KOLAR Document ID: 1411104

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 # 5682
Name: Hughes Drilling Co, a General Partnership
Address 1: 122 MAIN
Address 2:
City: WELLSVILLE State: KS Zip: 66092 + 8522
Contact Person: Clay Hughes
Phone: ( 785 ) 883-2235
CONTRACTOR: License # 5682
Name: Hughes Drilling Co, a General Partnership
Wellsite Geologist: NA
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 #:

4/24/2018 Spud Date or Recompletion Date
5/9/2018 Date Reached TD
5/9/2018 Completion Date or Recompletion Date

API No.: 15-091-24491-00-00
Spot Description:
NE - SE - NE - SE Sec. 36 Twp. 14 S. R. 21 ☑ East ☐ West
1815 Feet from ☐ North / ☑ South Line of Section
290 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Johnson
Lease Name: HF Well #: 1
Field Name:
Producing Formation: Bartlesville
Elevation: Ground: 1011 Kelly Bushing: 0
Total Vertical Depth: 911 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 29 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: 1500 ppm Fluid volume: 0 bbls
Dewatering method used: Evaporated
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:** Karen Ritter **Date:** 09/12/2018

Operator Name: Hughes Drilling Co, a General Partnership Lease Name: HF Well #: 1

Sec. 36 Twp. 14 S. R. 21 ☑ East ☐ West County: Johnson

**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 ☐ Yes ☑ No
*(Attach Additional Sheets)*

Samples Sent to Geological Survey ☐ Yes ☑ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

Geologist Report / Mud Logs ☐ Yes ☑ No

List All E. Logs Run:

GammaRayNeutronCCL

☐ Log Formation (Top), Depth and Datum ☐ Sample

| Name | Top | Datum |
|---|---|---|
| Bartlesville | 836 | GL |

CASING RECORD ☑ New ☐ 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 |
|---|---|---|---|---|---|---|---|
| Surface | 9 | 7 | 10 | 29 | Common | 10 | 50/50 POZ |
| Production | 5.625 | 2.875 | 6 | 896 | Common | 119 | 50/50 POZ |
| | | | | | | | |

ADDITIONAL CEMENTING / SQUEEZE RECORD

| Purpose: | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
|---|---|---|---|---|
| ☐ Perforate<br>☐ Protect Casing<br>☐ Plug Back TD<br>☐ 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: 7/1/2018

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:
☐ Vented ☐ Sold ☐ Used on Lease
*(If vented, Submit ACO-18.)*

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*

PRODUCTION INTERVAL:

| Top | Bottom |
|---|---|
| 836 | 850 |
| | |

| Shots Per Foot | Perforation Top | Perforation Bottom | Bridge Plug Type | Bridge Plug Set At | Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)* |
|---|---|---|---|---|---|
| | 836 | 843 | | | |
| | 847 | 850 | | | |
| | | | | | |
| | | | | | |
| | | | | | |

TUBING RECORD: Size: Set At: Packer At:

**Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202**

| | |
|---|---|
| Form | ACO1 - Well Completion |
| Operator | Hughes Drilling Co, a General Partnership |
| Well Name | HF 1 |
| Doc ID | 1411104 |

Casing

| Purpose Of String | Size Hole Drilled | Size Casing Set | Weight | Setting Depth | Type Of Cement | Number of Sacks Used | Type and Percent Additives |
|---|---|---|---|---|---|---|---|
| Surface | 9 | 7 | 10 | 29 | Common | 10 | 50/50 POZ |
| Production | 5.625 | 2.875 | 6 | 896 | Common | 119 | 50/50 POZ |
| | | | | | | | |
| | | | | | | | |

# HUGHES DRILLING REPORT

Jo Co., Kansas
1815 FSL 290 FEL
API # 15-091-24491
S. 36 T 14 S R 21 E

Well No. 1
Farm H.F

SURFACE CASING
Size 7"
Feet 29
Circulated 10 sx cement

PERMANENT CSG.
Size
Feet

T. D. at Completion 911

OPERATOR Hughes Drilling

Contractor HUGHES DRILLING CO.

| DATE | | DRILLED FROM | DRILLED TO | REMARKS – TYPE WORK – BILLING REF. | PIPE TALLY |
|---|---|---|---|---|---|
| 4-24-18 | | 0 | 2 | soil | (1) 21.5-21.5 |
| 29' | | 2 | 28 | clay | (2) 22.5-44.0 |
| 5-7-18 | | 28 | 56 | Lime | (3) 22.5-66.5 |
| 5/8 | | 56 | 64 | Shale (Coke 59'6") | (4) 22.5-89.0 |
| PDC - HBit | | 64 | 73 | Lime | (5) 22.5-111.5 |
| | | 73 | 78 | Shale | (6) 22.5-134.0 |
| | | 78 | 99 | Lime | (7) 22.5-156.5 |
| | | 99 | 119 | Shale | (8) 22.5-179.0 |
| | | 119 | 144 | Lime | (9) 22.5-201.5 |
| | | 144 | 170 | Shale | (10) 22.5-224.0 |
| | | 170 | 181 | Lime | (11) 22.5-246.5 |
| | | 181 | 201 | Shale | (12) 22.5-269.0 |
| | | 201 | 214 | Lime | (13) 22.5-291.5 |
| | | 214 | 225 | Shale | (14) 22.5-314.0 |
| | | 225 | 235 | Lime | (15) 22.5-336.5 |
| | | 235 | 253 | Shale | (16) 22.5-359.0 |
| | | 253 | 261 | Lime | (17) 22.5-381.5 |
| | | 261 | 267 | Shale | (18) 22.5-404.0 |
| | | 267 | 273 | Lime | (19) 22.5-426.5 |
| | | 273 | 315 | Shale (Limebreak 304-306) | (20) 22.5-449.0 |
| | 30' | 315 | 340 | Lime | (21) 22.5-471.5 |
| | | 340 | 347 | Shale (Slate 342-343) | (22) 22.5-494.0 |
| | 20 | 347 | 371 | Lime | (23) 22.5-516.5 |
| | | 371 | 375 | Shale (Slate 371-372) | (24) 22.5-539.0 |
| | | 375 | 378 | Lime | (25) 22.5-561.5 |
| | | 378 | 382 | Shale | (26) 22.5-584.0 |
| | "Heatha" | 382 | 388 | Lime | (27) 22.5-606.5 |

| STRATA THICKNESS | FORMATION DRILLED | T.D. |
|---|---|---|
| 2 | soil | 2 |
| 26 | clay | 28 |
| 28 | Lime | 56 |
| 8 | Shale | 64 |
| 9 | Lime | 73 |
| 5 | Shale | 78 |
| 21 | Lime | 99 |
| 20 | Shale | 119 |
| 25 | Lime | 144 |
| 26 | Shale | 170 |
| 11 | Lime | 181 |
| 20 | Shale | 201 |
| 13 | Lime | 214 |
| 11 | Shale | 225 |
| 10 | Lime | 235 |
| 18 | Shale | 253 |
| 8 | Lime | 261 |
| 6 | Shale | 267 |
| 6 | Lime | 273 |
| 42 | Shale | 315 |
| 30' 25 | Lime | 340 |
| 7 | Shale | 347 |
| 20 24 | Lime | 371 |
| 4 | Shale | 375 |
| 3 | Lime | 378 |
| 4 | Shale | 382 |
| "H" 6 | Lime | 388 |
| 169 | Shale | 557 |
| 5 | Lime | 562 |
| 4 | Shale | 566 |
| 3 | Lime | 569 |
| 4 | Shale | 573 |
| 9 | Lime | 582 |
| 17 | Shale | 599 |
| 3 | Lime | 602 |
| 10 | Shale | 612 |
| 7 | Lime | 619 |
| 5 | Shale | 624 |
| 17 | Rat Bed | 641 |
| 1 | Lime | 642 |
| 3 | Shale | 645 |

T.D. 500
K.D. 201
Its on Trailer
Pulled 5th

# HUGHES DRILLING REPORT

Jo Co., Kansas (L454)

1815 FSL 290 FEL

API # 15-091-24491

SURFACE CASING — PERMANENT CSG.

Well No. 1 — Size — Size

Farm H.F. — Feet — Feet

Circulated ____ sx cement

T. D. at Completion 911

OPERATOR Hughes Drilling — Contractor HUGHES DRILLING CO.

| DATE | DRILLED FROM | DRILLED TO | REMARKS – TYPE WORK – BILLING REF. | PIPE TALLY |
|---|---|---|---|---|
| 5/7 | 388 | 557 | Shale | (28) 22.5-629.0 |
| 5/8/15 | 557 | 562 | Lime | (29) 22.5-651.5 |
| | 562 | 566 | Shale | (30) 22.5-674.0 |
| | 566 | 569 | Lime | (31) 22.5-696.5 |
| | 569 | 578 | Shale | (32) 22.5-719.0 |
| | 578 | 582 | Lime | (33) 22.5-741.5 |
| | 582 | 599 | Shale | (34) 22.5-764.0 |
| | 599 | 602 | Lime (Brown) | (35) 22.5-786.5 |
| | 602 | 612 | Shale (Slate 602-603) | (36) 22.5-809.0 |
| | 612 | 619 | Lime (Broken) | (37) 22.5-831.5 |
| | 619 | 624 | Shale | (38) 22.5-854.0 |
| | 624 | 641 | Red Bed | (39) 22.5-876.5 |
| | 641 | 642 | Lime | (40) 22.5-899.0 |
| | 642 | 645 | Shale | |
| | 645 | 647 | Lime | |
| | 647 | 694 | Shale | |
| | 694 | 695 | Lime | |
| | 695 | 705 | Shale | |
| | 705 | 706 | Lime | |
| | 706 | 715 | Shale | |
| #2 Squirrel | 715 | 716 | Brown Sand (No odor) | |
| | 716 | 744 | Shale | |
| | 744 | 746 | Lime | |
| | 746 | 835 | Shale (Broken 750-752) (Red Bed 824-828) | |
| Bartlesville | 835 | 845 | Oil sand (Remarks pg. 4) | |
| | 845 | 847 | Shale | |
| Lower Bartlesville | 847 | 853 | Oil Sand (Remarks pg. 4) | |

| STRATA THICKNESS | FORMATION DRILLED | T.D. |
|---|---|---|
| 2 | Lime | 647 |
| 57 | Shale | 694 |
| 1 | Lime | 695 |
| 10 | Shale | 705 |
| 1 | Lime | 706 |
| 9 | Shale | 715 |
| #2 Squirrel 1 | Br. Sand | 716 |
| 28 | Shale | 744 |
| 2 | Lime | 746 |
| 89 | Shale | 835 |
| 10 | oil sand | 845 |
| 2 | Shale | 847 |
| 6 | oil sand | 853 |
| 2 | Shale | 855 |
| 22 | Shale | 877 |
| 18 | Shale | 895 |
| 2 | Lime | 897 |
| 11 | Shale | 908 |
| 3 | Lime | 911 |
| | | T.D. |

# HUGHES DRILLING REPORT

Jo. Co., Kansas 1857

1815 FSL 290 FEL

API # 15-091-24491

SURFACE CASING

Well No. 1 Size

Farm H.F. Feet

Circulated ____ sx cement

PERMANENT CSG.

Size

Feet

T. D. at Completion 911

OPERATOR Hughes Drilling

Contractor HUGHES DRILLING CO.

| DATE | | DRILLED FROM | DRILLED TO | REMARKS – TYPE WORK – BILLING REF. | PIPE TALLY |
|---|---|---|---|---|---|
| | | 853 | 855 | Shale | |
| | | 855 | 857 | Slate | |
| | | 857 | 895 | Shale (Lime Break 870, 876) | |
| | | 895 | 897 | Lime | |
| | | 897 | 908 | Shale | |
| | | 908 | 911 | Lime | |
| | | | TD | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| 5/9/18 – | | | | Set 896.65' of 2 7/8" 8rd EVE pipe (used) | |
| | | | | used 3 centralizers | |
| | | | | Float shoe on bottom | |

| STRATA THICKNESS | FORMATION DRILLED | T.D. |
|---|---|---|
| | | |

# HUGHES DRILLING REPORT

Jo Co., Kansas V9.4

1815 FSL 290 FEL

API # 15-091-24491

Well No. #1 SURFACE CASING PERMANENT CSG.

Farm H F Size Size

Feet Feet

Circulated ____ sx cement

T. D. at Completion

OPERATOR Hughes Drilling Contractor HUGHES DRILLING CO.

| STRATA THICKNESS | FORMATION DRILLED | T.D. |
|---|---|---|
| | | |

| DATE | DRILLED FROM | DRILLED TO | REMARKS – TYPE WORK – BILLING REF. | PIPE TALLY |
|---|---|---|---|---|
| 5/8/18 | | | Bartlesville (chip sample) | |
| | 835 | 836 | Hard Sand (Some Bleed) | |
| | 836 | 837 | Sand slightly lamin. w/shale (Bleed) | |
| | 837 | 838 | } Solid Sand (Good Bleed) | |
| | 838 | 839 | | |
| | 839 | 840 | | |
| | 840 | 841 | | |
| | 841 | 842 | } Solid Sand (Bleed) | |
| | 842 | 843 | (Harder than above) | |
| | 843 | 844 | } sand very lamin. w/shale (little Bleed) | |
| | 844 | 845 | | |
| | 845 | 846 | } shale | |
| | 846 | 847 | | |
| | 847 | 848 | – sand very lamin. w/shale (Bleed) (Heavier Oil than above) | |
| | 848 | 849 | } sand lamin. w/shale & a little white sand maybe (Good Bleed) | |
| | 849 | 850 | | |
| | 850 | 851 | } Sand very lamin. w/shale (Bleed) | |
| | 851 | 852 | | |
| | 852 | 853 | | |
| | 853 | 854 | → shale | |
| | 854 | 855 | | |
| | 855 | 856 | → slate | |
| | 856 | 857 | | |
| | 857 | 858 | → shale | Perf zone |
| | 858 | 859 | | 836 – 843 |
| | | | | & 847 – 850 |

JM-10734
PO-16694
FT-10628

QES
PRESSURE PUMPING LLC
PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

TICKET NUMBER 54011
LOCATION Ottawa, KS
FOREMAN Casey Kennedy

# FIELD TICKET & TREATMENT REPORT
## CEMENT

Invoice #813226

| DATE | CUSTOMER # | WELL NAME & NUMBER | SECTION | TOWNSHIP | RANGE | COUNTY |
|---|---|---|---|---|---|---|
| 5/9/18 | 3425 | HF # 1 | SE 36 | 14 | 21 | JO |

CUSTOMER: Hughes Drilling
MAILING ADDRESS: 122 Main
CITY: Wellsville | STATE: KS | ZIP CODE: 66092

| TRUCK # | DRIVER | TRUCK # | DRIVER |
|---|---|---|---|
| 729 | Casken | Safety Meeting | |
| 495 | HarBec | | |
| 548 | AlaMad | | |

JOB TYPE Longstring | HOLE SIZE 5 5/8" | HOLE DEPTH 911' | CASING SIZE & WEIGHT 2 7/8" EUE
CASING DEPTH 896' | DRILL PIPE | TUBING | OTHER
SLURRY WEIGHT | SLURRY VOL | WATER gal/sk | CEMENT LEFT in CASING
DISPLACEMENT 5.19 bbls | DISPLACEMENT PSI | MIX PSI | RATE 4 bpm

REMARKS: held safety meeting, established circulation, mixed & pumped 100 # Gel followed by 5 bbls fresh water, mixed & pumped 119 sks Portland 1A cement w/ 2% gel + 1/4 # Flosea per sk, cement to surface, flushed pump clean, pumped 2 1/2" rubber plug to casing TD w/ 5.19 bbls fresh water, pressured to 800 PSI, released pressure to set float valve.

| ACCOUNT CODE | QUANITY or UNITS | DESCRIPTION of SERVICES or PRODUCT | UNIT PRICE | TOTAL |
|---|---|---|---|---|
| CE0450 | 1 | PUMP CHARGE | 1500.00 | |
| CE0002 | 30 mi | MILEAGE | 214.50 | |
| CE071 | min | ton mileage | 1600.00 | |
| | | trucks | 2374.50 | |
| | | -35% | 831.08 | |
| | | subtotal | | 1543.42 |
| CC5840 | 119 sks | Portland 1A cement | 1606.50 | |
| CC5965 | 300 # | Gel | 90.00 | |
| CC6075 | 30 # | Flosea | 60.00 | |
| CP8176 | 1 | 2 1/2" rubber plug | 45.00 | |
| | | materials | 1801.50 | |
| | | -35% | 630.53 | |
| | | subtotal | | 1170.97 |
| | | 7.975% | SALES TAX | 93.38 |
| Ravin 3737 | | | ESTIMATED TOTAL | 2807.77 |

AUTHORIZTION [signature] TITLE DATE (4319.67)

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.