

Kansas Corporation Commission
Oil & Gas Conservation Division

1084524

Form ACO-4 Form must be typed March 2009

APPLICATION FOR COMMINGLING OF Commingling ID # CO061202 PRODUCTION (K.A.R. 82-3-123) OR FLUIDS (K.A.R. 82-3-123a)

OPERATOR: License # 33343 API No. 15 - 15-205-26734-00-01 Name: PostRock Midcontinent Production LLC Spot Description: Address 1: Oklahoma Tower NE_NESec. 30Twp. 28S. R. 17 €_EastWest Address 2: 210 Park Ave, Ste 2750 S60
Address 1: Oklahoma Tower
Address 2: 210 Park Ave, Ste 2750 City: OKLAHOMA CITY State; OK Zip; 73102 + 660 Feet from North / □ South Line of Section Contact Person: CLARK EDWARDS County: Wilson Lease Name; MCMILLEN BILLY D Well #: 30-1 1. Name and upper and lower limit of each production interval to be commingled: Formation: RIVERTON (Perfs): 984-986 984-986 Formation: NEUTRAL (Perfs): 978-980 868-870 Formation: TEBO Perfs): 868-870 Estimated amount of fluid production to be commingled from each interval: Formation: NEUTRAL BOPD: 0 MCFPD: 3.54 BWPD: 3.64 Formation: ROWE BOPD: 0 MCFPD: 3.54 BWPD: 3.64 Formation: WEIR BOPD: 0 MCFPD: 3.54 BWPD: 3.64 F
City: OKLAHOMA CITY State: OK Zip: 73102 + 660 Feet from V East / West Line of Section Contact Person: CLARK EDWARDS Phone: (620) 4324200 1. Name and upper and lower limit of each production interval to be commingled: Formation: RIVERTON Formation: ROWE Formation: Pormation: Formation: Formation: Pormation: Formation: Pormation: Pormat
Contact Person: CLARK EDWARDS Phone: (620) 4324200 Lease Name: MCMILLEN BILLY D Well #: 30-1 1. Name and upper and lower limit of each production interval to be commingled: Formation: RIVERTON Formation: ROWE Formation: WEIR Formation: TEBO 2. Estimated amount of fluid production to be commingled from each interval: Formation: RIVERTON Formation: NEUTRAL Formation: RIVERTON Formation: RIVERTON Formation: NEUTRAL Formation: NEUTRAL Formation: NEUTRAL Formation: NEUTRAL Formation: ROWE Formation: ROW
Phone: (620) 4324200 Lease Name: MCMILLEN BILLY D Well #: 30-1 1. Name and upper and lower limit of each production interval to be commingled: Formation: RIVERTON Formation: NEUTRAL Formation: WEIR Formation: TEBO Formation: RIVERTON Formation: NEUTRAL Formation: RIVERTON Formation: Perfs): 868-870 Formation: RIVERTON Formation: RIVERTON Formation: RIVERTON Formation: NEUTRAL Formation: NEUTRAL Formation: ROWE Formation: TEBO BOPD: 0 MCFPD: 3.54 BWPD: 3.64 BWPD: 3.64 BWPD: 3.64 BWPD: 3.64 BWPD: 3.64 BWPD: 3.54 BWPD: 3.64 BWPD: 3.64 BWPD: 3.54 BWPD: 3.64 BWPD: 3.64 BWPD: 3.64 BWPD: 3.54 BWPD: 3.64 BWPD: 3.6
In Name and upper and lower limit of each production interval to be commingled: Formation: RIVERTON Formation: NEUTRAL Formation: ROWE Formation: WEIR Formation: TEBO 2. Estimated amount of fluid production to be commingled from each interval: Formation: RIVERTON Formation: RIVERTON Formation: NEUTRAL Formation: NEUTRAL Formation: ROWE Formation: NEUTRAL Formation: ROWE Formation: ROWE Formation: ROWE Formation: ROWE Formation: ROWE Formation: WEIR Formation: WEIR Formation: WEIR Formation: TEBO BOPD: 0 MCFPD: 3.54 BWPD: 3.64
Formation: RIVERTON Formation: NEUTRAL Formation: ROWE Formation: RIVERTON Formation: RIVERTON Formation: ROWE
Formation: NEUTRAL Formation: ROWE Formation: TEBO Formation: RIVERTON Formation: NEUTRAL Formation: NEUTRAL Formation: NEUTRAL Formation: RIVERTON Formation: NEUTRAL Formation: NEUTRAL Formation: NEUTRAL Formation: NEUTRAL Formation: ROWE Formation: ROWE Formation: ROWE Formation: NEUTRAL Formati
Formation: ROWE WEIR Formation: TEBO Refres): 978-980 (Perfs): 868-870 Refres): 868-870 Refres): 840-842 2. Estimated amount of fluid production to be commingled from each interval: Formation: RIVERTON Formation: NEUTRAL Formation: NEUTRAL Formation: ROWE Formatio
Formation: WEIR Formation: TEBO (Perfs): 868-870 (Perfs): 840-842 2. Estimated amount of fluid production to be commingled from each interval: Formation: RIVERTON BOPD: 0 MCFPD: 3.54 BWPD: 3.64 3.64 Formation: ROWE Formation: ROWE Formation: WEIR Formation: WEIR Formation: TEBO BOPD: 0 MCFPD: 3.54 BWPD: 3.64 3.64
Formation: TEBO (Perfs): 840-842 2. Estimated amount of fluid production to be commingled from each interval: Formation: RIVERTON Formation: NEUTRAL Formation: ROWE Formation: WEIR Formation: WEIR Formation: WEIR Formation: DEBO BOPD: D MCFPD: 3.54 BWPD: 3.64 BWPD: 3.6
2. Estimated amount of fluid production to be commingled from each interval: Formation: RIVERTON Formation: NEUTRAL Formation: ROWE Formation: WEIR Formation: WEIR Formation: TEBO BOPD: 0 MCFPD: 3.54 BWPD: 3.64 3.64 3.64 BWPD: 3.64 B
Formation: RIVERTON Formation: NEUTRAL Formation: NEUTRAL Formation: WEIR Formation: TEBO Popp: 0 MCFPD: 3.54 BWPD: 3.64 BOPD: 0 MCFPD: 3.54 BWPD: 3.64 BOP
Formation: RIVERTON Formation: NEUTRAL Formation: NEUTRAL Formation: WEIR Formation: TEBO Popp: 0 MCFPD: 3.54 BWPD: 3.64 BOPD: 0 MCFPD: 3.54 BWPD: 3.64 BOP
Formation: NEUTRAL Formation: NEUR Formation: WEIR Formation: TEBO BOPD: 0 MCFPD: 3.54 BWPD: 3.64 BOPD: 0 MCFPD: 3.64 BOPD: 0 MCFPD: 3.64 BOPD: 0 MCFPD
Formation: ROWE Formation: WEIR Formation: TEBO BOPD: 0 MCFPD: 3.54 BWPD: 3.64 BOPD: 0 MCFPD: 3.54 BWPD: 3.64 BOPD: 0 MCFPD: 3.54 BWPD: 3.64
Formation: WEIR Formation: D BOPD: 0 MCFPD: 3.54 BWPD: 3.64 3.64 3.64 WCFPD: 3.54 BWPD: 3.64 BWPD: 3.64 WCFPD: 3.54 BWPD: 3.64 WCFPD: 3.54 BWPD: 3.64
Formation: TEBO BOPD: 0 MCFPD: 3.54 BWPD: 3.64 Plat map showing the location of the subject well, all other wells on the subject lease, and all wells on offsetting leases within a 1/2 mile radius of the subject well, and for each well the names and addresses of the lessee of record or operator.
2 3. Plat map showing the location of the subject well, all other wells on the subject lease, and all wells on offsetting leases within a 1/2 mile radius of the subject well, and for each well the names and addresses of the lessee of record or operator.
2 3. Plat map showing the location of the subject well, all other wells on the subject lease, and all wells on offsetting leases within a 1/2 mile radius of the subject well, and for each well the names and addresses of the lessee of record or operator.
4. Signed certificate showing service of the application and affidavit of publication as required in K.A.R. 82-3-135a.
For Commingling 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 well.
For Commingling of FLUIDS ONLY, include the following:
7. Well construction diagram of subject well.
8. Any available water chemistry data demonstrating the compatibility 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
in writing and comply with K.A.R. 82-3-135b and must be filed within 15 days of publication of the notice of application.
15-Day Periods Ends: 6/28/2012
Approved By: Rick Hestermann Date: 06/28/2012



CONFIDENTIAL

Kansas Corporation Commission Oil & Gas Conservation Division 1083387

Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #33343	API No. 15
Name: PostRock Midcontinent Production LLC	Spot Description:
Address 1: Oklahoma Tower	NE_NE_Sec30_Twp28_SR17
Address 2: 210 Park Ave, Ste 2750	
City: OKLAHOMA CITY State: OK Zip: 73102 +	Feet from 🗹 East / 🗌 West Line of Section
Contact Person: CLARK EDWARDS	Footages Calculated from Nearest Outside Section Corner:
Phone: (620) 4324200	☑ne □nw □se □sw
CONTRACTOR: License # 34453	County: Wilson
Name: PostRock Energy Services Corporation	Lease Name: MCMILLEN BILLY D Well #: 30-1
Wellsite Geologist: N/A	Field Name:
Purchaser:	Producing Formation: RIVERTON, NEUTRAL, ROWE, WEIR, TEBO, FLEMING, CROWEBURG, BEVIER, MULKY, SUMMIT
Designate Type of Completion:	Elevation: Ground: 874 Kelly Bushing: 0
New Well ☐ Re-Entry	Total Depth: 1138 Plug Back Total Depth: 1131
☐ Oil ☐ wsw ☐ SWD ☐ SIOW	Amount of Surface Pipe Set and Cemented at: 22 Feet
☐ Gas ☐ D&A ☐ ENHR ☐ SIGW	Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
✓ OG GSW Temp. Abd.	If yes, show depth set: Feet
CM (Coal Bed Methane)	If Alternate II completion, cement circulated from:
Cathodic Other (Core, Expl., etc.):	feet depth to:w/sx cmt.
If Workover/Re-entry: Old Well Info as follows:	
Operator: POSTROCK	Palling Phaid Management Plan
Well Name: MCMILLEN, BILLY D 30-1	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: 6/21/2006 Original Total Depth: 1138	Chloride content: bbls
☐ Deepening	••
Conv. to GSW	Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
✓ Commingled Permit #:	Operator Name:
Dual Completion Permit #:	Lease Name: License #:
☐ SWD Permit #:	
■ ENHR Permit #:	QuarterSecTwpS. R Bast West
GSW Permit #:	County: Permit #:
4/17/2012 4/17/2012	
Spud Date or Date Reached TD Completion Date or Recompletion Date	

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY					
Letter of Confidentiality Received Date: 06/05/2012					
Confidential Release Date:					
☐ Wireline Log Received					
Geologist Report Received					
UIC Distribution					
ALT I I II Approved by: NAOMI JAMES Date: 06/06/2012					

Side Two



1083387

Operator Name: Pos	stRock	Midcontiner	nt Prod	uction LLC	Lease	e Name: _	MCMILLE!	N BILLY D	Weil #:	<u>30-1</u>	
Sec. 30 Twp. 28	S.	R. <u>17</u>	✓ East	☐ West	Coun	ty: Wilso	on				
INSTRUCTIONS: Shitime tool open and clorecovery, and flow rate line Logs surveyed. A	osed, flo es if gas	wing and shut-i to surface test	in pressu , along v	ires, whether s vith final chart(hut-in pre	essure rea	ched static le	evel, hydrostatic p	oressures, botto	m hole temp	perature, fluid
Drill Stem Tests Taken (Attach Additional			<u></u> Y€	es 📝 No			_	ation (Top), Dept			Sample
Samples Sent to Geo	logical S	Survey	<u> </u>	es 🗹 No		Nam N/A	e		Тор	I	Datum
, , ,		Ye Ye Ye	es 🗹 No								
List All E. Logs Run:											
					55355						
			Repo	casing irt all strings set-	RECORE conductor,	_	_	duction, etc.			
Purpose of String		Size Hole Drilled		e Casing (In O.D.)		eight s. / Ft.	Setting Depth	Type of Cemen			and Percent Additives
											<u>-</u>
<u> </u>	I			ADDITIONAL	CEMEN	TING / SQL	JEEZE RECC	DRD			
Purpose:	_	Depth Top Bottom	Туре	of Cement	# Sac	# Sacks Used Type and Percent Additives					
Protect Casing Plug Back TD Plug Off Zone	-							-	•		
	-		_	 -					<u> </u>		
Shots Per Foot		PERFORATION Specify Fo	N RECOR	tD - Bridge Plug Each Interval Per	js Set/Typ forated	e	Acid	Fracture, Shot, Co		ecord	Depth
3	906-9	908/912-915/9	18-922				250 GALS 12% AC	IDV 365 BBLS SLICK WATER/ 10	000 FRAC GEL! 12200# 2040 S	SAND/ 7500# 12/20 SA	906-906/912-915/918-9
3 668-672/679-684						_	250 GALS 12%	ACID/ 223 BBLS SLICK W	/ATER/ 250# FRAC GEL/	6000# 20/40 SAND	668-672/679-68
	_										
TUBING RECORD: Size: Set At: Packer At: Liner Run:											
Date of First, Resumed	Producti	ion, SWD or ENH	R.	Producing Met	hod:	ping [Gas Lift	Other (Explain)			
Estimated Production Per 24 Hours	_	Oil Bi	bís.	Gas	Mcf	Wat	er	Bbls.	Gas-Oil Ratio)	Gravity
				<u> </u>							
DISPOSITI								l Commission	PRODUC	CTION INTER	tVAL:
Vented ✓ Sole (If vented, Su	_	Jsed on Lease 1-18.)		Open Hole Other (Specify)	Perf.	(Submit		Commingled (Submit ACO-4)			

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



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

Sam Brownback, Governor

Mark Sievers, Chairman Ward Loyd, Commissioner Thomas E. Wright, Commissioner

June 05, 2012

CLARK EDWARDS
PostRock Midcontinent Production LLC
Oklahoma Tower
210 Park Ave, Ste 2750
OKLAHOMA CITY, OK 73102

Re: ACO1 API 15-205-26734-00-00 MCMILLEN BILLY D 30-1 NE/4 Sec.30-28S-17E Wilson County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully, CLARK EDWARDS

1 NAME & UPPER & LOWER LIMIT OF EACH PRODUCTION INTERVAL TO BE COMMINGLED

	·			
FORMATION:	FLEMING	(PERFS):	797 -	799
FORMATION:	FLEMING	(PERFS):	779 -	781
FORMATION:	CROWBURG	(PERFS):	738 -	741
FORMATION:	BEVIER	(PERFS):	820 -	822
FORMATION:	MULKY	(PERFS):	652 -	656
FORMATION:	SUMMITT	(PERFS):	639 -	643
FORMATION:	BARTLESVILLE	(PERFS):	906 -	908
FORMATION:	BARTLESVILLE	(PERFS):	912 -	915
FORMATION:	BARTLESVILLE	(PERFS):	918 -	922
FORMATION:	SQUIRRELL	(PERFS):	668 -	672
FORMATION:	SQUIRRELL	(PERFS):	679 -	684
FORMATION:		(PERFS):	-	

2 ESTIMATED AMOUNT OF FLUID PRODUCTION TO BE COMMINGLED FROM EACH INTERVAL

FORMATION:	FLEMING	BOPD:	0	MCFPD:	3.54	BWPD:	3.6 <u>4</u>
FORMATION:	FLEMING	BOPD:	0	MCFPD:	3.54	BWPD:	3.64
FORMATION:	CROWBURG	BOPD:	0	MCFPD:	3.54	BWPD:	3.64
FORMATION:	BEVIER	BOPD:	0	MCFPD:	3.54	BWPD:	3.64
FORMATION:	MULKY	BOPD:	0	MCFPD:	3.54	BWPD:	3.64
FORMATION:	SUMMITT	BOPD:	0	MCFPD:	3.54	BWPD:	3.64
FORMATION:	BARTLESVILLE	BOPD:	0.6	MCFPD:	0	BWPD:	4
FORMATION:	BARTLESVILLE	BOPD:	0.6	MCFPD:	0	BWPD:	4
FORMATION:	BARTLESVILLE	BOPD:	0.6	MCFPD:	0	BWPD:	4
FORMATION:	SQUIRRELL	BOPD:	0.6	MCFPD:	0	BWPD:	4
FORMATION:	SQUIRRELL	BOPD:	0.6	MCFPD:	0	BWPD:	4
FORMATION:		BOPD:		MCFPD:		BWPD:	

	A	В	С	Ď	E	F	G	н		J	Тк
┰	Produced Fluids #	8	<u> </u>	2	3	4	5				
_	Parameters	Units	loput	Input	Input	Input	Input		Click he	ra	Click
3	Select the brines	Select fluid	in .		<u> </u>			Mixed brine:	to run S		
4	Sample ID	by checking						Cell H28 is	10 1511 0	••	Click
	Date	the box(es),	3/19/2012	3/4/2012	3/14/2012	1/20/2012	1/20/2012	STP cale. pH.			
6	Operator	Row 3	PostRock	PostRock	PostRock	PostRock	PostRock	Cells H35-38			Click
-	Well Name		Ward Feed	Ward Feed	Clinesmith	Clinesmith	Clinesmith	are used in	Goal Seek	SSP	
$\overline{}$	Location		#34-1	#4-1	#5-4	#1	#2	mixed brines			Click
-	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)	SL/SR
[11]	K* (if not known =0)	(mg/l)						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	Cu ²⁺	(mg/l)	1,836.00	2,452.00	2,044.00	1920.00	1948,00	2040,23	-0.73	-0.60	0.13
14	Sr ²⁺	(mg/l)					_	0.00	Br	urite	1-
15	Ba ²⁺	(mg/l)						0.00			1
	Fe ² *	(mg/l)	40.00	21.00	18.00	82.00	90.00	50.21	W.	lite	1
	Zn ²⁺		40.00	21.00	10.00	82.00	50.00				
 -	Pb ²⁺	(mg/l)		-	-			0.00	-1.77	-1,80	-0.03
$\overline{}$	CI.	(mg/l)						0.00		osum	1
تنا		(mg/l)	36,299.00	48,965.00	47,874.00	45632.00	43147.00	44388.44	-3.19	-3,18	0.00
_	SO, 2.	(mg/l)	1.00	1.00	8.00	1.00	1.00	2.40	Hemi	hydrate	.
21	F	(mg/l)						0.00	-3.96	-3.90	0.06
22	Br'	(mg/l)						0.00	Anh	ydrite	1
23	SIO2	(mg/l) SiO2						0.00	-3,47	-3,36	0.12
24	HCO3 Alkalinity**	(mg/l as HCO3)	190.00	234.00	259.00	268.00	254.00	241.03	Cel	estite	
25	CO3 Alkalinity	(mg/l as CO3)								_	1
26	Carboxylle acids**	(mg/l)						0.00	Iron	Sulfide	1 1
27	Ammonia	(mg/L) NH3						0.00	-0.16	-0.22	-0.06
28	Borate	(mg/L) H3BO3						0.00		Sulfide	1
	TDS (Measured)	(mg/l)						72781			1 1
-	Calc. Density (STP)	(g/ml)	1.038	1,051	1.050	1.048	1.045	1,047	Coleina	ı fluoride	1
	CO ₂ Gas Analysis	(%)	19.97	18.76	22,41	35.53	33.79	26.16	Carciun	1 Muoriue	1
-	H ₂ S Gas Attalysis***	(%)	0.0289	0.0292	0.0296	0.0306	0.0151	0.0269	Iron C	roonate	
	Total H2Saq	(mgH2S/l)	1.00	1.00	1.00	1.00	0.50	0.90	-0.74	-0.51	0.23
34	pH, measured (STP)	pH	5.67	5.76	5.72	5.54	5.55	5.63		eded (mg/L)	
		0-CO2%+Alk,							Calcite	NTMP	·}
ا ۔ ۔ ا	Choose one option										
35	to calculate S1?		0	0	0	0	0				.i ∣
	Gas/day(thousand cf/day) Oil/Day	(Mcf/D) (B/D)		0				0	0.00	0.00	-l
	Water/Day	(B/D)	100	100	100	100	100	500	Barite 0.00	8HPMP 0.00	-
	For mixed brines, enter val					100	100	(Enter H40-H43))H	1 1
	Initial T	(F) (66.0	71.0	70.0	41.0	49.0	60.0	5.69	5,60	1 1
41	Final T	(F)	66.0	71.0	70.0	41.0	49.0	89.0	Viscosity (CentiPoise)]
42	Initial P	(psia)	25.0	25.0	25.0	25.0	25.0	25.0	1.196	0.826	JJ
	Final P	(psia)	25.0	25.0	25.0		25.0	120.0		ty (cal/ml/°C)]
_	Use TP on Calcite sheet?	1-Yes;0-No							0.955	0.959	J 1
	API Oil Grav. Gas Sp.Grav.	API grav. Sp.Grav.						30.00		eded (mg/L)	4 I
	McOH/Day	(B/D)						0.60	Gypsum 0.00	0.00	-l
	MEG/Day	(B/D)						<u>-</u>	Anhydrite	HDTMP	1 [
	Conc. Multiplier	,	<u>_</u>						0.00	0.00	1
50	H* (Strong acid)	(N)							•	<u> </u>	- 1
	OH (Strong base) †	(N)									j
_	Quality Control Checks at			•							
	H ₂ S Gas	(%)									
	Total H2Saq (STP)	(mgH2S/I)									
	pH Calculated PCO2 Calculated	(pH)	İ İ	ľ				[Í
	Alkalinity Caclulated	(%) (mg/l) as HCO3									ľ
	ECations=	(mg)) as nCO3 (equiv./l)									ļ
59	ΣAnions=	(equiv./I)		1							
	Cate TDS=	(mg/l)		1							ľ
	Inhibitor Selection	Input	Unit	#	Inhibitor		(From metric		_		l
	Protection Time	120	min	1	NTMP	From Unit	Value	To Unit	Value		l
	Have ScaleSoftFitzer	<u> </u>	<u> </u>	2	ВНРМР	°C,	80	°F	176		l
64	pick inhibitor for you?	1	1-Yes;0-No	3	PAA	m	100	U ₃	3,531		
65	If No, inhibitor # is:	4	Ħ	4	DTPMP	m³	100	bbl(42 US gal)	629		
	If you select Mixed,	 	_ [5	PPCA	MPa -	1,000	psia	145,074		Į
67	1 st inhibitor # is:	1	#	6	SPA	Bar	496	psia	7,194		j
68	% of 1st inhibitor is:	50	%	7	HEDP	Тогг	10,000	psia	193		l
69	2 nd (nhibitor # ls:	2	#	8	HDTMP	Gal	10,000	bbl(42 US gal)	238		l
70 71	Display act. coefs?	0	1-Yes;0-No	9 10	Average Mixed	Liters	10,000	bbl(42 US gal)	63		1
(' 		l	1	10	MIXEG			1			l

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

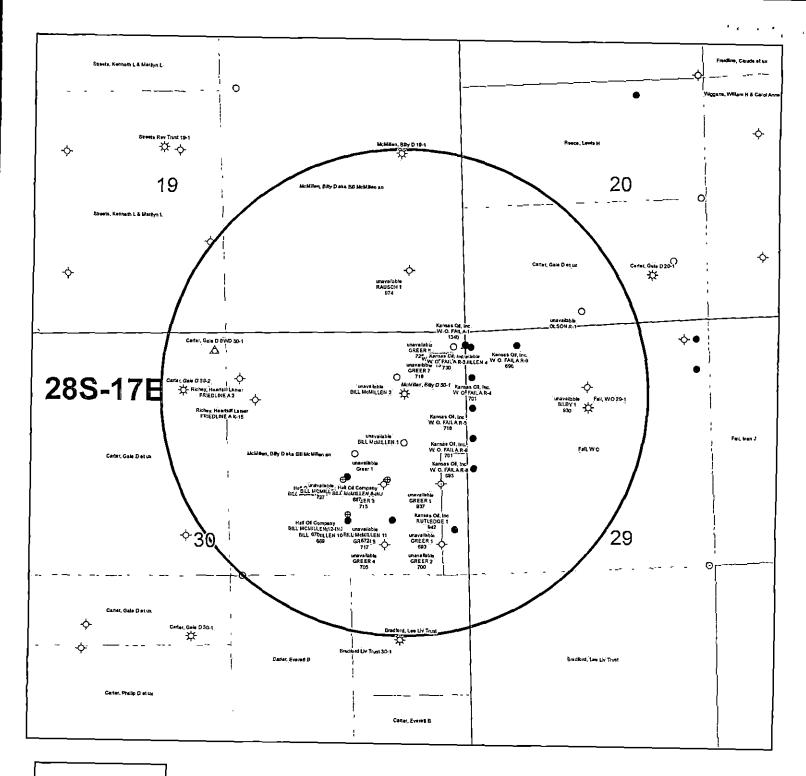
		_	Ratio	_		
,	20%	20%	20%	20%	20	J ,
Component (mg/L)_	Brine 1	Brine 2	Brine 3	Brine 4	Brine 5	Mixed Brine
Calcium	1836	2452	2044	1920	1948	1952
Magnesium	1096	872	1200	953	858	865
Barium	0	0	0	0	0	0
Strontium	0	0	0	0	0	0
Bicarbonate	190	234	259	268	254	253
Sulfate	1	1	8	1	1	1
Chloride	36299	48965	47874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

PTR

LID						
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
- e EOR
- ☆ GAS
- △ INJ/SWD
- OIL
- ★ OIL/GAS
- OTHER

McMillen, Billy D 30-1 30-28S-17E 1" = 1,000'

POSTROCK



Current Completion

WELL

: McMillen, Billy D 30-1 : Cherokee Basin CBM

FIELD STATE

: Kansas

COUNTY

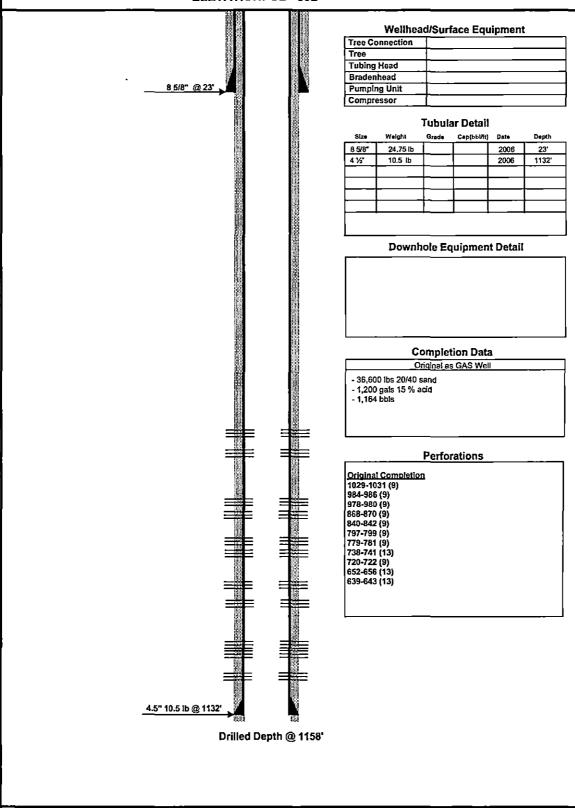
: Wilson

SPUD DATE: 6/14/2006 COMP. Date: 2/6/2006

API: 15-205-26734-00-00

LOCATION: 30-28S-17E (NE, NE)

ELEVATION: GL - 882'



PREPARED BY: POSTROCK APPROVED BY: _

DATE: June, 2012

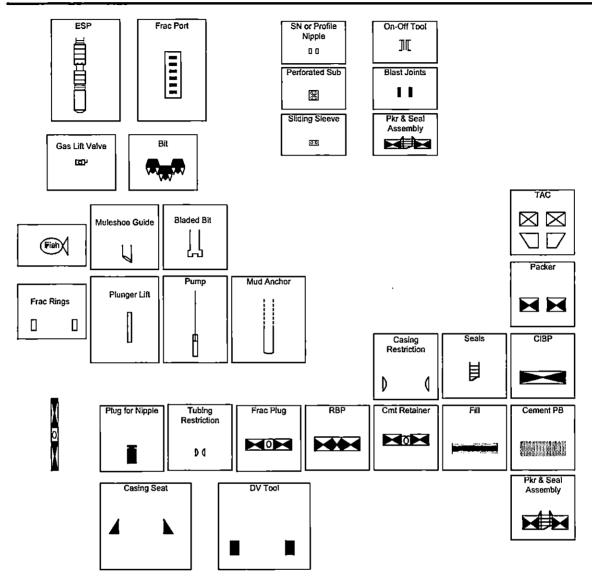
DATE:_

POSTROCK



LEGEND

PostRock



AFFIDAVIT

STATE OF KANSAS

SS.

County of Sedgwick

Mark Fletchall, of lawful age, being first duly sworn, deposeth and saith: That he is Record Clerk of The Wichita Eagle, a daily newspaper published in the City of Wichita, County of Sedgwick, State of Kansas, and having a general paid circulation on a daily basis in said County, which said newspaper has been continuously and uninterruptedly published in said County for more than one year prior to the first publication of the notice hereinafter mentioned, and which said newspaper has been entered as second class mail matter at the United States Post Office in Wichita, Kansas, and which said newspaper is not a trade, religious or fraternal publication and that a notice of a true copy is hereto attached was published in the regular and entire Morning issue of said The Wichita Eagle for _1_issues, that the first publication of said notice was

made as aforesaid on the 1st of

June 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

1st day of June, 2012

PENNY L. CAȘE Notary Public -/ State of My Appt. Expires

Notary Public Sedgwick County, Kansas

Printer's Fee : \$134.80

LEGAL PUBLICATION

PUBLISHED IN THE WICHITA EAGLE
JUNE 1: 2012 (3)87774)
BEFORE THE STATE CORPORATION
COMMISSION OF THE

BEFORE THE STATE CORPORATION
COMMISSION OF THE
STATE OF KANSAS.
NOTICE OF FILING APPLICATION
RE In the Mater of Postrack Midcomment
Production, LLC. Application in the
Commission of Production in the
McMillen, Bully 13 30-1 located in Wilson
County, Kansa.
TO An Oir & Gas Producers, Unleased Mineral
interest Owners. Landowners, and all
persons whoreever concerned.
You, and each of you, are thereby notified
that Postrack, Midcontinent, Production, LLC
has field an application to commission, LLC
has field an application to commission. LLC
has field an application to commission, LLC
has field an application to commission with the McMillen, Bully D 30-1, located in the
Riverton, Neutral, Roire, Bartisville, Welr,
Tebo, Flernins, Crawebure, Beyler, Squirret,
Mulky and Summit Production, to commission of the AndMillen, Billy D 30-1, located in the
Riverton Neutral, Roire, Bartisville, in the Riverton Neutral, Roire, Bartisville, in the Riverton Neutral, Roire, Bartisville, in the Riverton Neutral, Roire, Bartisville, in the Riverton Neutral, Roire, Bartisville, in the Riverton Neutral, Roire, Bartisville, in the Riverton Neutral, Roire, Bartisville, in the Riverton Neutral, Roire, Bartisville, in the Riverton Neutral, Roire, Bartisville, in the Riverton Neutral, Roire, Bartisville, in the Riverton Neutral, Roire, Bartisville, in the Riverton Neutral, Roire, State of the State of the Production of the Interest of the Interest of the State of the State
protest shall be filed pursuant to Commission, of the State of the Interest of concerned shall lake notics of the Interest of concerned shall lake notics of the Interest of concerned shall lake notics of the Interest of concerned shall lake notics of the Interest of concerned shall lake notics of the Interest of concerned shall govern
hemselves, accordingly, All person and/or companies withing to profest this application
are required, by Illo, a written protest with the
Conservation Division of the Kansas Oi and
Gas Commission will convene a heering vanither own behalf.

PROOF OF PUBLICATION

STATE OF KANSAS Wilson County - SS

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

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

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

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

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

1st publication was made on the	day of
Na	y .2012
2nd publication was made on the	<i></i> day of
	20
3rd publication was made on the	
	20
4th publication was made on the	
5th publication was made on the	20
	20
6th publication was made on the	day of
	20—— 20——
TOTAL PUBLICATION FEE: \$	77. =
(Signed) Mines Stablerry	<u></u>
Subscribed and sworn to before me, this/	Al day of
- June	,20_/2
Rita M. Relph	(Notary Public)
My commission expires Qua, 30	2014

(Published in the Wilson County Citizen on Thursday, May 31, 2012.)

BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

NOTICE OF FILING APPLICATION

KE In the Matter of Postrock Midcontinent Production, LLC Application for Commingling of Production in the McMillen, Billy D 30-1 located in Wilson County, Kansas

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

You, and each of you, are hereby notified that Postrock: Midomtinent Production, LLO has filed an application to commingle the Riverton Weutral, Rove, Bardesville, Weir, Tebo, Fleming, Croweburg, Beyer, Squirrel, Mulky and Summit producing formations at the McMillen, Billy D 30-1; located in the NE NR, 830-T28S-R17E, Approximately 664 FNL & 667 FEL, Wilson 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 them selves accordingly. All person and/or companies wishing to protest this application are required to file a written protect with the Conservation Division of the Kansas Oil and Gas Commission.

Upon the recept 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 30 1 qpy



_	
Affidavit of Notice Served	
Re: Application for: APPLICATION FOR COMMINGLIN	
Well Name: MCMILLEN, BILLY D 30-1	Legal Location: NENE S30-T28S-R17E
The undersigned hereby certificates that he / she is a duty authorized agent	
2012 , a true and correct copy of the application referenced a	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 (Atlach additional sheets if necessary)
POSTROCK MIDCONTINENT PRODUCTION, LLC	210 PARK AVENUE, SUITE 2750, OKLAHOMA CITY, OK 73102-5641
KANSAS OIL, INC	16716 WICHITA RD, CHANUTE, KS 66720
RICHEY, HEARTSILL LANIER	PO BOX 2005, TYLER, TX 75710
HALL, RICHARD A DBA HALL OIL COMPANY	501 CHEROKEE, PO BOX 282, HUMBOLDT, KS 66748
MICHEAL J & RABERTA J RUTLEDGE	14736 VIOLA ROAD, CHANUTE, KS 66720
	WILSON COUNTY CITIZEN
THU CON	WILSON COUNTY CITIZEN , the official county publication county. A copy of the affidavit of this publication is attached.
30,07	D12 Applicatifor Duty Authorized Agent
DENISE V. VENNEMAN OFFICIAL MY COMMISSION EXPIRES July 1, 2012	Lewis Menneman John Public T (-13
M	ty Commission Expires:
	,

Offset Operators, Unleased Mineral Owners and Landowners acreage Attach additional sheets if necessary)	<u> </u>			
Name: HALL, RICHARD A. DBA HALL OIL COMPANY	Legal Description of Leasehold: S2NE S30-T28S-R17E			
HALL, RICHARD A. DBA HALL OIL COMPANY	SENESWNE S30-T28S-R17E			
HALL, RICHARD A. DBA HALL OIL COMPANY	NENWSENE \$30-T28S-R17E			
RICHEY, HEARTSILL LANIER	NE \$30-T28S-R17E			
KANSAS OIL, INC	NESESENE S30-T28S-R17E			
KANSAS OIL, INC	NWNWNW S29-T28S-R17E			
KANSAS OIL, INC	NWNWNWNW S29-T28S-R17E			
KANSAS OIL, INC	N2NWNW S29-T28S-R17E			
KANSAS OIL, INC	SWNWNW \$29-T28\$-R17E			
KANSAS OIL, INC	SWSWNWNW S29-T28S-R17E			
KANSAS OIL, INC	NWSWNW S29-T28S-R17E			
(ANSAS OIL, INC	N2NWNW S29-T28S-R17E			
hereby certify that the statements made herein are true and correct to the best of the bes	My knowledge and belief. Amelia Bendo M or Duly fluthorized Agent			
DENISE V. VENNEMAN OFFICIAL MY COMMISSION EXPIRES July 1, 2012 Subscribed and sworn before Notary	me this 13TH day of JUNE 2012			

MCMILLEN, BILL D 30-1 - APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS OFFSET OPERATORS, UNLEASED MINERAL OWERS & LAND OWNERS ACREAGE

E/2 E/2 SE/4 NE/4 of Section 30-28S-17E
Michael J Rutledge and Roberta J Rutledge, husband and wife, as Joint Tentants
14736 Viola Road
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 Ward Loyd, Commissioner Thomas E. Wright, Commissioner

June 28, 2012

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

RE:

Approved Commingling CO061202

McMillen Billy D 30-1, Sec.30-T28S-R17E, Wilson County

API No. 15-205-26734-00-01

Dear Mr. Edwards:

Your Application for Commingling (ACO-4) for the above described well 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. This application, which was received by the KCC on June 14, 2012, concerns approval to simultaneously produce from the following sources of supply through the same tubing string in the same wellbore:

		Estimated Current Production		
Source of Supply	BOPD	MCFPD	BWPD	Perf Depth
Riverton	00	3.54	3.64	1029-1031
Neutral	0	3.54	3.64	984-986
Rowe	0	3.54	3.64	978-980
Weir	0	3.54	3.64	868-870
Tebo	0	3.54	3.64	840-842
Fleming	0	3.54	3.64	779-799
Crowburg	0	3.54	3.64	738-741
Bevier	0	3.54	3.64	820-822
Mulky	0	3.54	3.64	652-656
Summitt	0	3.54	3.64	639-643
Bartlesville	1.8	0.00	12.00	906-922
Squirrell	1.2	0.00	8.00	668-684
Total Estimated Current Production	3	35.40	56.40	

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).

Commingling ID number CO061202 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