

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1103583

Form ACO-4 Form must be typed March 2009

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

| OPERAT | OR: License # | API No. 15 | | | |
|------------------------|---|----------------------|---------------------|---------------------|--------------------------|
| Name:_ | | Spot Descriptio | n: | | |
| Address | 1: | - | Sec | Twp S. R. | East West |
| Address | 2: | | Feet fro | m North / | South Line of Section |
| City: | | | Feet fro | m 🗌 East / 🛭 | West Line of Section |
| Contact | Person: | County: | | | |
| Phone: | () | Lease Name:_ | | Well #: | |
| | | | | | |
| 1. | Name and upper and lower limit of each production interval to be con | - | | | |
| | Formation: | (Per | fs): | | |
| | Formation: | (Per | fs): | | |
| | Formation: | (Per | fs): | | |
| | Formation: | (Per | fs): | | |
| | Formation: | (Per | fs): | | |
| | | | | | |
| 2. | Estimated amount of fluid production to be commingled from each int | | | | |
| | Formation: | | | | BWPD: |
| | Formation: | | | | BWPD: |
| | Formation: | BOPD: | MCFPD | : | BWPD: |
| | Formation: | BOPD: | MCFPD | : | BWPD: |
| | Formation: | BOPD: | MCFPD | : | BWPD: |
| 3. | Plat map showing the location of the subject well, all other wells on the subject well, and for each well the names and addresses of the le | | | setting leases with | nin a 1/2 mile radius of |
| 4. | Signed certificate showing service of the application and affidavit of p | oublication as req | uired in K.A.R. 82- | 3-135a. | |
| For Con | nmingling of PRODUCTION ONLY, include the following: | | | | |
| <u> </u> | Wireline log of subject well. Previously Filed with ACO-1: | No | | | |
| 6. | Complete Form ACO-1 (Well Completion form) for the subject well. | | | | |
| For Con | nmingling of FLUIDS ONLY, include the following: | | | | |
| 7. | Well construction diagram of subject well. | | | | |
| 8. | Any available water chemistry data demonstrating the compatibility of | f the fluids to be o | commingled. | | |
| current ir mingling | /IT: I am the affiant and hereby certify that to the best of my nformation, knowledge and personal belief, this request for comis true and proper and I have no information or knowledge, which istent with the information supplied in this application. | | Submitted E | Electronically | / |

KCC Office Use Only

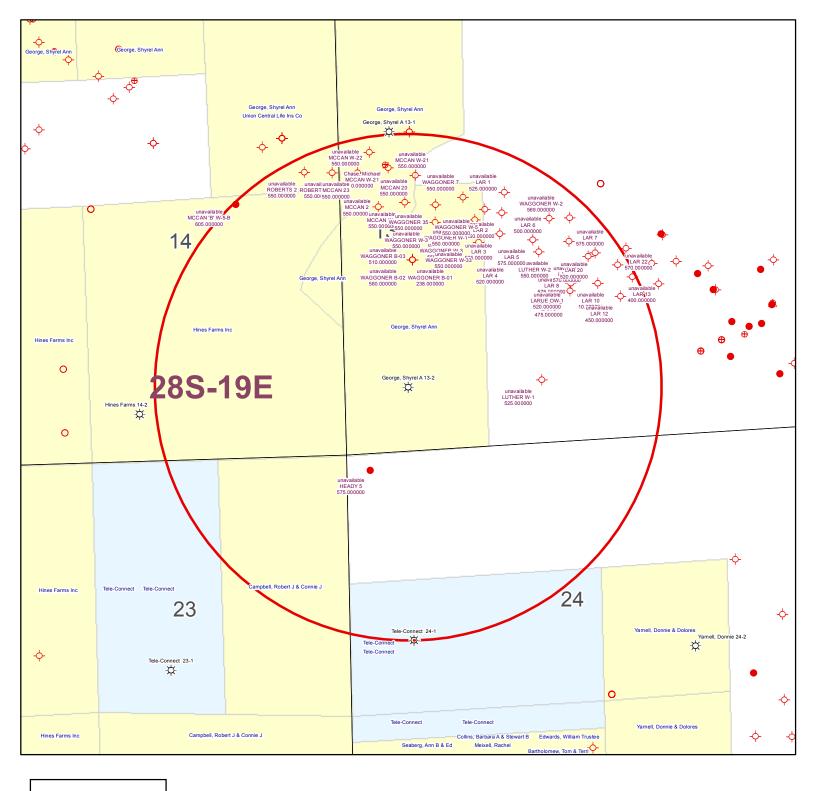
Denied Approved

15-Day Periods Ends:

Approved By:

Date:

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.



KGS STATUS

- → DA/PA
- EOR
- GAS
- △ INJ/SWD
- OIL
- **♦** OIL/GAS
- OTHER

George, Shyrel A 13-2 13-28S-19E 1" = 1,000'

| | Α | В | С | D | Е | F | G | Н | 1 | | K |
|--|--|---|---|--|--|--|---|--|---|---|-----------------|
| 1 | Produced Fluids # | Б | 1 | 2 | 3 | 4 | 5 | 11 | • | <u> </u> | |
| | Parameters | Units | Input | Input | Input | Input | Input | | Click he | re | Click |
| 3 | Select the brines | Select fluid | | Ī | V | | Ī | Mixed brine: | to run SS | - | |
| 4 | Sample ID | by checking | | | | | | Cell H28 is | to ruii oc | | Click |
| 5 | Date | the box(es), | 3/19/2012 | 3/4/2012 | 3/14/2012 | 1/20/2012 | 1/20/2012 | STP calc. pH. | — | | |
| 6 | Operator | Row 3 | PostRock | PostRock | PostRock | PostRock | PostRock | Cells H35-38 | | | Click |
| 7 | Well Name | | Ward Feed | Ward Feed | Clinesmith | Clinesmith | Clinesmith | are used in | Goal Seek | SSP | |
| 8 | Location | | #34-1 | #4-1 | #5-4 | #1 | #2 | mixed brines | | | Click |
| 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 |
| 11 | K ⁺ (if not known =0) | (mg/l) | | | | | | 0.00 | Saturation Index | values | (Final-Initial) |
| | Mg ²⁺ | (mg/l) | 1,096.00 | 872.00 | 1,200.00 | 953.00 | 858.00 | 995.91 | | lcite | |
| | Ca ²⁺ | (mg/l) | 1,836.00 | 2,452.00 | 2,044.00 | 1920.00 | 1948.00 | 2040.23 | -0.73 | -0.60 | 0.13 |
| | Sr ²⁺ | | 1,050.00 | 2,432.00 | 2,044.00 | 1720.00 | 1740.00 | | | | 0.13 |
| | Ba ²⁺ | (mg/l) | | | | | | 0.00 | Da | rite | |
| ., | | (mg/l) | | | | | | 0.00 | | | |
| | Fe ²⁺ | (mg/l) | 40.00 | 21.00 | 18.00 | 82.00 | 90.00 | 50.21 | | lite | |
| | Zn ²⁺ | (mg/l) | | | | | | 0.00 | -1.77 | -1.80 | -0.03 |
| 18 | Pb ²⁺ | (mg/l) | | | | | | 0.00 | Gyp | sum | |
| 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 | Hemil | ydrate | |
| | F. | (mg/l) | | | | | | 0.00 | -3.96 | -3.90 | 0.06 |
| | Br ⁻ | (mg/l) | | | | | | 0.00 | | ydrite | 3.00 |
| | SiO2 | (mg/l) SiO2 | | | | | | 0.00 | -3.47 | -3.36 | 0.12 |
| _ | | | 100.00 | 224.00 | 250.00 | 200 00 | 254.00 | | | | 0.12 |
| | HCO3 Alkalinity** | (mg/l as HCO3) | 190.00 | 234.00 | 259.00 | 268.00 | 254.00 | 241.03 | Cele | estite | |
| | CO3 Alkalinity | (mg/l as CO3) | | | | | | _ | | | |
| | Carboxylic acids** | (mg/l) | | | | | | 0.00 | | 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 | | | |
| | H ₂ S Gas Analysis*** | (%) | 0.0289 | 0.0292 | 0.0296 | 0.0306 | 0.0151 | 0.0269 | | rbonate | |
| 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) | pН | 5.67 | 5.76 | 5.72 | 5.54 | 5.55 | 5.63 | Inhibitor ne | eded (mg/L) | |
| | Chassa and antion | 0-CO2%+Alk, | | | | | | | Calcite | NTMP | |
| 35 | Choose one option to calculate SI? | | 0 | 0 | 0 | 0 | | | | | |
| | Gas/day(thousand cf/day) | (Mcf/D) | | | | | U | 0 | 0.00 | 0.00 | |
| | Oil/Day | (B/D) | 0 | 0 | 1 | 1 | 1 | 4 | Barite | BHPMP | - |
| | Water/Day | (B/D) | 100 | 100 | 100 | 100 | 100 | 500 | 0.00 | 0.00 | |
| 39 | For mixed brines, enter val | | | | | | | | | | |
| - | | lues for tempera | tures and pressi | <u>ires in Cells</u> (H | (40-H43) | | | (Enter H40-H43) | p | Н | |
| 41 | Initial T | (F) | 66.0 | 71.0 | 70.0 | 41.0 | 49.0 | 60.0 | 5.69 | 5.60 | |
| | Final T | | 66.0 66.0 | 71.0 71.0 | 70.0 70.0 | 41.0 | 49.0 | 60.0 89.0 | 5.69 Viscosity (| 5.60 CentiPoise) | |
| | | (F) | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 | 5.69 Viscosity (1.196 | 5.60 CentiPoise) 0.826 | |
| 42 43 | Final T Initial P Final P | (F) (F) (psia) (psia) | 66.0 66.0 | 71.0 71.0 | 70.0 70.0 | 41.0 | 49.0 | 60.0 89.0 | 5.69 Viscosity (1.196 Heat Capaci | 5.60 CentiPoise) 0.826 ty (cal/ml/ ⁰ C) | |
| 42 43 44 | Final T Initial P Final P Use TP on Calcite sheet? | (F) (F) (psia) (psia) 1-Yes;0-No | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 | 5.69 Viscosity (1.196 Heat Capaci 0.955 | 5.60 CentiPoise) 0.826 ty (cal/ml/ ⁰ C) 0.959 | |
| 42 43 44 45 | Final T Initial P Final P Use TP on Calcite sheet? API Oil Grav. | (F) (F) (psia) (psia) 1-Yes;0-No API grav. | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor no | 5.60 CentiPoise) 0.826 ty (cal/ml/ ⁰ C) 0.959 eeded (mg/L) | |
| 42 43 44 45 46 | Final T Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. | (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne | 5.60 CentiPoise) 0.826 ty (cal/ml/ ⁰ C) 0.959 seded (mg/L) HDTMP | |
| 42 43 44 45 46 47 | Final T Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. McOH/Day | (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 | |
| 42 43 44 45 46 47 48 | Final T Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day | (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne | 5.60 CentiPoise) 0.826 ty (cal/ml/ ⁰ C) 0.959 seded (mg/L) HDTMP | |
| 42 43 44 45 46 47 48 49 | Final T Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier | (F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 | Final T Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) † | (F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 | Final T Initial P Final P Use TP on Calcite sheet? API Oil Grav. Gas Sp.Grav. MeOH/Day MEG/Day Conc. Multiplier H* (Strong acid) † OH' (Strong base) † | (F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 | Final T Initial P Final P 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 | (F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 | Final T Initial P Final P 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 | (F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 54 55 | Final T Initial P Final P 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 | (F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/l) (pH) | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 | Final T Initial P Final P 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 | (F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) (N) STP: (%) (mgH2S/I) (pH) (%) | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 | Final T Initial P Final P 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 | (F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 | Final T Initial P Final P 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 \$\textstyle{\textstyle{\textstyle{2}}}\$ | (F) (F) (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) | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 | Final T Initial P Final P 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 | (F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 | Final T Initial P Final P 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 Scations= \$\times\$ | (F) (F) (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) | 66.0 66.0 25.0 | 71.0 71.0 25.0 | 70.0 70.0 25.0 | 41.0 25.0 25.0 | 49.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 0 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 | Final T Initial P Final P 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= CAlci TDS= | (F) (F) (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) | 66.0 66.0 25.0 25.0 | 71.0 71.0 25.0 25.0 | 70.0 70.0 25.0 25.0 Inhibitor NTMP | 41.0 25.0 25.0 Unit Converter | 49.0 25.0 25.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 0 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 | Final T Initial P Final P 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 \$\text{\$\cupe{C}\$}\te | (F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) Input | 66.0 66.0 25.0 25.0 0 0 | 71.0 71.0 25.0 25.0 | 70.0 70.0 25.0 25.0 | 41.0 25.0 25.0 Unit Converter From Unit | 49.0 25.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 0 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 | Final T Initial P Final P 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 | (F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (mg/I) Input | 66.0 66.0 25.0 25.0 0 0 | 71.0 71.0 25.0 25.0 | 70.0 70.0 25.0 25.0 Inhibitor NTMP | 41.0 25.0 25.0 Unit Converter | 49.0 25.0 25.0 25.0 | 60.0 89.0 25.0 120.0 30.00 0.60 0 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 60 61 62 63 | Final T Initial P Final P 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 \$\textit{Z}\text{Calculated}\$ Alkalinity Caclulated \$\text{Lactions}\$ EAnions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer | (F) (F) (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (equiv./I) Input 120 | 66.0 66.0 25.0 25.0 0 0 | 71.0 71.0 25.0 25.0 4 1 1 2 | 70.0 70.0 25.0 25.0 25.0 Inhibitor NTMP BHPMP | 41.0 25.0 25.0 Unit Converter From Unit | 49.0 25.0 25.0 25.0 (From metric Value 80 | 60.0 89.0 25.0 120.0 30.00 0.60 0 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 | Final T Initial P Final P 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= \$\times\$ \text{Lanions}\$ Lanions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you? | (F) (F) (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (equiv./I) (mg/I) Input 120 | 66.0 66.0 25.0 25.0 0 0 0 | # 1 2 3 | Inhibitor NTMP BHPMP PAA | 41.0 25.0 25.0 Unit Converter From Unit °C m³ | 49.0 25.0 25.0 25.0 (From metric Value 80 100 | 60.0 89.0 25.0 120.0 30.00 0.60 0 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 | Final T Initial P Final P 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: | (F) (F) (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (equiv./I) (equiv./I) (mg/I) Input 120 | 66.0 66.0 25.0 25.0 0 0 0 | 71.0 71.0 25.0 25.0 1 1 1 2 3 4 | Inhibitor NTMP BHPMP PAA DTPMP | Unit Converter From Unit °C m³ m³ | 49.0 25.0 25.0 25.0 (From metric Value 80 100 100 | 60.0 89.0 25.0 120.0 30.00 0.60 0 | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 67 68 60 61 62 63 64 65 66 | Final T Initial P Final P 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 Alkalinity Caclulated PCO2 Calculated Alkalinity Caclulated FOCO Calculated FOCO Calculated Alkalinity Caclulated FOCO Calculated Alkalinity Caclulated FOCO Calculated FOCO Cal | (F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (mg/I) Input 120 1 4 | 0 0 0 Unit min 1-Yes;0-No # | ## 1 2 3 4 5 5 | Inhibitor NTMP BHPMP PAA DTPMP PPCA | Unit Converter From Unit °C m³ m³ MPa | 49.0 25.0 25.0 25.0 (From metric Value 80 100 1,000 | 60.0 89.0 25.0 120.0 30.00 0.60 0 0 To Unit °F ft³ bbl(42 US gal) psia | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 145,074 | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 | Final T Initial P Final P 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 SCations= ZAnions= Calc TDS= Inhibitor Selection Protection Time Have ScaleSoftPitzer pick inhibitor for you? If No, inhibitor # is: If you select Mixed, 1st inhibitor # is: | (F) (F) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/I) as HCO3 (equiv./I) (mg/I) Input 120 1 4 | 0 0 0 Unit min 1-Yes;0-No # | ## 1 2 3 4 5 6 | Inhibitor NTMP BHPMP PAA DTPMP PPCA SPA | Unit Converter From Unit C m MPa Bar | 49.0 25.0 25.0 25.0 (From metric Value 80 100 100 1,000 496 | 60.0 89.0 25.0 120.0 30.00 0.60 0 0 To Unit "F ft ³ bbl(42 US gal) psia | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 145,074 7,194 | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (mg/L) HDTMP 0.00 HDTMP | |
| 42 44 45 46 47 48 49 50 51 52 53 54 55 56 60 61 62 63 64 65 66 67 68 69 | Final T Initial P Final P 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 inhibitor for you? If No, inhibitor # is: If you select Mixed, 1st inhibitor # is: % of 1st inhibitor is: | (F) (F) (psia) (psia) (psia) 1-Yes;0-No API grav. Sp.Grav. (B/D) (N) (N) STP: (%) (mgH2S/I) (pH) (%) (mg/l) as HCO3 (equiv./l) (equiv./l) (mg/l) Input 120 1 4 1 50 | 0 0 0 0 Unit min 1-Yes;0-No # # % | ## 1 2 3 4 4 5 6 6 7 | Inhibitor NTMP BHPMP PAA DTPMP PPCA SPA HEDP | Unit Converter From Unit °C m³ m³ MPa Bar Torr | 49.0 25.0 25.0 25.0 25.0 Value 80 100 1,000 496 10,000 | 60.0 89.0 25.0 120.0 30.00 0.60 0 0 To Unit °F ft³ bbl(42 US gal) psia psia psia | 5.69 Viscosity (1.196 Heat Capaci 0.955 Inhibitor ne Gypsum 0.00 Anhydrite 0.00 Value 176 3,531 629 145,074 7,194 193 | 5.60 CentiPoise) 0.826 ty (cal/ml/°C) 0.959 ceded (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

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



KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

ORIGINAL September 1999

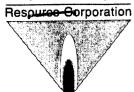
WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

| County Needto Address: 211 W. 14th Street Address: 211 W. | Operator: License # 33344 | API No. 15 - 133-27068-0000 |
|--|---|---|
| Address: 211 W. 14th Street CiplyStates/Ep. Chanute, KS 66720 CiplyStates/Ep. Chanute, KS 66720 CiplyStates/Ep. Chanute, KS 66720 Coperator Contact Person, Jennifer R. Ammann Phone (820) 43149500 Contractor: Name TXD Drilling Contractor: Nam | Name: Quest Cherokee, LLC | |
| Second Period Composition Second Period | | |
| Footages Calculated From Nearest Outside Section Corner: | City/State/Zip. Chanute, KS 66720 | |
| Poperator Contact Person: Jennifer R. Ammann Phone: (E2D 431-9500 Contractor: Name: X00 Delling Contractor: Name: | Purchaser. Bluestem Pipeline, LLC | 000 |
| Phone: (820 431-9500 | ^() | |
| Contractor: Name: TXD Drilling Licenses: 33837 Well site Geologist: Ken Recoy Well Selection: Selection: Selection of the Completion: Velocity 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 Into as follows: Operator: Well Name: Original Comp. Date: Original Total Depth: Despening Re-pert. Corn. to Entr/SWD Plug Back Pipug Back Total Depth: Despening Re-pert. Corn. to Entr/SWD Plug Back Pipug Back Total Depth: Other (SWD or Enhr.?) Docket No. Dual Completion Docket No. Other (SWD or Enhr.?) Docket No. Date Reached TD Date Reached TD Completion Date Or Recompletion Recompletion Recompletion Recompletion Recompletion Recompletion Recompletion Recompletion Reco | | |
| Wellste Gologiet. Ken Recoy Segretary Well Re-Entry Workover Completion: Field Name. Cherokee Basin CBM Producing Formation. Ind yet complete Elevation: Ground. S51 Kelly Bushing. Inda Total Depth. S95 Plug Back Total Depth. Sufface | | (|
| Wellsite Geologist: Ken Recoy Designate Type of Completion: V New Well Re-Entry Workover Oil SWD SIOW Temp. Abd. V Gas ENHR SIGW Dry Other (Core, WSW, Expl., Cathodic, etc) If Workover/Re-entry: Old Well Into as follows: Operator: Operator: Despening Re-port. Original Total Depth: Despening Re-port. Original Total Depth: Despening Re-port. Corn. to Entr/SWD Plug Back. Plug Back. Ditling Fluid Management Plan Commingled Docket No. Dother (SWD or Enhr.?) Dother (SWD or Enhr.?) Dother (SWD or Enhr.?) Dother (SWD or Enhr.?) Dother No. Other (SWD or Enhr.?) Dother No. Other (SWD or Enhr.?) Dothet No. Dother No. Dother SwD Date Fleached TD Recompletion Date Notar must be cellected from the Reserve Pilu Plud Volume. Despension of fluid disposal if hauled offsite: Operator Name: Lease Name: L | | Field Name: Cherokee Basin CBM |
| Designate Type of Completion: New Well | License. | Producing Formation, not yet complete |
| New Well | | Floration: Ground: 951 Kelly Rushing: n/a |
| Amount of Surface Pipe Set and Cemented at 22 Feet Gas | | |
| Multiple Stage Cementing Collar Used? | · | , |
| If yes, show depth set | | |
| If Workover/Re-entry: Old Well Info as follows: Operator: Well Name: Original Comp. Date: Deepening Re-perl. Conv. to Enhr/SWD Plug Back Plug Back Total Depth Commingled Docket No. Other (SWD or Enhr.?) Docket No. 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 writine logs and geologist well report shall be firm. 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: 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: 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 sworn to before me this Subscribed and sworn to before me this DEC 2.8 200 | | |
| Operator: | | |
| Well Name: Original Comp. Date: Original Comp. Date: Original Total Depth: Deepening Re-perl. Conv. to Enhr/SWD Plug Back Plug Back Total Depth Commingled Docket No. Double Completion Docket No. Other (SWD or Enhr.?) Docket No. Other (SWD or Enhr.?) Docket No. Spud Date or Recompletion Date 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, 82-3-105 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 writh 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: All requirements Coordinator Subscribed and sworn to before me this 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: Notary Public: All Commission Furires: All | • | |
| Original Comp. Date: Original Total Depth: Conv. to Enhr/SWD Deepening Re-perl. Conv. to Enhr/SWD Plug Back Plug Back Total Depth Commingled Docket No. Dual Completion Docket No. Other (SWD or Enhr.?) Docket No. Operator Name: Lease Name: License No.: Operator Name: Lease Name: License No.: Operator Name: County: Docket No. 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. Signature: 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: 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: All 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: All regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements her | Operator: | teet depth tosx cmt. |
| Depening 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. Other (SWD or Enhr.?) Spud Date or Recompletion Date Recompletion Date 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. Signature: 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: 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: All requirements of the statutes 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: All requirements of the statutes 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: All requirements beginned 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: All requirement | | Drilling Fluid Management Plan AH IL NS3-2409 |
| Plug Back Plug Back Total Depth Commingled Docket No. Dual Completion Docket No. Other (SWD or Enhr.?) Docket No. 9/4/07 97/07 9/8/07 Date Reached TD Completion Date or Recompletion Date 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). 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: Profite Use ONLY Wireline Log Received KANSAS CORPORATION CO Geologist Report Received UIC Distribution DEC 2.8 2000 Date Commission Frances: 8 - 4 - 2010 A. TERRA KIALIMAN | - | (Data must be collected from the Reserve Pit) |
| Commingled Docket No. Dual Completion Docket No. Other (SWD or Enhr.?) Docket No. 9/4/07 Spud Date or Recompletion Date 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 ploty. 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: All Policy Subscribed and sworn to before me this Statements of the statutes of the statutes. The statements herein are complete and correct to the best of my knowledge. Signature: All Denied, Yes Date: RECEIVED KANSAS CORPORATION CO Geologist Report Received Wireline Log Received Mireline Log Received Mireline Log Received Mansas CORPORATION CO Geologist Report Received UIC Distribution DEC 2,8 2001 | • | Chloride content ppm Fluid volume bbls |
| Dual Completion Docket No. Other (SWD or Enhr.?) Docket No. Spud Date or Recompletion Date Notary Public: Date Reached TD Date Reached TD Docket No. Operator Name: Lease Name: Lease Name: Lease Name: Docket No.: Ouarter Sec. Twp. S. R. East West County: Docket No.: Docket No.: Docket No.: Ouarter Sec. Twp. S. R. East West County: Docket No.: Docket No.: 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: Wireline Log Received Wireline Log Received Wireline Log Received UIC Distribution DEC 2,8 2001 | Plug Back Plug Back Total Depth | Dewatering method used |
| Operator Name: Lease Name: Lease Name: Lease Name: Lease Name: Lease Name: Lease Name: County: Docket No.: Docket | Commingled Docket No | Location of fluid disposal if hauled offsite: |
| Other (SWD or Enhr.?) Other (SWD or Enhr.?) Docket No. | Dual Completion Docket No | Operator Name: |
| 9/8/07 Spud Date or Recompletion Date Ouarter | Other (SWD or Enhr.?) Docket No | • |
| 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: 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. KCC Office Use ONLY Letter of Confidentiality Received If Denied, Yes Date: Wireline Log Received KANSAS CORPORATION CO Geologist Report Received UIC Distribution DEC 2,8 200 | 9/4/07 9/7/07 9/8/07 | |
| 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: Accordinator Date: 12/25/07 Subscribed and sworn to before me this DST day of Letter of Confidentiality Received Wireline Log Received | | |
| 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: New Well Development Coordinator Date: 12/25/07 Letter of Confidentiality Received Subscribed and sworn to before me this Statement Stateme | necompletion bate 1000mpletion bate | County: Docket No.: |
| Signature: New Well Development Coordinator Date: 12/25/07 Subscribed and sworn to before me this DST day of Determined Mireline Log Received Notary Public: New Well Development Coordinator Date: 12/25/07 Notary Public: New Well Development Coordinator Date: 12/25/07 Letter of Confidentiality Received Find the Commission Evolution Received | Kansas 67202, within 120 days of the spud date, recompletion, workon information of side two of this form will be held confidential for a period of 107 for confidentiality in excess of 12 months). One copy of all wireline log | over or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. 12 months if requested in writing and submitted with the form (see rule 82-3- ps and geologist well report shall be attached with this form. ALL CEMENTING |
| Subscribed and sworn to before me this Date: 12/25/07 Subscribed and sworn to before me this Date: 12/25/07 Subscribed and sworn to before me this Date: 12/25/07 Subscribed and sworn to before me this Date: RECEIVED Wireline Log Received KANSAS CORPORATION CO Geologist Report Received UIC Distribution DEC 2,8 2001 | | late the oil and gas industry have been fully complied with and the statements |
| Subscribed and sworn to before me this Date: 12/25/07 Subscribed and sworn to before me this Date: 12/25/07 Subscribed and sworn to before me this Date: 12/25/07 Subscribed and sworn to before me this Date: RECEIVED Wireline Log Received KANSAS CORPORATION CO Geologist Report Received UIC Distribution DEC 2,8 2001 | $O \cdot I \mathcal{D} O$ | KCC Office Line ONLY |
| Subscribed and sworn to before me this DEC 1 DEC 1 DEC 2 8 2001 Subscribed and sworn to before me this DEC 2 8 2001 Subscribed and sworn to before me this DEC 2 8 2001 If Denied, Yes Date: Wireline Log Received KANSAS CORPORATION CO Geologist Report Received UIC Distribution DEC 2 8 2001 | · / / / | \(\lambda \text{ RCC Office Use ONLY} \) |
| Subscribed and sworn to before me this day of | Title: New Well Development Coordinator Date: 12/25/07 | Letter of Confidentiality Received |
| Wireline Log Received KANSAS CORPORATION CO Geologist Report Received UIC Distribution DEC 2,8 2007 Date Commission Evoires: 8-4-2010 TERRAKIALMAN CONSERVATION CO | Subscribed and sworn to before me this $asth}{asym}$ | |
| Notary Public: Services: 8-4-2010 A. TERRAKIALMAN CONSERVATION OF THE COMPANY Public Services: 8-4-2010 A. TERRAKIALMAN | | Wireline Log Received KANSAS CORPORATION COMMIT |
| Date Commission Evnires: 8-4-2010 A. TERRAKIAUMAN | . N | Geologist Report Received |
| Date Commission Evoires: 8-4-2010 A. TERRAKIALIMAN | Notary Public: <u>Verra</u> Xlauman | UIC Distribution DEC 2,8 2007 |
| Notary Public - State of Kanana | Date Commission Expires: 8-4-2010 | TERRA KLAUMAN |
| My Appt. E. Siras & - 4 - 2010 | | MICHITA Ke |

Side Two

| Operator Name: Que | st Cherokee, LL | <u> </u> | Lease Name | e: George, Snyrei | Λ. | Well #: 13-2 | |
|---|--|---|---------------------------------------|--------------------|---|-------------------|-------------------------------|
| Sec. 13 Twp. 28 | | | County: Nec | osho | | ···· | i unha |
| tested, time tool open temperature, fluid reco | and closed, flowing overy, and flow rates | and base of formations po g and shut-in pressures, s if gas to surface test, a inal geological well site r | whether shut-in long with final cl | pressure reached | static level, hydro | ostatic pressure | s, bottom hole |
| Drill Stem Tests Taker (Attach Additional S | | Yes No | ₽ | Log Formati | on (Top), Depth | and Datum | Sample |
| Samples Sent to Geol | logical Survey | Yes No | 1 1 | ame ee attached | | Тор | Datum |
| Cores Taken Electric Log Run (Submit Copy) | | ☐ Yes ☐ No ☐ Yes ☐ No | | | | | |
| List All E. Logs Run: | | | | | | | |
| Compensated Dual Induction | - | ron Log | | | | • | |
| | | CASING Report all strings set-o | RECORD | | tion ata | | |
| 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" | 22 | 22 | "A" | 5 | |
| Production | 6-3/4 | 4-1/2 | 10.5 | 944.82 | "A" | 120 | |
| | | | | | | | |
| | | ADDITIONAL | CEMENTING / S | 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 | | ON RECORD - Bridge Plug Footage of Each Interval Per | | | cture, Shot, Cemer mount and Kind of M | | d Depth |
| | waiting on pipeline | | | | | | |
| | | A A A A A A A A A A A A A A A A A A A | | | | | |
| TUBING RECORD Wai | Size iting on pipeline | Set At | Packer At | Liner Run | Yes N | 0 | |
| Date of First, Resumerd | Production, SWD or E | Enhr. Producing Met | | wing Pump | ing Gas L | ift Othe | er (Explain) |
| Estimated Production Per 24 Hours | Oil | Bbls. Gas | Mof V | Vater E | Bbls. | Gas-Oil Ratio | Gravity |
| Disposition of Gas | METHOD OF C | COMPLETION | | Production Inte | rval | | |
| Vented Sold (If vented, Sul | Used on Lease | Open Hole Other (Spec | Perf. [| Dually Comp. | Commingled . | | |

QUEST



Ravin 4513

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

TICKET NUMBER 2403

FIELD TICKET REF #

SECTION | TOWNSHIP

FOREMAN Soe

RANGE

622900

TREATMENT REPORT & FIELD TICKET CEMENT

WELL NAME & NUMBER

| 9-8-07 | Genrae | Shyre | 1 13 | · 2 | 13 | 28 19 | ~0 |
|--|---|-----------------------------|-------------------|----------------------------------|------------------|--------------------|-----------------------|
| FOREMAN / OPERATOR | TIME | TIME | LESS LUNCH | TRUCK # | TRAILER # | TRUCK HOURS | EMPLOYEE SIGNATURE |
| Jae | 6:45 | 10:15 | | 902427 | | 3.5 | you Blanchad |
| Tim | 6:45 | | | 903197 | | 3.5 | In and |
| Tyler | | | | 903600 | | | |
| Rill. TR | 6:45 | | | 931385 | 93/387 | 3.5 | 1.10-01 |
| DANIEL | 6:45 | 1 | | 931420 | | 3.5 | A |
| JOB TYPE LONGS CASING DEPTH AT SLURRY WEIGHT DISPLACEMENT 15 | 14.62 DRILLI 14.5 SLURR 5.06 DISPLA | PIPE RY VOL ACEMENT P | T V SI N | HOLE DEPTH 95 UBING VATER gal/sk | OTHE | ENT LEFT in CASING | |
| | | do | <u> </u> | <u> </u> | | | |
| | 9 44. | <i>g</i> a 5 | Central | Cosina | | | |
| | | | 11/2 floa- | | | | |
| 400011117 | | | 1 12 1 10C | | | | TOTAL |
| ACCOUNT CODE | QUANTITY or I | UNITS | | DESCRIPTION OF SE | ERVICES OR PRODU | CT | AMOUNT |
| 903427 | 3.5 | hr | Foreman Pickup | | • | | |
| 903197 | 3.5 | hr | Cement Pump Truck | k | | | |
| 903600 | | hr | Bulk Truck | | | | |
| 1104 | 116 | 1 SK | Portland Cement | | | | |
| 1124 | | 2 | 50/50 POZ Blend C | | es 31/2 1 | ν3 | |
| 1126 | 1 | <u> </u> | OWG - Blend Cerne | =nr -11/2 L | res plu | 2 | |
| 1110 | | 2 5K | Gilsonite | | , 4 | <i></i> | |
| 1107 | / | 1 5 K | Flo-Seal | | | R | ECEIVED |
| 1118 | / | / SK | Premium Gel | | | KANSAS COR | PORATION COMMISSION |
| 1215A | 199 | ` | KCL | 7) 1 1 1 | . | | 0.0007 |
| 1111B | | 25K | Sodium Silicate | Calchlori | dl | <u>DE</u> | C 282007 |
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POSTROCK



Current Completion

SPUD DATE: 9/4/2007

COMP. Date: 9/8/2007 API: 15-133-27068-00-00

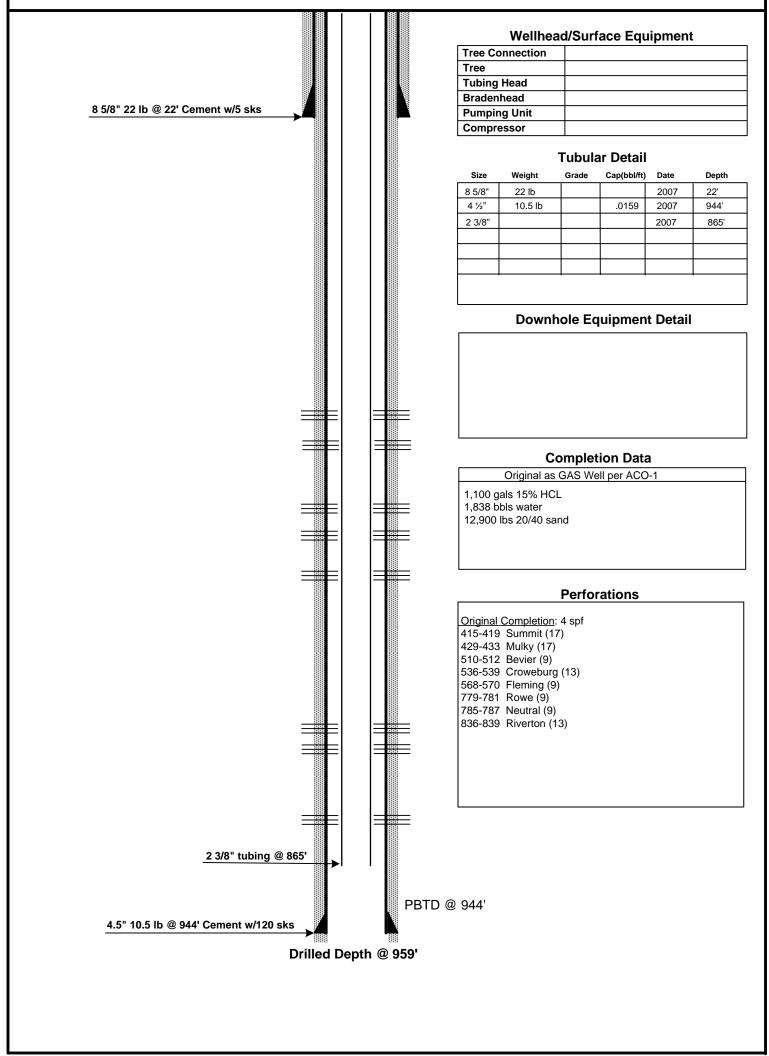
WELL : George, Shyrel A 13-2

FIELD : Cherokee Basin

STATE : Kansas **COUNTY** : Neosho

LOCATION: 13-28S-19E (SW,SW)

ELEVATION: 951'



PREPARED BY: POSTROCK

APPROVED BY: _

DATE: Dec, 2012

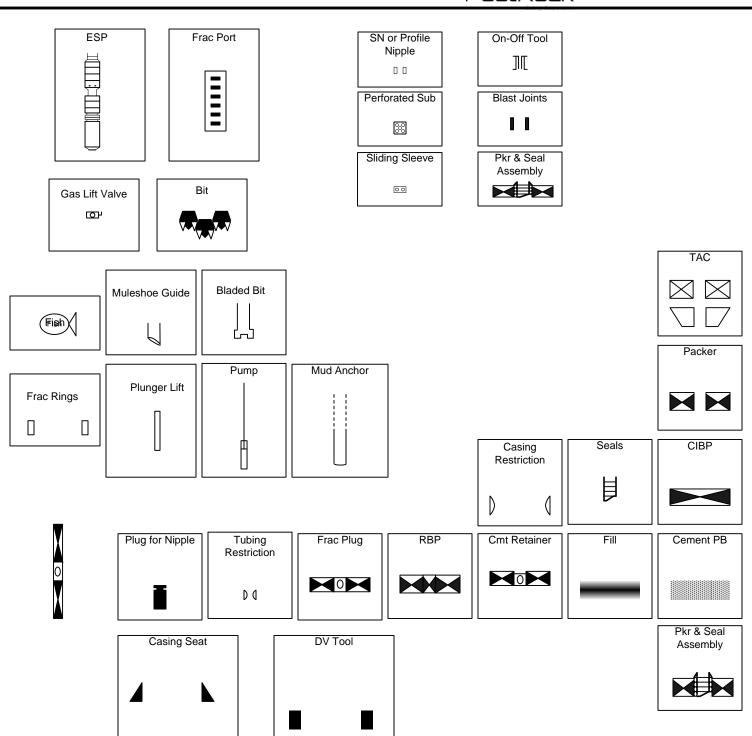
DATE:_

POSTROCK



LEGEND

PostRock[®]



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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 17th of

January A.D. 2013, 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.

Subscribed and sworn to before me this

17th day of January, 2013

PENNY J 国面 Notary Public - State My Appt, Expires

Notary Public Sedgwick County, Kansas

Printer's Fee : \$132.40

LEGAL PUBLICATION

PUBLISHED IN THE WICHITA

PUBLISHED IN THE WICHITA

EAGLEJANUARY 17, 2013 (3227101)

BEFORE THE STATE CORPORATION

COMMISSION OF THE STATE OF KANSAS

NOTICE OF FILING APPLICATION

RE: In the Mailer of Posirock Midconlinent

Production, LLC Application for

Commingling of Production in the George,
Shyrel A 13-2 located in Neosho County,

Kansas.

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

You, and each of you, are hereby notified
that Postrock Midcontinent Production,
LLC has filled an application to commingle
the Summit, Mulky, Bevier, Croweburg,
Fleming, Rowe, Neutral, Riverton and
Cattleman production formalions at the
George, Shyrel A 13-2, located in the SW NE
SW SW, 513-7285-R17E, Approximately 666
FSL & 661 FWL, Neosho County, Kansas,
Any persons who object to or protest
this application of the Stale Corporation
Division of the Stale Corporation
Commission of the Stale Corporation
Commission of the Stale Corporation
Division of the Stale of Kansas within
fifteen (15) days from the date of this
publication. These protests shall be filled
pursuant to Commission regulations and
must state specific reasons why granling
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 witshing to protest this
application are required to file a wrillen
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
ordestants will be expected to enter an

Natisas viriand cas 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 behalt.

own behalt. Postrock Midconlinent Production, LLC 210 Park Avenue, Suite 2750 Oklahoma City, Oklahoma 73102 (405) 660-7704

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

RE: In the Matter of Postrock Midcontinent Production, LLC Application for Commingling of Production in the George, Shyrel A 13-2 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 Midcontinent Production, LLC has filed an application to commingle the Summit, Mulky, Bevier, Croweburg, Fleming, Rowe, Neutral, Riverton and Cattleman producing formations at the George. Shyrel A 13-2, located in the SW NE SW SW, S13-T28S-R17E, Approximately 666 FSL & 661 FWL, Neosho County, Kansas.

Any persons who object to or protest this application shall be required to file their objections or protest with the Conservation Division of the State Corporation Commission of the State of Kansas within fifteen (15) days from the date of this publication. These protests shall be filed pursuant to Commission regulations and must state specific reasons why granting the application may cause waste, violate correlative rights or pollute the natural resources of the State of Kansas.

All persons interested or concerned shall take notice of the foregoing and shall govern themselves accordingly. All person and/or companies wishing to protest this application are required to file a written protest with the Conservation Division of the Kansas Oil and Gas Commission.

Upon the receipt of any protest, the Commission will convene a hearing and protestants will be expected to enter an appearance either through proper legal counsel or as individuals, appearing on

their own behalf.

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

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

| | Affidavit of Publication | |
|------|-------------------------------|--|
| STAT | TE OF KANSAS NEOSHO COUNTY 60 | |

The spinor of

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 paic circulation on a daily basis in Neosho County, Kansas, and that said newspaper is not a trade, religious or fraterna 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 saic 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 _____ coacacio temo_, the first publication thereof being made as aforesaid on the 100 day of Muary 2013, with subsequent publications being made on the following dates: , 2012 , 2012 Subscribed and sworn to and before mg this Oday of _(Notary Public My commission expires: January 9, 2015,

Printer's Fee\$107.34 Affidavit, Notary's Fee\$ 3.00 Additional Copies\$___ Total Publication Fees\$_70.39

> SHANNA L. GUIOT Notary Public - State of Kansas My Appt Expires QQ - 1-

| Re: | Application for: APPLICATION FOR COMM | MINGLING OF PRODUCTION OR FLUIDS ACO-4 |
|-----------|--|---|
| | Well Name: GEORGE, SHYREL A 13-2 | Legal Location: SWNESWSW S13-T28S-R19E |
| The un | dersigned hereby certificates that he / she is a duly authori | ized agent for the applicant, and that on the day 1511 of JANUARY |
| 2013 | | eferenced above was delivered or mailed to the following parties: |
| Note: A | A copy of this affidavit must be served as a part of the appli | ication |
| 710.0. | Name | Address (Attach additional sheets if necessary) |
| OEE | | Addiess (Attable additional shoots in necessary) |
| SEE | EATTACHED | |
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| وموالس ٤ | " (Charles of the filler of this population was publish | CHANI ITE TRIRI INE |
| NIE. | attest that notice of the filing of this application was publish | |
| of NE | | county. A copy of the affidavit of this publication is attached. |
| Signed th | his 10 th day of JANUARY | 2013 |
| - | , | 011011 |
| | | Applicant or Dish Authorized Arous |
| | | Applicant or Duly Authorized Agent sworn to before me this /// # day of JANLIARY 201 |
| | and the same of th | sworn to before me this |
| | JENNIFER R. BEAL | Chinnike L. Beals |
| | OFFICIAL MY COMMISSION EXPIRES | Notary Public |
| | 1 00 0019 J | My Commission Expires: Quely 20, 2014 |
| | | 1. 1 |
| | | |

LEGAL LOCATION

SPOT

CURR_OPERA

ADDRESS

S13-T28S-R19E

NE SW SW NW

Chase, Michael WEST 35TH STREET, PO BOX 41, CHANUTE, KS 66720

13-28S-19E

tract in S2 and NW4
Manley Declaration Trust
310 Hillside Dr
Chanute, KS 66720

S2 SE4

Roger O. Kinne 16225 Ottawa Rd Erie, KS 66733

24-28S-19E

N2 NW4

Helen Louise Thiesing 618 Apache Dr. Alva, OK 73717

N2 NE4

Terry & Pamela Thiesing 16905 Queen Rd Erie, KS 66733

GEORGE, SHYREL A 13-2-APPLICATION FOR COMMINGLING OF PRODUCTION OR FLUIDS Offset Operators, Unleased Mineral Owners and Landowners acreage (Attach additional sheets if necessary) 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 day of JANUARY 2013 Subscribed and sworn before me this JENNIFER R. BEAL MY COMMISSION EXPIRES My Commission Expires:

LEGAL LOCATION SPOT

CURR_OPERA

ADDRESS

S13-T28S-R19E

NE SW SW NW

Chase, Michael WEST 35TH STREET, PO BOX 41, CHANUTE, KS 66720

13-28S-19E

tract in S2 and NW4 Manley Declaration Trust 310 Hillside Dr Chanute, KS 66720

S2 SE4

Roger O. Kinne 16225 Ottawa Rd Erie, KS 66733

24-28S-19E

N2 NW4

Helen Louise Thiesing 618 Apache Dr. Alva, OK 73717

N2 NE4

Terry & Pamela Thiesing 16905 Queen Rd Erie, KS 66733 Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



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

Sam Brownback, Governor

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

February 1, 2013

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

RE: Approved Commingling CO011311

George, Shyrel A. 13-2, Sec. 13-T28S-R19E, Neosho County

API No. 15-133-27068-00-00

Dear Mr. Edwards:

Your Application for Commingling (ACO-4) for the above described well, received by the KCC on January 23, 2013, 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 CO011311 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