

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)</i> <i>(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 | Shakespeare Oil Co., Inc. |
| Well Name | NICHOLS 3-15 |
| Doc ID | 1460748 |

All Electric Logs Run

| |
|-----------------|
| |
| Array Induction |
| Photo Density |
| Comp Neutron |
| Microlog |

| | |
|-----------|---------------------------|
| Form | ACO1 - Well Completion |
| Operator | Shakespeare Oil Co., Inc. |
| Well Name | NICHOLS 3-15 |
| Doc ID | 1460748 |

Tops

| Name | Top | Datum |
|-------------------|------|-------|
| Base Anhydrite | 2466 | +664 |
| Heebner | 3992 | -862 |
| Lansing | 4033 | -903 |
| Muncie Creek | 4216 | -1086 |
| Stark Shale | 4316 | -1186 |
| Hushpuckney | 4359 | -1229 |
| Marmaton | 4456 | -1326 |
| Pawnee | 4530 | -1400 |
| L. Cherokee Shale | 4613 | -1483 |
| Johnson | 4668 | -1538 |
| Mississippian | 4781 | -1651 |

SWIFT



P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300



Invoice

| | |
|-----------|-----------|
| DATE | INVOICE # |
| 4/25/2019 | 32035 |

| |
|---|
| BILL TO |
| Shakespeare Oil Company, Inc 202 West Main Street Salem, IL 62881 |

- Acidizing
- Cement
- Tool Rental

INT

| TERMS | Well No. | Lease | County | Contractor | Well Type | Well Category | Job Purpose | Operator |
|------------|---|---|--------|------------------|-----------|---------------|---------------------|-----------|
| Net 30 | | Nicholas <i>Nicholas</i> <i># 3-15</i> | Scott | Southwind Rig #8 | Oil | Development | <u>Surface Pipe</u> | Gideon |
| PRICE REF. | DESCRIPTION | | | | QTY | UM | UNIT PRICE | AMOUNT |
| 575D | Mileage - 1 Way | | | | 80 | Miles | 5.00 | 400.00 |
| 576D-S | Pump Charge - Shallow Surface (< 500 Ft.) | | | | 1 | Job | 875.00 | 875.00 |
| 325 | Standard Cement | | | | 165 | Sacks | 13.00 | 2,145.00T |
| 279 | Bentonite Gel | | | | 3 | Sack(s) | 30.00 | 90.00T |
| 278 | Calcium Chloride | | | | 7 | Sack(s) | 40.00 | 280.00T |
| 276 | Flocele | | | | 40 | Lb(s) | 2.50 | 100.00T |
| 290 | D-Air | | | | 2 | Gallon(s) | 42.00 | 84.00T |
| 581D | Service Charge Cement | | | | 165 | Sacks | 1.75 | 288.75 |
| 583D | Drayage | | | | 648 | Ton Miles | 0.85 | 550.80 |
| | Subtotal | | | | | | | 4,813.55 |
| | Sales Tax Scott County | | | | | | 8.50% | 229.42 |

RECEIVED

APR 29 2019

502-5
DN

We Appreciate Your Business!

Total

\$5,042.97

DW



CHARGE TO: Shakespeare Oil + Gas
 ADDRESS
 CITY, STATE, ZIP CODE

PAGE 1 OF 1

TICKET 032035

SERVICE LOCATIONS: Ness City, KS
 WELL/PROJECT NO.: Nichols #3-15
 LEASE: Nichols #3-15
 COUNTY/PARISH: Scott
 STATE: KS
 CITY: Penne
 DATE: 2/29/19
 OWNER: Staff

TICKET TYPE: SERVICE SALES
 CONTRACTOR: Southwind
 RIG NAME/NO.: 8
 SHIPPED VIA: CT
 DELIVERED TO: Location
 ORDER NO.:

WELL TYPE: Oil
 WELL CATEGORY: Development
 JOB PURPOSE: Surface Ppe
 WELL PERMIT NO.:
 WELL LOCATION: Penne

REFERRAL LOCATION: INVOICE INSTRUCTIONS

| PRICE REFERENCE | SECONDARY REFERENCE/ PART NUMBER | ACCOUNTING | | | DESCRIPTION | MILEAGE | QTY. | UM | UNIT PRICE | AMOUNT |
|-----------------|----------------------------------|------------|------|----|-----------------------|---------|------|----|------------|---------|
| | | LOC | ACCT | DF | | | | | | |
| 576 | | 1 | | | Trk #112 | | | | 5.00 | 400.00 |
| 576S | | 1 | | | Pump Charge - Surface | | | | 875.00 | 875.00 |
| 326 | | 1 | | | Standard CMT | | | | 13.00 | 2145.00 |
| 279 | | 1 | | | Bentonite Grd | | | | 30.00 | 90.00 |
| 278 | | 1 | | | Calcium Chloride | | | | 40.00 | 280.00 |
| 276 | | 1 | | | Flocals | | | | 2.00 | 100.00 |
| 290 | | 1 | | | D-Air | | | | 42.00 | 84.00 |
| 581 | | 1 | | | CMT Service Charge | | | | 76.00 | 288.76 |
| 583 | | 1 | | | Drayage | | | | 0.85 | 550.85 |

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.

DATE SIGNED: 4/25/19 TIME SIGNED: 12:15 A.M. P.M.

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES: The customer hereby acknowledges receipt of the materials and services listed on this ticket.

REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY: OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN? WE UNDERSTOOD AND MET YOUR NEEDS? OUR SERVICE WAS PERFORMED WITHOUT DELAY? WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY? ARE YOU SATISFIED WITH OUR SERVICE? CUSTOMER DID NOT WISH TO RESPOND

AGREE UNDECIDED DISAGREE

PAGE TOTAL: 1 TOTAL: 5042.97

SWIFT OPERATOR: Andrew Fields APPROVAL:

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 4/25/19 PAGE NO. 1

CUSTOMER Shakespeare Oil & Gas WELL NO. 3-15 LEASE Nichols #3-15 JOB TYPE Surface Pipe TICKET NO. 032036

| CHART NO. | TIME | RATE (BPM) | VOLUME (BBL) (GAL) | PUMPS | | PRESSURE (PSI) | | DESCRIPTION OF OPERATION AND MATERIALS |
|-----------|-----------------|------------|--------------------|-------|---|----------------|--------|--|
| | | | | T | C | TUBING | CASING | |
| 4/24 | 2300 | | | | | | | On Location 8 5/8" 23 lb/ft |
| | | | | | | | | RTD: 268 TP: 268 |
| | 2326 | | | | | | | 8 5/8" Casing in well upon arrival Break Circulation |
| | 2330 | 4 1/2 | 5 | | ✓ | 200 | | Pump 5 bbl H ₂ O Spacer |
| | 2335 | 4 1/2 | 40 | | ✓ | 200 | | Mix 165 sks 1/4" Flo 2/gel 3/8 CC Standard CMT @ 14.7 ppq |
| | 2350 | 4 1/2 | 0 | | ✓ | 350 | | Start Displacement |
| | 2355 | 0 | 16 1/2 | | ✓ | 200 | | KO Pump * Shut in * |
| | | | | | | | | Release Pressure * Valve Hold * |
| | 10000 | | | | | | | Jet Cellar to find CMT CMT found * Circulated 10 sks to pit * |
| | | | | | | | | Wash up Trk #112 |
| 4/25 | 0015 | | | | | | | Job Complete |
| | | | | | | | | 165 sks of Standard CMT w/ 1/4" Flo 2/gel 3/8 CC used |
| | | | | | | | | Thank You |
| | | | | | | | | Circleon, Preston, Kirby |

SWIFT



P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300

Invoice

| | |
|----------|-----------|
| DATE | INVOICE # |
| 5/2/2019 | 32200 |

| |
|---|
| BILL TO |
| Shakespeare Oil Company, Inc 202 West Main Street Salem, IL 62881 |

- Acidizing
- Cement
- Tool Rental

INT

| TERMS | Well No. | Lease | County | Contractor | Well Type | Well Category | Job Purpose | Operator |
|------------|----------------------------------|---------|--------|------------------|-----------|---------------|-------------|-----------|
| Net 30 | #3-15 | Nichols | Scott | Southwind Rig #8 | Oil | Development | PTA | Blaine |
| PRICE REF. | DESCRIPTION | | | | QTY | UM | UNIT PRICE | AMOUNT |
| 575D | Mileage - 1 Way | | | | 80 | Miles | 5.00 | 400.00 |
| 576D-P | Pump Charge - PTA | | | | 1 | Job | 925.00 | 925.00 |
| 328-4 | 60/40 Pozmix (4% Gel) <i>PTA</i> | | | | 300 | Sacks | 11.00 | 3,300.00T |
| 276 | Flocele | | | | 75 | Lb(s) | 3.00 | 225.00T |
| 290 | D-Air | | | | 2 | Gallon(s) | 42.00 | 84.00T |
| 581D | Service Charge Cement | | | | 300 | Sacks | 1.85 | 555.00 |
| 583D | Drayage | | | | 1,004.4 | Ton Miles | 0.95 | 954.18 |
| | Subtotal | | | | | | | 6,443.18 |
| | Sales Tax Scott County | | | | | | 8.50% | 306.77 |

RECEIVED
MAY 07 2019

*502-5
DH*

We Appreciate Your Business!

Total

\$6,749.95

DW



TICKET 032200

CHARGE TO: Shakespeare
 ADDRESS
 CITY, STATE, ZIP CODE

PAGE 1 OF 1

SERVICE LOCATIONS: Waco City KS
 WELL/PROJECT NO.: 3-15 LEASE: Nichols COUNTY/PARISH: Scott STATE: KS CITY: Pence DATE: 2 MAY 19 OWNER:
 TICKET TYPE: SERVICE CONTRACTOR: SEARCHING RIG NAME/NO.: 2 SHIPPED: WT DELIVERED TO: location ORDER NO.:
 SALES: WELL TYPE: 0:1 WELL CATEGORY: PTA JOB PURPOSE: plug to abandon WELL PERMIT NO.:
 REFERRAL LOCATION: INVOICE INSTRUCTIONS:

| PRICE REFERENCE | SECONDARY REFERENCE/ PART NUMBER | ACCOUNTING | | | DESCRIPTION | QTY. U/M | | | UNIT PRICE | AMOUNT |
|-----------------|----------------------------------|------------|------|----|-----------------------|----------|-----|------|------------|---------|
| | | LOC | ACCT | DF | | QTY. | U/M | QTY. | | |
| 515 | | | | | MILEAGE TRV US | 80 | mi | | 5.00 | 400.00 |
| 576P | | | | | Power Charge (PTA) | 1 | ea | | 925.00 | 925.00 |
| 378-4 | | | | | 66/40 grease (4/age1) | 300 | sk | | 11.00 | 3300.00 |
| 276 | | | | | Fluoresce | 75 | lb | | 3.00 | 225.00 |
| 296 | | | | | D-air | 2 | gal | | 42.00 | 84.00 |
| 581 | | | | | Service charges | 300 | sk | | 1.85 | 555.00 |
| 583 | | | | | Drayage | 2500 | lb | | 0.95 | 954.18 |

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.

X

DATE SIGNED: _____ TIME SIGNED: _____
 A.M. P.M.

REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY: OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN? WE UNDERSTOOD AND MET YOUR NEEDS? OUR SERVICE WAS PERFORMED WITHOUT DELAY? WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY? ARE YOU SATISFIED WITH OUR SERVICE? CUSTOMER DID NOT WISH TO RESPOND

AGREE: _____ UNDECIDED: _____ DISAGREE: _____
 PAGE TOTAL: 6443.18
 TOTAL: 10749.95

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR

APPROVAL

[Signature]

Thank You!

JOB LOG

SWIFT Services, Inc.

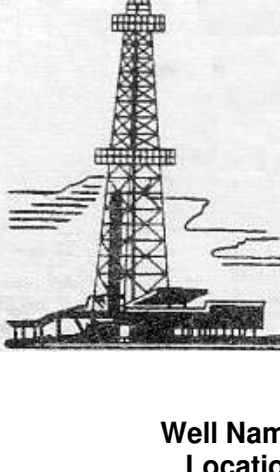
DATE 2 MAY 19 PAGE NO. 1

CUSTOMER Shakespeare WELL NO. 3-15 LEASE Nichols JOB TYPE TICKET NO. 32200

| CHART NO. | TIME | RATE (BPM) | VOLUME (BBL) (GAL) | PUMPS | | PRESSURE (PSI) | | DESCRIPTION OF OPERATION AND MATERIALS |
|-----------|------|------------|--------------------|-------|---|----------------|--------|--|
| | | | | T | C | TUBING | CASING | |
| | | | | | | | | 300 sk 60/40 P22 mix (40/bbl) w/ 1/4" flxide 4 1/2" x 166# drill pipe 2470' - 50 sk 1530' - 80 765' - 50 sk 300' - 50 60' - 20 sk RH - 30 wt 20 |
| | 2000 | | | | | | | on loc TRK 115 |
| | 2100 | | | | | | | fill hole w/ mud |
| | 2110 | 3 | 13 | | | 400 | | mix 40 sk @ 2470' @ 13.1 ppf |
| | | 4 | 31 | | | 200 | | Displace cement pull to 1530' |
| | 2200 | 3 | 21 | | | 400 | | mix 40 sk @ 13. ppf |
| | | 4 | 14 | | | 200 | | Displace pull to 765' |
| | 2238 | 3 | 13 | | | 200 | | mix 40 sk @ 13.1 |
| | | 3 | 5 | | | ∅ | | Displace pull to 300' in & out of surface |
| | 2304 | 2 1/2 | 13 | | | ∅ | | mix 40 sk @ 13.1 ppf Displace |
| | | | 2 1/2 | | | | | |
| | 2331 | | 6 | | | | | plug MH 20 sk RH 30 sk 60' 20 sk |
| | | | 4 | | | | | |
| | | | 6 | | | | | |
| | 2345 | | | | | | | → cement standing at surface ← |
| 3 MAY | 0000 | | | | | | | wash truck |
| | | | | | | | | Rack up |
| 3 MAY | 0000 | | | | | | | job complete |
| | 0030 | | | | | | | Thanks |
| | | | | | | | | Blaine, Flint & SQUATCH |

WELLSITE GEOLOGIST'S REPORT

VERNON C. SCHRAG
CONSULTANT GEOLOGIST



Scale 1:240 (5"=100') Imperial

Well Name: **NICHOLS #3-15**
 Location: **SW SE NE SEC. 15-16S-34W**
 Licence Number: **API: 15-171-21246**
 Spud Date: **April 24, 2019**
 Surface Coordinates: **1350' FSL & 460' FEL**

Region: **Scott Co., KS**
 Drilling Completed: **May 2, 2019**

Bottom Hole Coordinates: **3120'**
 Ground Elevation (ft): **3120'** K.B. Elevation (ft): **3130'**
 Logged Interval (ft): **3800'** To: **RTD** Total Depth (ft): **4860'**
 Formation: **D&A Mississippi**
 Type of Drilling Fluid: **Chemical Premix (Displaced)**

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR:

Company: **Shakespeare Oil Co., Inc.**
 Address: **202 West Main Street
 Salem, IL 62881**

DRILLING CONTRACTOR:

Southwind Drilling Co., Rig #8
 DP 4.5" XH (16.6#); DC 6-1/4" x 2-3/8", 411.5#; Kelly 40.00', Tool Joint 5.5" ; Bit: 7-7/8", Varel HE29A, 3/14; rpm 80, WOB 35k; Kelly Bushing 10' above ground level; Doug Roberts (tool pusher).

CASING:

Ran 6 joints of new 23#, 8 5/8" casing, Tally @ 253', Set @ 268',

CIRCULATION SYSTEM:

Continental EMSCO D-375, duplex, 6 x 14, Chemical, premix, earth pits, MudCo/Service Mud, Inc., Reid Atkins.

OPEN HOLE LOGS:

DN, DI (SP), ML, No Sonic; 5" detail LTD-3800; 2" DI to surface casing; Weatherford Wireline Services, Liberal, KS, LTD 4858', 2' short to rotary total depth.

DRILL STEM TEST #1:

Marmaton: Interval 4421-4505 (84' anchor); Weak surf. blow IFP, no blow FFP; Time Periods: 30-30-30-30; Recovery: 10' mud, oil spots; Pressures: HP: 2215-2161; SIP: 460-163; FP: 26-25, 25-26 psi; BHT: 110 deg. F., Trilobite Testing, Inc., Scott City, KS, Bradley Walter.

| ROP (min/ft) | DST | Lithology | Depth | Geological Descriptions | Total Gas |
|-----------------------------|-----|-----------|-------|--|--|
| ROP (min/ft) Five Ten | | | | | TG (units) Fifty One |
| | | | 3800 | LS: It grayish-brown; vf-xtal; sli. granular; dense; sli. fos; N.S. | HotWire 100 |
| | | | 3850 | LS: It grayish brown; vf-xtal; rough textured; fine vugular porosity; N.S. | |
| | | | 3900 | LS: It grayish brown; vf-xtal; dense to sli. chalky in part; poor porosity; N.S. | |
| | | | 3950 | LS: mostly lt-brown; vf-xtal; dense to chalky in part; no visible porosity; N.S. w/trc mica siltstone; | |
| | | | 4000 | HEEBNER SH 3994 (-864) Shale: black; carbonaceous; many chips 4010. LS: dense; indistinctive. | HotWire 100 |
| | | | 4050 | LS: It brown; vf-xtal; trc chert; chalky; dull fluor.; poor apparent porosity; N.S. | PERFORM 35 STAND WIPER TRIP AT 4011. |
| | | | 4100 | LANSING 4035 (-905) LS: off white to lt brown; vf-xtal; white opa; cherts; chalky in part; poor apparent porosity; N.S. | |
| | | | 4150 | LS: It brown; vf-xtal; dense; no visible porosity; N.S. | |
| | | | 4200 | Shale: greenish-gray; calc. | |
| | | | 4250 | MUNCIE CRK SH 4218 (-1088) Shale: black; carbon.; trc 4330, incr 4340; slow ascension; | MUNCIE CRK SH WAS WAY LATE IN SAMPLES. OBSERVED AT 4240 CIRC RATHER THAN 4230 SAMPLE. SAME FOR G' LIME NEXT BELOW. |
| | | | 4300 | STARK SH 4317 (-1187) Shale: black; carbon.; trc 4330, incr 4340; slow ascension; | |
| | | | 4350 | HUSHPUCKNEY 4361 (-1231) Shale: black; carbon.; few chips 4380 stop. | |
| | | | 4400 | MARMATON 4453 (-1323) LS: It-md brown; vf-xtal; mostly dense; minor chalk; sli granular; no visible porosity; N.S. comes w/maroon & green shale which washes 440 & 4480 samples red. | |
| | | | 4450 | PAWNEE 4531 (-1401) LS: dk grayish brown; dense; N.S. | |
| | | | 4500 | FT. SCOTT 4588 (-1458) LS: grayish-brn; vf-xtal; oolitic in part; trc spotted dry stain 1 chip 4600; no visible oil; | |
| | | | 4550 | CHER SH 4616 (-1486) Shale: black; carbon. | |
| | | | 4600 | CONGLOMERATE | |
| | | | 4650 | MISSISSIPPI 4784 (-1654) LS: white to lt brown; vf-xtal; very finely sandy; acid digestion yields tiny qtz grains; v- tight int gran porosity; N.S.; first appears 4800; much shale is probably slough. | HotWire 100 |
| | | | 4700 | ROTARY TOTAL DEPTH 4860 (-1730) | HotWire 100 |
| | | | 4750 | | HotWire 100 |
| | | | 4800 | | HotWire 100 |
| | | | 4850 | | HotWire 100 |
| | | | 4860 | | HotWire 100 |

RTD 4:40 AM 5/02/2019

WEATHERFORD LTD 4858'



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Shakespeare Oil Co, Inc.

15 16s 34w Scott, Ks

202 W Main St.
Salem, IL 62881

Nichols 3-15

Job Ticket: 65222

DST#: 1

ATTN: Vern Schrag

Test Start: 2019.04.30 @ 16:52:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:15:45

Time Test Ended: 23:21:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 78

Interval: 4421.00 ft (KB) To 4505.00 ft (KB) (TVD)

Reference Elevations: 3130.00 ft (KB)

Total Depth: 4505.00 ft (KB) (TVD)

3120.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8522 Inside

Press@RunDepth: 26.34 psig @ 4422.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.04.30

End Date:

2019.04.30

Last Calib.: 2019.04.30

Start Time: 16:52:05

End Time:

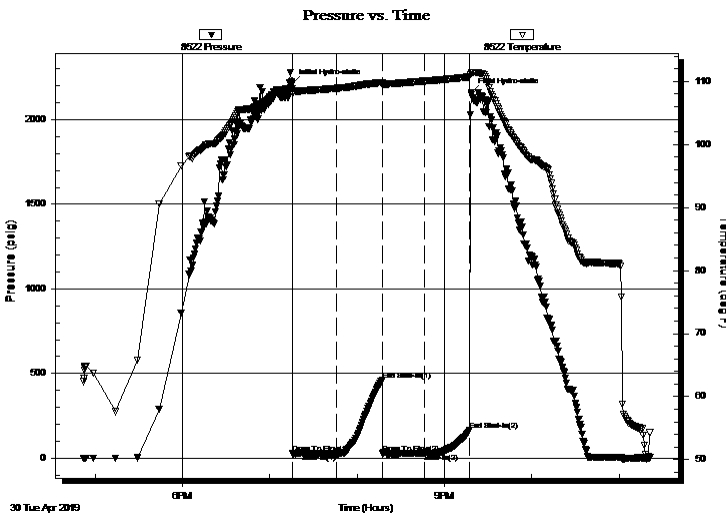
23:20:59

Time On Btm: 2019.04.30 @ 19:15:30

Time Off Btm: 2019.04.30 @ 21:18:30

TEST COMMENT: 30- IF: 1/4" blow .
30- IS: No return.
30- FF: No blow .
30- FSI: No return.

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2215.24 | 108.82 | Initial Hydro-static |
| 1 | 25.69 | 108.15 | Open To Flow (1) |
| 30 | 25.04 | 108.91 | Shut-In(1) |
| 62 | 459.99 | 109.81 | End Shut-In(1) |
| 62 | 25.23 | 109.42 | Open To Flow (2) |
| 91 | 26.34 | 110.06 | Shut-In(2) |
| 122 | 163.32 | 110.72 | End Shut-In(2) |
| 123 | 2161.43 | 111.34 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------------|--------------|
| 10.00 | mud 100m (oil spots) | |
| | | |
| | | |
| | | |
| | | |

Gas Rates

| Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|----------------|-----------------|------------------|
| | | |



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co, Inc.

15 16s 34w Scott, Ks

202 W Main St.
Salem, IL 62881

Nichols 3-15

Job Ticket: 65222

DST#: 1

ATTN: Vern Schrag

Test Start: 2019.04.30 @ 16:52:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|----------------------|---------------|
| 10.00 | mud 100m (oil spots) | |

Total Length: 10.00 ft Total Volume: bbl

Num Fluid Samples: 0

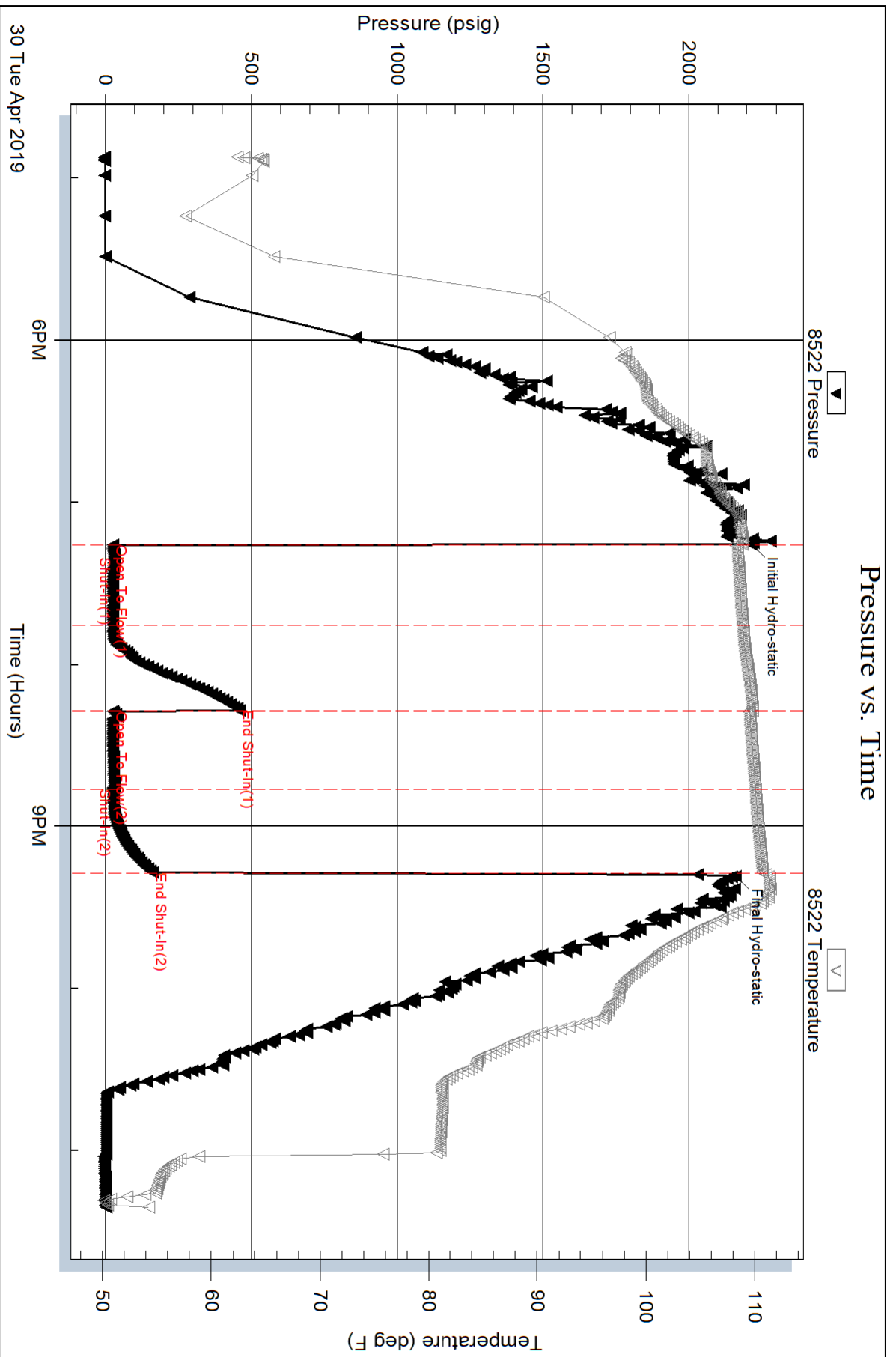
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Serial #: 8319

Outside Shakespeare Oil Co, Inc.

Nichols 3-15

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 65222

Printed: 2019.05.01 @ 07:35:36