1084668

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

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 #* CO061211

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 ) 4324200

API No. 15 - 15-133-27082-00-01
Spot Description:
NE - SW - SW - NE Sec. 1 Twp. 30 S. R. 18 ☑ East ☐ West
2309 Feet from ☑ North / ☐ South Line of Section
2306 Feet from ☑ East / ☐ West Line of Section
County: Neosho
Lease Name: KRAMER, LOIS Well #: 1-3

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

| | | | |
|---|---|---|---|
| Formation: | RIVERTON | (Perfs): | 951-954 |
| Formation: | NEUTRAL | (Perfs): | 896-898 |
| Formation: | ROWE | (Perfs): | 890-892 |
| Formation: | FLEMING | (Perfs): | 670-672 |
| Formation: | CROWEBURG | (Perfs): | 633-636 |

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

| | | | | | | |
|---|---|---|---|---|---|---|
| Formation: | RIVERTON | BOPD: | 3 | MCFPD: | 0 | BWPD: 5 |
| Formation: | NEUTRAL | BOPD: | 3 | MCFPD: | 0 | BWPD: 5 |
| Formation: | ROWE | BOPD: | 3 | MCFPD: | 0 | BWPD: 5 |
| Formation: | FLEMING | BOPD: | 3 | MCFPD: | 0 | BWPD: 5 |
| Formation: | CROWEBURG | BOPD: | 3 | MCFPD: | 0 | BWPD: 5 |

☑ 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: 7/10/2012
Approved By: Rick Hestermann Date: 07/10/2012

*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**

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1083377

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

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

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 ) 4324200
CONTRACTOR: License # 34453
Name: PostRock Energy Services Corporation
Wellsite Geologist: N/A
Purchaser:

Designate Type of Completion:

- ☐ New Well ☐ Re-Entry ☑ Workover
- ☐ Oil ☐ WSW ☐ SWD ☐ SIOW
- ☐ Gas ☐ D&A ☐ ENHR ☐ SIGW
- ☑ OG ☐ GSW ☐ Temp. Abd.
- ☐ CM *(Coal Bed Methane)*
- ☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:

Operator: POSTROCK
Well Name: KRAMER, LOIS 1-3
Original Comp. Date: 8/15/2007 Original Total Depth: 1065

- ☐ Deepening ☑ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
- ☐ Conv. to GSW
- ☐ Plug Back: ____ Plug Back Total Depth
- ☑ Commingled Permit #:
- ☐ Dual Completion Permit #:
- ☐ SWD Permit #:
- ☐ ENHR Permit #:
- ☐ GSW Permit #:

| 4/3/2012 | | 4/3/2012 |
|---|---|---|
| Spud Date or Recompletion Date | Date Reached TD | Completion Date or Recompletion Date |

API No. 15 - 15-133-27082-00-01
Spot Description:
NE - SW - SW - NE Sec. 1 Twp. 30 S. R. 18 ☑ East ☐ West
2309 Feet from ☑ North / ☐ South Line of Section
2306 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW
County: Neosho
Lease Name: KRAMER, LOIS Well #: 1-3
Field Name:
Producing Formation: RIVERTON, NEUTRAL, ROWE, FLEMING, CROWEBURG, BEVIER, MULKY, SUMMITT, CATTLEMA
Elevation: Ground: 976 Kelly Bushing: 0
Total Depth: 1065 Plug Back Total Depth: 1051
Amount of Surface Pipe Set and Cemented at: 22 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

**Drilling Fluid Management Plan**
*(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 #:
Quarter Sec. Twp. S. R. ☐ East ☐ West
County: Permit #:

**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 ☑ II ☐ III **Approved by:** NAOMI JAMES **Date:** 06/06/2012

*Side Two*

1083377

Operator Name: PostRock Midcontinent Production LLC Lease Name: KRAMER, LOIS Well #: 1-3

Sec. 1 Twp. 30 S. R. 18 ☑ East ☐ West County: Neosho

**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 complete copy of all Electric Wire-line 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
Electric Log Submitted Electronically ☐ Yes ☐ No
*(If no, Submit Copy)*

List All E. Logs Run:

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

| Name | Top | Datum |
|---|---|---|
| N/A | | |

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 |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

ADDITIONAL CEMENTING / SQUEEZE RECORD

| Purpose: | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
|---|---|---|---|---|
| ☐ Perforate<br>☐ Protect Casing<br>☐ Plug Back TD<br>☐ Plug Off Zone | - | | | |
| | - | | | |

| 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 |
|---|---|---|---|
| | 692-698 | 248 BBLS SLICK WATER/ 350# FRAC GEL/ 9800# 20/40 SAND/ 3800# 12/20 SAND | 692-698 |
| | | | |
| | | | |
| | | | |
| | | | |

TUBING RECORD: Size: Set At: Packer At: Liner Run: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 4/10/2012

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

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

DISPOSITION OF GAS:
☐ Vented ☑ Sold ☐ Used on Lease
*(If vented, Submit ACO-18.)*

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☑ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:

**Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202**

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/



June 05, 2012

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

Re: ACO1
API 15-133-27082-00-00
KRAMER, LOIS 1-3
NE/4 Sec.01-30S-18E
Neosho 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

| | 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 |

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 **Kramer, Lois 1-3** 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 **Riverton, Neutral, Rowe, Cattleman, Fleming, Croweburg, Bevier, Mulky and Summit** producing formations at the **Kramer, Lois 1-3**, located in the **NE SW SW NE, S1-T30S-R18E, Approximately 2309 FNL & 2305 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**

# 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 1 ~~consecutive~~ time, the first publication thereof being made as aforesaid on the 10 day of May 2012, with subsequent publications being made on the following dates:

_____, 2012 _____, 2012

_____, 2012 _____, 2012

Rhonda Howerter

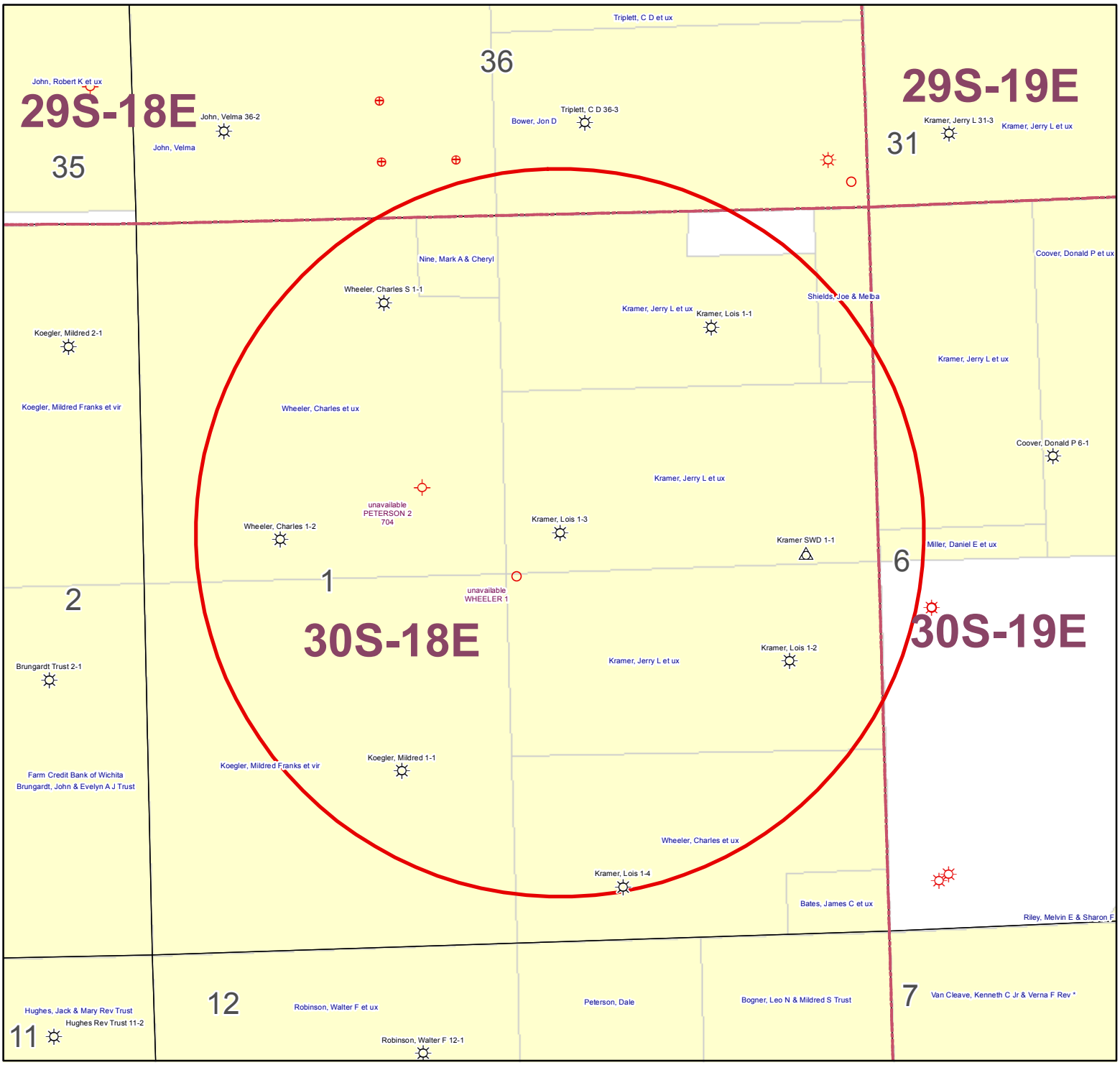
Subscribed and sworn to and before me this 1 day of June, 2012

_____ Notary Public

My commission expires: January 9, 2015

Printer's Fee ..... $ 64.18
Affidavit, Notary's Fee ..... $ 3.00
Additional Copies ..... $ _____
**Total Publication Fees** ..... $ 67.18

SHANNA L. GUIOT
Notary Public - State of Kansas
My Appt. Expires 1-9-15




## KGS STATUS

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

Kramer, Lois 1-3
1-30S-18E
1" = 1,000'

KRAMER, LOIS 1-3 - 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: |
|---|---|
| BRYAN W & DEBRA J COOVER | Tract in SW/4 of 6-30S-19E |

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

Jennifer B Beal

*Applicant or Duly Authorized Agent*

DENISE V. VENNEMAN
NOTARY PUBLIC
OFFICIAL SEAL
MY COMMISSION EXPIRES
July 1, 2012

Subscribed and sworn before me this 15TH day of JUNE, 2012

Denise V Venneman

*Notary Public*

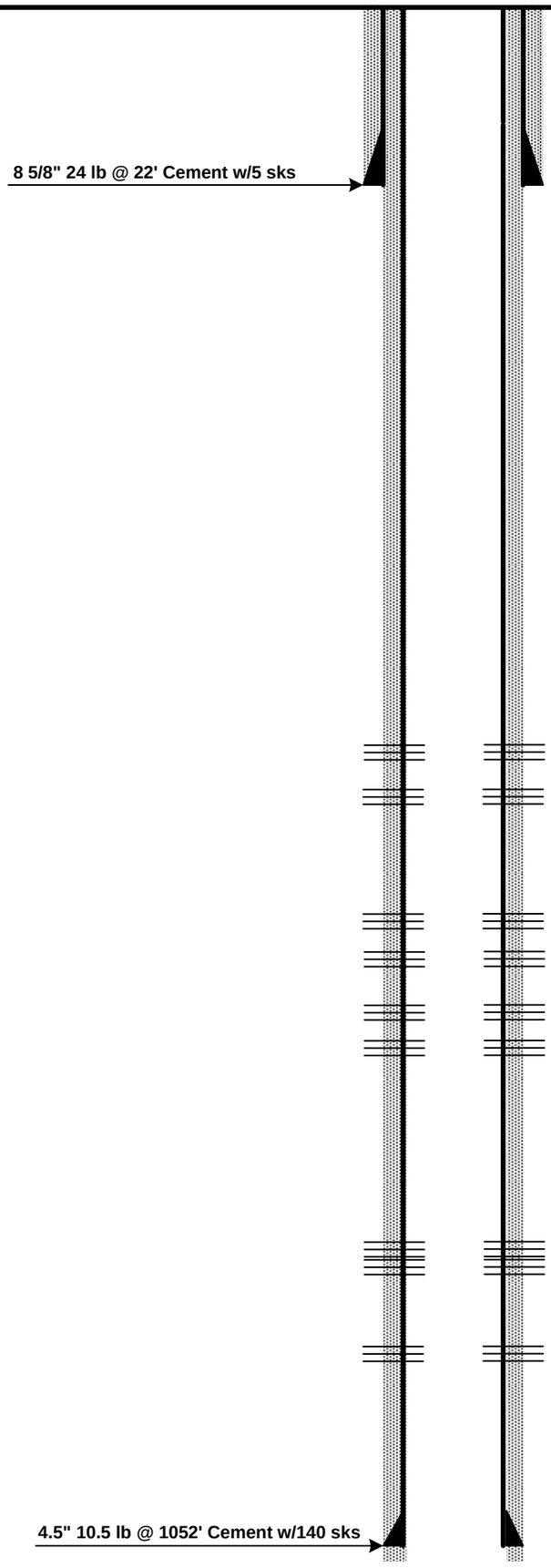
My Commission Expires: 7-1-12

| POSTROCK | PostRock | Current Completion |
|---|---|---|

**WELL** : Kramer, Lois 1-3
**FIELD** : Cherokee Basin
**STATE** : Kansas
**COUNTY** : Neosho

**SPUD DATE : 8/7/2007**
**COMP. Date : 8/15/2007**
**API: 15-133-27082-00-00**

**LOCATION: 1-30S-18E (SW, NE)**
**ELEVATION: GL -972'**




**Drilled Depth @ 1065'**

### 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" | 32lb | | | 2007 | 22' |
| 4 ½" | 10.5 lb | | .0159 | 2007 | 1051' |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

### Downhole Equipment Detail

### Completion Data

Original as GAS Well

- 18,700 lbs 20/40 sand
- 900 gals 15% acid
- 1,976 bbls

### Perforations

Original Completion (2007)
951-954 (13)
896-898 (9)
890-892 (9)
670-672 (9)
633-636 (13)
610-612 (9)
521-525 (17)
509-513 (17)

4/3/2012
692-698

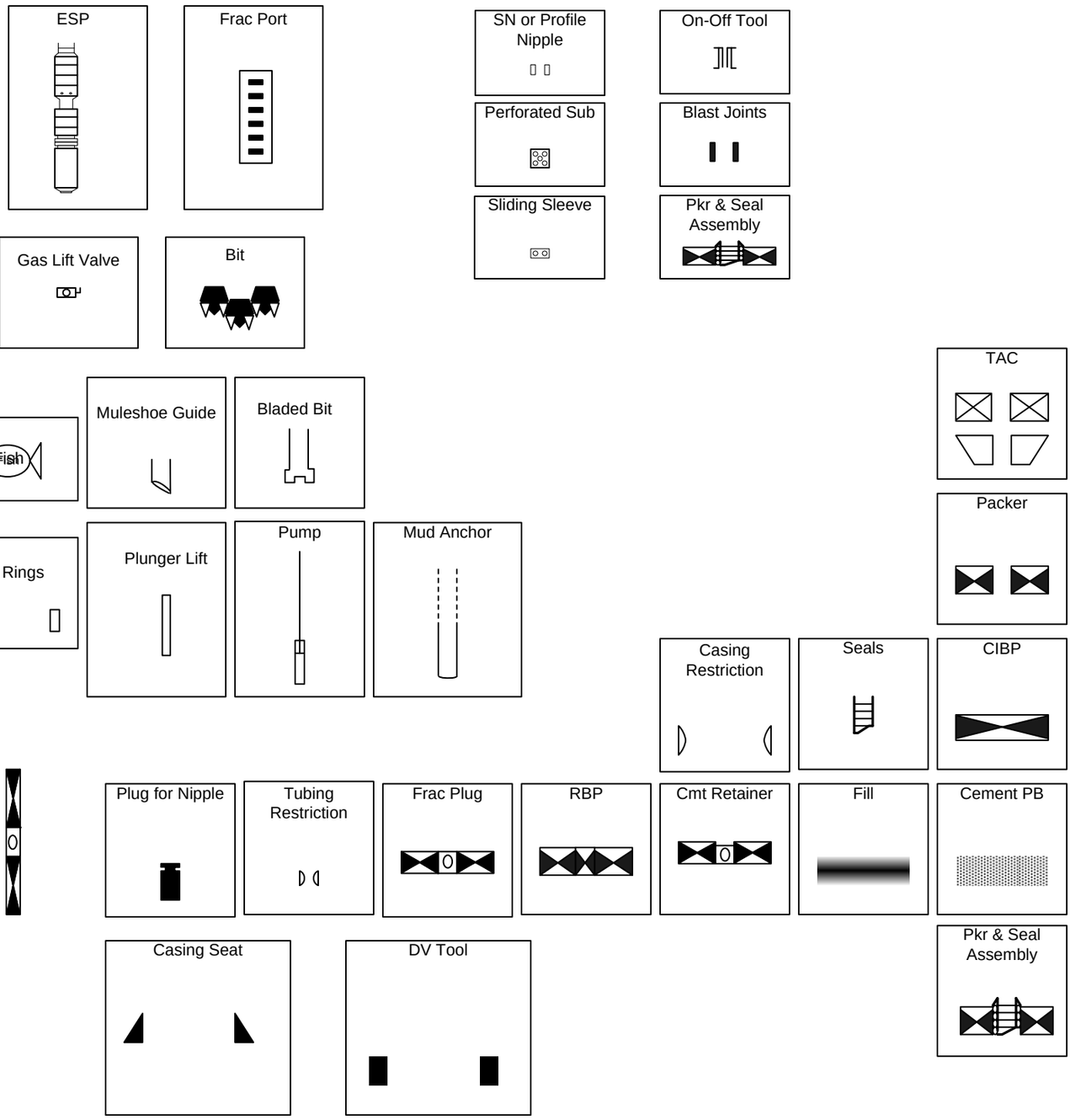
**PREPARED BY:** POSTROCK **DATE:** June, 2012

**APPROVED BY:** _____ **DATE:** _____

# POSTROCK

PostRock

## LEGEND



# 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.

Mark Fletchall

Subscribed and sworn to before me this

**1st day of June, 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
JUNE 1, 2012 (3187796)
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 **Kramer, Lois 1-3** 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 **Riverton, Neutral, Rowe, Cattleman, Fleming, Croweburg, Bevier, Mulky and Summit** producing formations at the **Kramer, Lois 1-3,** located in the **NE SW SW NE, S1-T30S-R18E, Approximately 2309 FNL & 2305 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**

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

| | | | | | |
|---|---|---|---|---|---|
| FORMATION: | BEVIER | (PERFS): | 610 | - | 612 |
| FORMATION: | MULKY | (PERFS): | 521 | - | 525 |
| FORMATION: | SUMMITT | (PERFS): | 509 | - | 513 |
| FORMATION: | CATTLEMAN | (PERFS): | 692 | - | 698 |
| 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: | BEVIER | BOPD: | 0 | MCFPD: | 3 | BWPD: | 5 |
| FORMATION: | MULKY | BOPD: | 0 | MCFPD: | 3 | BWPD: | 5 |
| FORMATION: | SUMMITT | BOPD: | 0 | MCFPD: | 3 | BWPD: | 5 |
| FORMATION: | CATTLEMAN | BOPD: | 3 | MCFPD: | 0 | BWPD: | 20 |
| FORMATION: | | BOPD: | | MCFPD: | | BWPD: | |
| FORMATION: | | BOPD: | | MCFPD: | | BWPD: | |
| FORMATION: | | BOPD: | | MCFPD: | | BWPD: | |
| FORMATION: | | BOPD: | | MCFPD: | | BWPD: | |
| FORMATION: | | BOPD: | | MCFPD: | | BWPD: | |
| FORMATION: | | BOPD: | | MCFPD: | | BWPD: | |
| FORMATION: | | BOPD: | | MCFPD: | | BWPD: | |
| FORMATION: | | BOPD: | | MCFPD: | | BWPD: | |

***Affidavit of Notice Served***

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

Well Name: KRAMER, LOIS 1-3 Legal Location: NESWSWNE S1-T30S-R18E

The undersigned hereby certificates that he / she is a duly authorized agent for the applicant, and that on the day 25TH of JUNE, 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)* |
|---|---|
| POSTROCK MIDCONTINENT PRODUCTION, LLC | 210 PARK AVENUE, SUITE 2750, OKLAHOMA CITY, OK 73102-5641 |
| BRYAN W COOVER DEBRA J COOVER | 6165 JACKSON RD, GALESBURG, KS 66740 |

I further attest that notice of the filing of this application was published in the CHANUTE TRIBUNE, the official county publication of NEOSHO county. A copy of the affidavit of this publication is attached.

Signed this 25TH day of JUNE, 2012

*Applicant or Duly Authorized Agent*

Subscribed and sworn to before me this 25TH day of JUNE, 2012

NOTARY PUBLIC OFFICIAL SEAL STATE OF KANSAS
DENISE V. VENNEMAN
MY COMMISSION EXPIRES
July 1, 2012

Denise V Venneman
*Notary Public*

My Commission Expires: 7-1-12

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/



July 10, 2012

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

RE: Approved Commingling CO061211
Kramer, Lois 1-3, Sec.1-T30S-R18E, Neosho County
API No. 15-133-27082-00-01

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 25, 2012, concerns approval to simultaneously produce from the following sources of supply through the same tubing string in the same wellbore:

| Source of Supply | Estimated Current Production | | | |
|---|---|---|---|---|
| | BOPD | MCFPD | BWPD | Perf Depth |
| Riverton | 0.00 | 3.00 | 5.00 | 951-954 |
| Neutral | 0.00 | 3.00 | 5.00 | 896-898 |
| Rowe | 0.00 | 3.00 | 5.00 | 890-892 |
| Fleming | 0.00 | 3.00 | 5.00 | 670-672 |
| Croweburg | 0.00 | 3.00 | 5.00 | 633-636 |
| Bevier | 0.00 | 3.00 | 5.00 | 610-612 |
| Mulky | 0.00 | 3.00 | 5.00 | 521-525 |
| Summitt | 0.00 | 3.00 | 5.00 | 509-513 |
| Cattleman | 3.00 | 0.00 | 20.00 | 692-698 |
| Total Estimated Current Production | 3.00 | 24.00 | 60.00 | |

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 CO061211 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