

Confidentiality Requested:

Yes No

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

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

Gas DH EOR

OG GSW

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 EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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

| 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 | | | | |
| | | | | |

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
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)*

| | | | | |
|---|--|---------|-------------|-----------------------|
| Date of first Production/Injection or Resumed Production/Injection: | Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____ | | | |
| 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) (Submit ACO-4)</i> | PRODUCTION INTERVAL: Top Bottom |
|---|--|------------------------------------|

| Shots Per Foot | Perforation Top | Perforation Bottom | Bridge Plug Type | Bridge Plug Set At | Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i> |
|----------------|-----------------|--------------------|------------------|--------------------|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| | | | | |
|----------------|-------|---------|------------|--|
| TUBING RECORD: | Size: | Set At: | Packer At: | |
|----------------|-------|---------|------------|--|

| | |
|-----------|---------------------------|
| Form | ACO1 - Well Completion |
| Operator | Merit Energy Company, LLC |
| Well Name | KELLS I 2 |
| Doc ID | 1412203 |

All Electric Logs Run

| |
|---|
| |
| ANNULAR HOLE VOLUME LOG 5 CASING |
| ARRAY COMPENSATED TRUE RESISTIVITY LOG 1 |
| ARRAY COMPENSATED TRUE RESISTIVITY LOG 2 |
| ARRAY COMPENSATED TRUE RESISTIVITY LOG 5 |
| ARRAY RESISTIVITY SPECTRAL DENSITY DUAL SPACED NEUTRON SONIC QUAD COMBO LOG |
| BOREHOLE COMPENSATED SONIC ARRAY LOG |
| MICROLOG |
| SPECTRAL DENSITY DUAL SPACED NEUTRON LOG |

| | |
|-----------|---------------------------|
| Form | ACO1 - Well Completion |
| Operator | Merit Energy Company, LLC |
| Well Name | KELLS I 2 |
| Doc ID | 1412203 |

Tops

| Name | Top | Datum |
|--------------|------|-------|
| Heebner | 4107 | |
| Lansing | 4189 | |
| Kansas City | 4590 | |
| Marmaton | 4731 | |
| Pawnee | 4836 | |
| Fort Scott | 4874 | |
| Cherokee | 4893 | |
| Atoka | 5060 | |
| Morrow | 5196 | |
| Chester "A" | 5331 | |
| Chester "B" | 5365 | |
| Chester "C" | 5381 | |
| St Genevieve | 5382 | |

FIELD TICKET

Client MERIT ENERGY COMPANY
Well Kells I-2
Job Description Surface
Date February 14, 2018



Field Ticket # FT-03680-C125P00202-69666

MATERIALS

| Product Code | Description | UOM | Quantity | List Price | Gross Amount | Disc (%) | Net Amount |
|-----------------------------------|---|-----------|-----------------|------------|--------------------|----------|--------------------|
| L100112 | ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS | LB | 1,754.0000 | \$2.40 | \$4,209.60 | 76.00 | \$1,010.30 |
| L100318 | CEMENT EXTENDER, GYPSUM, A-10 | LB | 950.0000 | \$0.72 | \$684.00 | 76.00 | \$164.16 |
| L100275 | CEMENT EXTENDER, SODIUM METASILICATE, A-2 | LB | 950.0000 | \$3.28 | \$3,116.00 | 76.00 | \$747.84 |
| L013156 | Cement Nose, 8-5/8 in. | EA | 1.0000 | \$460.00 | \$460.00 | 76.00 | \$110.40 |
| L488168 | CEMENT, ASTM TYPE I | SK | 175.0000 | \$44.11 | \$7,719.25 | 76.00 | \$1,852.62 |
| L499703 | CEMENT, ASTM TYPE II | SK | 505.0000 | \$57.31 | \$28,941.55 | 76.00 | \$6,945.97 |
| L017068 | CENTRALIZER, 8-5/8" NON-WELD | EA | 10.0000 | \$246.40 | \$2,464.00 | 76.00 | \$591.36 |
| L100120 | EXTENDER, BENTONITE | LB | 1,899.0000 | \$2.08 | \$3,949.92 | 76.00 | \$947.98 |
| L015399 | Float collars with poppet valve, 8-5/8 in. | EA | 1.0000 | \$0.00 | \$0.00 | 0.00 | \$0.00 |
| L100295 | IntegraSeal CELLO | LB | 340.0000 | \$5.76 | \$1,958.40 | 76.00 | \$470.02 |
| L415082 | IntegraSeal KOL | LB | 2,525.0000 | \$1.20 | \$3,030.00 | 76.00 | \$727.20 |
| L86718 | PLUG, CEMENT 8.6 TOP BIPL | EA | 1.0000 | \$287.04 | \$287.04 | 76.00 | \$68.89 |
| L499632 | RETARDER, SUGAR, GRANULAR | LB | 100.0000 | \$4.16 | \$416.00 | 76.00 | \$99.84 |
| L100404 | SALT, SODIUM CHLORIDE, A-5 | LB | 1,224.0000 | \$1.04 | \$1,272.96 | 76.00 | \$305.51 |
| Product Material Subtotal: | | | | | \$58,508.72 | | \$14,042.09 |

SERVICES

| Product Code | Description | UOM | Quantity | List Price | Gross Amount | Disc (%) | Net Amount |
|--------------|---|------|----------|-------------|--------------|----------|------------|
| S-100004 | Cement Crew Mobilization-Demobilization Fee | EA | 1.00 | \$10,880.00 | \$10,880.00 | 91.00 | \$979.200 |
| S-100475 | Cement head | EA | 1.00 | \$2,656.00 | \$2,656.000 | 91.00 | \$239.040 |
| S-100049 | Cement pump charge, 1,001-2,000 feet/ 301-600 m | 4/HR | 1.00 | \$4,680.00 | \$4,680.000 | 91.00 | \$421.200 |

Cementing Treatment



Start Date 2/13/2018 **Well** Kells I-2
End Date 2/14/2018 **County**
Client MERIT ENERGY COMPANY **State/Province** KS
Client Field Rep **API** 15-081-22172
Service Supervisor **Formation**
Field Ticket No. Merit - Kells I-2 - Surface C **Rig**
District Liberal, KS **Type of Job** Surface

WELL GEOMETRY

| Type | ID (in) | OD (in) | Wt. (lb/ft) | MD (ft) | TVD (ft) | Excess(%) | Grade | Thread |
|-----------|---------|---------|-------------|----------|----------|-----------|-------|--------|
| Open Hole | 12.25 | | | 1,867.00 | 1,867.00 | 0.00 | | |
| Open Hole | 12.25 | | | 1,867.00 | 1,867.00 | 130.00 | | |
| Casing | 8.10 | 8.63 | 24.00 | 1,857.00 | 1,857.00 | | J-55 | LTC |

Shoe Length (ft): 42

HARDWARE

Bottom Plug Used? Yes **Tool Type** Float Collar
Bottom Plug Provided By BJ **Tool Depth (ft)** 1,814.86
Bottom Plug Size 8.625 **Max Tubing Pressure - Rated (psi)**
Top Plug Used? No **Max Tubing Pressure - Operated (psi)**
Top Plug Provided By **Max Casing Pressure - Rated (psi)**
Top Plug Size **Max Casing Pressure - Operated (psi)** 2,500.00
Centralizers Used Yes **Pipe Movement** None
Centralizers Quantity 10.00 **Job Pumped Through** Manifold
Centralizers Type Bow **Top Connection Thread** 8rd
Landing Collar Depth (ft) 1,857 **Top Connection Size** 8.625

CIRCULATION PRIOR TO JOB

Cementing Treatment



TD- 1867 TP-1857 SJ-42.14 Mud-9.1

Prime Lines 2 bbls

Pressure Test 2500 psi

Spacer 10 bbls

LCmt 505 sks @ 12.1 ppg / 232 bbls

TCmt 175 sks @ 15.2 ppg / 40 bbls

Shutdown WashEquipment Drop Plug

Displacement 115 bbls

Slow Rate last 50 bbls @ 2 bbls/min

Bump Plug 500 over PLP

PLP +/- 431 psi

Release Pressure and Check Floats

FIELD TICKET

4501-02792

Client MERIT ENERGY COMPANY
 Well Kells I-2
 Job Description Long String
 Date February 19, 2018



Field Ticket # FT 03870 M6Z4S90202-78058

MATERIALS

Set @ 5008

| Product Code | Description | UOM | Quantity | List Price | Gross Amount | Disc (%) | Net Amount |
|-----------------------------------|-----------------------------------|-----|------------|------------|--------------------|----------|-------------------|
| L100318 | CEMENT EXTENDER, GYPSUM, A-10 | LB | 1,213.0000 | \$0.72 | \$873.36 | 78.00 | \$192.14 |
| L488168 | CEMENT, ASTM TYPE I 3 | SK | 215.0000 | \$44.11 | \$9,483.65 | 78.00 | \$2,086.40 |
| 200000 | CFL-210 | LB | 102.0000 | \$22.72 | \$2,317.44 | 78.00 | \$509.84 |
| L100120 | EXTENDER, BENTONITE | LB | 405.0000 | \$2.08 | \$842.40 | 78.00 | \$185.33 |
| L101196 | Foam Preventer, FP-25 | LB | 41.0000 | \$14.52 | \$595.32 | 78.00 | \$130.97 |
| L488735 | IntegraGuard BOND IIA Concentrate | GAL | 12.0000 | \$159.60 | \$1,915.20 | 78.00 | \$421.34 |
| L100295 | IntegraSeal CELLO | LB | 54.0000 | \$5.76 | \$311.04 | 78.00 | \$68.43 |
| L415082 | IntegraSeal KOL | LB | 1,075.0000 | \$1.20 | \$1,290.00 | 78.00 | \$283.80 |
| L86710 | PLUG,CEMENT 5.5 TOP BJPL | EA | 1.0000 | \$1,026.48 | \$1,026.48 | 78.00 | \$225.83 |
| L100404 | SALT,SODIUM CHLORIDE, A-5 | LB | 1,716.0000 | \$1.04 | \$1,784.64 | 78.00 | \$392.62 |
| Product Material Subtotal: | | | | | \$20,439.53 | | \$4,496.70 |

SERVICES

| Product Code | Description | UOM | Quantity | List Price | Gross Amount | Disc (%) | Net Amount |
|--------------|--|------|----------|-------------|--------------|----------|------------|
| S-100004 | Cement Crew Mobilization-Demobilization Fee | EA | 1.00 | \$10,880.00 | \$10,880.00 | 92.00 | \$870.400 |
| S-100475 | Cement head | EA | 1.00 | \$2,656.00 | \$2,656.00 | 92.00 | \$212.480 |
| S-100053 | Cement pump charge, 5,001-6,000 feet/1,501 - 1,800 m | 6/HR | 1.00 | \$7,032.00 | \$7,032.00 | 92.00 | \$562.560 |
| S-100066 | Cement pump charge, Additional Hours | HR | 0.00 | #Error | \$0.000 | 92.00 | \$0.000 |
| S-100072 | Circulating Equipment | JOB | 1.00 | \$5,248.00 | \$5,248.00 | 92.00 | \$419.840 |
| S-100001 | Mileage - vehicle heavy weight | MI | 50.00 | \$18.96 | \$948.000 | 92.00 | \$75.840 |
| S-100002 | Mileage - vehicle light weight | MI | 50.00 | \$10.72 | \$536.000 | 92.00 | \$42.880 |

Cementing Treatment



| | | |
|--------------|------|--------|
| Tail Cement | 4.00 | 56.90 |
| Displacement | 4.00 | 129.50 |

| | Min | Max | Avg |
|----------------|------|----------|--------|
| Pressure (psi) | 0.00 | 2,500.00 | 500.00 |
| Rate (bpm) | 2.00 | 5.00 | 4.00 |

DISPLACEMENT AND END OF JOB SUMMARY

| | | | |
|--|----------|------------------------------------|--------|
| Displaced By | BJ | Amount of Cement Returned/Reversed | 0.00 |
| Calculated Displacement Volume (bbbls) | 129.00 | Method Used to Verify Returns | Visual |
| Actual Displacement Volume (bbbls) | 129.00 | Amount of Spacer to Surface | 0.00 |
| Did Float Hold? | Yes | Pressure Left on Casing (psi) | 0.00 |
| Bump Plug | No | Amount Bled Back After Job | 1.00 |
| Bump Plug Pressure (psi) | 1,430.00 | Total Volume Pumped (bbbls) | 214.00 |
| Were Returns Planned at Surface | No | Top Out Cement Spotted | No |
| Cement returns During Job | None | Lost Circulation During Cement Job | No |

CEMENT PLUG

| | | | |
|------------------------|----|-------------------|----|
| Bottom of Cement Plug? | No | Wiper Balls Used? | No |
| Wiper Ball Quantity | | Plug Catcher | No |
| Number of Plugs | | | |

SQUEEZE

| | |
|---------------------------------|---------------------|
| Injection Rate (bpm) | Fluid Density (ppg) |
| Injection Pressure (psi) | ISIP (psi) |
| Type of Squeeze | FSIP (psi) |
| Operators Max SQ Pressure (psi) | |

Cementing Treatment



COMMENTS

Treatment Report

12bbls of HIVIS Sweep Spacer
17bbls of cement for rat and mouse hole
56bbls of cement
129bbls of displacement with KCL water

Job Summary

Arrived at location, spot truck, rig up, safety meeting, pressure test lines to 2500psi
pump 12bbls of hivis sweep spacer
pump 17bbls of cement to fill rat and mouse hole from 50sacks at 13.6lbs
pump 56bbls from 165sacks at 13.6lbs
Drop plug/.wash pump and lines to pit
start displacement of 129bbls with KCL water
bump plug./check if float holds, rig down

RH - 50 sx