

Kansas Corporation Commission Oil & Gas Conservation Division 1084798

Form ACO-4 Form must be typed March 2009

APPLICATION FOR COMMINGLING OF Commingling ID # CO071203 PRODUCTION (K.A.R. 82-3-123) OR FLUIDS (K.A.R. 82-3-123a)

| Name: PostRock Midcontinent Production LLC Address 1: Oklahoma Tower Address 2: 210 Park Ave, Ste 2750 City: OKLAHOMA CITY State: OK Zip: 73102 + 2092 Contact Person: CLARK EDWARDS Phone: (620) 4324200 Spot Description: Spot Description: Sw. NE NE Sw. Sec. 32 Twp. 28 S. R. 19 Feat west South Line of Section County: Neosho County: Neosho Lease Name: STICH WILLIAM A Well #: 32-2 | OPERATOR: License # 33343 | API No. 1515-133-26273-00-00 |
|--|---|---|
| Address 2: 210 Park Ave, Ste 2750 1994 Feet from North / Subh Line of Section City. OKLAHOMA CITY state OK 2p: 73102 + 2092 Feet from East / West Line of Section County. Neosho County: Neosho County: Neosho County: Neosho County: Neosho Lease Name: STICH WILLIAM A Well #: 32-2 1. Name and upper and lower limit of each production interval to be commingled: Formalion: RIVERTON Formalion: ROWE Formal | Name: PostRock Midcontinent Production LLC | Spot Description: |
| Address 2: 210 Park Ave, Ste 2750 City: OKLAHOMA CITY State, OK Zip: 73102 + 2092 Feet from | Address 1: Oklahoma Tower | SW_NE_NE_SW Sec. 32 Two. 28 S. R. 19 ✓ Teast □ West |
| City. OKLAHOMA CITY State OK Zip. 73102 + 2092 Feet from | Address 2: 210 Park Ave, Ste 2750 | |
| County: Neosho Lease Name: STICH WILLIAM A Well #: 32-2 1. Name and upper and lower limit of each production interval to be commingled: Formation: RIVERTON Formation: NEUTRAL Formation: NEUTRAL Formation: FLEMING Formation: FLEMING Formation: FLEMING Formation: FLEMING Formation: RIVERTON Formation: ROWE Formation | City: OKLAHOMA CITY State: OK Zip: 73102 + | 0000 |
| Phone: (620) 4324200 Lease Name: STICH WILLIAM A Well #: 32-2 1. Name and upper and lower limit of each production interval to be commingled: Formation: RIVERTON Formation: RIVERTON Formation: ROWE Formation: FLEMING Formation: FLEMING Formation: FLEMING Formation: FLEMING Formation: RIVERTON Formatio | Contact Person: CLARK EDWARDS | |
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| Formation: RIVERTON Formation: NEUTRAL Formation: ROWE Formation: RIVERTON BOPD: 0 MCFPD: 9.4 BWPD: 4 BWPD | , | |
| Formation: RIVERTON Formation: ROWE Formation: FLEMING Formation: FLEMING Formation: RIVERTON Formation: FLEMING Formation: FLEMING Formation: RIVERTON Formation: ROWE Formation: ROWE Formation: ROWE Formation: ROWE Formation: FLEMING | 1. Name and upper and lower limit of each production interval to | be commingled: |
| Formation: NEUTRAL Formation: ROWE Formation: RIVERTON Formation: ROWE Formation: FLEMING Formation: | Formation: RIVERTON | (Perfs): 891-892 |
| Formation: FLEMING (Perfs): 877-879 (Perfs): 678-680 2 2. Estimated amount of fluid production to be commingled from each interval: Formation: RIVERTON BOPD: 0 MCFPD: 9.4 BWPD: 4 Formation: RIVERTON BOPD: 0 MCFPD: 9.4 BWPD: 4 Formation: ROWE Formation: ROWE Formation: FLEMING BOPD: 0 MCFPD: 9.4 BWPD: 4 BWPD: | Formation: RIVERTON | |
| Formation: FLEMING (Perfs): 678-680 2. Estimated amount of fluid production to be commingled from each interval: Formation: RIVERTON Formation: RIVERTON Formation: NEUTRAL BOPD: 0 MCFPD: 9.4 BWPD: 4 Formation: ROWE Formation: FLEMING BOPD: 0 MCFPD: 9.4 BWPD: 4 Formation: ROWE Formation: FLEMING BOPD: 0 MCFPD: 9.4 BWPD: 4 Formation: FLEMING BOPD: 0 MCFPD: 9.4 BWPD: 4 | TOTTIBLION: | (Perfs):871-873 |
| 2. Estimated amount of fluid production to be commingled from each interval: Formation: RIVERTON BOPD: 0 MCFPD: 9.4 BWPD: 4 Formation: RIVERTON BOPD: 0 MCFPD: 9.4 BWPD: 4 Formation: RIVERTON BOPD: 0 MCFPD: 9.4 BWPD: 4 Formation: ROWE Formation: ROWE Formation: FLEMING BOPD: 0 MCFPD: 9.4 BWPD: 4 BWPD: 4 BWPD: 4 BWPD: 9.4 BWPD: 4 BWPD: 9.4 BWPD: 4 BWPD: 9.4 BWPD: 4 BWPD: 9.4 BWPD: 9.4 BWPD: 4 BWPD: 9.4 BWPD: 9.4 BWPD: 4 BWPD: 9.4 BWPD: 9 | romation. | (Perfs): 877-879 |
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| Formation: RIVERTON Formation: RIVERTON Formation: RIVERTON Formation: NEUTRAL BOPD: 0 MCFPD: 9.4 BWPD: 4 Formation: NEUTRAL BOPD: 0 MCFPD: 9.4 BWPD: 4 Formation: ROWE Formation: FLEMING BOPD: 0 MCFPD: 9.4 BWPD: 4 Formation: FLEMING BOPD: 0 MCFPD: 9.4 BWPD: 4 Formation: FLEMING BOPD: 0 MCFPD: 9.4 BWPD: 4 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 Commingting 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 Commingting 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. KCC Office Use Only Denied Approved 15-Day Periods Ends: 7/10/2012 | | |
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| Formation: NEUTRAL Formation: ROWE Formation: ROWE Formation: FLEMING BOPD: O MCFPD: 9.4 BWPD: 4 BOPD: O MCFP | | BOPD: MICPPD: BWPD: |
| Formation: ROWE Formation: FLEMING BOPD: 0 MCFPD: 9.4 BWPD: 4 WCFPD: 9.4 BWPD: 4 WC | | |
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| □ Denied | current information, knowledge and personal belief, this request for commingling is true and proper and I have no information or knowledge, which | Submitted Electronically |
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| | | от полос от арримитот и |
| | | |

KGS STATUS

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

Stich, William A 32-2 32-28S-19E 1" = 1,000'

RECEIVED KANSAS CORPORATION COMMISSION

APR 1 8 2006

Kansas Corporation Commission Oil & Gas Conservation Division

ORIGINA form Must Be Typed

WELL COMPLETION FORM

CONSERVATION DIVISION WICHITA, KS

WELL HISTORY - DESCRIPTION OF WELL & LEASE

| Operator: License # 33344 | API No. 15 - 133-26273-00-00 |
|---|--|
| Name: Quest Cherokee, LLC | County: Neosho |
| Address: 211 W. 14th Street | |
| City/State/Zip: Chanute, KS 66720 | 1980 feet from Sy N (circle one) Line of Section |
| Purchaser: Bluestem Pipeline, LLC | 1980 feet from E (W circle one) Line of Section |
| Operator Contact Person: Gary Laswell | Footages Calculated from Nearest Outside Section Corner: |
| Phone: (620) 431-9500 | (circle one) NE SE NW SW |
| Contractor: Name: Well Refined Drilling Company, Inc. | Lease Name: Stich, William A. Well #: 32-2 |
| License: 33072 | Field Name: Cherokee Basin CBM |
| Wellsite Geologist: Julie Talkington | Producing Formation: Mulky/Summit/Bovier/Crowberg/Fleming/Riverton/URiverton/Rowa/Neutral |
| Designate Type of Completion: | Elevation: Ground: 970 Kelly Bushing: n/a |
| ✓ New Well Re-Entry Workover | Total Depth: 990 Plug Back Total Depth: 986 |
| OilSWDSIOWTemp. Abd. | Amount of Surface Pipe Set and Cemented at 20.7 Feet |
| ✓ GasENHR SIGW | Multiple Stage Cementing Collar Used? |
| Dry Other (Core, WSW, Expl., Cathodic, etc) | If yes, show depth setFeet |
| If Workover/Re-entry: Old Well Info as follows: | If Alternate II completion, cement circulated from 986 |
| Operator: | feet depth to Surface w/ 112 sx cmt. |
| Well Name: | feet depth to Surface w/ 112 sx cmt. ALT II WHM §-25-06 |
| Original Comp. Date: Original Total Depth: | Drilling Fluid Management Plan |
| Deepening Re-perf Conv. to Enhr/SWD | (Data must be collected from the Reserve Pit) |
| Plug BackPlug Back Total Depth | Chloride content ppm Fluid volume bbls |
| Commingled Docket No. | Dewatering method used |
| Dual Completion Docket No | Location of fluid disposal if hauled offsite: |
| Other (SWD or Enhr.?) Docket No | Operator Name: |
| Onlor (GVVD or Emil.) | Lease Name: License No.: |
| 1/14/05 | Quarter Sec TwpS. R |
| Spud Date or Date Reached TD Completion Date or Recompletion Date | County: Docket No.: |
| | |
| INSTRUCTIONS: An original and two copies of this form shall be filed with Kansas 67202, within 120 days of the spud date, recompletion, workover information of side two of this form will be held confidential for a period of 12 107 for confidentiality in excess of 12 months). One copy of all wireline logs of TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. | r or conversion of a well. Flule 82-3-130, 82-3-106 and 82-3-107 apply. 2 months if requested in writing and submitted with the form (see rule 82-3-and geologist well report shall be attached with this form. ALL CEMENTING Submit CP-111 form with all temporarily abandoned wells. |
| All requirements of the statutes, rules and regulations promulgated to regulat herein are complete and correct to the best of my knowledge. | te the oil and gas industry have been fully complied with and the statements |
| Signature: / January | KCC Office Use ONLY |
| Title: Head of Operations Date: 4/13/06 | Letter of Confidentiality Received |
| inth 1 | If Denled, Yes Date: |
| Subscribed and sworn to before me this 13 day of 1 pril | |
| 20 010. | Geologist Report Received |
| Notary Public: Limite X. ammaner | UIC Distribution |
| V O Nota | ENNIFERR AMMANN Try Public - State of Kansas |
| My Appt. E | spires Guly 30,309 |
| | |

| Operator Name; Que | est Cherokee, LL | <u>c</u> | | Lease | Name: | Stich, William | ıA | Well #: _32-2 | 2 | |
|--|--|---------------------------|-------------------------------------|----------------------------|------------|------------------------------|-----------------------|------------------------------|-------------|---|
| Sec. 32 Twp. 2 | | | t 🗍 West | County | Neos | ho | <u>.</u> | | | |
| INSTRUCTIONS: Sitested, time tool oper temperature, fluid red Electric Wireline Logs | n and closed, flowing covery, and flow rate | g and shut s if gas to | in pressures, s surface test, al | whether sh long with fi | rut-in pre | essure reached | static level, hydro | static pressure | es, botto | m hole |
| Drill Stem Tests Take (Attach Additional | | Y | es 📝 No | | ₽ L | og Formati | on (Top), Depth a | nd Datum | | Sample |
| Samples Sent to Geo | ological Survey | □Y | es 🗹 No | | Nam See | e attached | | Тор | | Datum |
| Cores Taken Electric Log Run (Submit Copy) | | □ Y ☑ Y | = | | | | , KANSAS CO | RECEIVED PR 1 8 201 | DVONISSK | ж |
| List All E. Logs Run: | | | | | | | | | | |
| Comp. Density Dual Induction Gamma Ray/N | Log | | | | | | CON | SERVATION DIV WICHITA, KS | ISION | |
| | | Repo | | RECORD | _ | ew Used ermediate, produc | dion, etc. | | | |
| Purpose of String | Size Hole Drilled | Siz | e Casing t (In O.D.) | Weig | ght | Setting Depth | Type of Cement | # Sacks Used | Туре | and Percent Additives |
| Surface | 12-1/4" | 8-5/8" | | 20# | | 20.7' | "A" | 4 | | |
| Production | 6-3/4" | 4-1/2" | | 10.5# | | 986' | "A" | 112 | | |
| | | | | | 10.1001 | Inches process | <u> </u> | <u></u> | <u> </u> | |
| Purpose: | Depth Top Bottom | Туре | of Cement | #Sacks | | JEEZE RECORI | | ercent Additives | i | |
| Protect Casing Plug Back TD Plug Off Zone | | | | <u> </u> | | | | | | |
| | PERFORATI | ON RECOR | ID - Bridge Plug | s Set/Type | | Acid Fra | cture, Shot, Cement | Squeeze Recor | d | |
| Shots Per Foot | Specify | Footage of | Each Interval Per | forated | | (4) | mount and Kind of Ma | terial Used) | | Depth |
| 4 | 500-504/501-503/511- 871.5-873.5/877 | | | | 578-680/ | 430 bbls H20, 5# | gel, 2% KCL, Biocide, | Max flo,13442# 2 | 0/40 sand | 678-680/661-663/ |
| | 5/ 1.5-6/ 5.5/6/ / | . | | 1.0-932 | | 425 bbts H20, 5# i | ÆC, 2% KCL, Biocide, | Max flo. 15477# 2 | 0/40 sand | 622-626/598-600 891-892-8/927-8-032/ |
| | <u> </u> | | | | | | | | | 671.5-673.5/677.5-679 |
| | <u> </u> | | | | | 433 bbls H20, 5# | gel, 2% KCL, Blocide, | Max flo, 8501# 20 |)/40 sand | 511-515/500-504 |
| TUBING RECORD 2-3 | Size 3/8* | Set At 962' | | Packer A | t | Liner Run | Yes ☑ No | | | |
| Date of First, Resument 3/04/05 | d Production, SWD or E | nhr. | Producing Meth | | Flowing | Pumpi | ng Gas Lift | : Othe | or (Explain | |
| Estimated Production Per 24 Hours | oii n/a | Bbis. | Gas 1 | Mcf | Wate | | bls. G | as-Oil Ratio | | Gravity |
| Disposition of Gas | METHOD OF C | OMPLETIC | | ! | | Production inter | val | | | |
| Vented Sold | Used on Lease | | Open Hole | ✓ Perf. | | tually Comp. | Commingled | | | |

| | A | B | С | Ď | E | F | G | н | 1 | 1 J | К |
|--|---|---|-----------------------------|-----------------------|--|---|--|---|--|--|--------------------------|
| 1 | Produced Fluids# | | 1 | 2 | 3 | 4 | 5 | | | | • |
| 2 | Parameters | Units | Input | Input | Input | Input | Input | | Click he | re · | Click |
| 3 | Select the brines | Select fluid | | | | D. | | Mixed brine: | to run S | | |
| Į | Sample ID | by checking | | | | | | Cell H28 is | | | Click |
| | Date | the box(es), | 3/19/2012 | 3/4/2012 | 3/14/2012 | 1/20/2012 | 1/20/2012 | STP calc. pH. | Į. | - | |
| 6 7 | Operator Well Name | Row 3 | PostRock Ward Feed | PostRock Ward Feed | PostRock Clinesmith | PostRock Clinesmith | PostRock Clinesmith | Cells H35-38 | | | Click |
| 8 | Location | | #34-1 | #4-1 | #5-4 | #1 | #2 | are used in mixed brines | Goal Seek | SSP | |
| 9 | Field | | CBM | CBM | Bartles | Bartles | Bartles | calculations. | | | Click |
| | Na ⁺ | (mg/l)* | 19,433.00 | 27,381.00 | 26,534.00 | 25689.00 | 24220.00 | 24654.20 | Initial(BH) | Final(WH) | 1 |
| Ľ | K⁺(if not known =0) | | 27,433.00 | 27,501.00 | 20,004.00 | 23007.00 | 24220.00 | | | | SI/SR (Floal-Initial) |
| | Mg ²⁺ | (mg/l) | 1.005.00 | | | | | | Saturation Index | | (Frost-Titres) |
| | Ca ²⁺ | (mg/l) | 1,096.00 | 872.00 | 1,200.00 | 953.00 | 858.00 | 995.91 | | lcite | |
| | | (mg/l) | 1,836.00 | 2,452.00 | 2,044.00 | 1920.00 | 1948.00 | 2040.23 | -0.73 | -0.60 | 0.13 |
| | Sr ²⁺ Ba ²⁺ | (mg/l) | . . | | | | | 0.00 | Ba | rite | |
| | | (mg/l) | | | | | | 0.00 | | | <u> </u> |
| ÷ | Fe ²⁺ | (mg/l) | 40,00 | 21.00 | 18.00 | 82.00 | 90.00 | 50.21 | H | alite | |
| 17 | Zn ²⁺ | (mg/l) | | | | | | 0.00 | -1.77 | -1.80 | -0.03 |
| _ | Pb ²⁺ | (mg/l) | | | | | | 0.00 | Gyj | psum | <u>.</u> |
| 19 | Ct* | (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 | Hemil | hydrate | 1 |
| 21 | F | (mg/l) | | | | | | 0.00 | -3,96 | -3.90 | 0.06 |
| 22 | Br* | (mg/l) | | | | | | 0.00 | Anh | ydrite | |
| 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) | | | | | | | | | |
| 26 | Carboxylic acids** | (mg/l) | | | | | | 0.00 | Iron : | Sulfide | |
| 27 | Ammonia | (mg/L) NH3 | | | L | | | 0.00 | -0.16 | -0.22 | -0.06 |
| 28 | Borate | (mg/L) H3BO3 | | | | _ | | 0.00 | Zine : | 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 | n fluoride | |
| | CO ₂ Gas Analysis | (%) | 19.97 | 18.76 | 22.41 | 35.53 | 33.79 | 26.16 | | | |
| - | H ₂ S Gas Analysis*** | (%) | 0.0289 | 0.0292 | 0.0296 | 0,0306 | 0.0151 | 0.0269 | | arbonate | |
| lee | 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 0-CO2%+Alk, | 5.67 | 5.76 | 5.72 | 5.54 | 5,55 | 5,63 | | eeded (mg/L) | _ |
| | Choose one option | | | | | | | | Calcite | NTMP | |
| 35 | to calculate S1? | | 0 | 0 | 0 | o | 0 | | | | |
| 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 | ВНРМР | |
| | Water/Day | (B/D) | 100 | 100 | 100 | 100 | 100 | 500 | 0.00 | 0,00 | 4 |
| | For mixed brines, enter val Initial T | (F) | ures and pressi | res in Cells (H | 70.0 | 41.0 | 49.0 | (Enter H40-H43) 60.0 | 5,69 | 5.60 | - |
| | Final T | | 66.0 | 71.0 | | 41.0 | | | | (CentiPoise) | - |
| 42 | Initial P | (4) | | | 1 70.0 | | 49.0 | 1 89.01 | Viscosity (| | |
| 43 | | (F) (psia) | | | 70.0 25.0 | | 49.0 25.0 | 89.0 25.0 | | 0.826 | - |
| | Final P | (psia) (psia) | 25.0 25.0 | 25.0 25.0 | 70.0 25.0 25.0 | 25.0 25.0 | 25.0 25.0 | | 1.196 | | - |
| | Use TP on Calcite sheet? | (psia) (psia) 1-Yes;0-No | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 | 1.196 | 0.826 | |
| 45 | Use TP on Calcite sheet? API Oil Grav. | (psia) (psia) 1-Yes;0-No APl grav. | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 30.00 | 1.196 Heat Capaci 0.955 Inhibitor ne | 0.826 ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) | |
| 45 46 | Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. | (psia) (psia) 1-Yes;0-No AP1 grav. Sp.Grav. | 25.0 25.0 | 25.0 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 30.00 0.60 | 1.196 Heat Capaci 0.955 Inhibitor ne | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP | |
| 45 46 47 | Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day | (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) | 25.0 25.0 | 25.0 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 30.00 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 | 0.826 ity (cal/ml/ ⁰ C) 0.959 eeded (mg/L) HDTMP 0.00 | - |
| 45 46 47 48 | Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. | (psia) (psia) 1-Yes;0-No AP1 grav. Sp.Grav. | 25.0 25.0 | 25.0 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 30.00 0.60 | 1.196 Heat Capaci 0.955 Inhibitor ne | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP | |
| 45 46 47 48 49 | Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day | (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) | 25.0 25.0 | 25.0 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 30.00 0.60 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anbydrite | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 | Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier | (psia) (psia) 1-Yes;0-No APl grav. Sp.Grav. (B/D) (B/D) | 25.0 25.0 | 25.0 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 30.00 0.60 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anbydrite | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 | Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) | (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) | 25.0 25.0 | 25.0 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 30.00 0.60 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anbydrite | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 | Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) * OH* (Strong base) * Quality Control Checks at H ₂ S Gas | (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: | 25.0 25.0 | 25.0 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 30.00 0.60 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anbydrite | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 | Use TP on Calcite sheet? API Oil Grav, Gas Sp.Grav, MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid)* OH* (Strong base)* Quality Control Checks at H ₂ S Gas Total H2Saq (STP) | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) | 25.0 25.0 | 25.0 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 30.00 0.60 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anbydrite | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 54 55 | Use TP on Calcite sheet? API Oil Grav, Gas Sp.Grav, MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) OH* (Strong base) Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) | 25.0 25.0 | 25.0 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 30.00 0.60 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anbydrite | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 54 55 56 | Use TP on Calcite sheet? API Oil Grav, Gas Sp.Grav, MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid)* OH* (Strong base)* Quality Control Checks at H ₂ S Gas Total H2Saq (STP) | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) | 25.0 25.0 | 25.0 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 30.00 0.60 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anbydrite | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 54 55 56 57 58 | Use TP on Calcite sheet? API Oil Grav, Gas Sp.Grav, MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid)* OH* (Strong base)* Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated ECations= | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) | 25.0 25.0 | 25.0 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 30.00 0.60 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anbydrite | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 | Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid)* OH* (Strong base)* Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated ECations= EXanions= | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/l) as HCO3 (equiv./l) (equiv./l) | 25.0 25.0 | 25.0 25.0 | 25.0 | 25.0 | 25.0 | 25.0 120.0 30.00 0.60 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anbydrite | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 | Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) * OH* (Strong base) * Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated ECations= ECations= EAnions= Calc TDS= | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) | 25.0 25.0 0 0 | 25.0 25.0 | 25.0 25.0 | 25.0 25.0 | 25.0 25.0 | 25.0 120.0 30.00 0.60 0 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anbydrite | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 | Use TP on Calcite sheet? API Oil Grav, Gas Sp.Grav, MeOH/Day MEG/Day Conc. Multiplier H' (Strong acid) ' OH' (Strong base) ' Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated ECations= ZAnions= Calc TDS= Inhibitor Selection | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/l) as HCO3 (equiv./I) (equiv./I) (mg/l) Input | 25.0 25.0 0 0 | 25.0 25.0 | 25.0 25.0 | 25.0 25.0 Unit Converter | 25.0 25.0 | 25.0 120.0 30.00 0.60 0 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anbydrite | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 55 56 57 58 59 60 61 62 | Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) * OH* (Strong base) * Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated ECations= EAnions= Calc TDS= | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) | 25.0 25.0 0 0 | 25.0 | 25.0 25.0 | 25.0 25.0 | 25.0 25.0 | 25.0 120.0 30.00 0.60 0 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anhydrite 0.00 | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 55 56 57 58 59 60 61 62 | Use TP on Calcite sheet? API Oil Grav, Gas Sp.Grav, MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) * OH (Strong base) * Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated 2Cations= EAnions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (equiv./I) Input 120 | 25.0 25.0 0 0 | 25.0 25.0 | 25.0 25.0 Inhibitor NTMP | 25.0 25.0 Unit Converter | 25.0 25.0 25.0 (From metric Value 80 | 25.0 120.0 30.00 0.60 0 0 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anhydrite 0.00 | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 | Use TP on Calcite sheet? API Oil Grav, Gas Sp.Grav, MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid)* OH* (Strong base)* Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated PCO2 Calculated 2Cations= EAnions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you? | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (equiv./I) (mg/I) Input 120 I | 25.0 25.0 0 0 | # 1 2 3 | Inhibitor NTMP BHPMP PAA | Unit Converter From Unit °C m³ | 25.0 25.0 25.0 (From metric Value 80 100 | 25.0 120.0 30.00 0.60 0 0 0 To Unit | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 66 66 66 66 66 66 66 66 66 66 66 66 66 | Use TP on Calcite sheet? API Oil Grav, Gas Sp.Grav, MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) * OH (Strong base) * Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated 2Cations= EAnions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (equiv./I) Input 120 | 25.0 25.0 0 0 0 | 25.0 25.0 | 25.0 25.0 Inhibitor NTMP BHPMP | 25.0 25.0 Unit Converter | 25.0 25.0 25.0 (From metric Value 80 | 25.0 120.0 30.00 0.60 0 0 | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anhydrite 0.00 | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 66 66 66 66 66 66 66 66 66 66 66 66 66 | Use TP on Calcite sheet? API Oil Grav, Gas Sp.Grav, MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) OH (Strong base) Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated ECations= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inbibitor for you? If No, inhibitor # is: | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (equiv./I) (mg/I) Input 120 I | 25.0 25.0 0 0 0 | # 1 2 3 4 | Inhibitor NTMP BHPMP PAA DTPMP | Unit Converter From Unit °C m³ m³ | 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 | 25.0 120.0 30.00 0.60 0 0 To Unit °F ft ³ bbl(42 US gal) | 1.196 Heat Capaci 0.955 Inhibitor in Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 54 55 55 57 58 59 60 61 62 66 | Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid)* OH (Strong base)* Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated Alkalinity Caclulated EXATIONS= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you? If No, inhibitor # is: If you select Mixed, | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) Input 120 I | 25.0 25.0 0 0 0 | # 1 2 3 4 5 5 | Inhibitor NTMP BHPMP PAA DTPMP PPCA | Unit Converter From Unit C C m³ m³ MPa | 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 | 25.0 120.0 30.00 0.60 0 0 0 To Unit °F ft³ bbl(42 US gal) | 1.196 Heat Capaci 0.955 Inhibitor in Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 145,074 | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 52 53 54 55 55 55 55 55 66 66 66 67 | Use TP on Calcite sheet? API Oil Grav, Gas Sp.Grav, MeOH/Day MEG/Day Conc. Multiplier H' (Strong acid) ' OH' (Strong base) ' Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated Alkalinity Caclulated Alkalinity Caclulated ECations= CAnions= CAnions= CAnions= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you? If No, inhibitor # is: If you select Mixed, 1st inhibitor # is: | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv.I) (equiv.I) (mg/I) Input 120 I 4 | 25.0 25.0 0 0 0 | # 1 2 3 4 5 6 | Inhibitor NTMP BHPMP PAA DTPMP PPCA SPA | Unit Converter From Unit C m MPa Bar | 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 | 25.0 120.0 30.00 0.60 0 0 0 To Unit °F ft ³ bbl(42 US gal) psia | 1.196 Heat Capaci 0.955 Inhibitor no Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 145,074 7,194 | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |
| 45 46 47 48 49 50 51 55 55 57 55 57 55 66 67 66 67 68 69 | Use TP on Calcite sheet? API Oil Grav, Gas Sp.Grav, MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) * OH' (Strong base) * Quality Control Checks at H ₂ S Gas Total H2Saq (STP) pH Calculated PCO2 Calculated Alkalinity Caclulated ECations= EAnions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inbibitor for you? If No, inhibitor # is: If you select Mixed, 1st inhibitor # is: % of 1st inhibitor is: | (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) Input 120 I 4 I 50 | 25.0 25.0 0 0 0 | # 1 2 3 4 5 6 7 | Inhibitor NTMP BHPMP PAA DTPMP PPCA SPA HEDP | Unit Converter From Unit °C m³ MPa Bar Torr | 25.0 25.0 25.0 25.0 25.0 25.0 25.0 26.0 26.0 26.0 26.0 26.0 26.0 26.0 26 | 25.0 120.0 30.00 0.60 0 0 0 To Unit °F ft³ bbl(42 US gal) psia psia | 1.196 Heat Capaci 0.955 Inhibitor in Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 145,074 7,194 193 | 0.826 ity (cal/ml/°C) 0.959 eeded (mg/L) HDTMP 0.00 HDTMP | |

Saturation Index Calculations

Champion Technologies, Inc. (Based on the Tomson-Oddo Model)

Brine 1: Ward Feed Yard 34-1 Brine 2: Ward Feed Yard 4-1 Brine 3: Clinesmith 5-4 Brine 4: Clinesmith 1 Brine 5: Clinesmith 2

| | | | Ratio | | | |
|--------------------------|---------|---------|---------|---------|---------|-------------|
| ! | 20% | 20% | 20% | 20% | 20 | |
| Component (mg/L) | Brine 1 | Brine 2 | Brine 3 | Brine 4 | Brine 5 | Mixed Brine |
| Calcium | 1836 | 2452 | 2044 | 1920 | 1948 | 1952 |
| Magnesium | 1096 | 872 | 1200 | 953 | 858 | 865 |
| Barium | 0 | 0 | 0 | 0 | 0 | 0 |
| Strontium | 0 | 0 | 0 | 0 | 0 | 0 |
| Bicarbonate | 190 | 234 | 259 | 268 | 254 | 253 |
| Sulfate | 1 | _ 1 | 8 | 1 | 1 | 1 |
| Chloride | 36299 | 48965 | 47874 | 45632 | 43147 | 43206 |
| CO 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

| <u> </u> | | | | | | |
|-------------|-------|------|-----|-----|-----|------|
| 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 | Ñ/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 CORPO-RATION COMMISSION OF THE STATE OF KANSAS NOTICE OF FILING APPLICATION

RE: In the Matter of Postrock Midcontinem Production, LLC Application for Commingling of Production in the Stich, William A 32-2 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 Middontinent Production, LLC has filled an application to commingle the Riverton, Neutral, Rowe, Fleming, Croweburg, Bovler, Mulky, Summit and Cattleman producing formations at the Stich, William A 32-2, located in the SW NE NE SW, S32-T26S-R19E, Approximately 1994 FSL & 2092 FWL, Neosho County, Kansas.

Any persons who object to or prolest 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 Kensas.

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 counset or as Individuals, appearing on their own behalf.

Postrock Midcontinent Production, LLC 210 Park Avenue, Suite 2750 Oklahoma City, Oklahoms 73102 (405) 680-7704

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

Affidavit of Publication 🐝

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

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



Total Publication Fees \$ 74.

POSTROCK

Current Completion

SPUD DATE: 1/14/2005

COMP. Date: 2/4/2005

API: 15-133-26273

WELL

: Stich, William A 32-2

FIELD

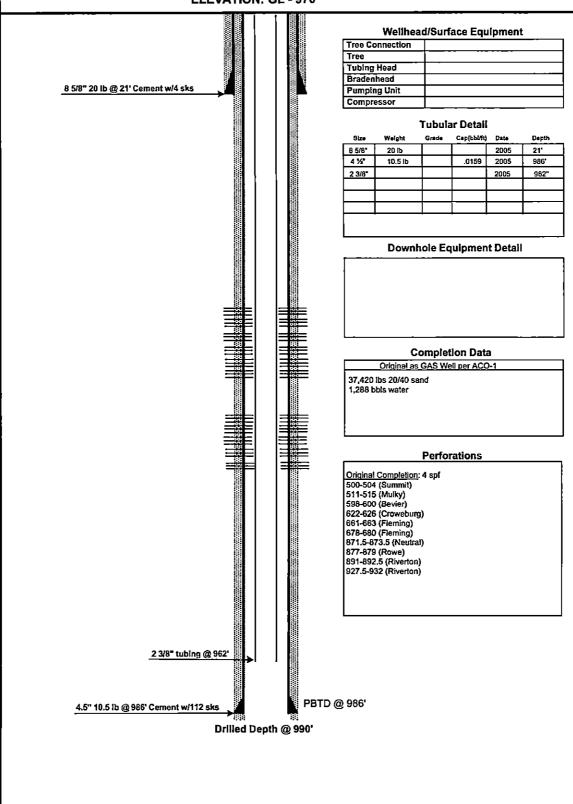
: Cherokee Basin : Kansas

STATE COUNTY

: Neosho

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LOCATION: 32-28S-19E (C NE SW)

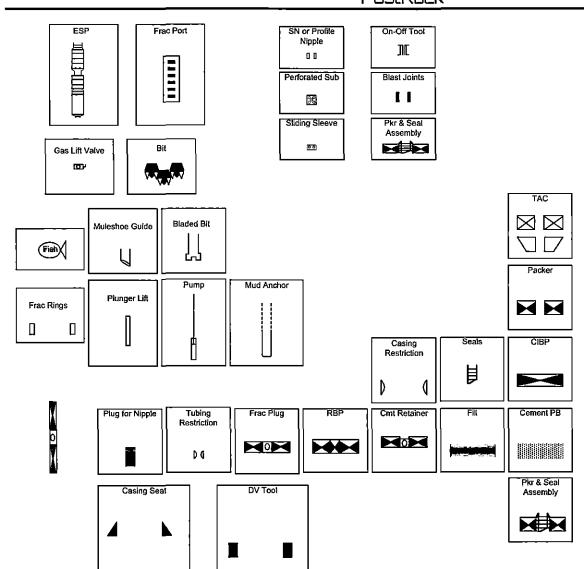


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| APPROVED BY: | |

POSTROCK



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| 4m/dav | d of Notice Served | | |
| ₹e: | Application for: APPLICATION FOR COMMINGL | ING OF PRODUCTION OR FLUIDS - ACO-4 | . <u>.</u> |
| | Well Name: STICH, WILLIAM A 32-2 | Legal Location: SWNENESW S32-T28S-F | R19E |
| he und | ersigned hereby certificates that he / she is a duly authorized ago | ent for the applicant, and that on the day 25TH of JUNE | |
| 2012 | , a true and correct copy of the application reference | | |
| J., J., | | | |
| lote: A | copy of this affidavit must be served as a part of the application. | | |
| 0007 | Name | Address (Atlach additional sheets if necessary) | UTV OV 72400 5044 |
| POST | ROCK MIDCONTINENT PRODUCTION, LLC | 210 PARK AVENUE, SUITE 2750, OKLAHOMA C | ITY, OK 73102-5641 |
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| hereby certify that the statements made herein are true and correct to the bost of my knowledge and belief. Applica of Design County adjusted Apolit Subscribed and sworn before me this 25TH day of JUNE 2012 DEMSE V. VERNELAN OFFICIAL MY COMMISSION EXPIRES July 1, 2012 My Commission Expires: My Commission Expires: | OOTTOOK MIDOORTHALITY TEE | ,11011, LEO | | AUNEAUE III III |
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AFFIDAVIT

STATE OF KANSAS

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 natice was

made as aforesaid on the 18th 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

<u>18th day of June, 2012</u>

PENNY L. CASE Notary Public - State of Kaps My Appt, Expires

Notary Public Sedgifick County, Kansas

Printer's Fee: \$132.40

LEGAL PUBLICATION

PUBLISHED IN THE WICHITA EAGLE
JUNE 18,2012 (0191300)
BEFORE THE STATE CORPORATION
COMMISSION

JUNE 18-2017 (1913) 201
BEFORE THE 5TATE CORPORATION
COMMISSION
OF THE STATE OF KANSAS
NOTICE OF PILING APPLICATION
RE: In the Addler of Postrock Addentisent
Production, LLC Application for
Commission of Production in the Stein,
William A 22-7 located in Neishe County,
Kanses
TO: All Olf & Gas Productris, Unicesed Athers
Interest: Owners, Landowners, and ell
persons whomever concerned.
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Postrock Midicantisent Production, LCC has the
an application to commission hereby notified that
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an application to commission for Referror, Neutral,
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Summit: and Caffernan producting formations at
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Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichito, KS 67202-3802



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

Sam Brownback, Governor

Mark Sievers, Chairman Thomas E. Wright, Commissioner

July 10, 2012

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

RE:

Approved Commingling CO071203

Stich William A 32-2 Sec.32-T28S-R19E, Neosho County

API No. 15-133-26273-00-00

Dear Mr. Edwards:

Your Application for Commingling (ACO-4) for the above described well, received by the KCC on July 2, 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 completion of the well to commingle.

Commingling ID number CO071203 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