent with the information supplied in this application.	Sı	ubmitted Electroni	ically			
KCC	C Office Use Only	Protosto man ha filad b	y porty boying a vallet inter-	in the application Draft-to word			
	enied Approved			in the application. Protests must be filed wihin 15 days of publication of			

Date: \_

15-Day Periods Ends: \_\_

Approved By: \_



## **KGS STATUS**

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

Neely, William G 25-1 25-28S-18E 1" = 1,000'

-	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 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 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{\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 <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  m  MPa  Bar	49.0 25.0 25.0 25.0 	60.0 89.0 25.0 120.0 30.00 0.60 0 0 To Unit "F ft <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 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) * 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 Have ScaleSoftPitzer pick inhibitor for you? If No, inhibitor # is: If you select Mixed,  1st inhibitor is: % of 1st inhibitor is:	(F) (F) (Psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) Input 120  1 4	0 0 0 0 Unit min 1-Yes;0-No # # %	## 1 2 3 4 5 6	Inhibitor NTMP BHPMP PAA DTPMP PPCA SPA	Unit Converter From Unit  C  m  MPa  Bar	49.0 25.0 25.0 25.0 	60.0 89.0 25.0 120.0 30.00 0.60 0 0 To Unit "F ft <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

# KANSAS CORPORATION COMMISSION ORIGINAL OIL & GAS CONSERVATION DIVISION WELL COMPANY TO THE PROPERTY OF THE PRO

Form ACO-1 September 1999 Form Must Be Typed

### **WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE**

Operator: License # 33344 RECEIVED	API No. 15 - 133-26404-0000
Name: Quest Cherokee, LLC KANSAS CORPORATION COMMISSION	N County: Neosho
Address: 211 W. 14th Street APR 1 8 2006	N2 52 _ nw _ sw Sec. 25 Twp. 28 S. R. 18 ▼ East West
City/State/Zip: Chanute, KS 66720	1830 feet from N (circle one) Line of Section
Rivestem Pineline LLC CONSERVATION DIVISION	660 feet from E / (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)
Contractor: Name: Well Refined Drilling Company, Inc.	Lease Name: Neely, William G. Well #: 25-1
License: 33072	Field Name: Cherokee Basin CBM
Wellsite Geologist: n/a	Producing Formation: Multiple
Designate Type of Completion:	Elevation: Ground: 920 Kelly Bushing: n/a
✓ New Well Re-Entry Workover	Total Depth: 1030 Plug Back Total Depth: 1018.73
Oil SWD SIOW Temp. Abd.	Amount of Surface Pipe Set and Cemented at 20' 4" Feet
Gas ENHR SIGW	Multiple Stage Cementing Collar Used?
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 1018.73
Operator:	feet depth to surface w/ 139 sx cmt.
Well Name:	ALTI WHM 8-28-06
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	
Plug BackPlug Back Total Depth	Chloride content ppm Fluid volume bbls
Commingled Docket No.	Dewatering method used
Dual Completion Docket No	Location of fluid disposal if hauled offsite:
Other (SWD or Enhr.?) Docket No	Operator Name:
12/30/05 1/2/06 1/9/06	Lease Name: License No.:
12/30/05         1/2/06         1/9/06           Spud Date or         Date Reached TD         Completion Date or	Quarter Sec TwpS. R
Recompletion Date Recompletion Date	County: Docket No.:
	·
INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas 67202, within 120 days of the spud date, recompletion, workover Information of side two of this form will be held confidential for a period of 12 107 for confidentiality in excess of 12 months). One copy of all wireline logs at TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. All requirements of the statutes, rules and regulations promulgated to regulate herein are complete and correct to the best of my knowledge.	or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. months if requested in writing and submitted with the form (see rule 82-3-nd geologist well report shall be attached with this form. ALL CEMENTING Submit CP-111 form with all temporarily abandoned wells.
M. Clare	VCC Office Hee ONLY
Signature.	KCC Office Use ONLY
Title: Head of Operations Date: 4/8/06	Letter of Confidentiality Received
Subscribed and sworn to before me this 84 day of April	If Denied, Yes Date:
20.06.	Wireline Log Received
	Geologist Report Received
Notary Public: Semufer & Amnan	UIC Distribution
	Public - State of Kansas

Operator Name: Que	perator Name: Quest Cherokee, LLC					Lease Name: Neely, William G. Well #: 25-1				
	28 S. R. 18		: West	Count	y: Neosl	no				
INSTRUCTIONS: S tested, time tool ope temperature, fluid re- Electric Wireline Log	n and closed, flowing covery, and flow rate	g and shut s if gas to	-in pressures, surface test, a	whether s long with	hut-in pre	ssure reached	static level, hydr	ostatic pressure	es, botto	m hole
Drill Stem Tests Take		Y	es 📝 No		✓ Log Formation (Top), Depth and Datum				Sample	
Samples Sent to Ge	ological Survey	Y	es 🗸 No		Nam See	e attached		Тор		Datum
Cores Taken		Y	es 🗸 No							
Electric Log Run (Submit Copy)		<b>√</b> Yo	es No					RECEIVED RPORATION COM	MISSION	
ist All E. Logs Run:							AF	PR 1 8 2006	Ì	
Comp. Density/Neutron Log Dual Induction Log Gamma Ray/Neutron Log							CONS	ERVATION DIVISI WICHITA, KS	ON	
	A	Repo		RECORD	Ne	ew Used	ction, etc.			
Purpose of String	Size Hole	Siz	ze Casing	We	eight	Setting	Type of	# Sacks		and Percent
Surface	Drilled 12-1/4"	8-5/8"	t (In O.D.)	20#	. / Ft.	Depth 20' 4"	"A"	Used 4		Additives
Production	6-3/4"	4-1/2		10.5#		1018.73	"A"	139		
			ADDITIONAL	CEMENT	ING / SQI	JEEZE RECOR	D	-		
Purpose:  —— Perforate  —— Protect Casing  —— Plug Back TD  —— Plug Off Zone	Depth Top Bottom	Туре	of Cement	#Sack	s Used		Type and	Percent Additives		
Shots Per Foot			RD - Bridge Plug Each Interval Pe		De Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)				Depth	
4	930-934/873-87	3/679-68	1/662-664/6	25-628/6	00-602	400gal 15%HCLw/ 44 b	obis 2%kci water, 487bbis wate	or w/ 2% KCL, Biocide, 5300	)# 20/40 sand	930-934/873-878
4	519-523/507-51	1				500gal 15%HCLw/ 23 t	obls 2%kci water, 589bbls wate	er w/ 2% KCL, Biocide, 9600	0# 20/40 sand	679-681/662-664
										625-628/600-602
						400gal 15%HCLw/ 45 b	obis 2%kci water, 405bbis wate	er w/ 2% KCL, Biocide, 4900	0# 20/40 sand	519-523/507-511
TUBING RECORD	Size	Set At		Packer	Δ†	Liner Run				
1	-3/8"	958.07		n/a			Yes ✓ N	0		
Date of First, Resume	rd Production, SWD or I	Enhr.	Producing Met	hod	Flowin	g 📝 Pump	oing Gas L	ift Othe	er (Explair	))
Estimated Production Per 24 Hours	oil n/a	Bbls.	Gas 40.5mcf	Mcf	Wate 87.21		Bbls.	Gas-Oil Ratio		Gravity
Disposition of Gas	METHOD OF	COMPLETIC				Production Inte	erval			
Vented ✓ Sold (If vented, S	Used on Lease ubmit ACO-18.)		Open Hole Other (Spec	✓ Per	rf. [	Dually Comp.	Commingled			



Ravin 4513

## RECEIVED KANSAS CORPORATION COMMISSION

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

## APR 1 8 2006

CONSERVATION DIVISION WICHITA, KS

TICKET NUMBER	1		6	Ü
---------------	---	--	---	---

FIELD TICKET REF.#

FOREMAN \_\_\_\_\_\_\_

## ATMENT DEDORT

				MENT REPORT					
DATE		WELL NAM	E & NUMBER	}	SECTION		RAN	IGE COUNTY	
1-9-06	neely w	illian	0 25	5-1	25	28	18	N'0	
FOREMAN / OPERATOR	TIME TII	ME UT	LESS LUNCH	TRUCK #	TRAILER #	TRU HOU		EMPLOYEE SIGNATURE	
Jue . B	11:45 3:	30		903 388		.3. 75		Toe Blackers	
	11:45 3:3	30		903197		3.75	 >	La Gian	
Tim. A MAYERICK	12:00 3:3	.0		903206		3.5		mille	
mille - H	11:45 3:3		ř.	extra		3.7		7	
Leon . H	11:45 3.			903100	932452	1 .	5	Dentill all	
david . c		30		903296	932700	l l	5 = 1	Sam Janes	
Jerry H	11:45 3:		مواط على الله الله و الدولة والمواجع والما الله الله المواجع والما	1 extra				The same of the sa	
	HOLE SIZE			HOLE DEPTH 10	3 <i>0</i> C	ASING SIZE &	WEIGHT	472 70.5	
	18.13 DRILL PIPE_			TUBING					
SLURRY WEIGHT	14.5 SLURRY VOL		V	NATER gal/sk	c	EMENT LEFT i	1 CASING	G	
DISPLACEMENT 16	2H DISPLACEME	NT PSI _	N	MIX PSI	R	ATE	>~		
REMARKS:				_				, , ,	
RAN 2 SK	(s prem get	ځرب ۽	pt to :	surface.	Installed	Cemput	heca	1 RAN	
SK prem	gel follower	64	10 bb	of tye ar	ud 152	SKS C	<u> √</u>	OF + LLARAGE	
set due	RAN 2 SKS prem get swept to surface. Installed cement head RAN / SK prem get follower by 10 bbl tye And 152 SKS of coment to get due to Sifface. Flushed pump. Pumpep wiper Plug to bottom								
, F	100 L 2005		/ hal-	e was ve	vy dirty	<u>, 5</u>			
			-			and the state of t		en e	
	1018.73	L	11/2 Co	Sing					
	4		Cpsutua"	112-612-5	5				
	1	4	Va wa						
983139	2 4			tracter					
930804	2 }			troiler					
								TOTAL	
ACCOUNT CODE	QUANTITY or UNITS			DESCRIPTION OF S	SERVICES OR PRO	ODUCT		AMOUNT	
903388	3.75	Fore	man Pickup						
97 403355	3.75 h		ent Pump Truc	ck					
903206		4	Truck						
1104	139 5	ド Portl	and Cement						
1124	2	50/5	0 POZ Blend (	Cement Free Rs	2(t.1=2 3.)	x 4 3"			
1126	-	owo	C - Blend Cem	Cement Frac RS	. Par Plu	<u>s</u>			
1110	,	SK Gilso	onite						
1107		5K Flo-9							
1118	3 :		nium Gel						
1215A	1001		KCL						
1111B				(alchloria	110				
1123	7000 001	·	Water						
903296	3.75	1 1000	sport Truck sport Trailer			· · · · · · · · · · · · · · · · · · ·			
903100	3.75								
703100	3. 7	ETY OU	au						

4/2

Flost shoe

KANSAS CORPORATION COMMISSION

APR 1 8 2006

CONSERVATION DIVISION

WICHITA, KS

4270 Gray Road - Thayer, KS 66776 Contractor License # 33072 -

620-763-2619/Office; 918-449-0976/Lowell Pocket; 620-432-6170/Jeff Pocket; 620-763-2065/FAX

WERE TO BE REFE

D: #	r	2.773° 28445 No. 16446	1/// m And 2		]	C 05	T 000	D 40F	
Rig #:			LIC# 3334	4		S 25	T 28S	R 18E	
API#:	15-133-264					Location:	<u> </u>	C, NW, SW	
Operator:	Quest Che	rokee, LLC				County:	., .,	Neosho	
Address:	9520 North	May Avenu	ue - Suite 30	00					
	Oklahoma	City, OK 73	120			Gas Tes			
Well #:	25-1		Neely, Willian	n G.	Depth	Oz.	Orfice	flow - MCF	
Location:		ft. from S			155		No Flow		
	660	ft. from W	Line		255		No Flow		
Spud Date:		#########		_	330		No Flow		
Date Complet	ted:	1/2/2006	TD:	1030	405		No Flow		
Driller:	Mike Reid				455	11	1/2	20.9	
Casing Rec	Casing Record Surface Production				517	18	1/2	26.6	
Hole Size					530	6.5	3/4	36.1	
Casing Siz					605	Ga	s Check Sa	ame	
Weight					630	Ga	s Check Sa	ame	
Setting De	pth	20' 4"			680	Ga	s Check Sa	ame	
Cement Ty	/pe	Portland			705	Ga	s Check Sa	ame	
Sacks		4			730	Gas Check Same			
Feet of Ca	sing	20' 8"			855	Gas Check Same			
		<u> </u>			880	4	3/4	28.3	
Rig Time		Work Perfo	rmed		939	Ga	s Check Sa	me	
Used Boos	ster				955	Gas Check Same			
Тор	Bottom	Formation	Тор	Well Log Bottom	Formation	Тор	Bottom	Formation	
0	1	Overburden	219	225	shale	404	442	Pink- lime	
1	13	clay	225	226	coal	442	443	shale	
13	70	lime	226	235	shale	443	445' 6"	Lexington- Blk s	
70	72	shale	235	251	sand	445' 6"	466	shale	
72	74	Blk shale	251	272	shale	466	478	Peru- sand	
		Wet	272	273' 6"	coal	478	485	shale	
74	75	shale	273' 6"	276	shale	485	504	Oswego- lime	
75	77	lime	276	278	sand	504		shale	
77	104	sand	278	283	lime	507	509	Summit- Blk sh	
104	125	lime	283	294	sand	509	515	shale	
125	137	shale	294	304	shale	515		lime	
137	147	lime	304	314	Altamont- lime	520		shale	
147	150	shale	314	317	shale	522		Mulky- Blk sha	
150		Stark- Blk sha	317		Weiser- sand	524		coal	
		Wet	326		shale	525	526	shale	
152	160	shale	364		sand	526		Squirrel- sand	
400					shale	542		shale	
160	212	lime	375	393	snaie	572	500	snale	
160 212		shale	395			588			
			395			588	589		

Operator:	Quest Cherok	ee, LLC	Lease Name:		Neely, Willian	Well #	25-1	page 2	
Тор	Bottom	Formation	Тор	Bottom	Formation	Тор	Bottom	Formation	
597' 6"		shale							
599				and Maria Control				R	MSAS CORPORATION COMMISSION SERVATION DIVISION WICHTIA, KS.
601	622	coal							MS45 CORECT
622	623	Ardmore- lime	9						ORPOREIVED
623	624	shale							APD WONCO
624	626	Crowburg- Blk	shale					Co	APR 1 8 2006  SERVATION ON BOOM
626	627' 6"	coal						37	SERVAL COO
627' 6"	650	shale							WICHTON DIL
650	651	Flemming- co	al						"A KS "BOW
651	662	shale							
662	664	Mineral-coal							
664		shale							
677		Scammon- co	oal						
678		shale							
689	700	Cattleman sa	nd						
		Oil Odor							
700	L	shale							
718		Wier- shale							
	721' 6"	coal							
721' 6"		shale							
725		Bartlesville- s	and						
731		shale	<u> </u>						
	770' 6"	Bluejaket- co	al						
770' 6"		shale							
792		sand							
870		Rowe- coal							
873		shale			<u> </u>				
	875' 6"	Neutral- coal							
875' 6"		shale			<u> </u>				
894		Add Water			<b></b>				
935		Riverton- coa	1				4		
936		shale			ļ				
943	1030	Mississippi- li	ime		<u> </u>				
1030		Total Depth							
							1		

Notes: 06LA-010206-R2-001-Neely, William G.-25-1 - Quest

Keep Drilling - We're Willing!

## **POSTROCK**



## **Current Completion**

SPUD DATE: 12/30/2005

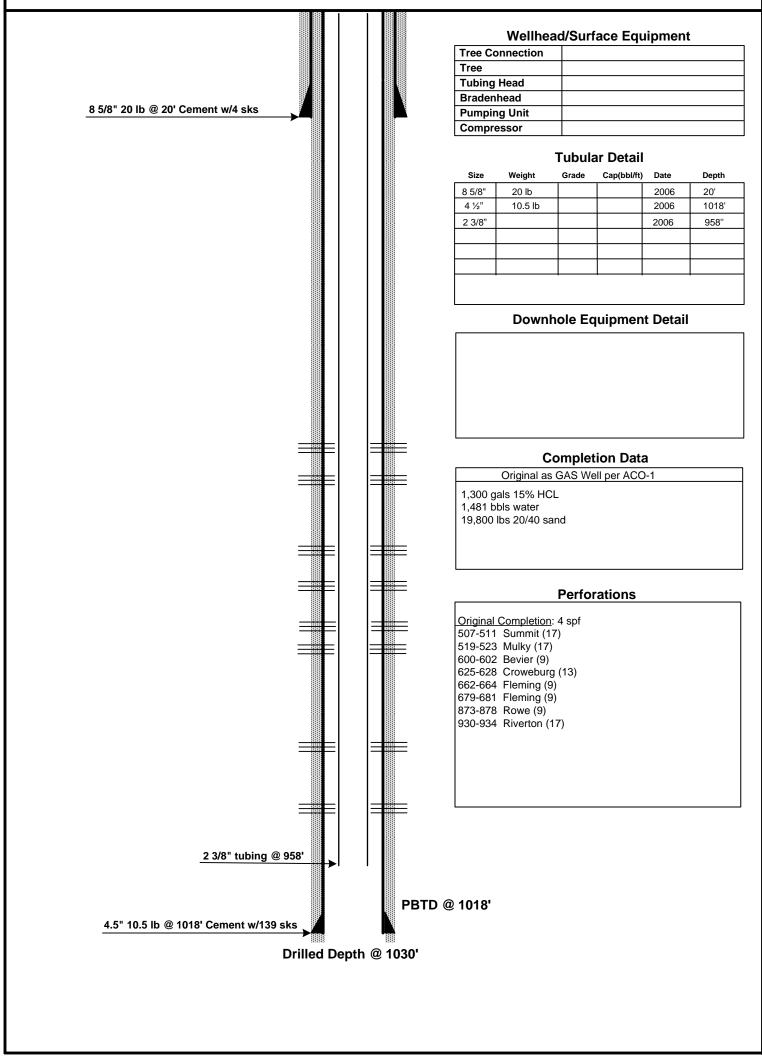
WELL: Neely, William G 25-1

FIELD : Cherokee Basin

STATE : Kansas COUNTY : Neosho COMP. Date : 1/9/2006 API: 15-133-26404-00-00

LOCATION: 25-28S-18E (NW,SW)

**ELEVATION: 920'** 



PREPARED BY:	POSTROCK

APPROVED BY: \_\_\_\_\_

**DATE:** July, 2012

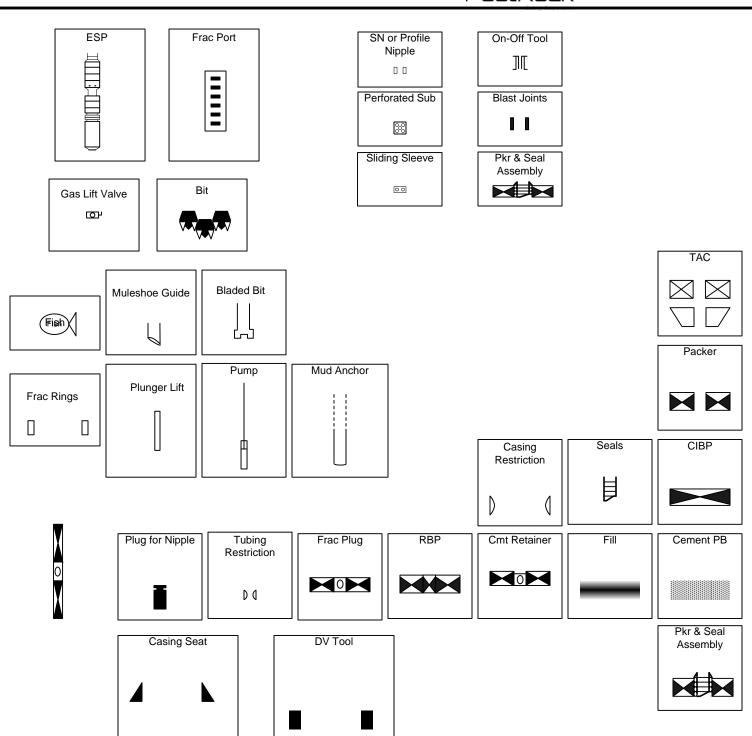
DATE:

## **POSTROCK**



## **LEGEND**

## PostRock<sup>®</sup>



## 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 Neely, William G 25-1 located in Neosho County, Kansas.

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

You, and each of you, are hereby notified that Postrock Midcontinent Production, LLC has filed an application to commingle the Summit, Mulky, Bevier, Croweburg, Fleming, Rowe, Riverton and Cattleman producing formations at the Neely, William G 25-1, located in the N2 S2 NW SW, S25-T285-R18E, Approximately 1813 FSL & 712 FWL, Neosho County, Kansas.

Any persons who object to or protest this application shall be required to file their objections or protest with the Conservation Division of the State Corporation Commission of the State of Kansas within fifteen (15) days from the date of this publication. These protests shall be filed pursuant to Commission regulations and must state specific reasons why granting the application may cause waste, violate correlative rights or pollute the natural resources of the State of Kansas.

All persons interested or concerned shall take notice of the foregoing and shall govern themselves accordingly. All person and/or companies wishing to protest this application are required to file a written protest with the Conservation Division of the Kansas Oil and Gas Commission.

Upon the receipt of any protest, the Commission will convene a hearing and protestants will be expected to enter an appearance either through proper legal counsel or as individuals, appearing on their own behalf.

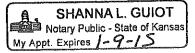
Postrock Midcontinent Production, LLC 210 Park Avenue, Suite 2750 Oklahoma City, Oklahoma 73102 (405) 660-7704

A COPY OF THE AFFIDAVIT OF PUBLICATION MUST ACCOM-PANY ALL APPLICATIONS

## Affidavit of Publication 🐝

STATE OF KANSAS, NEOSHO COUNTY, ss: Rhonda Howerter, being first duly sworn, deposes and says: That she is Classified Manager of THE CHANUTE TRIBUNE, a daily newspaper printed in the State of Kansas, and published in and of general circulation in Neosho County, Kansas, with a general paid circulation on a daily basis in Neosho County, Kansas, and that said newspaper is not a trade, religious or fraternal publication.

Said newspaper is a daily published at least weekly 50 times a year: has been so published continuously and uninterruptedly in said county and state for a period of more than five years prior to the first publication of said notice; and has been admitted at the post office of Chanute, in said county as second class matter.



#### AFFIDAVIT

STATE OF KANSAS

SS.

County of Sedgwick

Mark Fletchall, of lawful age, being first duly sworn, deposeth and saith: That he is Record Clerk of The Wichita Eagle, a daily newspaper published in the City of Wichita, County of Sedgwick, State of Kansas, and having a general paid circulation on a daily basis in said County, which said newspaper has been continuously and uninterruptedly published in said County for more than one year prior to the first publication of the notice hereinafter mentioned, and which said newspaper has been entered as second class mail matter at the United States Post Office in Wichita, Kansas, and which said newspaper is not a trade, religious or fraternal publication and that a notice of a true copy is hereto attached was published in the regular and entire Morning issue of said The Wichita Eagle for \_1\_ issues, that the first publication of said notice was

made as aforesaid on the 11th of

August 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

13th day of August, 2012

PENNY L. CASE Notary Public My Appt. Expires

Notary Public Sedgwick County, Kansas

Printer's Fee: \$139.60

PUBLISHED IN THE WICHITA EAGLE
AUGUST 11, 2012 (3200871)
BEFORE THE STATE COPPORATION COMMISSION
OF THE STATE COPPORATION COMMISSION
OF THE STATE OF KANSAS
NOTICE OF FILING APPLICATION.
RE: In the Matter of Postrock Midconlinent
Production, LLC Application for
Commingling of Production in the
Neely, William G 25-1 located in
Neostho Country, Kansas.
TO: All Oil & Gas, Producters, Unleased
Mineral Interest Owners, Landowners,
and all persons whomever concerned.
You, and each of you, are hereby
notified that Postrock Midconlinent
Production, LLC has filled an application
to commingle the Summit; Mulky, Bevier,
Croweburg, Fleming, Rowe, Riverton and
Catileman producing formalions at the
Neely, William G 25-1, located in the N2 52
NW SW, S25-7285-R18E, Approximately
1813 FSL & 712 FWL, Neosho Country,
Kansas.

Any persons who object to of profest

NW SW, \$25-1285-RIBE, Approximately 1813 FSL & 712 FWL, Neosho County, Kansas.

Any persons who object to or protest this application shall be required to file their objections or protest with the Conservation Division of the State of Kansas within fiffeen (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, vlotale 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 Oll 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

#### NEELY, WILLIAM G 25-1

	TION INTERVAL TO BE					
FLEMING	(PERFS):	679 -	681			
ROWE	(PERFS):	873 -	878			
RIVERTON	(PERFS):	930 -	934			
CATTLEMAN	(PERFS):	692 -	698			
	(PERFS):					
	(PERFS):		·			
	(PERFS):		- <u></u> _			
	(PERFS):					
	(PERFS):		·			
	(PERFS):		- <u></u> _			
	(PERFS):					
	(PERFS):					
MOUNT OF FLUID PRODUCTION TO E		_		40.27	DWDD.	-
FLEMING	BOPD:	0	MCFPD:	10.37	BWPD:	5
FLEMING ROWE	BOPD: BOPD:	0	MCFPD:	10.37	BWPD:	5 5
FLEMING ROWE RIVERTON	BOPD: BOPD: BOPD:	0 0 0	MCFPD: MCFPD:	10.37 10.37	BWPD: BWPD:	5
ROWE RIVERTON CATTLEMAN	BOPD: BOPD: BOPD: BOPD:	0	MCFPD:  MCFPD:  MCFPD:  MCFPD:	10.37	BWPD: BWPD: BWPD:	5 5 5 20
FLEMING ROWE RIVERTON CATTLEMAN 0	BOPD: BOPD: BOPD: BOPD:	0 0 0	MCFPD:	10.37 10.37	BWPD: BWPD: BWPD:	5
ROWE RIVERTON CATTLEMAN	BOPD: BOPD: BOPD: BOPD: BOPD: BOPD:	0 0 0	MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD:	10.37 10.37	BWPD: BWPD: BWPD: BWPD:	5
FLEMING ROWE RIVERTON CATTLEMAN  0 0 0	BOPD: BOPD: BOPD: BOPD: BOPD: BOPD: BOPD:	0 0 0	MCFPD:  MCFPD:  MCFPD:  MCFPD:  MCFPD:  MCFPD:  MCFPD:	10.37 10.37	BWPD: BWPD: BWPD: BWPD: BWPD:	5
FLEMING ROWE RIVERTON CATTLEMAN  0 0 0 0	BOPD: BOPD: BOPD: BOPD: BOPD: BOPD: BOPD: BOPD: BOPD:	0 0 0	MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD: MCFPD:	10.37 10.37	BWPD: BWPD: BWPD: BWPD: BWPD: BWPD:	5
FLEMING ROWE RIVERTON CATTLEMAN  0 0 0	BOPD:	0 0 0	MCFPD:	10.37 10.37	BWPD: BWPD: BWPD: BWPD: BWPD: BWPD: BWPD:	5
FLEMING  ROWE  RIVERTON  CATTLEMAN  0 0 0 0 0 0	BOPD:	0 0 0	MCFPD:	10.37 10.37	BWPD: BWPD: BWPD: BWPD: BWPD: BWPD: BWPD: BWPD:	5
FLEMING ROWE RIVERTON CATTLEMAN  0 0 0 0	BOPD:	0 0 0	MCFPD:	10.37 10.37	BWPD: BWPD: BWPD: BWPD: BWPD: BWPD: BWPD:	5
	ROWE RIVERTON	ROWE  RIVERTON  CATTLEMAN  (PERFS):  (PERFS):	ROWE  RIVERTON  (PERFS): 930 -  CATTLEMAN  (PERFS): 692 -  (PERFS): (PERFS): -  (PERFS): -	ROWE RIVERTON (PERFS): 930 - 934 CATTLEMAN (PERFS): 692 - 698 (PERFS): -	ROWE RIVERTON (PERFS): 930 - 934  CATTLEMAN (PERFS): 692 - 698 (PERFS): -	ROWE RIVERTON (PERFS): 930 - 934  CATTLEMAN (PERFS): 692 - 698 (PERFS): -

Affidavit of Notice Served	L
Re: Application for: APPLICATION FOR COMMING	LING OF PRODUCTION OR FLUIDS ACO-4
Well Name: NEELY, WILLIAM G 25-1	Legal Location: N2S2NWSW S25-T28S-R18E
The undersigned hereby certificates that he / she is a duly authorized a	gent for the applicant, and that on the day and of AUGUST
	ced above was delivered or mailed to the following parties:
Note: A copy of this affidavit must be served as a part of the application	
Name	Address (Attach additional sheets if necessary)
DESIGN TECH OF KS, INC	15803 WINDHAM DRIVE, LITTLE ROCK, AR 72206
LANCER OIL, INC	PO BOX 34, PIQUA, KS 66761
STICH PHILLIP W TRUST	7250 130TH RD, CHANUTE, KS 66720
I further attest that notice of the filling of this application was published in	the THE CHANUTE TRIBUNE , the official county publication
of NEOSHO	county. A copy of the affidavit of this publication is attached.
. 44	
Signed this day of AUGUST	2012
	Elul Elm
	Applicant or Duly Authorized Agent
Subscribed and sworr	to before me this day of AUGUST , 2012
JENNIFER R. BEAL OFFICIAL MY COMMISSION EXPIRES	Aumelie & Deal
7-20-2011	Notary Public
	My Commission Expires: Agely 30, 2016

## NEELY, WILLIAM G 25-1-APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS Offset Operators, Unleased Mineral Owners and Landowners acreage (Attach additional sheets if necessary) Legal Description of Leasehold: Name: SEE ATTACHED I hereby certify that the statements made herein are true and correct to the best of my knowledge and belief. Subscribed and sworn before me this \_\_\_\_\_\_\_ day of AUGUST 2012 JENNIFER R. BEAL MY COMMISSION EXPIRES

## NEELY, WILLIAM G 25-1

LEGAL LOCATION	SPOT	CURR_OPERA
S36-T28S-R18E	NW SW NW NW	Design Tech of KS, Inc.
S35-T28S-R18E	NE NE NE NE	Design Tech of KS, Inc.
S25-T28S-R18E	NW SW NW	Lancer Oil, Inc.
S25-T28S-R18E	SE NW NW	Lancer Oil, Inc.

## NEELY, WILLIAM G 25-1

## 26-28S-18E

per TO dtd 1.19.06

S2SE4

STICH PHILLIP W TRUST 7250 130TH 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/

Mark Sievers, Chairman Thomas E. Wright, Commissioner Sam Brownback, Governor

September 11, 2012

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

RE: Approved Commingling CO081227

Neely, William G. 25-1, Sec. 25-T28S-R18E, Neosho County

API No. 15-133-26404-00-00

Dear Mr. Edwards:

Your Application for Commingling (ACO-4) for the above described well, received by the KCC on August 27, 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 CO081227 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