



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1210018
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

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

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

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

| | | |
|-----------------------------------|-----------------|---|
| Spud Date or Recompletion Date | Date Reached TD | Completion Date or Recompletion Date |
|-----------------------------------|-----------------|---|

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1210018

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

| | | | | |
|---|--|------------------------------|----------------------------------|---------------------------------|
| Drill Stem Tests Taken <i>(Attach Additional Sheets)</i> | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Log | Formation (Top), Depth and Datum | <input type="checkbox"/> Sample |
| Samples Sent to Geological Survey | <input type="checkbox"/> Yes <input type="checkbox"/> No | Name | Top | Datum |
| Cores Taken | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| Electric Log Run | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| List All E. Logs Run: | | | | |

| CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used | | | | | | | |
|---|-------------------|---------------------------|-------------------|---------------|----------------|--------------|----------------------------|
| Report all strings set-conductor, surface, intermediate, production, etc. | | | | | | | |
| Purpose of String | Size Hole Drilled | Size Casing Set (In O.D.) | Weight Lbs. / Ft. | Setting Depth | Type of Cement | # Sacks Used | Type and Percent Additives |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| ADDITIONAL CEMENTING / SQUEEZE RECORD | | | | |
|---|------------------|----------------|--------------|----------------------------|
| Purpose: | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
| <input type="checkbox"/> Perforate | | | | |
| <input type="checkbox"/> Protect Casing | | | | |
| <input type="checkbox"/> Plug Back TD | | | | |
| <input type="checkbox"/> Plug Off Zone | | | | |

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

| Shots Per Foot | PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i> | Depth |
|----------------|---|--|-------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

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

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

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

| | | |
|--|---|---|
| DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ | PRODUCTION INTERVAL: _____ _____ |
|--|---|---|

| | |
|-----------|------------------------|
| Form | ACO1 - Well Completion |
| Operator | Linn Operating, Inc. |
| Well Name | SHAFFER B-4 ATU-283 |
| Doc ID | 1210018 |

Tops

| Name | Top | Datum |
|----------|------|-------|
| KRIDER | 2435 | KB |
| WINFIELD | 2472 | KB |
| TOWANDA | 2534 | KB |
| FT_RILEY | 2593 | KB |
| FUNSTON | 2723 | KB |
| CROUSE | 2775 | KB |
| MORRILL | 2844 | KB |
| GRENOLA | 2896 | KB |

JOB SUMMARY

| | | |
|-------------------------------|-----------------------------------|---------------------------------------|
| COUNTY Kearney | PROJECT NUMBER TN # 610 | TICKET DATE 3/29/2014 |
| LEASE NAME Shaffer | COMPANY Linn Energy | CUSTOMER REP Weldon Higgins |
| Well No. 84 ATU 283 | JOB TYPE Production | EMPLOYEE NAME Bryon Hackett |

| | | | |
|----------|---------------|---------------|------------------|
| EMP NAME | Bryon Hackett | Steve Crocker | Santiago Calixto |
|----------|---------------|---------------|------------------|

Form Name: _____ Type: _____

Packer Type: _____ Set At: _____

Bottom Hole Temp: _____ Pressure: _____

Retainer Depth: _____ Total Depth: _____

| | | | | |
|------|-------------------------------|--------------------------------|--------------------------------|----------------------------------|
| Date | Called Out 03/28/14 | On Location 03/29/14 | Job Started 03/29/14 | Job Completed 03/29/14 |
| Time | 2115 | 300 | 858 | 1035 |

| Type and Size | Qty | Make |
|--------------------|-----|------|
| Auto Fill Tube | 1 | IR |
| Insert Float Valve | 1 | IR |
| Centralizers | 26 | IR |
| Top Plug | 1 | IR |
| HEAD | 1 | IR |
| Limit clamp | 1 | IR |
| Weld-A | 2 | IR |
| Guide Shoe | 1 | IR |
| Cement Basket | 0 | IR |

| New/Used | | Weight | Size | Grade | From | To | Max. Allow |
|--------------|-----|--------|------|-------|------|------|------------|
| Casing | New | 15.5 | 5.5 | J-55 | KB | 3104 | 2500 |
| Liner | | | | | | | |
| Liner | | | | | | | |
| Tubing | | | | | | | |
| Drill Pipe | | | | | | | |
| Open Hole | | | | | | | |
| Perforations | | | | | | | Shots/Ft. |
| Perforations | | | | | | | |
| Perforations | | | | | | | |

| Materials | | | |
|---------------|----------------|---------|-------------|
| Mud Type | 0 | Density | 0 Lb/Gal |
| Disp Fluid | H2O | Density | 8.33 Lb/Gal |
| Spacer type | SodSilctH2 BBL | | 20 |
| Spacer type | BBL | | |
| Acid Type | Gal | | % |
| Acid Type | Gal | | % |
| Surfactant | Gal | | In |
| NE Agent | Gal | | In |
| Fluid Loss | Gal/Lb | | In |
| Gelling Agent | Gal/Lb | | In |
| Fric. Red. | Gal/Lb | | In |
| MISC. | Gal/Lb | | In |
| Perfpac Balls | Qty. | | |
| Other | | | |
| Other | | | |
| Other | | | |
| Other | | | |
| Other | | | |

| Hours On Location | | Operating Hours | | Description of Job |
|-------------------|-------|-----------------|-------|--------------------|
| Date | Hours | Date | Hours | |
| 03/29/14 | 8.0 | 03/29/14 | 1.6 | Production |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Total | 8.0 | Total | 1.6 | |

| Pressures | |
|----------------------|---------|
| MAX 1050 | AVG 100 |
| Average Rates in BPM | |
| MAX 3.5 | AVG 3 |
| Cement Left in Pipe | |
| Feet 44 | Reason |
| Shoe Track | |

| Stage | Sacks | Cement | Additives | W/Rq. | Yield | Lbs/Gal |
|-------|-------|----------------|---|-------|-------|---------|
| 1 | 435 | O-Tex LowDense | 2% Gyp, 2% Calcium Chloride, 2% C-45, 0.4% C-15, 0.4% C-41P, 0.2% C-51, 0.25 #/sk Cellofaka | 13.29 | 2.25 | 11.5 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | | | | | | |
| 4 | | | | | | |

| Preflush Breakdown | | Summary | |
|----------------------|----------------------|------------------------|--------|
| Type: _____ | MAXIMUM _____ | Preflush: BBI | 20.00 |
| Actual TOC _____ | Actual TOC _____ | Load & Bkdn: Gal - BBI | 0 |
| Frac. Gradient _____ | Frac. Gradient _____ | Excess /Return BBI | 43 |
| ISIP 5 Min _____ | 10 Min _____ | Calc. TOC _____ | 0 |
| | 15 Min _____ | Treatment: Gal - BBI | 174.0 |
| | | Cement Slurry: BBI | 267.00 |
| | | Total Volume BBI | 267.00 |
| | | | |

CUSTOMER REPRESENTATIVE Weldon Higgins SIGNATURE

Thank You For Using
O - TEX Pumping

| | | | |
|------------------------------|-------------------------------|---------------------------------------|---------------------------------|
| JOB SUMMARY | | PROJECT NUMBER TN # 604 | TICKET DATE 3/27/2014 |
| COUNTY Kearney | COMPANY Linn Energy | CUSTOMER REP Weldon | |
| LEASE NAME Shaffer | Well No B-4 ATU 293 | EMPLOYEE NAME Bryon Hackett | |
| JOB TYPE Surface | | | |

| | | | | | |
|----------------------------------|---------------------|--|--|--|--|
| EMP NAME Bryon Hackett | Cody Glassgo | | | | |
| Steve Crocker | | | | | |
| Miguel Garcia | | | | | |
| Santiago Calixto | | | | | |

Form Name Chase-Council Drive Type: _____
 Packer Type _____ Set At _____
 Bottom Hole Temp. _____ Pressure _____
 Retainer Depth _____ Total Depth _____

| | | | | |
|------|-------------------------------|--------------------------------|--------------------------------|----------------------------------|
| Date | Called Out 03/27/14 | On Location 03/27/14 | Job Started 03/27/14 | Job Completed 03/27/14 |
| Time | 1115 | 1700 | 2202 | 2307 |

Tools and Accessories

| Type and Size | Qty | Make |
|--------------------------|-----|------|
| Auto Fill Tube | 1 | IR |
| Insert Float Valve | 1 | IR |
| Centralizers | 5 | IR |
| Top Plug | 1 | IR |
| HEAD | 1 | IR |
| Limit clamp | 1 | IR |
| Weld-A | 2 | IR |
| Texas Pattern Guide Shoe | 1 | IR |
| Cement Basket | 0 | IR |

Well Data

| | New/Used | Weight | Size | Grade | From | To | Max. Allow |
|--------------|----------|--------|-------|-------|------|-----|------------|
| Casing | New | 24 | 8.625 | J-55 | KB | 726 | 1500 |
| Liner | | | | | | | |
| Liner | | | | | | | |
| Tubing | | | | | | | |
| Drill Pipe | | | | | | | |
| Open Hole | | | | | | | |
| Perforations | | | | | | | Shots/Ft. |
| Perforations | | | | | | | |
| Perforations | | | | | | | |

Materials

| Mud Type | Density | Lb/Gal |
|---------------|------------------|--------|
| Disp. Fluid | 0 | 0 |
| Spacer type | H2O Density 8.33 | |
| Spacer type | BBL 10 | |
| Acid Type | Gal. % | |
| Acid Type | Gal. % | |
| Surfactant | Gal. In | |
| NE Agent | Gal. In | |
| Fluid Loss | Gal/Lb In | |
| Gelling Agent | Gal/Lb In | |
| Fric. Red. | Gal/Lb In | |
| MISC. | Gal/Lb In | |

Perpac Balls _____ Qty _____
 Other _____
 Other _____
 Other _____
 Other _____

| Hours On Location | | Operating Hours | | Description of Job |
|-------------------|-------|-----------------|-------|--------------------|
| Date | Hours | Date | Hours | |
| 03/27/14 | 7.0 | 03/27/14 | 1.0 | Surface |
| | | | | Cement to surface |
| | | | | Top of cement |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Total | 7.0 | Total | 1.0 | |

Pressures

| | | | |
|----------------------|-----|--------|------------|
| MAX | 800 | AVG | 100 |
| Average Rates in BPM | | | |
| MAX | 3.5 | AVG | 3 |
| Cement Left in Pipe | | | |
| Feet | 44 | Reason | Shoe Track |

Cement Data

| Stage | Sacks | Cement | Additives | W/Rq. | Yield | Lbs/Gal |
|-------|-------|-----------------|--|-------|-------|---------|
| 1 | 456 | Premium Class C | 2% Calcium Chloride and .25 #/sk Cellotack | 6.34 | 1.35 | 14.8 |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

Summary

| | | | | | | | | | | | |
|--------------------|-------------|---------------|--------------------|----------------------------|--------------------------|--------------------------|-----------|--------------------|---------------------|-------------------|----------------|
| Preflush Breakdown | Type: _____ | MAXIMUM _____ | Lost Returns _____ | Actual TOC _____ | Frac. Gradient _____ | Preflush: BBI 10.00 | Type: H2O | Pad Bbl -Gal _____ | Calc Diso Bbl _____ | Actual Diso _____ | Diso Bbl 43.00 |
| Average | 5 Min _____ | 10 Min _____ | 15 Min _____ | Treatment: Gal - BBI _____ | Cement Slurry: BBI _____ | Total Volume: BBI 162.00 | | | | | |

CUSTOMER REPRESENTATIVE Weldon Hugg SIGNATURE

Thank You For Using
O - TEX Pumping