

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form U3C
June 2015
Form must be Typed
Form must be completed
on a per well basis

**ANNUAL REPORT OF PRESSURE MONITORING,
FLUID INJECTION AND ENHANCED RECOVERY**

Complete all blanks - add pages if needed. Copy to be retained for five (5) years after filing date.

OPERATOR: License # _____
Name: _____
Address 1: _____
Address 2: _____
City: _____ State: _____ Zip: _____ + _____
Contact Person: _____
Phone: (_____) _____
Lease Name: _____
Well Number: _____

API No.: _____
Permit No.: _____
Reporting Year: _____
(January 1 to December 31)
____ - ____ - ____ - ____ Sec. ____ Twp. ____ S. R. ____ E W
(a/a/a/a)
_____ feet from N / S Line of Section
_____ feet from E / W Line of Section
County: _____

I. Injection Fluid:

Type (Pick one): Fresh Water Treated Brine Untreated Brine Water/Brine
Source: Produced Water Other (Attach list)
Quality: Total Dissolved Solids: _____ mg/l Specific Gravity: _____ Additives: _____
(Attach water analysis, if available)

II. Well Data:

Maximum Authorized Injection Pressure: _____ psi Injection Zone: _____
Maximum Authorized Injection Rate: _____ barrels per day
Total Number of Enhanced Recovery Injection Wells Covered by this Permit: _____ (Include TA's)

| III. | Month: | Total Fluid Injected BBL | Maximum Fluid Pressure | Total Gas Injected MCF | Maximum Gas Pressure | # Days of Injection |
|------|--------------|-----------------------------|---------------------------|---------------------------|-------------------------|------------------------|
| | January | _____ | _____ | _____ | _____ | _____ |
| | February | _____ | _____ | _____ | _____ | _____ |
| | March | _____ | _____ | _____ | _____ | _____ |
| | April | _____ | _____ | _____ | _____ | _____ |
| | May | _____ | _____ | _____ | _____ | _____ |
| | June | _____ | _____ | _____ | _____ | _____ |
| | July | _____ | _____ | _____ | _____ | _____ |
| | August | _____ | _____ | _____ | _____ | _____ |
| | September | _____ | _____ | _____ | _____ | _____ |
| | October | _____ | _____ | _____ | _____ | _____ |
| | November | _____ | _____ | _____ | _____ | _____ |
| | December | _____ | _____ | _____ | _____ | _____ |
| | TOTAL | _____ | _____ | _____ | _____ | _____ |



WATER ANALYSIS REPORT

Company: Haack Operations

Sample Point: Wellhead

Source: Lowe-Jones

Date Sampled: 5/12/2014

Well No: No. 8

Date Analyzed: 5/20/2014

| | | | |
|---------------------------------|---------|--------------------------------|---------|
| pH: | 3.66 | Total Dissolved Solids (mg/L): | 153,102 |
| Dissolved H ₂ S: | N/A | Total Ionic Strength: | 3.127 |
| Dissolved CO ₂ : | N/A | Specific Gravity: | 1.115 |
| Resistivity @ 75°F(Ohm-Meters): | 0.05540 | Density, (lbs/gal): | 9.30 |

| Cations | mg/L | Meq/L | Anions | mg/L | Meq/L |
|-----------------------|--------|-------|-----------------|--------|-------|
| Calcium: | 15,206 | 760 | Carbonate: | 0 | 0 |
| Magnesium: | 1,551 | 127 | Bicarbonate: | 0 | 0 |
| Sodium: | 41,204 | 1,791 | Chloride: | 95,000 | 2,676 |
| Barium: | 0 | | Sulfate: | 140 | 3 |
| Strontium: | 0 | | Total Hardness: | 44,400 | |
| Total Dissolved Iron: | 228.00 | | | | |

PROBABLE MINERAL COMPOSITION

| | mg/L | Meq/L |
|------------------------|---------|-------|
| Calcium Bicarbonate: | 0 | 0 |
| Calcium Sulfate: | 199 | 3 |
| Calcium Chloride: | 42,036 | 757 |
| Magnesium Bicarbonate: | 0 | 0 |
| Magnesium Sulfate: | 0 | 0 |
| Magnesium Chloride: | 6,055 | 127 |
| Sodium Bicarbonate: | 0 | 0 |
| Sodium Sulfate: | 0 | 0 |
| Sodium Chloride: | 104,731 | 1,791 |

Remarks



SCALE DEPOSITION POTENTIAL ANALYSIS

Company: Haack Operations

Sample Point: Wellhead

Source: Lowe-Jones

Date Sampled: 5/12/2014

Well No: No. 8

Date Analyzed: 5/20/2014

Brine Composition

| | | | | | |
|--------------------------|--------|-----------|--------|-------------------------------|---------|
| pH: | 3.66 | Ca, mg/L: | 15,206 | Total Hardness, mg/L: | 44,400 |
| Specific Gravity: | 1.115 | Mg, mg/L: | 1,551 | Total Dissolved Solids, mg/L: | 153,102 |
| HCO ₃ , mg/L: | 0 | Na, mg/L: | 41,204 | Total Ionic Strength: | 3.127 |
| Cl, mg/L: | 95,000 | Ba, mg/L: | 0 | Total Dissolved Iron, mg/L: | 228.0 |
| SO ₄ , mg/L: | 140 | Sr, mg/L: | 0 | | |

Calcium Carbonate Scale Indices

| | | | | | | |
|-----------------------------|-------|-------|-------|-------|------------------------|-------|
| | | | | | Specified Temperatures | |
| Temperature, °F: | 75 | 100 | 125 | 150 | 40 | 180 |
| Stiff-Davis Index: | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Deposition, lbs/1,000 Bbls: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Calcium Sulfate Scale Indices

| | | | | | | |
|-----------------------------|-------|-------|-------|-------|------------------------|-------|
| | | | | | Specified Temperatures | |
| Temperature, °F: | 75 | 100 | 125 | 150 | 40 | 180 |
| Supersaturation Ratio: | 0.183 | 0.183 | 0.185 | 0.184 | 0.183 | 0.183 |
| Deposition, lbs/1,000 Bbls: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Barium Sulfate Scale Indices

| | | | | | | |
|-----------------------------|-------|-------|-------|-------|------------------------|-------|
| | | | | | Specified Temperatures | |
| Temperature, °F: | 75 | 100 | 125 | 150 | 40 | 180 |
| Supersaturation Ratio: | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Deposition, lbs/1,000 Bbls: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



SCALE DEPOSITION POTENTIAL TRENDS

Company: Haack Operations

Source: Lowe-Jones

Well No: No. 8

Sample Point: Wellhead

Date Sampled: 5/12/2014

Date Analyzed: 5/20/2014

