KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1093844

Form ACO-4
Form must be typed
March 2009

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

Commingling ID # CO121205

OPERATOR: License # 33343
Name: PostRock Midcontinent Production LLC
Address 1: Oklahoma Tower
Address 2: 210 Park Ave, Ste 2750
City: OKLAHOMA CITY State: OK Zip: 73102 + _ _ _ _
Contact Person: CLARK EDWARDS
Phone: (620) 432-4200

API No. 15 - 15-205-27013-00-00
Spot Description:
SW - SE - NE - SW Sec. 2 Twp. 28 S. R. 15 ☑ East ☐ West
1580 Feet from ☐ North / ☑ South Line of Section
2078 Feet from ☐ East / ☑ West Line of Section
County: Wilson
Lease Name: ORENDORFF HARRY L Well #: 2-1

☑ 1. Name and upper and lower limit of each production interval to be commingled:

Formation:	SUMMIT	(Perfs):	813-817
Formation:	MULKY	(Perfs):	825-829
Formation:	BEVIER	(Perfs):	894-896
Formation:	CROWEBURG	(Perfs):	911-914
Formation:	FLEMING	(Perfs):	966-968

☑ 2. Estimated amount of fluid production to be commingled from each interval:

Formation:	SUMMIT	BOPD:	0	MCFPD:	2.57	BWPD: 2.14
Formation:	MULKY	BOPD:	0	MCFPD:	2.57	BWPD: 2.14
Formation:	BEVIER	BOPD:	0	MCFPD:	2.57	BWPD: 2.14
Formation:	CROWEBURG	BOPD:	0	MCFPD:	2.57	BWPD: 2.14
Formation:	FLEMING	BOPD:	0	MCFPD:	2.57	BWPD: 2.14

☑ 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

☐ Denied ☑ Approved
15-Day Periods Ends: 12/12/2012
Approved By: Rick Hestermann Date: 12/12/2012

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 wihin 15 days of publication of the notice of application.

Mail with all required attachments and files to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

	A	B	C	D	E	F	G	H	I	J	K
1	Produced Fluids #		1	2	3	4	5		Click here to run SSP	Click	
2	Parameters	Units	Input	Input	Input	Input	Input				
3	Select the brines	Select fluid	☑	☑	☑	☑	☑	Mixed brine:		Click	
4	Sample ID	by checking						Cell H28 is			
5	Date	the box(es),	3/19/2012	3/4/2012	3/14/2012	1/20/2012	1/20/2012	STP calc. pH.	Goal Seek SSP	Click	
6	Operator	Row 3	PostRock	PostRock	PostRock	PostRock	PostRock	Cells H35-38			
7	Well Name		Ward Feed	Ward Feed	Clinesmith	Clinesmith	Clinesmith	are used in		Click	
8	Location		#34-1	#4-1	#5-4	#1	#2	mixed brines			
9	Field		CBM	CBM	Bartles	Bartles	Bartles	calculations.			
10	Na^+	(mg/l)*	19,433.00	27,381.00	26,534.00	25689.00	24220.00	24654.20	Initial(BH)	Final(WH)	SI/SR (Final-Initial)
11	K^+ (if not known =0)	(mg/l)						0.00	Saturation Index values		
12	Mg^{2+}	(mg/l)	1,096.00	872.00	1,200.00	953.00	858.00	995.91	Calcite		
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
14	Sr^{2+}	(mg/l)						0.00	Barite		
15	Ba^{2+}	(mg/l)						0.00			
16	Fe^{2+}	(mg/l)	40.00	21.00	18.00	82.00	90.00	50.21	Halite		
17	Zn^{2+}	(mg/l)						0.00	-1.77	-1.80	-0.03
18	Pb^{2+}	(mg/l)						0.00	Gypsum		
19	Cl^-	(mg/l)	36,299.00	48,965.00	47,874.00	45632.00	43147.00	44388.44	-3.19	-3.18	0.00
20	SO_4^{2-}	(mg/l)	1.00	1.00	8.00	1.00	1.00	2.40	Hemihydrate		
21	F^-	(mg/l)						0.00	-3.96	-3.90	0.06
22	Br^-	(mg/l)						0.00	Anhydrite		
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	Celestite		
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			
30	Calc. Density (STP)	(g/ml)	1.038	1.051	1.050	1.048	1.045	1.047	Calcium fluoride		
31	CO_2 Gas Analysis	(%)	19.97	18.76	22.41	35.53	33.79	26.16			
32	H_2S Gas Analysis***	(%)	0.0289	0.0292	0.0296	0.0306	0.0151	0.0269	Iron Carbonate		
33	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	Inhibitor needed (mg/L)		
35	Choose one option to calculate SI?	0-CO2%+Alk, 1-pH+Alk, 2-CO2%+pH	0	0	0	0	0		Calcite	NTMP	
36	Gas/day(thousand cf/day)	(Mcf/D)						0	0.00	0.00	
37	Oil/Day	(B/D)	0	0	1	1	1	4	Barite	BHPMP	
38	Water/Day	(B/D)	100	100	100	100	100	500	0.00	0.00	
39	For mixed brines, enter values for temperatures and pressures in Cells (H40-H43)							(Enter H40-H43)	pH		
40	Initial T	(F)	66.0	71.0	70.0	41.0	49.0	60.0	5.69	5.60	
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	
43	Final P	(psia)	25.0	25.0	25.0	25.0	25.0	120.0	Heat Capacity (cal/ml/^{0}C)		
44	Use TP on Calcite sheet?	1-Yes;0-No							0.955	0.959	
45	API Oil Grav.	API grav.						30.00	Inhibitor needed (mg/L)		
46	Gas Sp.Grav.	Sp.Grav.						0.60	Gypsum	HDTMP	
47	MeOH/Day	(B/D)	0					0	0.00	0.00	
48	MEG/Day	(B/D)	0					0	Anhydrite	HDTMP	
49	Conc. Multiplier								0.00	0.00	
50	H^+ (Strong acid) †	(N)									
51	OH^- (Strong base) †	(N)									
52	Quality Control Checks at STP:										
53	H_2S Gas	(%)									
54	Total H2Saq (STP)	(mgH2S/l)									
55	pH Calculated	(pH)									
56	PCO2 Calculated	(%)									
57	Alkalinity Caclulated	(mg/l) as HCO3									
58	ΣCations=	(equiv./l)									
59	ΣAnions=	(equiv./l)									
60	Calc TDS=	(mg/l)									

61	Inhibitor Selection	Input	Unit	#	Inhibitor	Unit Converter (From metric to English)				
62	Protection Time	120	min	1	NTMP	From Unit	Value	To Unit	Value	
63	Have ScaleSoftPitzer			2	BHPMP	°C	80	°F	176	
64	pick inhibitor for you?	1	1-Yes;0-No	3	PAA	m^3	100	ft^3	3,531	
65	If No, inhibitor # is:	4	#	4	DTPMP	m^3	100	bbl(42 US gal)	629	
66	If you select Mixed,			5	PPCA	MPa	1,000	psia	145,074	
67	1st inhibitor # is:	1	#	6	SPA	Bar	496	psia	7,194	
68	% of 1st inhibitor is:	50	%	7	HEDP	Torr	10,000	psia	193	
69	2nd inhibitor # is:	2	#	8	HDTMP	Gal	10,000	bbl(42 US gal)	238	
70	Display act. coefs?	0	1-Yes;0-No	9	Average	Liters	10,000	bbl(42 US gal)	63	
71				10	Mixed					

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					
Component (mg/L)	20% Brine 1	20% Brine 2	20% Brine 3	20% Brine 4	20 Brine 5	Mixed Brine
Calcium	1836	2452	2044	1920	1948	1952
Magnesium	1096	872	1200	953	858	865
Barium	0	0	0	0	0	0
Strontium	0	0	0	0	0	0
Bicarbonate	190	234	259	268	254	253
Sulfate	1	1	8	1	1	1
Chloride	36299	48965	47874	45632	43147	43206
CO_2 in Brine	246	220	264	422	405	401
Ionic Strength	1.12	1.48	1.46	1.38	1.31	1.31
Temperature (°F)	89	89	89	89	89	89
Pressure (psia)	50	50	120	120	120	119

Saturation Index

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

PTB

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

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

ORIGINAL

Form ACO-1
September 1999
Form Must Be Typed

WELL COMPLETION FORM

WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 33344
Name: Quest Cherokee, LLC
Address: 211 W. 14th Street
City/State/Zip: Chanute, KS 66720
Purchaser: Bluestem Pipeline, LLC
Operator Contact Person: Jennifer R. Ammann
Phone: (620) 431-9500
Contractor: Name: TXD Services LP
License: 33837
Wellsite Geologist: Ken Recoy

Designate Type of Completion:

✓ New Well ____ Re-Entry ____ Workover
____ Oil ____ SWD ____ SIOW ____ Temp. Abd.
✓ Gas ____ ENHR ____ SIGW
____ Dry ____ Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: ____ Original Total Depth: ____
____ Deepening ____ Re-perf. ____ Conv. to Enhr./SWD
____ Plug Back ____ Plug Back Total Depth
____ Commingled Docket No.
____ Dual Completion Docket No.
____ Other (SWD or Enhr.?) Docket No.

11/29/06	12/04/06	12/05/06
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 205-27013-00-00
County: Wilson
__ - __ - ne - sw Sec. 2 Twp. 28 S. R. 15 ✓ East ☐ West
1980 feet from (S) N (circle one) Line of Section
1980 feet from E / (W) (circle one) Line of Section
Footages Calculated from Nearest Outside Section Corner:
(circle one) NE SE NW (SW)
Lease Name: Orendorff, Harry L. Well #: 2-1
Field Name: Cherokee Basin CBM
Producing Formation: Multiple
Elevation: Ground: 890 Kelly Bushing: n/a
Total Depth: 1262 Plug Back Total Depth: 1242.44
Amount of Surface Pipe Set and Cemented at 32' 6" Feet
Multiple Stage Cementing Collar Used? ☐ Yes ✓ No
If yes, show depth set ____ Feet
If Alternate II completion, cement circulated from 1242.44
feet depth to surface w/ 161 sx cmt.

Drilling Fluid Management Plan ALT#2 KJR 6/15/07
(Data must be collected from the Reserve Pit)
Chloride content ____ ppm Fluid volume ____ bbls
Dewatering method used
Location of fluid disposal if hauled offsite:
Operator Name:
Lease Name: License No.:
Quarter ____ Sec. ____ Twp. ____ S. R. ____ ☐ East ☐ West
County: ____ Docket No.:

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INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.

Signature: Jennifer R. Ammann
Title: New Well Development Coordinator Date: 3/23/07

Subscribed and sworn to before me this 23rd day of March, 20 07.

Notary Public: Terra Klauman
Date Commission Expires: 8-4-2010

TERRA KLAUMAN
Notary Public - State of Kansas
My Appt. Expires 8-4-2010

KCC Office Use ONLY

N **Letter of Confidentiality Received**
If Denied, Yes ☐ Date:
____ **Wireline Log Received**
____ **Geologist Report Received**
UIC Distribution

Side Two

Operator Name: Quest Cherokee, LLC Lease Name: Orendorff, Harry L. Well #: 2-1

Sec. 2 Twp. 28 S. R. 15 ☑ East ☐ West County: Wilson

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken ☐ Yes ☑ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☐ Yes ☑ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☐ Yes ☐ No
(Submit Copy)

List All E. Logs Run:

Compensated Density/Neutron Log
Dual Induction Log
Gamma Ray Neutron Log

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name Top Datum
See attached

CASING RECORD ☐ New ☐ Used
Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12-1/4	8-5/8"	20	32' 6"	"A"	5	
Production	6-3/4	4-1/2	10.5	1242.44	"A"	161	

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose: ___ Perforate ___ Protect Casing ___ Plug Back TD ___ Plug Off Zone	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
4	1190-1192	100gal 15%HCLw/ 30 bbls 2%kcl water, 266bbls water w/ 2% KCL, Biocide, 3100# 30/70 sand	1190-1192
4	1059-1061/966-968/911-914/894-896	400gal 15%HCLw/ 60 bbls 2%kcl water, 780bbls water w/ 2% KCL, Biocide, 13100# 30/70 sand	1059-1061/966-968
			911-914/894-896
4	825-829/813-817	300gal 15%HCLw/ 60 bbls 2%kcl water, 515bbls water w/ 2% KCL, Biocide, 13100# 30/70 sand	825-829/813-817

TUBING RECORD	Size	Set At	Packer At	Liner Run
	2-3/8"	1213	n/a	☐ Yes ☑ No

Date of First, Resumerd Production, SWD or Enhr.	Producing Method
waiting on pipeline	☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

Disposition of Gas METHOD OF COMPLETION Production Interval

☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

☐ Open Hole ☐ Perf. ☐ Dually Comp. ☐ Commingled _____
☐ Other *(Specify)* _____

TXD SERVICES LP DRILLERS LOG TXD SERVICES LP

RIG #	101	S. 2	T. 28	R. 15	
API #	205-27013	County:	Wilson		
	Elev: 890'	Location	Kansas		

Operator:	Quest Cherokee, LLC
Address:	9520 N. May Ave, Suite 300
	Oklahoma City, OK. 73120
Well #	2-1 Lease Name Orendorff, Harry L.
Footage Location	1980 ft from the S Line
	1980 ft from the W Line
Drilling Contractor:	TXD SERVICES LP
Spud Date;	11/29/2006 Geologist: Ken Recoy
Date Comp:	12/4/2006 Total Depth: 1263'
Exact spot Location;	NE SW

Casing Record	Surface	Production	Rig Time:
Size Hole	12-1/4"	6-3/4"	
Size Casing	8-5/8"	4-1/2"	
Weight	24#		
Setting Depth	32.5'		
Type Cement	portland		
Sacks			

GAS TESTS:		
470'	0	
563'	0	
752'	slight blow	
783'	slight blow	
815'	20 - 1/2"	28
845'	24 - 1/2"	30.7
908'	26 - 1/2"	31.9
940'	5 - 3/4"	33.2
970'	6 - 3/4"	34.7
1001'	11 - 3/4"	47.2
1032'	11 - 3/4"	47.2
1063'	11 - 3/4"	47.2
1157'	2 - 1 1/4"	62
1189'	2 - 1 1/4"	62
1263'	2 - 1 1/4"	62

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Well Log

Formation	Top	Btm.	Formation	Top	Btm.	Formation	Top	Btm.
top soil	0	11	sand/shale	564	595	sand	817	820
shale	11	130	lime	596	616	shale	820	822
lime	130	154	shale	616	626	coal	822	823
shale	154	200	lime	626	635	shale	823	905
lime	200	243	b.shale	635	639	coal	905	906
shale	243	296	lime	639	657	shale	906	915
lime	296	300	shale	657	677	coal	915	916
shale	300	304	coal	677	678	shale	916	927
lime	304	312	shale	678	683	coal	927	928
shale	312	323	coal	683	684	shale	928	952
lime	323	338	shale	684	736	sand	952	960
shale	338	340	lime	736	739	shale	960	962
lime	340	380	coal	739	740	coal	962	963
sand	380	385	coal	740	756	shale	963	968
lime	385	425	shale	756	758	coal	968	969
sand	425	437	lime	758	765	shale	969	982
sand/shale	437	448	shale	765	781	coal	982	983
lime	448	455	coal	781	782	shale	983	993
sand/shale	455	465	shale	782	797	coal	993	994
lime	465	481	lime	797	805	shale	994	1024
b.shale	481	489	shale	805	811	coal	1024	1025
lime	489	563	coal	811	812	shale	1025	1038
coal	563	564	shale	812	817	coal	1038	1040

Comments: 564-595' odor

Well Log Grendorff 2-1 #2

Formation	Top	Btm.	Formation	Top	Btm.	Formation	Top	Btm.
shale	1040	1055						
coal	1055	1056						
shale	1056	1076						
sand	1076	1120						
shale	1120	1130						
sand	1130	1151						
shale	1151	1154						
coal	1154	1155						
shale	1155	1168						
lime	1168	1263						

Comments

QUEST
Resource Corporation

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

TICKET NUMBER 1939
FIELD TICKET REF # [redacted]
FOREMAN Joe / craig

619040

TREATMENT REPORT & FIELD TICKET CEMENT

DATE	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-5-06	orendorff Harry 2-1	2	28	15	WL

FOREMAN / OPERATOR	TIME IN	TIME OUT	LESS LUNCH	TRUCK #	TRAILER #	TRUCK HOURS	EMPLOYEE SIGNATURE
~~Joe. D~~	~~6:45~~	~~5:30~~					
Craig. C	6:00	5:00		903427		11.5	
Wes. T	7:00	5:45		903197		10.75	
Russell. A	7.00	5:45		903103		10.75	
Brandon. M	11:45	6:30		903400	932705	6.50	
TROY. W	11:45	6:00		931420		6.50	

JOB TYPE long string HOLE SIZE 6 3/4 HOLE DEPTH 1262 CASING SIZE & WEIGHT 4 1/2 10.5
CASING DEPTH 1242.44 DRILL PIPE _____ TUBING _____ OTHER _____
SLURRY WEIGHT 14.5 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 0
DISPLACEMENT 19.81 DISPLACEMENT PSI _____ MIX PSI _____ RATE 4bpm

REMARKS:
Installed cement head, pumped 2 sacks of gel, 13 barrel dye; and 161 sacks of cement to get dye to surface. Flushed pump, pumped wiper plug to bottom, set float shoe.

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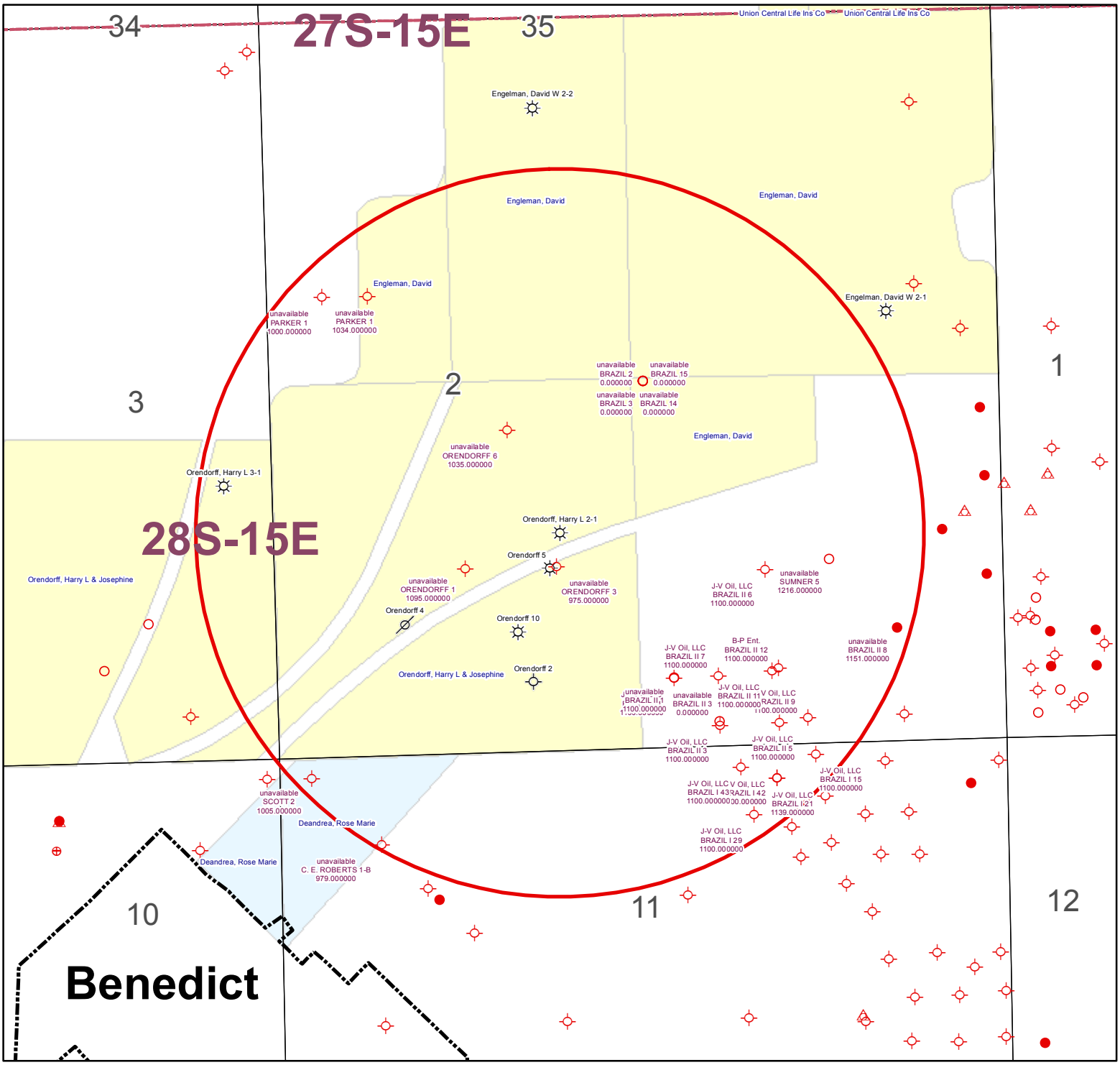
	1242.44	Ft 4 1/2 Casing
	6	Centralizers
	1	4 1/2 float shoe

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION OF SERVICES OR PRODUCT	TOTAL AMOUNT
903427	1.5 hr	Foreman Pickup	
903197	10.75 hr	Cement Pump Truck	
903103	10.75 hr	Bulk Truck	
1104	153 SK	Portland Cement	
1124	2	~~50/50 POZ Blend Cement~~ Baffle 2 1/2 + 3	
1126	1	~~OWC - Blend Cement~~ Plug 4 1/2	
1110	15 SK	Gilsonite	
1107	1 SK	Flo-Seal	
1118	2 SK	Premium Gel	
1215A	100 l	KCL	
1111B	2 SK	~~Sodium Silicate~~ Calchloride	
1123	7000 gal	City Water	
903414	6.50 hr	Transport Truck	
932705	6.50 hr	Transport Trailer	
931	6.50 hr	80 Vac	

Ravin 4513



KGS STATUS

- DA/PA
- EOR
- GAS
- INJ/SWD
- OIL
- OIL/GAS
- OTHER

Orendorff, Harry L 2-1
2-28S-15E
1" = 1,000'

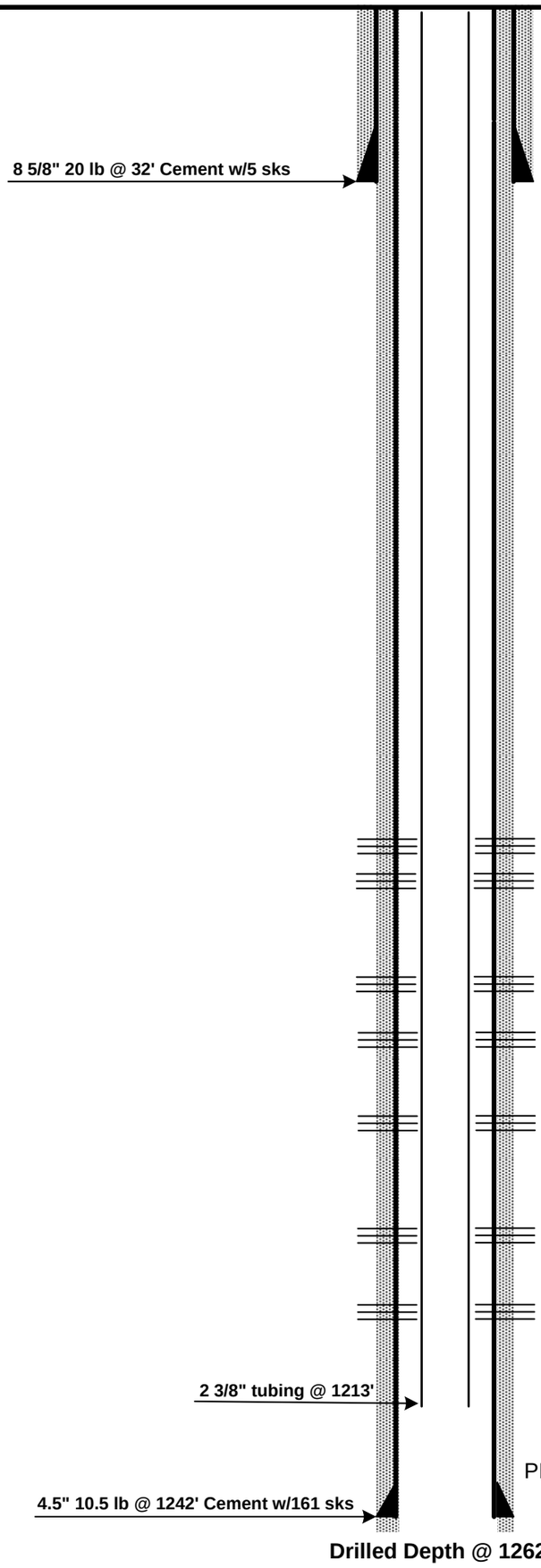
POSTROCK

Current Completion

WELL : Orendorff, Harry L 2-1
FIELD : Cherokee Basin
STATE : Kansas
COUNTY : Wilson

SPUD DATE : 11/29/2006
COMP. Date : 12/05/2006
API: 15-205-27013-00-00

LOCATION: 2-28S-15E (NE,SW)
ELEVATION: 890'



Wellhead/Surface Equipment

Tree Connection	
Tree	
Tubing Head	
Bradenhead	
Pumping Unit	
Compressor	

Tubular Detail

Size	Weight	Grade	Cap(bbl/ft)	Date	Depth
8 5/8"	20 lb			2006	32'
4 ½"	10.5 lb		.0159	2006	1242'
2 3/8"				2006	1213'

Downhole Equipment Detail

Completion Data

Original as GAS Well per ACO-1

800 gals 15% HCL
1,561 bbls water
29,300 lbs 30/70 sand

Perforations

Original Completion: 4 spf
813-817 Summit (17)
825-829 Mulky (17)
894-896 Bevier (9)
911-914 Croweburg (13)
966-968 Fleming (9)
1059-1061 Weir (9)
1190-1192 Riverton (9)

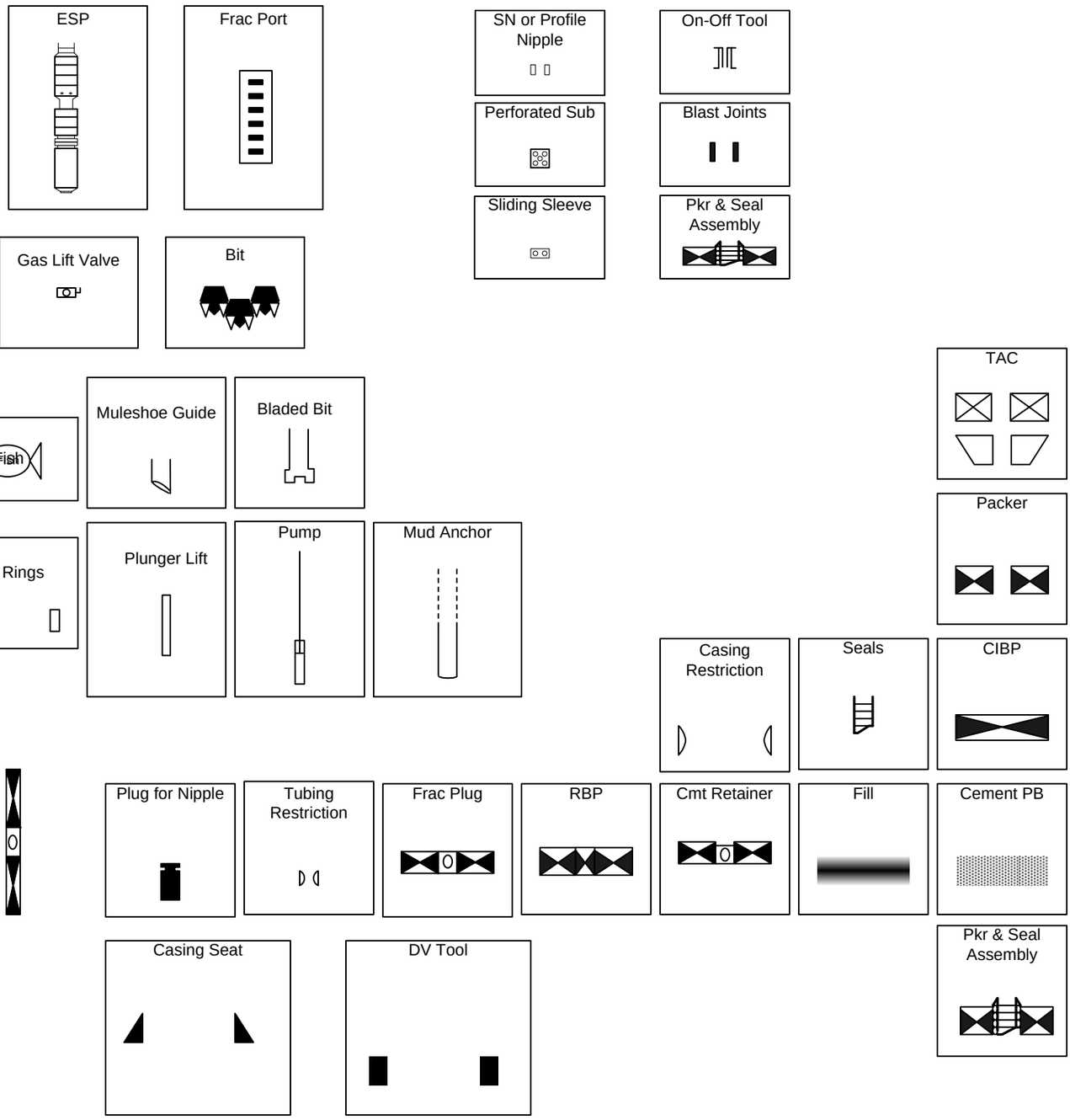
PREPARED BY: POSTROCK **DATE:** Sept, 2012

APPROVED BY: _____ **DATE:** _____

POSTROCK

PostRock

LEGEND



ORENDORFF, HARRY L 2-1

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

FORMATION:	WEIR	(PERFS):	1059	-	1061
FORMATION:	RIVERTON	(PERFS):	1190	-	1192
FORMATION:	CATTLEMAN	(PERFS):	944	-	954
FORMATION:	CATTLEMAN	(PERFS):	978	-	984
FORMATION:		(PERFS):		-	
FORMATION:		(PERFS):		-	
FORMATION:		(PERFS):		-	
FORMATION:		(PERFS):		-	
FORMATION:		(PERFS):		-	
FORMATION:		(PERFS):		-	
FORMATION:		(PERFS):		-	
FORMATION:		(PERFS):		-	

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

FORMATION:	WEIR	BOPD:	0	MCFPD:	2.57	BWPD:	2.14
FORMATION:	RIVERTON	BOPD:	0	MCFPD:	2.57	BWPD:	2.14
FORMATION:	CATTLEMAN	BOPD:	1.5	MCFPD:	0	BWPD:	10
FORMATION:	CATTLEMAN	BOPD:	1.5	MCFPD:	0	BWPD:	10
FORMATION:	0	BOPD:		MCFPD:		BWPD:	
FORMATION:	0	BOPD:		MCFPD:		BWPD:	
FORMATION:	0	BOPD:		MCFPD:		BWPD:	
FORMATION:	0	BOPD:		MCFPD:		BWPD:	
FORMATION:	0	BOPD:		MCFPD:		BWPD:	
FORMATION:	0	BOPD:		MCFPD:		BWPD:	
FORMATION:	0	BOPD:		MCFPD:		BWPD:	
FORMATION:	0	BOPD:		MCFPD:		BWPD:	

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

October 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.

Mark Fletchall

Subscribed and sworn to before me this

11th day of October, 2012

PENNY L. CASE
Notary Public - State of Kansas
My Appt. Expires 5/28/2014

Penny L Case

Notary Public Sedgwick County, Kansas

Printer's Fee : **$132.40**

LEGAL PUBLICATION

PUBLISHED IN THE WICHITA EAGLE
OCTOBER 11, 2012 (3211698)
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 Orendorff, Harry L 2-1 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 Midcontinent Production, LLC has filed an application to commingle the Summit, Mulky, Bevier, Croweburg, Fleming, Weir, Riverton and Cattleman producing formations at the Orendorff, Harry L 2-1, located in the SW SE NE SW, S2-T28S-R15E, Approximately 1580 FSL & 2078 FWL, 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 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

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 15th day of October, 2012

2nd publication was made on the _____ day of _____, 20____

3rd publication was made on the _____ day of _____, 20____

4th publication was made on the _____ day of _____, 20____

5th publication was made on the _____ day of _____, 20____

6th publication was made on the _____ day of _____, 20____

TOTAL PUBLICATION FEE: $ 40.04

(Signed) Mina S. DeBerry

Subscribed and sworn to before me, this 16th day of October, 2012

Rita M. Relph (Notary Public)

My commission expires Aug. 30, 2014

(Published in the Wilson County Citizen on Monday, October 15, 2012.)

BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

NOTICE OF FILING APPLICATION

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Postrock Midcontinent Production, LLC
210 Park Avenue, Suite 2750
Oklahoma City, Oklahoma 73102
(405) 660-7704
69 1 cpy.

STATE NOTARY PUBLIC KANSAS STATE OF KANSAS

Rita M. Relph
NOTARY PUBLIC
State of Kansas
My Commission Expires

PAID

ORENDORFF, HARRY L 2-1-APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS

Offset Operators, Unleased Mineral Owners and Landowners acreage

(Attach additional sheets if necessary)

Name:	Legal Description of Leasehold:
SEE ATTACHED	

I hereby certify that the statements made herein are true and correct to the best of my knowledge and belief.

Applicant or Duly Authorized Agent

Subscribed and sworn before me this ~~26TH~~ 27th day of NOVEMBER, 2012

JENNIFER R. BEAL
MY COMMISSION EXPIRES
7-20-2016

Notary Public

My Commission Expires: July 20, 2016

ORENDORFF, HARRY L 2-1

LEGAL LOCATION	SPOT	CURR_OPERA
S2-T28S-R15E	SE SW SE	**B-P Ent.**
S11-T28S-R15E	SE NW NE	**J-V Oil, LLC**
S11-T28S-R15E	NE NW NE	**J-V Oil, LLC**
S11-T28S-R15E	NE NW NE	**J-V Oil, LLC**
S11-T28S-R15E	NE NW NE	**J-V Oil, LLC**
S11-T28S-R15E	NW NW NE	**J-V Oil, LLC**
S2-T28S-R15E	SW SW SE	**J-V Oil, LLC**
S2-T28S-R15E	SE SW SE	**J-V Oil, LLC**
S2-T28S-R15E	SW SW SE	**J-V Oil, LLC**
S2-T28S-R15E	SE SW SE	**J-V Oil, LLC**
S2-T28S-R15E	NE SW SE	**J-V Oil, LLC**
S2-T28S-R15E	SW SW SE	**J-V Oil, LLC**
S2-T28S-R15E	SW SE	**J-V Oil, LLC**

ORENDORFF, HARRY L 2-1

2-28S-15E

W2SWNW	Charles T. Jr. & Dulcie M. Parker 227S 8th Fredonia, KS 66736
W2SE S. of RR & SESE less trct	Crown Properties PO Box 97 Bendict, KS 66714
NESE & tract	Midwest Minerals, Inc. PO Box 412 Pittsburg, KS 66762
	AT&SF Railway Co PO Box 961089 Fort Worth, TX 76161

3-28S-15E

Tract in E2E2	Charles T. Jr. & Dulcie M. Parker 227S 8th Fredonia, KS 66736

Affidavit of Notice Served

Re: Application for: APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS ACO-4

Well Name: ORENDORFF, HARRY L 2-1 Legal Location: SWSENESW S2-T28S-R15E

The undersigned hereby certificates that he / she is a duly authorized agent for the applicant, and that on the day ~~26TH~~ 27th of NOVEMBER,

2012, a true and correct copy of the application referenced 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)*

SEE ATTACHED

I further attest that notice of the filing of this application was published in the THE WILSON COUNTY CITIZEN, the official county publication of WILSON county. A copy of the affidavit of this publication is attached.

Signed this ~~26TH~~ 27th day of NOVEMBER, 2012

Applicant or Duly Authorized Agent

Subscribed and sworn to before me this 27th day of NOVEMBER, 2012

JENNIFER R. BEAL
NOTARY PUBLIC
OFFICIAL SEAL
STATE OF KANSAS
MY COMMISSION EXPIRES
7-20-2016

Notary Public

My Commission Expires: July 20, 2016

ORENDORFF, HARRY L 2-1

LEGAL LOCATION	SPOT	CURR_OPERA
S2-T28S-R15E	SE SW SE	**B-P Ent.**
S11-T28S-R15E	SE NW NE	**J-V Oil, LLC**
S11-T28S-R15E	NE NW NE	**J-V Oil, LLC**
S11-T28S-R15E	NE NW NE	**J-V Oil, LLC**
S11-T28S-R15E	NE NW NE	**J-V Oil, LLC**
S11-T28S-R15E	NW NW NE	**J-V Oil, LLC**
S2-T28S-R15E	SW SW SE	**J-V Oil, LLC**
S2-T28S-R15E	SE SW SE	**J-V Oil, LLC**
S2-T28S-R15E	SW SW SE	**J-V Oil, LLC**
S2-T28S-R15E	SE SW SE	**J-V Oil, LLC**
S2-T28S-R15E	NE SW SE	**J-V Oil, LLC**
S2-T28S-R15E	SW SW SE	**J-V Oil, LLC**
S2-T28S-R15E	SW SE	**J-V Oil, LLC**

BP Ent.
1803 Ridgebrook Drive
Arlington, TX 76015

J-V Oil, LLC
PO Box 151
Chanute, KS 66720

ORENDORFF, HARRY L 2-1

2-28S-15E

W2SWNW

Charles T. Jr. & Dulcie M. Parker
227S 8th
Fredonia, KS 66736

W2SE S. of RR & SESE less trct

Crown Properties
PO Box 97
Bendict, KS 66714

NESE & tract

Midwest Minerals, Inc.
PO Box 412
Pittsburg, KS 66762

AT&SF Railway Co
PO Box 961089
Fort Worth, TX 76161

3-28S-15E

Tract in E2E2

Charles T. Jr. & Dulcie M. Parker
227S 8th
Fredonia, KS 66736

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

Kansas
Corporation Commission

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

December 12, 2012

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

RE: Approved Commingling CO121205
Orendorff, Harry L. 2-1, Sec. 2-T28S-R15E, Wilson County
API No. 15-205-27013-00-00

Dear Mr. Edwards:

Your Application for Commingling (ACO-4) for the above described well, received by the KCC on December 10, 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 CO121205 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