

Kansas Corporation Commission Oil & Gas Conservation Division

1097674

Form ACO-4 Form must be typed March 2009

APPLICATION FOR COMMINGLING OF Commingling ID # CO111209 PRODUCTION (K.A.R. 82-3-123) OR FLUIDS (K.A.R. 82-3-123a)

OPERATOR: License # 33343	API No. 15 - 15-133-27075-00-00
Name: PostRock Midcontinent Production LLC	Spot Description:
Address 1: Oklahoma Tower	NE NE SW SE Sec. 18 Twp 27 S. R. 19 ✓ East West
Address 2: 210 Park Ave, Ste 2750	
City: OKLAHOMA CITY State: OK Zip: 73102 +	1495 Feet from 📝 East / 🗍 West Line of Section
Contact Person: CLARK EDWARDS	County: Neosho
Phone: (620) 432-4200	Lease Name: MIH, A.D. Well #: 18-1
/	
1. Name and upper and lower limit of each production interval to	be commingled:
Formation: SUMMIT	(Perfs): <u>544-548</u>
Formation: MULKY	(Perfs): 558-562
Formation: CROWEBURG	(Perfs): 645-648
Formation: FLEMING	(Perfs): 681-683
Formation: WEIR	(Perfs): 783-785
	•
2. Estimated amount of fluid production to be commingled from e	
Formation: SUMMIT	BOPD: MICPD: BVPD
Formation: MULKY	BOPD: MCFPD: BWPD:
Formation: CROWEBURG	BOPD: 0 MCFPD: 3.5 BWPD: 6.66
Formation: FLEMING	BOPD: 0 MCFPD: 3.5 BWPD: 6.66
Formation: WEIR	BOPD: 0 MCFPD: 3.5 BWPD: 6.66
 3. Plat map showing the location of the subject well, all other well the subject well, and for each well the names and addresses of 4. Signed certificate showing service of the application and affida 	
50	
For Commingling of PRODUCTION ONLY, include the following: 5. Wireline log of subject well. Previously Filed with ACO-1:	Von Die
6. Complete Form ACO-1 (Well Completion form) for the subject	weii.
For Commingling 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 commingled.
•	•
AFFIDAVIT: I am the affiant and hereby certify that to the best of my current information, knowledge and personal belief, this request for commingling is true and proper and I have no information or knowledge, which is inconsistent with the information supplied in this application.	Submitted Electronically
KCC Office Use Only	Protests may be filed by any party having a valid interest in the application. Protests must be
☐ Denied	in writing and comply with K.A.R. 82-3-135b and must be filed wihin 15 days of publication of the notice of application.
15-Day Periods Ends: 11/27/2012	
Approved By: Rick Hestermann Date: 11/27/2012	

Ċ	Α	В	·c	D	Ē	F	G	н	<u> </u>	J	K
1	Produced Fluids #		I	2	3	4	5				Oll-II
	Parameters	Units	lnput	Input	Input	Input	Input		Click he	ге	Click
_	Select the brines	Select fluid		[Mixed brine:	to run S	SP [Click
	Sample ID	by checking the box(es),	3/19/2012	3/4/2012	3/14/2012	1/20/2012	*/20/2012	Cell H28 is STP calc. pH.	t - c		
	Date Operator	Row 3	PostRock	3/4/2012 PostRock	PostRock	1/20/2012 PostRock	1/20/2012 PostRock	Cells H35-38		•	Cilck
7	Well Name	10110	Ward Feed	Ward Feed	Clinesmith	Clinesmith	Clinesmith	are used in	Goal Seek	SSP +	CIICK
8	Location		#34-1	#4-1	#5-4	#1	#2	mixed brines	Goul Occk		Click
	Field		СВМ	CBM	Bartles	Bartles	Bartles	calculations.			Olick
10	Na [†]	(mg/l)*	19,433.00	27,381.00	26,534.00	25689.00	24220.00	24654.20	Initial(BH)	Final(WH)	St/SR
11	K ⁺ (if not known =0)	(mg/i)						0,00	Saturation Index	values	(Final-Initial)
12	Mg ²⁺	(mg/l)	1,096.00	872.00	1,200.00	953.00	858.00	995,91	Ca	lcite	
13	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 ^{z+}	(mg/l)						0.00	Ва	rite	
15	Ba ²⁺	(mg/l)						0.00	_		
	Fe ²⁺	(mg/l)	40.00	21.00	18.00	82,00	90.00	50.21	H	alité	
17	Zn²+	(mg/l)						0.00	-1.77	-1.80	-0.03
18	Pb ²⁺	(mg/l)		-				0.00	Cy	psium	
19	CI.	(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,2	(mg/l)	1.00	1,00	8.00	1.00	1.00	2.40		hydrate′	
21	F*	(mg/l)						0.00	-3.96	-3,90	0.06
	Br ⁻	(mg/l)						0.00		ydrite	1
	SiO2	(mg/l) SiO2						0.00	r4 3.4 7.	-3.36	0.12
24	HCO3 Alkalinity**	(mg/l as HCO3)	190.00	234.00	259,00	268.00	⁷ 254,00	241.03	_Cel	ëstite	
25	CO3 Alkalinity	(mg/l as CO3)									
26	Carboxylic acids**	(mg/l)						0.00	. Iron	Sulfide	
27	Ammonia	(mg/L) NH3						0.00	-0.16	-0.22	-0.06
28	Borate	(mg/L) H3BO3						0.00	Zinc	Sulfide	
29	TDS (Measured)	(mg/l)						72781			-
	Calc. Density (STP)	(g/ml)	1.038	1.051	1,050	1.048	1.045	1.047	Calciun	fluoride	
	CO ₂ Gas Analysis	(%)	19.97	18.76	22.41	35.53	33.79	26,16			
	II ₂ S Gas Analysis***	(%)	0.0289	0.0292	0,0296 1.00	0.0306	0.0151 0.50	0.0269		arbonate -0.51	.0.00
	Total H2Saq pH, measured (STP)	(mgH2S/l) pH	1.00 5.67	1,00 5,76	5.72	1.00 5.54	5.55	0.90 5.63	-0.74	eeded (mg/L)	(0.23
34	pri, measuren (STF)	0-CO2%+Alk,	5.07	, 5.76	3.12		_ 5,55	5.03	Calcite	NTMP	-
	Choose one option										ł
35	to calculate S1?		0	0	0	0	0				
	Gas/day(thousand cf/day)	(Mcf/D)			<u>-</u>	ļ.,		0	0.00	0.00	
_	Oil/Day Water/Day	(B/D)	100	100	100	100	100	500	Barite 0.00	BHPMP 0.00	
	For mixed brines, enter val					100	100	(Enter H40-H43)		oH(-
	Initial T	(F)	66.0	71.0	70.0	41.0	49,0	60.0	5.69	5.60	
	Final T	(F)	66,0	71.0	70.0	41,0	49.0	89.0		CentiPoise)	
.42	Initial P	(psia)	25.0	25.0	25,0	25.0	25.0	25.0	1.196	0.826	_
	Final P	(psia)	25.0	25.0	25.0	25.0	25.0	120.0		ity (cal/ml/ C)	1
	Use TP on Calcite sheet?	1-Yes;0-No						20.00	0.955	0.959	4
_	API Oil Grav, Gas Sp.Grav,	API grav. Sp.Grav.						30.00	Gypsum	eeded (mg/L)	-
47	MeOH/Day	(B/D)	0					0	0.00	(0.00	Í
	MEG/Day	(D(D)	0							HDTMP	ח
49		(B/D)						0	Anhydrite		
_	Conc. Multiplier							· · ·	Anhydrite 0.00	0.00	
$\overline{}$	H ⁺ (Strong acid) [†]	(N)						<u>_</u>			
51	H* (Strong acid) * OH' (Strong base) *	(N) (N)						<u>_</u>			
51 52	H ⁺ (Strong acid) [†] OH (Strong base) [†] Quality Control Checks at	(N) (N) STP;		· · · ·				<u>_</u>			
51 52 53	H* (Strong acid) † OH' (Strong base) † Quality Control Checks at	(N) (N) STP; (%)						<u>_</u>			
51 52 53 54 55	H* (Strong acid) † OH* (Strong base) † Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated	(N) (N) STP;						<u>_</u>			
51 52 53 54 55 56	H* (Strong acid) 1 OH* (Strong base) 1 Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated	(N) (N) STP: (%) (mgH2S/l) (pH) (%)						<u>_</u>			
51 52 53 54 55 56 57	H* (Strong acid) 1 OH (Strong base) 1 Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated	(N) (N) STP: (%) (mgH2S/l) (pH) (%) (mg/l) as HCO3				· · · · · · · · · · · · · · · · · · ·		<u>_</u>			
51 52 53 54 55 56 57 58	H* (Strong acid) 1 OH* (Strong base) 1 Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated	(N) (N) STP: (%) (mgH2S/l) (pH) (%) (mg/l) as HCO3 (equiv./l)						<u>_</u>			
51 52 53 54 55 56 57 58 59	H* (Strong acid) 1 OH (Strong base) 1 Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated 2Cations=	(N) (N) STP: (%) (mgH2S/l) (pH) (%) (mg/l) as HCO3						<u>_</u>			
51 52 53 54 55 56 57 58 59 60 61	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	(N) (N) STP: (%) (mgH2S/l) (pH) (%) (mg/l) as HCO3 (equiv./l) (equiv./l) (mg/l) lnput	Untt	#	Inhibitor		(From metric	o English)	0.00		
51 52 53 54 55 56 57 58 59 60 61 62	H* (Strong acid) OH* (Strong base) Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated £Cations= £Anions= Calc TDS= Inhibitor Selection Protection Time	(N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/l) as HCO3 (equiv./I) (equiv./I) (equiv./I)	Untt	1	NTMP	From Unit	Value	o English) To Unit	0.00 _		
51 52 53 54 55 56 57 58 59 60 61 62 63	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 Have ScaleSoffPitzer	(N) (N) STP: (%) (mgH2S/l) (pH) (%) (mg/l) as HCO3 (equiv./l) (equiv./l) (mg/l) lnput 120	min	1 2	NTMP BHPMP	From Unit °C	Value 80	o English) To Unit	0.00 Value 176		
51 52 53 54 55 56 57 58 59 60 61 62 63 64	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 Have ScaleSoffPitzer pick lighibitor for you?	(N) (N) (N) STP: (%) (mgH2S/l) (pH) (%) (mg/l) as HCO3 (equiv./l) (equiv./l) (mg/l) 120	min 1-Yes;0-No	1 2 3	NTMP BHPMP PAA	From Unit °C m³	Value 80 100	o English) To Unit °F ft³	Value 176 3,531		
51 52 53 54 55 56 57 58 59 60 61 62 63 64 65	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 Have ScaleSoftPitzer plck Inhibitor for you? If No, inhibitor # is:	(N) (N) STP: (%) (mgH2S/l) (pH) (%) (mg/l) as HCO3 (equiv./l) (equiv./l) (mg/l) lnput 120	min	1 2 3 4	NTMP BHPMP PAA DTPMP	From Unit °C m³ m³	Value 80 100 100	o English) To Unit °F ft³ bbl(42 US gal)	Value 176 3,531 629		
51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66	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= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick Inhibitor for you? If No, inhibitor # is: If you select Mixed,	(N) (N) STP: (%) (mgH2S/l) (pH) (%) (mg/l) as HCO3 (equiv./l) (equiv./l) (equiv./l) 1120 1 4	min 1-Yes;0-No #	1 2 3 4 5	NTMP BHPMP PAA DTPMP PPCA	From Unit °C m³ m³ MPa	Value 80 100 100 1,000	o English) To Unit °F ft³ bbl(42 US gal) psia	Value 176 3,531 629 145,074		
51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67	H* (Strong acid) OH* (Strong base) Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated 2Cations= EAnions= Cate TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick Inhibitor # is: If you select Mixed, 1st inhibitor # is:	(N) (N) STP: (%) (mgH2S/l) (pH) (%) (mg/l) as HCO3 (equiv./l) (equiv./l) (mg/l) luput 120 1 4	min 1-Yes;0-No # #	1 2 3 4 5 6	NTMP BHPMP PAA DTPMP PPCA SPA	From Unit °C m³ m³ MPa Bar	Value 80 100 100 1,000 496	o English) To Unit °F ft³ bbl(42 US gal) psia	Value 176 3,531 629 145,074 7,194		
51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68	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 Have ScaleSoftPitzer pick Inhibitor for you? If No, inhibitor # is: If you select Mixed, 1st inhibitor is: % of 1st inhibitor is:	(N) (N) STP: (%) (mgH2S/l) (pH) (%) (mg/l) as HCO3 (equiv./l) (equiv./l) (mg/l) lnput 120 1 4 1 50	min 1-Yes;0-No # # %	1 2 3 4 5 6	NTMP BHPMP PAA DTPMP PPCA SPA HEDP	From Unit °C m³ m³ MPa Bar Torr	Value 80 100 100 1,000 496 10,000	o English) To Unit °F ft³ bbl(42 US gal) psia psia psia	Value 176 3,531 629 145,074 7,194 193		
51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69	H* (Strong acid) OH* (Strong base) Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated 2Cations= EAnions= Cate TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick Inhibitor # is: If you select Mixed, 1st inhibitor # is:	(N) (N) STP: (%) (mgH2S/l) (pH) (%) (mg/l) as HCO3 (equiv./l) (equiv./l) (mg/l) luput 120 1 4	min 1-Yes;0-No # #	1 2 3 4 5 6	NTMP BHPMP PAA DTPMP PPCA SPA	From Unit °C m³ m³ MPa Bar	Value 80 100 100 1,000 496	o English) To Unit °F ft³ bbl(42 US gal) psia	Value 176 3,531 629 145,074 7,194		

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
CO₂ in Brine	246	220	264	422	405	401
lonic 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 OIL & GAS CONSERVATION DIVISION

ORIGINAL September 1999
Must Be Typed

FEB 0 4 2008

CONSERVATION DIVISION WICHITA, KS

CONFIDENTIA WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

Date Commission Expires: 8-4-2010

1/31/10

Operator: License # 33344	API No. 15 - 15-133-27075-0000
Name: Quest Cherokee, LLC	County: Neosho
Address: 211 W. 14th Street	SW_SE_Sec_18_Twp. 27_S. R. 19 7 East West
City/State/Zip: Chanute, KS 66720	770 feet from S/ N (circle one) Line of Section
Purchaser: Bluestern Pipeline, LLC	1980 feet from E Y W (circle one) Line of Section
Operator Contact Person: Jennifer R. Ammann CONFIDENTIAL	Footages Calculated from Nearest Outside Section Corner:
	(circle one) NE SE NW SW
JAN 3 U ZUUU	Lease Name: Mih, A.D. Well #: 18-1
License: 33837 KCC	Field Name; Cherokee Basin CBM
Wellsite Geologist: Ken Recoy	Producing Formation: Multiple
Designate Type of Completion:	Elevation: Ground: 973 Kelly Bushing: n/a
New Well Re-Entry Workover	Total Depth; 1072 Plug Back Total Depth: 1063
Oil SWD SIOW Temp. Abd.	Amount of Surface Pipe Set and Cemented at 20 Feet
✓ GasENHRSIGW	Multiple Stage Cementing Collar Used? Yes 7 No
Dry Other (Core, WSW, Expl., Cathodic, etc)	If yes, show depth setFeet
If Workover/Re-entry: Old Well Info as follows:	If Alternate II completion, cement circulated from 1063
Operator:	feet depth to surface w/ 150 sx cmt.
Well Name:	All Till I come
Original Comp. Date: Original Total Depth:	Drilling Fluid Management Plan AH JJ NJ 6 509 (Data must be collected from the Reserve Pit)
Deepening Re-peri Conv. to Enhr./SWD	Chloride contentppm Fluid volumebbls
Plug Back Plug Back Total Depth	Dewatering method used
Commingled Docket No,	-
Dual Completion Docket No	Location of fluid disposal if hauled offsite:
Other (SWD or Enhr.?) Docket No	Operator Name:
10-11-07 10-13-07 10-15-07	Lease Name: License No.:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS, R 🗍 East 🗍 West
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 a TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells.	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
All requirements of the statutes, rules and regulations promulgated to regulate herein are complete and correct to the best of my knowledge.	the oil and gas industry have been fully complied with and the statements
Signature: Jamuje J. Ammann	KCC Office Use ONLY
Title: New Well Development Coordinator Date: 1/30/08	Letter of Confidentiality Received
Subscribed and sworn to before me this 20th day of	If Danied, Yes Date:
20.08	V Wireline Log Received RECEIVED
	Geologist Report ReceivenSAS CORPORATION COMMISSION
Notary Public: DOWNON Klauman	UIC Distribution O. L. once

TERRA KLAUMAN

Notary Public - State of Kansas

My Appt. Expires 8-4 - 2010 TERRA KLAUMAN

Operator Name: Que	st Cherokee, LL		Lease Name:	/lih, A.D.	1 .3	. Well #: 18-1		~ ° ∧
Sec. 18 Twp. 27		☑ East ☐ West	County: Neosh	3	ا فرا	1 9. 17	· • •	i fall
INSTRUCTIONS: Sh tested, time tool oper temperature, fluid rec	ow important tops a and closed, flowing overy, and flow rates	nd base of formations pe and shut-in pressures, v if gas to surface test, al inal geological well site re	whether shut-in pre long with final char	ssure reached s	tatic level, hydro	static pressure	es, botton	a hole
Drill Stem Tests Take		☐ Yes ☐ No	⊘ L	og Formatio	on (Top), Depth a	nd Datum	s	ample
Samples Sent to Geo	logical Survey	☐ Yes ☐ No	Nam See	e attached		Тор	D	atum
Cores Taken Electric Log Run (Submit Copy)	Ć,	Yes No		i .				
List All E. Logs Run:								
Compensated Dual Induction	-	ron Log						
		CASING Report all strings set-c		_	ion etc	-		
Purpose of String	Size Hole Drilled	Size Casing Set (in O.D.)	Weight Lbs. / Pt.	Setting Depth	Type of Cement	# Sacks Used		und Percent
Surface	12-1/4	8-5/8"	22	20	"A"	5		
Production .	6-3/4	4-1/2	10.5	1063	-A-	150		
		ADDITIONAL	CEMENTING / SQI	JEEZE RECORD				
Purpose: Perforate Protect Casing Plug Back TD	Depth Top Bottom	Type of Cement	#Sacks Used		Type and F	Percent Additives	-	
Plug Off Zone	- 0			-				•
Shots Per Foot		ON RECORD - Bridge Plug Footage of Each Interval Per			cture, Shot, Cement nount and Kind of Ma		rd	Depth -
4	935-938			300gal 15%/HCL=/ 49bble	296kd water, 448bbts water v	of 2% KCL, Blockle, 4400	20/40 cend	935-938
4	783-785/681-68	3/645-648		400gal 15%/HCLw/ 46bbb	s 2% kell wester, 646hbin wester t	af 2% KCL, Blocklo, 4800	2# 20/40 emid	783-785/681-683
_			,					645-648
4	558-562/544-54				o 254kel wester, 840bits wester t	er 2%, KCL., Blockie, 670x	06 2040 sand	558-562/544-548
TUBING RECORD 2-3	Size 3/8°	Set At 965.70	Packer At n/a	Liner Run	Yes No	•		
Date of First, Resumer	d Production, SWD or I	Enhr. Producing Met	hod Flowin	g Půmpi	ng (Gàs Ù	n ⊡ Ôth ———) er (Explain)	J
Estimated Production Per 24 Hours	OII n/a	Bbls. Gas 0.0 mcf	Mef Wat		bls, (Gas-Oil Ratio		Gravity
Disposition of Gas	METHOD OF	COMPLETION	<u>_</u>	Production Inter	val			
Vented ✓ Sold ∴ (If vented, Si	Used on Lease ubmit ACO-18.)	Open Hole Other (Spec	. _	Dually Comp.	Commingled _			
* * *	.	4330	ABATTHAT Page	र्म के हैं। इ.स.				r



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

CONFIDENTIAL JAN 3 0 2008 TREATMENT REPORT & FIELD TICKER CEMEN

TICKET NUMBER 2506

FIELD TICKET REF #	FIELD	TICKET	REF#
--------------------	-------	--------	------

. FOREMAN Jee_

693990 TREATMENT

		- Water		IICK PORTINEI	• 1	SECTION	TOWNSHIP	RAN	GE COUNT	~
DATE	44.5		L NAME & NUMBER							
10-15-07	1 Mih 1	<u> 1.D. 1</u>	<u> </u>			18	27	19		
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Mih, A.D. 18-1 15-133-27075-0000

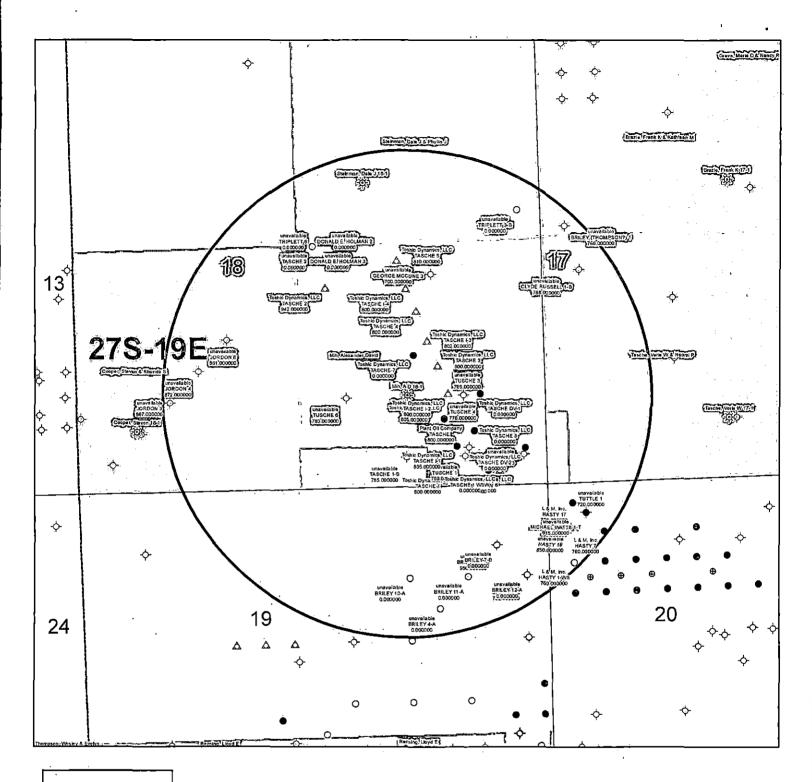
Pawnee LS / Pink	447-483
Oswego Coal	522-523
Oswego Limestone	523-543
Mineral Coal	695-697
Tebo Coal	730-732

CONFIDENTIAL JAN 3 0 2008 KCC

RECEIVED KANSAS CORPORATION COMMISSION

FEB 0 4 2008

COMSERVATION DIVISION WITHIN KS



KGS STATUS

- → DA/PA
- ⊕ EOR
- ☆ GAS
- △ INJ/SWD
- OIL
- ♦ OIL/GAS
- o OTHER

Mih, A D 18-1 18-27S-19E 1" = 1,000'

P **Current Completion POSTROCK** WELL : Mih, A. D. 18-1 SPUD DATE: 10/11/2007 **FIELD** : Cherokee Basin COMP. Date: 10/15/2007 API: 15-133-27075-00-00 **STATE** : Kansas COUNTY : Neosho **LOCATION: 18-27S-19E (SW,SE) ELEVATION: 973'** Wellhead/Surface Equipment Tree Connection Tree Tubing Head Bradenhead 8 5/8" 22 lb @ 20' Cement w/5 sks Pumping Unit Compressor **Tubular Detail** 5izo Weight 8 5/8" 22 lb 2007 20' 4 1/2" 10.5 lb .0159 2007 1063 965' 2 3/8° 2007 **Downhole Equipment Detail Completion Data** Original as GAS Well per ACO-1 1,000 gals 15% HCL 1,638 bbls water 15,700 lbs 20/40 sand Perforations Original Completion: 4 spf 101ginal Competion: 4 spi 544-548 Summit (17) 558-562 Mulky (17) 645-648 Croweburg (13) 681-683 Fleming (9) 783-785 Weir (9) 935-938 Riverton (13) 2 3/8" tubing @ 965' PBTD @ 1063' 4.5" 10.5 lb @ 1063' Cement w/150 sks

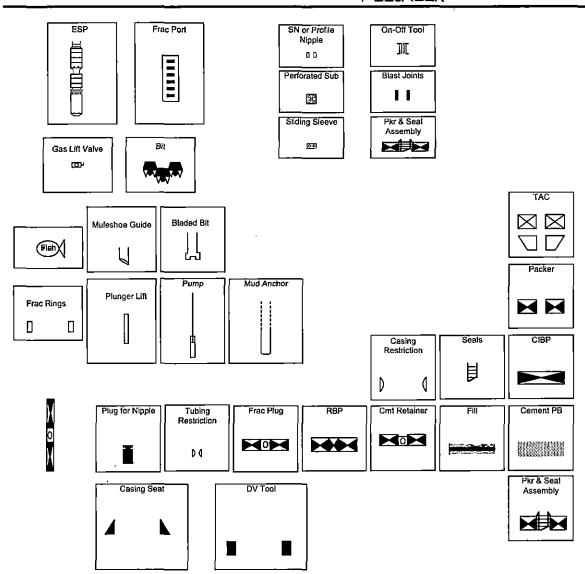
PREPARED BY:	POSTROCK	DATE: Oct, 201
APPROVED BY:		DATE:

Drilled Depth @ 1072"

POSTROCK



LEGEND



1 NAME & UPP FORMATION:	RIVERTON	(PERFS):	935 -	938		
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Affidavit of Notice Served	<u> </u>					
Re: Application for: APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS ACO-4						
Well Name: MIH, AD 18-1	Legal Location: NENESWSE S18-T27S-R19E					
The undersigned hereby certificates that he / she is a duly authorized ager	nt for the applicant, and that on the dayof_NOVEMBER					
2012 , a true and correct copy of the application referenced						
Note: A copy of this affidavit must be served as a part of the application.						
Name	Address (Atlach additional sheets if necessary)					
L&M,INC	1606 PAUL ST, APT A, PARKERSBURG, WV 26101					
PLANT OIL COMPANY	PO BOX 301, CHANUTE, KS 66720					
TOSHIC DYNAMICS LLC	8226 E HIGHLAND AVE, SCOTTSDALE, AZ 85251					
SEE ATTACHED						
	•					
•	•					
•						
I further attest that notice of the filing of this application was published in the	THE CHANUTE TRIBUNE , the official county publication					
of NEOSHO	$_{\perp}$ county. A copy of the affidavit of this publication is attached.					
Signed this 12 day of NOVEMBER , 2	2012					
•	() Maria					
	Applicant or Dilly Authorized Agent					
Subscribed and sworn to	before me this 12 day of NOVEMBER , 2012					
JENNIFER R. BEAL	Desnifu L. Bial					
SEAL MY COMMISSION EXPIRES	Notary Public (2)					
7-20-2016	My Commission Expires: Chilles Old					
	·					

18-27S-19E

NW4 less KW Oil Service

19450 Ford Rd Chanute, KS 66720

Tract in SE4 Arthur Jr & Connie Lester

2690 130th Rd Chanute, KS 66720

19-27S-19E

NE4 less Michael & Barbara A Watts

21350 Jackson Rd Chanute, KS 66720

Tract in NE4 Charles & Beverly Hole

9715 220th Rd Chanute, KS 66720

NW4 less Kynta Lou Leonard

PO Box 309

Cripple Creek, CO 80813

trct in NW Matthew & Jennifer Richard

20155 Harper Rd Chanute, KS 66720

MIH, A D 18-1-APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS

Officer							
		ased Mineral Owners	and Landowners	acreage			
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OFF.	ATTACHED	Name:				Legal Description of Lease	ehold:
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hereby	certify that the sta	lements made herein ar	e true and comect to	o the best of my know		,	
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				Applicant or De	lly Authorized Agen	<u> </u>	
						of NOVEMBER	2012
			Subscribed and	sworn before me this			
				\bigcirc		2 R.1	1
		JENNIFER R. BEAL		Notary Public	arouger_		
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LEGAL LOCATION	SPOT	CURR_OPERA
S20-T27S-R19E	NW NW NW NW	L & M, Inc.
S20-T27S-R19E	NW SW NW NW	L & M, Inc.
S20-T27S-R19E	SE NW NW NW	L & M, Inc.
S18-T27S-R19E	SE SE SE	Plant Oil Company
S18-T27S-R19E		Plant Oil Company
S18-T27S-R19E	SW SE SE	Toshic Dynamics, LLC
S18-T27S-R19E	SE SE SE	Toshic Dynamics, LLC
S18-T27S-R19E	NW SE SE	Toshic Dynamics, LLC
S18-T27S-R19E	NW NW SE	Toshic Dynamics, LLC
S18-T27S-R19E	W2 E2 SE	Toshic Dynamics, LLC
S18-T27S-R19E	SE NW SE	Toshic Dynamics, LLC
S18-T27S-R19E	NE NW SE	Toshic Dynamics, LLC
S18-T27S-R19E	SE SW SE	Toshic Dynamics, LLC
S18-T27S-R19E	SE NW SE	Toshic Dynamics, LLC
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S18-T27S-R19E	SW SE SE	Toshic Dynamics, LLC
S18-T27S-R19E	NW SE SE	Toshic Dynamics, LLC
S18-T27S-R19E	SE NW SE	Toshic Dynamics, LLC
S18-T27S-R19E	NE NW SE	Toshic Dynamics, LLC

18-27S-19E

NW4 less

KW Oil Service 19450 Ford Rd Chanute, KS 66720

Tract in SE4

Arthur Jr & Connie Lester

2690 130th Rd Chanute, KS 66720

19-27S-19E

NE4 less

Michael & Barbara A Watts

21350 Jackson Rd Chanute, KS 66720

Tract in NE4

Charles & Beverly Hole

9715 220th Rd Chanute, KS 66720

NW4 less

Kynta Lou Leonard

PO Box 309

Crippie Creek, CO 80813

trct in NW

Matthew & Jennifer Richard

20155 Harper Rd Chanute, KS 66720

AFFIDAVIT

STATE OF KANSAS

- SS.

County of Sedgwick

Mark Fletchall, of lawful age, being first duly sworn, deposeth and saith: That he is Record Clerk of The Wichita Eagle, a daily newspaper published in the City of Wichita, County of Sedgwick, State of Kansas, and having a general paid circulation on a daily basis in said County, which said newspaper has been continuously and uninterruptedly published in said County for more than one year prior to the first publication of the notice hereinafter mentioned, and which said newspaper has been entered as second class mail matter at the United States Post Office in Wichita, Kansas, and which said newspaper is not a trade, religious or fraternal publication and that a notice of a true copy is hereto attached was published in the regular and entire Morning issue of said The Wichita Eagle for _1_ issues, that the first publication of said notice was

made as aforesaid on the 9th of

November A.D. 2012, with

subsequent publications being made on the following dates:

And affiant further says that he has personal knowledge of the statements above set forth and that they are true.

Fletchall

Subscribed and sworn to before me this

9th day of November, 2012

PENNY L. CASE 国的 Notary Public - State My Appl. Expires

Printer's Fee: \$132.40

LEGAL PUBLICATION

PUBLISHED IN THE WICHITA EAGLE
NOVEMBER 9, 7012 (21/6888).
BEFORE THESTATE CORPORATION
COMMISSION
OF THE STATE OF KANSAS
NOTICE OF FILING APPLICATION
RE In the Maller of Postrock Microninent
Preduction, ELLC Application for
Comminging of Production in the Mily, A
D 18-1, keeled in Neotho County Kansas.
TO: At Oil & Gas Producers, Unleased Mineral
interest Dworst, Landovnert, and all
persons whomever concerned.
You, and, each of you, are bereby notified
that Postrock Micconlinent Production, LLC
has filed, an application to commingle the
Summit, Multy, Crowburg, Fleming, Weir,
Riverton and Bartinsville producing formations
at the Milh, A D 18-1, focated in the NE ME SW
SE, S18-7275, R19E, Approximately, 1801 FSL &
1495 FEL; Meosho County, Kansas.
Any persons who Oblect 10 or profest
this application shall be required to the their
objections or profest.

this application shall be required to the there objections or projects with the conservation Division of the Stale Corporation Commission of the Stale of Konros, within Titleen (15) days from the date of this publication. These projects shall be illed oursuant to Commission regulations and must state specific reasons why granting the application may cause wasterviolate correlative rights or pollute the natural resources of the Stale of Kansas.

All persons interested or concerned shall deep notice of the foreigning and shall govern themselves accordingly. All person and/or companies wishing to brotest this application are required to the a written project with the Contervation Division of the Kansas Oil and Gas. Commission.

Upon the receipt of any project, the

Commission.

Upon line receipl of any project. The Commission will convene a hearth and professants will be expected for enter an appearance when Introduction proper legal coursel or as individuals, appearing on their own behalf. Pastrock Midcontinent Production, LLC 210 Park Avenue, Suite 2750 (#2 Okiehema City, Oklahoma 23102 (405) 660-7704

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

RE: In the Matter of Postrock Midcontinent Production, LLC Application for Commingling of Production in the Mih, A D 18-1 located in Neosho County, Kansas.

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

You, and each of you, are hereby notified that Postrock Midcontinent Production, LLC has filed an application to commingle the Summit, Mulky, Croweburg, Fleming, Weir, Riverton and Bartlesville producing formations at the Mih, A D 18-1, located in the NE NE SW SE, S18-T27S-R19E, Approximately 1001 FSL & 1495 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.

That the attached notice is a true copy thereof and was published in the regular and entire issue of said newspaper for consecutive time, , the first publication thereof being made as aforesaid on the day of day of
, 2012, 2012
, 2012, 2012
Rhonda Howerton
Subscribed and sworn to and before me this
My commission expires: January 9, 2015
Printer's Fee
Affidavit, Notary's Fee\$ 3.00
Additional Copies\$
Total Publication Fees \$ 73.14

A. SHANNA L. GUIOT

Notary Public - State of Kensas
My Appt. Expires /-9-/5

Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichito, KS 67202-3802



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

Sam Brownback, Governor

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

November 27, 2012

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

RE: Approved Commingling CO111209

Mih, A.D. 18-1 Sec. 18-T27S-R19E, Neosho County

API No. 15-133-27075-00-00

Dear Mr. Edwards:

Your Application for Commingling (ACO-4) for the above described well, received by the KCC on November 19, 2012, has been reviewed and approved by the Kansas Corporation Commission (KCC) per K.A.R. 82-3-123. Notice was examined and found to be proper per K.A.R. 82-3-135a. No protest had been filed within the 15-day protest period.

Based upon the depth of the Riverton formation perforations, total oil production shall not exceed 100 BOPD and total gas production shall not exceed 50% of the absolute open flow (AOF).

File form ACO-1 upon re-completion of the well to commingle.

Commingling ID number CO111209 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