

CONFIDENTIAL

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

**WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE**

4/3/14
Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

OPERATOR: License # 4767
Name: Ritchie Exploration, Inc.
Address 1: P.O. Box 783188
Address 2: _____
City: Wichita State: KS Zip: 67278 + 3188
Contact Person: John Niernberger
Phone: (316) 691-9500
CONTRACTOR: License # 30606
Name: Murfin Drilling Co., Inc.
Wellsite Geologist: Mike Engelbrecht
Purchaser: NCRA

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SLOW
- 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
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

| 1/10/12 | 1/19/12 | 1/19/12 |
|-----------------------------------|-----------------|---|
| Spud Date or Recompletion Date | Date Reached TD | Completion Date or Recompletion Date |

API No. 15 - 057-20780-00-00

Spot Description: 50' S & 5' W

E/2_SE_NE_ Sec. 32 Twp. 28 S. R. 23 East West

2,030 Feet from North / South Line of Section

335 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW

County: Ford

Lease Name: Arch Well #: 4

Field Name: _____

Producing Formation: Pawnee

Elevation: Ground: 2476 Kelly Bushing: 2487

Total Depth: 5300 Plug Back Total Depth: 5242

Amount of Surface Pipe Set and Cemented at: 356 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: 1432 Feet

If Alternate II completion, cement circulated from: 1432
feet depth to: surface w/ 450 sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 11400 ppm Fluid volume: 825 bbls

Dewatering method used: evaporation

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

CONFIDENTIAL

APR 03 2014

RECEIVED
APR 04 2012

KCC WICHITA

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.

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.

Signature: _____

Title: Production Manager Date: 4/3/12

KCC Office Use ONLY

- Letter of Confidentiality Received
Date: 4-3-12 to 4-3-14
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: NJ Date: 4-11-12

Operator Name: Ritchie Exploration, Inc. Lease Name: Arch Well #: 4
 Sec. 32 Twp. 28 S. R. 23 East West County: Ford

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

| | |
|---|---|
| Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: Dual Induction Log Compensated Density/Neutron Log | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input checked="" type="checkbox"/> Sample Name Top Datum <p style="text-align: center;">SEE ATTACHED</p> |
|---|---|

| CASING RECORD <input checked="" 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 |
| Surface | 12-1/4 | 8-5/8 | 23 | 356 | common | 240 | 3% cc, 2% gel |
| Production | 7-7/8 | 4-1/2 | 10.5 | 5293 | AA-2 | 200 | 10% salt, 5% W-60, 6% C-15 |
| | | | | | | | |

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

| 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 |
|----------------|---|--|---|
| 4 | 4973.4'-4982.4', 4984.4'-4989.4' (2/3/12) | 2000 gals 15% NE | |
| | | | RECEIVED APR 04 2012 KCC WICHITA |
| | | | |

| | | | |
|--|------------------------|--|--|
| TUBING RECORD: Size: <u>2-3/8"</u> Set At: <u>5180'</u> Packer At: _____ | | Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| Date of First, Resumed Production, SWD or ENHR. <u>2/10/12</u> | | Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____ | |
| Estimated Production Per 24 Hours | Oil Bbls. <u>91.75</u> | Gas Mcf <u>0</u> | Water Bbls. <u>0</u> Gas-Oil Ratio _____ Gravity <u>38.5</u> |

| | | |
|---|--|---|
| 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 checked="" 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 (Specify) _____ | CONFIDENTIAL PRODUCTION INTERVAL: APR 03 2014 KCC |
|---|--|---|



#4 Arch

2030' FNL & 335' FEL
50' S & 5' W of E/2 SE NE
Section 32-28S-23W
Ford County, Kansas
API# 15-057-20780-0000
Elevation: 2476' GL: 2487' KB

| Sample Tops | | | Ref. Well |
|----------------|-------|-------|--------------|
| Anhydrite | N/A | | |
| B/Anhydrite | 1516' | +971 | -1 |
| Stotler | 3632' | -1145 | -4 |
| Heebner | 4282' | -1795 | -2 |
| Lansing | 4430' | -1943 | -4 |
| Muncie Shale | 4624' | -2137 | -5 |
| Stark Shale | 4763' | -2276 | -6 |
| BKC | 4886' | -2399 | -7 |
| Marmaton | 4908' | -2421 | -7 |
| Pawnee | 4977' | -2490 | -6 |
| Cherokee Shale | 5025' | -2538 | -6 |
| Huck. | 5117' | -2630 | -6 |
| Atoka Shale | 5125' | -2638 | -6 |
| Mississippian | 5140' | -2653 | -7 |
| RTD | 5300' | -2813 | |

RECEIVED
APR 04 2012
KCC WICHITA

CONFIDENTIAL
APR 03 2014
KCC



BASIC
ENERGY SERVICES
Liberal, Kansas

Cement Report

| | | | |
|-------------------------------------|-------------------|-----------------------------------|-----------------------------|
| Customer <i>N. Tech Exploration</i> | | Lease No. | Date <i>1-17-12</i> |
| Lease <i>Arch</i> | | Well # <i>4</i> | Service Receipt <i>2577</i> |
| Casing <i>4 1/2 10.5</i> | Depth <i>5300</i> | County <i>Ford</i> | State <i>KS</i> |
| Job Type <i>2 1/2 10 1/2</i> | Formation | Legal Description <i>32-78-25</i> | |

| Pipe Data | | Perforating Data | | Cement Data |
|--------------------------------|--------------------|------------------|----|-------------------------|
| Casing size <i>1 1/4 10.5H</i> | Tubing Size | Shots/Ft | | Lead <i>50# 60' 0"</i> |
| Depth <i>5395</i> | Depth <i>5378'</i> | From | To | <i>15113 50 102</i> |
| Volume <i>81125</i> | Volume | From | To | <i>7361 50 15 50</i> |
| Max Press <i>2000</i> | Max Press | From | To | Tail in <i>2005 112</i> |
| Well Connection <i>1 1/2</i> | Annulus Vol. | From | To | <i>15113 50</i> |
| Plug Depth <i>5273</i> | Packer Depth | From | To | <i>6646 50 14.5H</i> |

| Time | Casing Pressure | Tubing Pressure | Bbls. Pumped | Rate | Service Log |
|----------------|-----------------|-----------------|--------------|------------|--------------------------------|
| <i>4:00 PM</i> | | | | | <i>Arrive at location</i> |
| <i>4:30</i> | | | | | <i>Safety Meeting 11.5 hrs</i> |
| <i>6:00</i> | | | | | <i>R.S. Running in casing</i> |
| <i>8:00</i> | | | | | <i>Calculate well log</i> |
| <i>9:00</i> | | | | | <i>Hook up to TICS</i> |
| <i>9:10</i> | <i>2000</i> | | <i>10</i> | <i>1.0</i> | <i>Pressure Test</i> |
| <i>9:15</i> | <i>300</i> | | <i>5</i> | <i>1.0</i> | <i>Pump Water Spurt</i> |
| <i>9:18</i> | <i>215</i> | | <i>12</i> | <i>1.0</i> | <i>Pump Mud Flush</i> |
| <i>9:20</i> | <i>250</i> | | <i>5</i> | <i>1.0</i> | <i>Pump Water Spurt</i> |
| <i>9:25</i> | <i>200</i> | | <i>501</i> | <i>1.5</i> | <i>Pump mud @ 11.9 H</i> |
| <i>9:40</i> | | | | | <i>Drop Plug Washup</i> |
| <i>9:45</i> | <i>500</i> | | <i>74</i> | <i>1.5</i> | <i>Arrive</i> |
| <i>10:00</i> | <i>600</i> | | <i>10</i> | <i>2.0</i> | <i>Show down discharge</i> |
| <i>10:03</i> | <i>1100</i> | | | | <i>Load Plug Chart Held</i> |
| <i>11:00</i> | | | | | <i>Jobs Complete</i> |

RECEIVED
APR 04 2012

KCC WICHITA

CONFIDENTIAL
APR 03 2014

| | | | | | |
|---------------|--|--|--|--|-----|
| Service Units | | | | | KCC |
| Driver Names | | | | | |

Customer Representative *[Signature]* Station Manager *[Signature]* Cementer *[Signature]*

ALLIED CEMENTING CO., LLC. 30515

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: LIBERAL, KS

| | | | | | | | |
|--------------------------------------|----------------|-----------------|------------------|----------------------------|-------------|------------------------|---------------------------|
| DATE <u>1-11-12</u> | SEC. <u>32</u> | TWP. <u>28S</u> | RANGE <u>23W</u> | CALLED OUT | ON LOCATION | JOB START <u>11:20</u> | JOB FINISH <u>1:30 AM</u> |
| LEASE <u>Arch</u> | | WELL# <u>4</u> | | LOCATION <u>Foot 5W 5S</u> | | COUNTY <u>FORD</u> | STATE <u>KS</u> |
| OLD OR NEW (Circle one) <u>(New)</u> | | | | Notes <u>Unit</u> | | | |

CONTRACTOR Mossin #21

TYPE OF JOB 8 5/8 Surf ace

HOLE SIZE 12 1/4 TD. 354

CASING SIZE 8 5/8 24# DEPTH 339

TUBING SIZE _____ DEPTH _____

DRILL PIPE _____ DEPTH _____

TOOL _____ DEPTH _____

PRES. MAX 2:000 PSI MINIMUM 16

MEAS. LINE _____ SHOE JOINT 10'

CEMENT LEFT IN CSG. 10'

PERFS. N/A

DISPLACEMENT 21

OWNER SAME

CEMENT AMOUNT ORDERED 240 A

30% CC 20% GEL

| | | |
|-------------------------------|----------------|----------------|
| COMMON <u>240 A</u> | @ <u>16.25</u> | <u>3900.00</u> |
| POZMIX | @ | |
| GEL <u>55K</u> | @ <u>21.25</u> | <u>1068.75</u> |
| CHLORIDE <u>CC 95K</u> | @ <u>5.80</u> | <u>523.00</u> |
| ASC | @ | |
| | @ | |
| | @ | |
| | @ | |
| | @ | |
| | @ | |
| | @ | |
| HANDLING <u>254</u> | @ <u>2.25</u> | <u>571.50</u> |
| MILEAGE <u>58 x mi. x .11</u> | | <u>2514.60</u> |
| TOTAL | | <u>7616.15</u> |

EQUIPMENT

PUMP TRUCK CEMENTER R. RYAN

_____ HELPER BETO

BULK TRUCK

457/251 DRIVER LENNY

BULK TRUCK

_____ DRIVER _____

REMARKS:

THANK YOU

Circ cut to SURFACE

CHARGE TO: RITCHIE RICHIE

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

| | | |
|--------------------------|---------------|----------------|
| DEPTH OF JOB <u>339'</u> | @ <u>3.25</u> | <u>1125.00</u> |
| PUMP TRUCK CHARGE | | |
| EXTRA FOOTAGE <u>54'</u> | @ <u>95</u> | <u>51.30</u> |
| MILEAGE <u>180</u> | @ <u>7.00</u> | <u>1260.00</u> |
| MANIFOLD | @ <u>2.00</u> | <u>200.00</u> |
| <u>CTUEH mi. 180</u> | @ <u>4.00</u> | <u>720.00</u> |
| | @ | |
| TOTAL | | <u>3356.30</u> |

PLUG & FLOAT EQUIPMENT

| | | |
|----------------------------|----------------|---------------|
| <u>8 5/8</u> | @ | |
| <u>1- BASKET</u> | @ | <u>478.00</u> |
| <u>2- CENTRALIZERS</u> | @ <u>64.00</u> | <u>128.00</u> |
| <u>Cust. Supplied Plug</u> | @ | |
| TOTAL | | <u>606.00</u> |

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Juan Tinoco

SIGNATURE Juan Tinoco

SALES TAX (If Any) _____

TOTAL CHARGES 11578.45

DISCOUNT 2315.99 IF PAID IN 30 DAYS

9262 76
CONFIDENTIAL
APR 03 2014
KCC

RECEIVED
APR 04 2012
KCC WICHITA



Cement Report

| | | |
|--|-----------------------|--------------------------------------|
| Customer <i>Wichita Energy Services</i> | Lease No. | Date <i>1/24/12</i> |
| Lease <i>1111</i> | Well # <i>11</i> | Service Receipt <i>7581</i> |
| Casing <i>5 1/2</i> | Depth <i>11,29</i> | County <i>101</i> |
| Job Type <i>1111</i> | Formation | Legal Description <i>77 73 23</i> |

| Pipe Data | | Perforating Data | | Cement Data |
|------------------------------|-----------------------------|------------------|----|------------------------------|
| Casing size <i>11 1/2</i> | Tubing Size <i>8 1/2</i> | Shots/Ft | | Lead |
| Depth <i>11,29</i> | Depth <i>11,29</i> | From | To | Tail in <i>1150 34040</i> |
| Volume <i>343</i> | Volume <i>5 3015</i> | From | To | |
| Max Press | Max Press | From | To | |
| Well Connection | Annulus Vol. | From | To | |
| Plug Depth | Packer Depth | From | To | |

| Time | Casing Pressure | Tubing Pressure | Bbbs. Pumped | Rate | Service Log |
|--------------|-----------------|-----------------|--------------|-----------|--------------------------------|
| <i>11:50</i> | | | | | <i>Wichita Energy Services</i> |
| <i>11:00</i> | | | | | <i>Wichita Energy Services</i> |
| <i>11:00</i> | | | | | <i>Wichita Energy Services</i> |
| <i>13:15</i> | <i>1500</i> | | | | <i>Wichita Energy Services</i> |
| <i>13:50</i> | <i>1500</i> | | <i>13</i> | <i>10</i> | <i>Wichita Energy Services</i> |
| <i>14:00</i> | <i>50</i> | | <i>15</i> | <i>15</i> | <i>Wichita Energy Services</i> |
| <i>14:35</i> | <i>50</i> | | | <i>30</i> | <i>Wichita Energy Services</i> |
| <i>14:50</i> | | | | | <i>Wichita Energy Services</i> |
| <i>15:00</i> | <i>500</i> | | <i>30</i> | <i>75</i> | <i>Wichita Energy Services</i> |
| <i>15:30</i> | | | | | <i>Sub Complete</i> |
| | | | | | <i>Wichita Energy Services</i> |

RECEIVED

APR 04 2012

KCC WICHITA

| | | |
|-------------------------------|--------------------|--------------|
| Service Units <i>27162</i> | <i>71163 30924</i> | CONFIDENTIAL |
| Driver Names <i>Eddie</i> | <i>Victor</i> | APR 03 2012 |

Customer Representative: _____ Station Manager: *Tom Bantz* Cementer: _____
Taylor Printing, Inc.