

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 | OTTLEY 1-22 |
| Doc ID | 1417315 |

All Electric Logs Run

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

| | |
|-----------|---------------------------|
| Form | ACO1 - Well Completion |
| Operator | Shakespeare Oil Co., Inc. |
| Well Name | OTTLEY 1-22 |
| Doc ID | 1417315 |

Tops

| Name | Top | Datum |
|-------------------|------|-------|
| Base Anhydrite | 2207 | +527 |
| Heebner | 3703 | -969 |
| Lansing | 3740 | -1006 |
| Muncie Creek | 3904 | -1170 |
| Stark Shale | 3995 | -1261 |
| Hushpuckney | 4030 | -1296 |
| Marmaton | 4112 | -1378 |
| Pawnee | 4194 | -1460 |
| L. Cherokee Shale | 4278 | -1544 |
| Johnson | 4319 | -1585 |
| Mississippian | 4391 | -1657 |

| | |
|-----------|---------------------------|
| Form | ACO1 - Well Completion |
| Operator | Shakespeare Oil Co., Inc. |
| Well Name | OTTLEY 1-22 |
| Doc ID | 1417315 |

Perforations

| Shots Per Foot | Perforation Top | Perforation Bottom | BridgePlugType | BridgePlugSet At | Material Record |
|----------------|-----------------|--------------------|----------------|------------------|---------------------------------|
| 6 | 4382 | 4390 | | | |
| 4 | 4337 | 4340 | | | 750 gal 15% NeFe |
| 4 | 4326 | 4334 | | | 750 gal 15% NeFe |
| 4 | 4322 | 4324 | | | 750 gal NeFe |
| 4 | 4262 | 4266 | | | 500 gal 15% NeFe, 20 perf balls |
| 4 | 4238 | 4244 | | | 500 gal 15% NeFe, 20 perf balls |
| 4 | 3774 | 3778 | | | 250 gal 15% RWR-1 |



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



Invoice

| | |
|----------|-----------|
| DATE | INVOICE # |
| 7/3/2018 | 27321 |

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

- Acidizing
- Cement
- Tool Rental

| TERMS | Well No. | Lease | County | Contractor | Well Type | Well Category | Job Purpose | Operator |
|------------|---|--------|--------|---------------|-----------|---------------|--------------------|-----------|
| Net 30 | #1-22 | Ottley | Logan | Cheyenne Well | Oil | Development | Cement Port Collar | Jonathan |
| PRICE REF. | DESCRIPTION | | | | QTY | UM | UNIT PRICE | AMOUNT |
| 575D | Mileage - 1 Way | | | | 80 | Miles | 5.00 | 400.00 |
| 576D-D | Pump Charge - Deep Surface (> 500 Ft.) & Port Collars | | | | 1 | Job | 1,300.00 | 1,300.00 |
| 290 | D-Air | | | | 2 | Gallon(s) | 42.00 | 84.00T |
| 330 | Swift Multi-Density Standard (MIDCON II) | | | | 140 | Sacks | 16.25 | 2,275.00T |
| 276 | Flocele | | | | 35 | Lb(s) | 2.50 | 87.50T |
| 581D | Service Charge Cement | | | | 275 | Sacks | 1.75 | 481.25 |
| 583D | Drayage | | | | 1,094.64 | Ton Miles | 0.85 | 930.44 |
| | Subtotal | | | | | | | 5,558.19 |
| | Sales Tax Logan County | | | | | | 8.00% | 195.72 |

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JUL 09 2018

We Appreciate Your Business!

Total

\$5,753.91

DW



Services, Inc.

CHARGE TO: Shakespeare Oil Co
 ADDRESS: _____
 CITY, STATE, ZIP CODE: _____

TICKET 27321

PAGE 1 OF 1

| | | | | | | | | |
|-------------------------|--|--|--|---|--------------------------|---------------------------------|-----------------|-------|
| SERVICE LOCATIONS | | WELL/PROJECT NO. | LEASE | COUNTY/PARISH | STATE | CITY | DATE | OWNER |
| 1. <u>Hays, KS</u> | | <u>1-22</u> | <u>Attley</u> | <u>Logan</u> | <u>KS</u> | | <u>07/03/18</u> | |
| 2. <u>Ness City, KS</u> | | TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES | CONTRACTOR <u>Cheyenne Well Service</u> | RIG NAME/NO. | SHIPPED VIA <u>CT</u> | DELIVERED TO <u>Location</u> | ORDER NO. | |
| 3. | | WELL TYPE <u>Oil</u> | WELL CATEGORY <u>Development</u> | JOB PURPOSE <u>Central Port Collar</u> | WELL PERMIT NO. | WELL LOCATION | | |
| 4. | | INVOICE INSTRUCTIONS | | | | | | |

| PRICE REFERENCE | SECONDARY REFERENCE/ PART NUMBER | ACCOUNTING | | | DESCRIPTION | MILEAGE # | QTY. | UM | QTY. | UM | UNIT PRICE | AMOUNT |
|-------------------|-------------------------------------|------------|------|----|------------------------------|------------|------|-------|------|----|------------|---------|
| | | LOC | ACCT | DF | | | | | | | | |
| 575 | | 1 | | | MILEAGE # 113 | 1 | EA | | | | 1300.00 | 1300.00 |
| 576D | | 1 | | | Pump Charge - Port Collar | 2 | gal | | | | 42.00 | 84.00 |
| 290 | | 2 | | | N-Air | 140 | SKS | | | | 16.25 | 2275.00 |
| 330 | | 2 | | | Swift Multi-Density Standard | 35 | lbs | | | | 2.50 | 87.50 |
| 276 | | 2 | | | Floacle | 275 | SKS | | | | 1.75 | 481.25 |
| 581 | | 2 | | | Service Charge Cement | 80 | mi | | | | 9.30 | 744.00 |
| 583 | | 2 | | | Drayage | | | | | | 55.58 | 111.16 |
| REMIT PAYMENT TO: | | | | | | PAGE TOTAL | | TOTAL | | | | |

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 _____ 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

DATE _____

SWIFT OPERATOR: [Signature] APPROV: [Signature]

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

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 07/03/18 PAGE NO. 1

CUSTOMER *Shale Spire* WELL NO. LEASE *Ottley* JOB TYPE *Port Collar* TICKET NO. *27321*

| CHART NO. | TIME | RATE (BPM) | VOLUME (BBL) (GAL) | PUMPS | | PRESSURE (PSI) | | DESCRIPTION OF OPERATION AND MATERIALS |
|-----------|-----------------|------------|--------------------|-------|---|----------------|----------------|---|
| | | | | T | C | TUBING | CASING | |
| | 1310 | | | | | | | On location, set up trucks. Had trouble starting pump Motor. Motor started. |
| | | | | | | | | P.C. - 2140 |
| 1410 | 1410 | | 6 | | | | | Load Hole |
| 1415 | 1415 | | | | | 1000 | | Test P.C. - Held. |
| 1425 | 1425 | 3 | | | | 400 | | Open P.C. - Inj rate |
| 1430 | 1430 | 3 | | | | | | Hook up to tubing |
| 1435 | 1435 | 3 | 8 | | | 400 | 400 | Pump 8 bbl water |
| 1440 | 1440 | 3 | | | | 400 | 400 | Start Cmt, got circulation |
| | | 3 | 68 | | | 600 | 600 | Cmt Circulating - raise wt |
| | | 3 | 73 | | | 600 | 600 | Fin Cmt, Start Displacement |
| 1510 | 1450 | 3 | 80 1/2 | | | 600 | 600 | Fin Displacement, shut in. |
| 1515 | | | | | | 1000 | | Close P.C. - Test - Held Run 5 JTs |
| 1525 | | 2 1/2 | | | | 200 | | Reverse Out |
| | | 2 1/2 | 8/12 | | | 200 | | 2 Cement flags - 8 bbl + 12 bbl |
| 1530 | | 2 1/2 | 20 | | | 200 | | Fin Reverse Out |
| 1535 | | | | | | | | Wash up truck Rack up |
| 1540 | | | | | | | | Job Complete |
| | | | | | | | | Thanks Jon, Austin, Kirby |
| | | | | | | | | Circulated 10 SKS to pit |

SWIFT



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



Invoice

| | |
|-----------|-----------|
| DATE | INVOICE # |
| 6/30/2018 | 27333 |

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

- Acidizing
- Cement
- Tool Rental

| TERMS | Well No. | Lease | County | Contractor | Well Type | Well Category | Job Purpose | Operator |
|--------|----------|--------|--------|-----------------------|-----------|---------------|-------------|----------|
| Net 30 | #1-22 | Ottley | Logan | Duke Drilling Rig ... | Oil | Development | Long String | David E. |

| PRICE REF. | DESCRIPTION | QTY | UM | UNIT PRICE | AMOUNT |
|------------|---|-------|-----------|------------|-----------|
| 575D | Mileage - 1 Way | 80 | Miles | 5.00 | 400.00 |
| 578D-L | Pump Charge - Long String | 1 | Job | 1,300.00 | 1,300.00 |
| 290 | D-Air | 2 | Gallon(s) | 42.00 | 84.00T |
| 221 | Liquid KCL (Clayfix) | 2 | Gallon(s) | 25.00 | 50.00T |
| 280 | Flocheck 21 | 500 | Gallon(s) | 3.50 | 1,750.00T |
| 325 | Standard Cement | 200 | Sacks | 13.00 | 2,600.00T |
| 284 | Calseal | 9 | Sack(s) | 35.00 | 315.00T |
| 283 | Salt | 1,100 | Lb(s) | 0.20 | 220.00T |
| 292 | Halad 322 | 200 | Lb(s) | 8.00 | 1,600.00T |
| 277 | Gilsonite (Coal Seal) | 1,400 | Lb(s) | 0.85 | 1,190.00T |
| 276 | Flocele | 25 | Lb(s) | 2.50 | 62.50T |
| 581D | Service Charge Cement | 200 | Sacks | 1.75 | 350.00 |
| 583D | Drayage | 897 | Ton Miles | 0.85 | 762.45 |
| 195 | High Connection Fee - 10 Feet Or More Above Rig Floor | 1 | Each | 200.00 | 200.00T |
| | Subtotal | | | | 10,883.95 |
| | Sales Tax Logan County | | | 8.00% | 645.72 |

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OH

We Appreciate Your Business!

Total

\$11,529.67

DW



Services, Inc.

TICKET 27333

CHARGE TO: Shakespeare
 ADDRESS: _____
 CITY, STATE, ZIP CODE: _____

PAGE 1 OF 3

SERVICE LOCATIONS: 1. Hays, KS WELLS/PROJECT NO. 1-22 LEASE Ottley COUNTY/PARISH Osage STATE KS CITY _____ DATE 6-30-18 OWNER _____
 2. Ness City, KS TICKET TYPE Drill CONTRACTOR Drill Drilling RIG NAME/NO. Rig # 1 SHIPPED VIA OT DELIVERED TO location ORDER NO. _____
 3. WELL TYPE _____ WELL CATEGORY _____ JOB PURPOSE development WELL PERMIT NO. _____
 4. REFERRAL LOCATION _____ INVOICE INSTRUCTIONS long string WELL LOCATION _____

| PRICE REFERENCE | SECONDARY REFERENCE/ PART NUMBER | ACCOUNTING | | | DESCRIPTION | QTY. | UM | QTY. | UM | UNIT PRICE | AMOUNT |
|-----------------|----------------------------------|------------|------|----|---------------------------|------|-----|------|----|------------|--------|
| | | LOC | ACCT | DF | | | | | | | |
| 575 | | 1 | | | MILEAGE TRK # 111 | 80 | mi | | | 5 | 400 |
| 578 | | 1 | | | Pump Charge - long string | 1 | ea | | | 1300 | 1300 |
| 290 | | 1 | | | D-Air | 2 | bar | | | 42 | 84 |
| 221 | | 1 | | | Liquid Hec | 2 | bar | | | 25 | 50 |
| 280 | | 1 | | | Flashed 21 | 500 | bar | | | 3 | 1750 |
| 325 | | 2 | | | Standard Cement | 200 | sls | | | 13 | 2600 |
| 284 | | 2 | | | Cement | 9 | sls | | | 35 | 315 |
| 283 | | 2 | | | Salt | 1100 | lbs | | | 20 | 220 |
| 292 | | 2 | | | Harad-332 | 200 | lbs | | | 8 | 1600 |
| 272 | | 2 | | | Coal Sand | 400 | lbs | | | 85 | 1190 |
| 276 | | 2 | | | Flarels | 25 | lbs | | | 2 | 50 |

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: [Signature] 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 SATISFACTORILY? ARE YOU SATISFIED WITH OUR SERVICE? CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL: P.1 9571 50
P.2 1312 45
TOTAL 10883 95

TOTAL: 115291.67

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

SWIFT OPERATOR: _____ APPROVAL: _____

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 6-30-18 PAGE NO.

CUSTOMER Shakespeare WELL NO. 1-22 LEASE OTHY JOB TYPE Long String TICKET NO. 27333

| CHART NO. | TIME | RATE (BPM) | VOLUME (BBL) (GAL) | PUMPS | | PRESSURE (PSI) | | DESCRIPTION OF OPERATION AND MATERIALS |
|-----------|------|------------|--------------------|-------|---|----------------|--------|---|
| | | | | T | C | TUBING | CASING | |
| | 900 | | | | | | | On location |
| | | | | | | | | csg- 5 1/2 LTD- 4482 RTD- 4481 Set e 4482 Shoe- 42.40 Port Collar - 2140 |
| | 1100 | | | | | | | Co Ran Float Equip Circ on Bottom |
| | 1200 | 2.5 | 7 | | | 0 | | plug Rat hole - 30 sks |
| | 1205 | 2.5 | 5 | | | 0 | | plug mouse hole - 20 sks |
| | 1210 | 5 | 10 | | | 400 | | Pump Kel spacer |
| | | 5 | 12 | | | 400 | | pump Flocheck 21 - 500 bar |
| | | 5 | 5 | | | 400 | | Pump Kel spacer |
| | 1220 | 5 | 36 | | | 400 | | pump CMT - 150 sks EA:2 e 15.5pps |
| | 1235 | | | | | | | Drop plug - wash P&L |
| | 1245 | 7.5 | 0 | | | 200 | | Start Disp |
| | 1300 | 5.5 | 106 | | | 900 | | land plug 1 ft psi - 900 # land psi 1500 # |
| | | | | | | | | Thanks David Zmet & Kirby |



| | | | |
|----------------|---------|--------|--------------|
| PAGE | CUST NO | YARD # | INVOICE DATE |
| 1 of 1 | 1003782 | 1718 | 06/20/2018 |
| INVOICE NUMBER | | | |
| 92736877 | | | |

Pratt (620) 672-1201
 B SHAKESPEARE OIL COMPANY
 I 202 W MAIN ST
 L SALEM
 L IL US 62881
 T
 O ATTN: ACCOUNTS PAYABLE

J LEASE NAME Ottley 1-22
 O LOCATION
 B COUNTY Logan
 S STATE KS
 I JOB DESCRIPTION Cement-New Well Casing/Pi
 T JOB CONTACT
 E

INT

| JOB # | EQUIPMENT # | PURCHASE ORDER NO. | TERMS | DUE DATE |
|----------|-------------|--------------------|---------------|------------|
| 41114823 | 19842 | | Net - 30 days | 07/20/2018 |

| | QTY | U of M | UNIT PRICE | INVOICE AMOUNT |
|---|--------|--------|------------|----------------|
| <i>For Service Dates: 06/19/2018 to 06/19/2018</i> | | | | |
| 0041114823 | | | | |
| 171815776L Cement-New Well Casing/Pi 06/19/2018 <u>Cement/Surface Casing</u> | | | | |
| Premium Plus Cement | 165.00 | EA | 8.15 | 1,344.75 T |
| Calcium Chloride | 312.00 | EA | 0.53 | 165.36 T |
| Celloflake | 42.00 | EA | 1.85 | 77.70 T |
| "Top Rubber Cmt Plug, 8 5/8"" | 1.00 | EA | 225.00 | 225.00 |
| Heavy Equipment Mileage | 200.00 | MI | 3.75 | 750.00 |
| Blending & Mixing Service Charge | 165.00 | BAG | 0.70 | 115.50 |
| Proppant & Bulk Del. Chgs., per ton mil | 780.00 | EA | 1.25 | 975.00 |
| Depth Charge; 0-500' | 1.00 | EA | 500.00 | 500.00 |
| Plug Container Util. Chg. | 1.00 | EA | 125.00 | 125.00 |
| "Unit Mileage Chg (PU, cars one way)" | 100.00 | MI | 2.25 | 225.00 |
| "Service Supervisor, first 8 hrs on loc. | 1.00 | EA | 87.50 | 87.50 |
| Cement Data Acquisition Monitor | 1.00 | EA | 275.00 | 275.00 |

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| | | | |
|---------------------------|-------------------------------|---------------|----------|
| PLEASE REMIT TO: | SEND OTHER CORRESPONDENCE TO: | SUB TOTAL | 4,865.81 |
| BASIC ENERGY SERVICES, LP | BASIC ENERGY SERVICES, LP | TAX | 127.02 |
| PO BOX 841903 | 801 CHERRY ST, STE 2100 | INVOICE TOTAL | 4,992.83 |
| DALLAS, TX 75284-1903 | FORT WORTH, TX 76102 | | |

DW

ELEVATIONS
KB 2734'
GL 2722'

COMPANY & WELL Shakespeare #1-22 Otley
LOCATION 800' FSL, 525' FEL, SE/4
SEC 22 TWPSP 14s RGE 32w
COUNTY Logan STATE Kansas

Tim J. Lauer

Petroleum Geologist

Office 316.832.0530
Cell 316.253.1275

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

| | |
|---|---|
| COMPANY <i>Shakespeare Oil Company, Inc</i> | ELEVATIONS KB 2734' |
| LEASE # 1-22 Otley | DF |
| FIELD APPX E/2 SE/4 SE/4 | GL 2722' |
| LOCATION 800' FSL, 525' FEL | Measurements Are All From Kelly Bure |
| SEC 22 TWPSP 14s RGE 32w | CASING CONDUCTOR SURFACE 8-5/8" @ 267' |
| COUNTY Logan STATE Kansas | PRODUCTION |
| CONTRACTOR Duke Drilling Rig #1 | ELECTRICAL SURVEYS Weatherford Sonic, DCPM, DIL, ML Engineer: Adam Sill |
| SPUD 6-18-2018 COMP 6-30-2018 | |
| RTD 4480' LTD 4480'? | |
| MUD UP 3440' TYPE MUD Chemical | |
| SAMPLES SAVED FROM 3500' TO RTD | |
| DRILLING TIME KEPT FROM 3500' TO RTD | |
| SAMPLES EXAMINED FROM 3500' TO RTD | |
| GEOLOGICAL SUPERVISION FROM 3635' TO RTD | |
| GEOLOGIST ON WELL: <u>Tim J. Lauer</u> | |
| FORMATION TOPS | ELECTRIC LOG |
| | SAMPLE LOG |

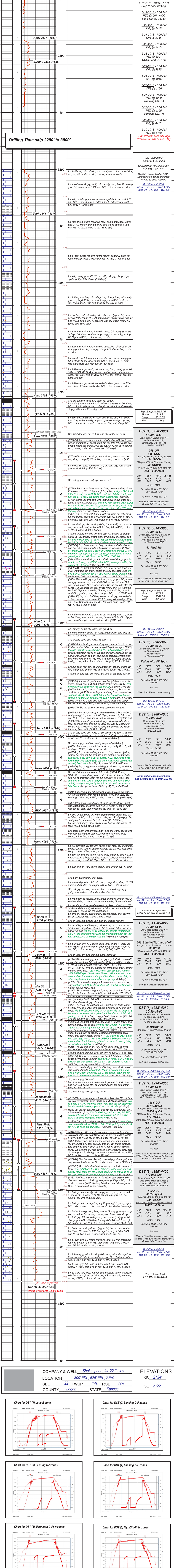
Anhydrite
Heebner
Lansing
Stark
Marmaton
Fort Scott
Cherokee Shale
Johnson Zone
Mississippian
Total Depth

REMARKS *Due to drill stem test results, and log evaluation, operator elected to run production casing to further test the location.*

Respectfully submitted,

Tim J. Lauer
6/30/2018

API: 15-109-21,552-00-00



COMPANY & WELL Shakespeare #1-22 Otley
LOCATION 800' FSL, 525' FEL, SE/4
SEC 22 TWPSP 14s RGE 32w
COUNTY Logan STATE Kansas

ELEVATIONS
KB 2734'
GL 2722'





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co, Inc
 202 W Main St
 Salem IL
 62881
 ATTN: Tim Lauer

22-14s-32w Logan Co KS

Ottley 1-22

Job Ticket: 63612

DST#: 1

Test Start: 2018.06.23 @ 02:20:15

GENERAL INFORMATION:

Formation: **Lansing B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:55:45

Time Test Ended: 09:21:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Mike Roberts

Unit No: 81

Interval: 3756.00 ft (KB) To 3801.00 ft (KB) (TVD)

Reference Elevations: 2734.00 ft (KB)

Total Depth: 3801.00 ft (KB) (TVD)

2724.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8647

Inside

Press@RunDepth: 155.75 psig @ 3796.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.06.23

End Date:

2018.06.23

Last Calib.:

2018.06.23

Start Time: 02:20:15

End Time:

09:21:45

Time On Btm:

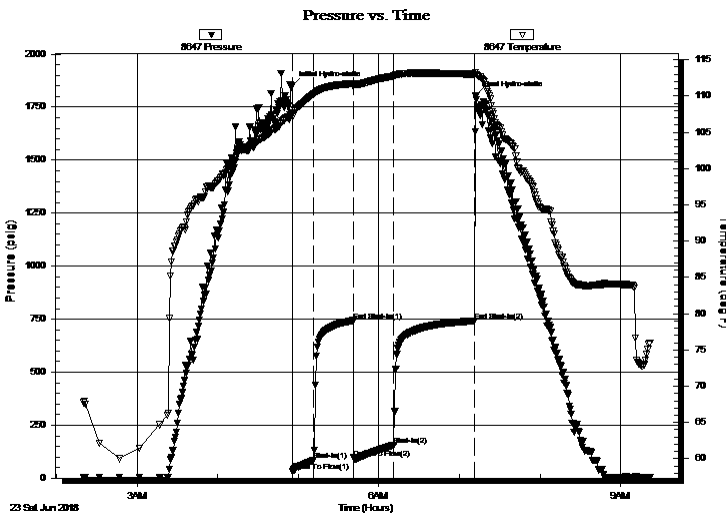
2018.06.23 @ 04:55:30

Time Off Btm:

2018.06.23 @ 07:12:15

TEST COMMENT: IF: Built to 22" blow BOB in 8 min (Ipro)
 IS: No return blow
 FF: Built to 37" blow BOB in 9 min (Ipro)
 FS: Return blow 1 1/2"

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1851.78 | 107.69 | Initial Hydro-static |
| 1 | 33.46 | 107.09 | Open To Flow (1) |
| 16 | 83.85 | 110.29 | Shut-In(1) |
| 46 | 742.61 | 111.71 | End Shut-In(1) |
| 46 | 95.88 | 111.35 | Open To Flow (2) |
| 76 | 155.75 | 112.76 | Shut-In(2) |
| 136 | 741.81 | 113.00 | End Shut-In(2) |
| 137 | 1802.97 | 113.22 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 0.00 | GIP= 248 | 0.00 |
| 186.00 | gco 5%g 95%o | 2.61 |
| 124.00 | gcom 5%g 10%o 85%m | 1.74 |
| 62.00 | gcw m 5%g 45%w 50%m | 0.87 |
| | | |
| | | |

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co, Inc

22-14s-32w Logan Co KS

202 W Main St
Salem IL
62881

Ottley 1-22

Job Ticket: 63612

DST#: 1

ATTN: Tim Lauer

Test Start: 2018.06.23 @ 02:20:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

16000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.96 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbf |
|--------------|---------------------|---------------|
| 0.00 | GIP= 248 | 0.000 |
| 186.00 | gco 5%g 95%o | 2.609 |
| 124.00 | gcom 5%g 10%o 85%m | 1.739 |
| 62.00 | gcw m 5%g 45%w 50%m | 0.870 |

Total Length: 372.00 ft Total Volume: 5.218 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

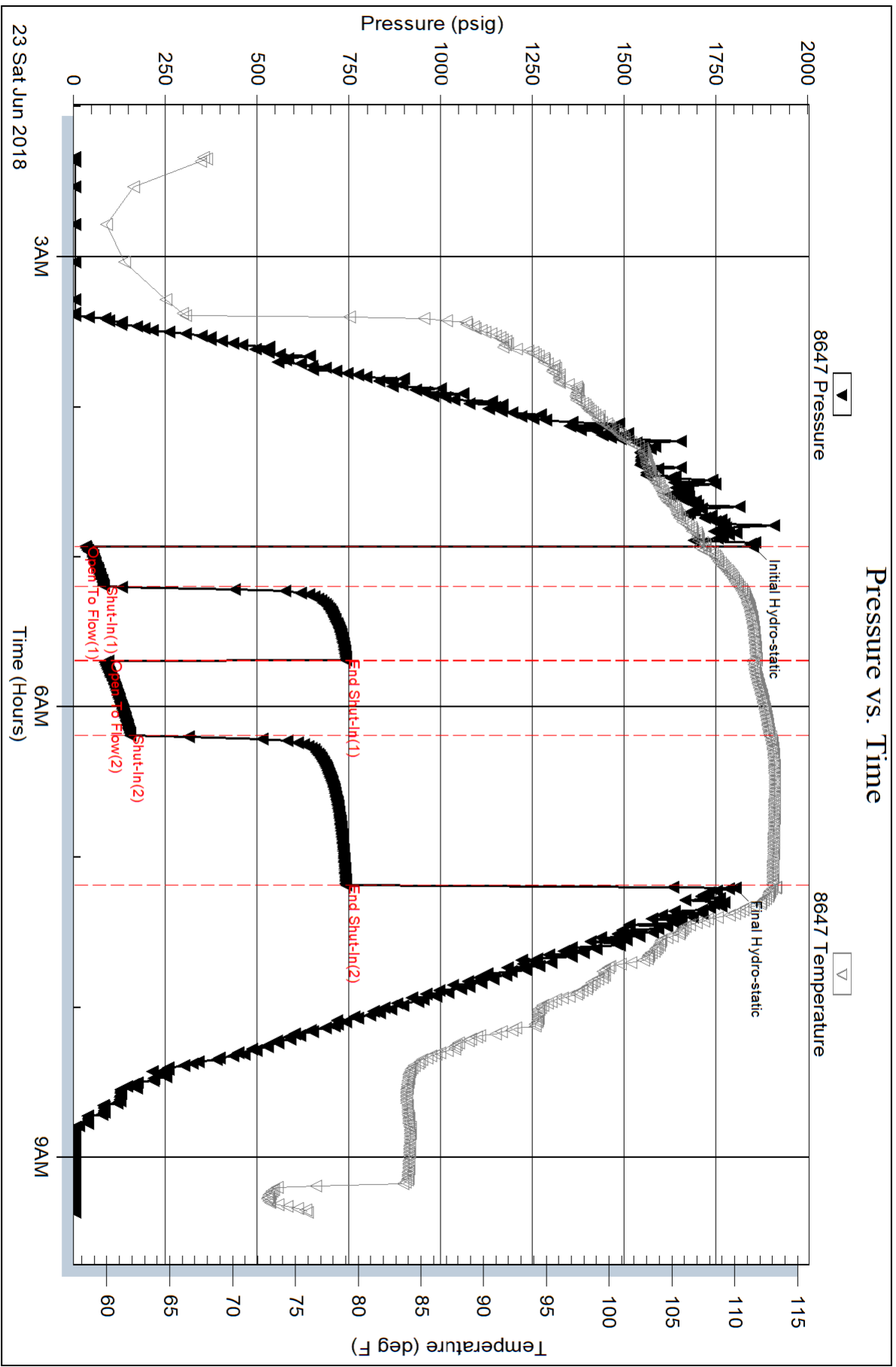
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API= 33@ 60 corrected to 33

RW= .461@ 71.2 = 16,000 ppm

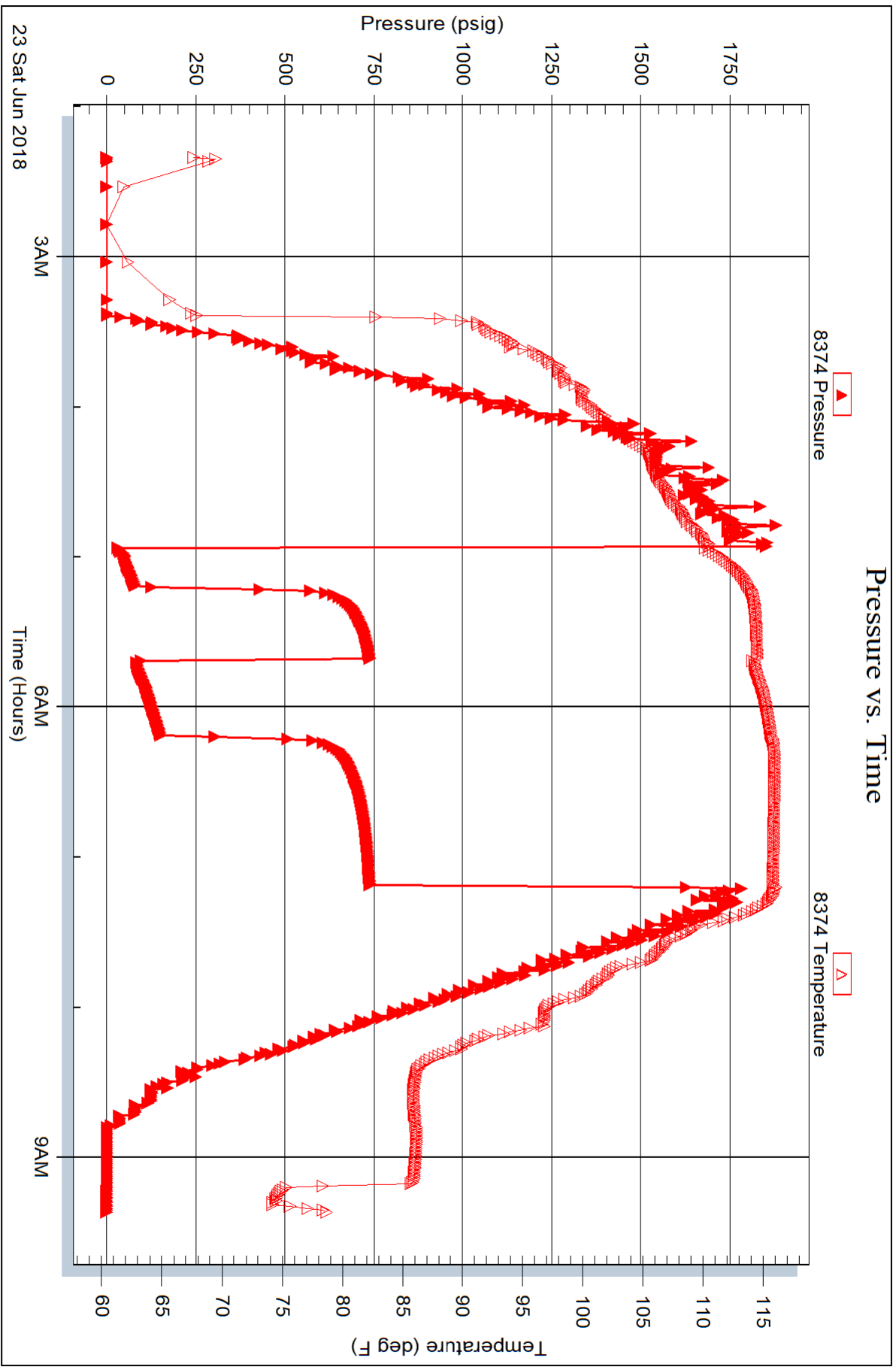


Serial #: 8374

Outside Shakespeare Oil Co, Inc

Ottley 1-122

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 63612

Printed: 2018.06.23 @ 14:37:02



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co, Inc
 202 W Main St
 Salem IL
 62881
 ATTN: Tim Lauer

22-14s-32w Logan Co KS

Ottley 1-22

Job Ticket: 63613

DST#: 2

Test Start: 2018.06.23 @ 20:39:15

GENERAL INFORMATION:

Formation: **D-F**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 22:28:45
 Tester: Mike Roberts
 Time Test Ended: 02:37:30
 Unit No: 81
 Interval: **3814.00 ft (KB) To 3858.00 ft (KB) (TVD)**
 Reference Elevations: 2734.00 ft (KB)
 Total Depth: 3858.00 ft (KB) (TVD)
 2724.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 10.00 ft

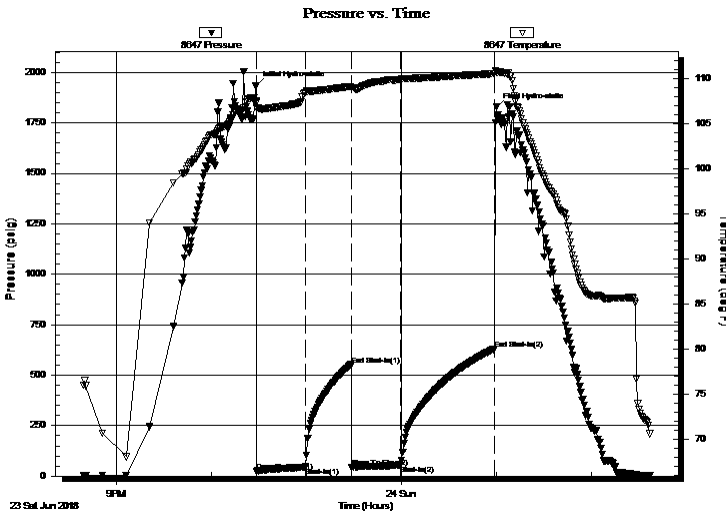
Serial #: 8647

Inside

Press@RunDepth: 53.81 psig @ 3853.00 ft (KB)
 Capacity: 8000.00 psig
 Start Date: 2018.06.23
 End Date: 2018.06.24
 Last Calib.: 2018.06.24
 Start Time: 20:39:15
 End Time: 02:37:30
 Time On Btm: 2018.06.23 @ 22:28:30
 Time Off Btm: 2018.06.24 @ 01:00:00

TEST COMMENT: IF: Built to 2 3/4" blow
 IS: No return blow
 FF: Built to 1 1/5" blow
 FS: No return blow

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1933.45 | 107.40 | Initial Hydro-static |
| 1 | 24.39 | 106.77 | Open To Flow (1) |
| 31 | 43.48 | 108.45 | Shut-In(1) |
| 60 | 550.46 | 109.13 | End Shut-In(1) |
| 60 | 44.25 | 108.97 | Open To Flow (2) |
| 91 | 53.81 | 109.93 | Shut-In(2) |
| 151 | 631.05 | 110.55 | End Shut-In(2) |
| 152 | 1827.14 | 110.74 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 62.00 | mud 100% m | 0.87 |
| | | |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co, Inc

22-14s-32w Logan Co KS

202 W Main St
Salem IL
62881

Ottley 1-22

Job Ticket: 63613

DST#: 2

ATTN: Tim Lauer

Test Start: 2018.06.23 @ 20:39:15

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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 62.00 | mud 100%m | 0.870 |

Total Length: 62.00 ft Total Volume: 0.870 bbl

Num Fluid Samples: 0

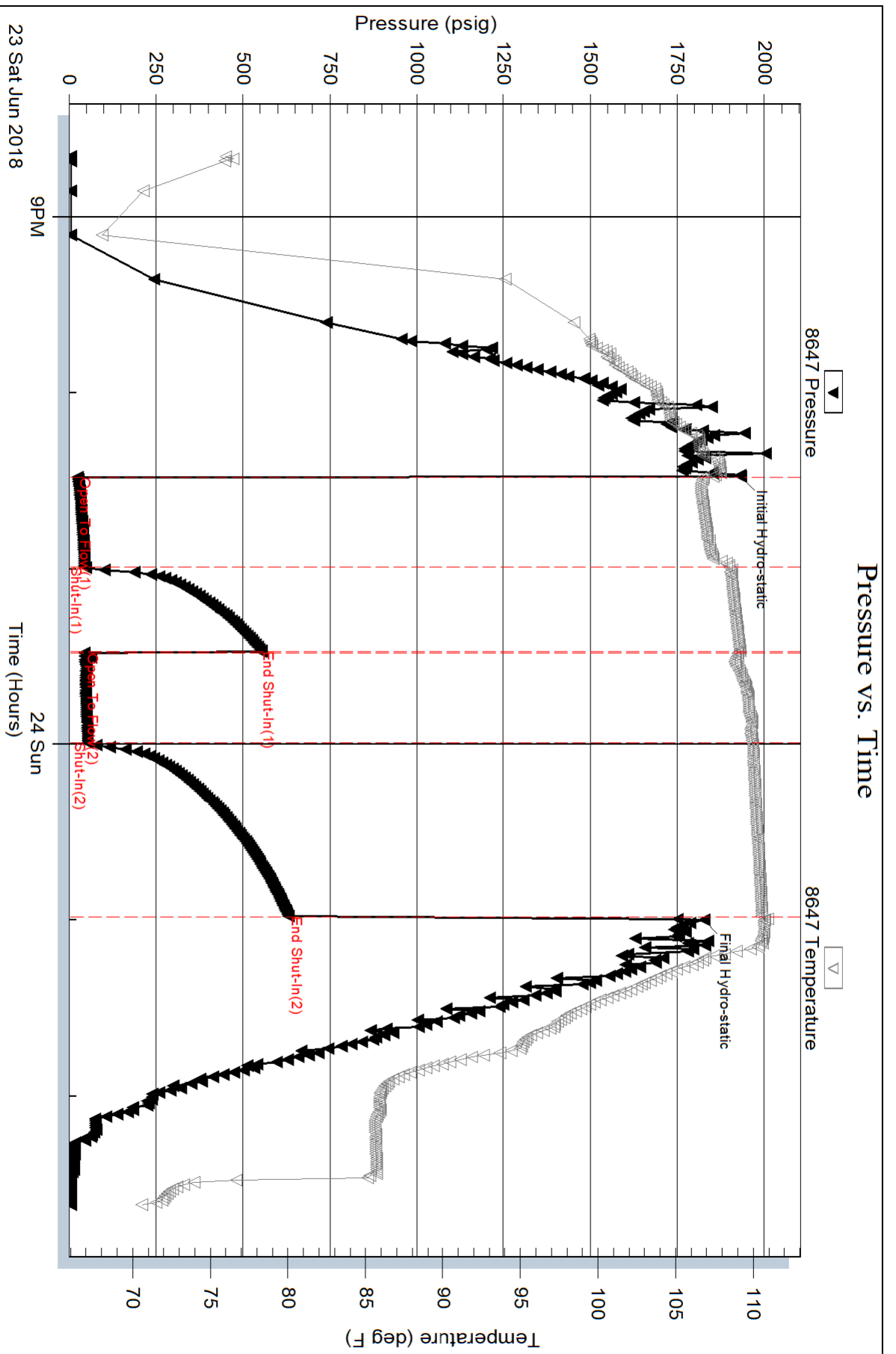
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co, Inc
 202 W Main St
 Salem IL
 62881
 ATTN: Tim Lauer

22-14s-32w Logan Co KS

Ottley 1-22

Job Ticket: 63614

DST#: 3

Test Start: 2018.06.24 @ 15:30:15

GENERAL INFORMATION:

Formation: **H-I**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 17:03:45
 Time Test Ended: 21:00:00
 Interval: **3896.00 ft (KB) To 3970.00 ft (KB) (TVD)**
 Total Depth: 3970.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Mike Roberts
 Unit No: 81
 Reference Elevations: 2734.00 ft (KB)
 2724.00 ft (CF)
 KB to GR/CF: 10.00 ft

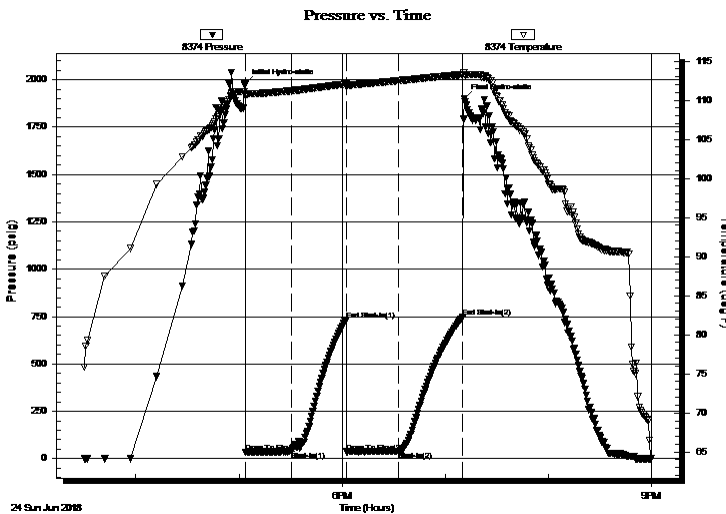
Serial #: 8374

Outside

Press@RunDepth: 37.36 psig @ 3934.00 ft (KB)
 Start Date: 2018.06.24 End Date: 2018.06.24
 Start Time: 15:30:15 End Time: 21:00:00
 Capacity: 8000.00 psig
 Last Calib.: 2018.06.24
 Time On Btm: 2018.06.24 @ 17:03:30
 Time Off Btm: 2018.06.24 @ 19:11:15

TEST COMMENT: IF: Built to 1/2" blow
 IS: No return blow
 FF: No blow
 FS: No return blow

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1976.87 | 111.09 | Initial Hydro-static |
| 1 | 35.03 | 110.51 | Open To Flow (1) |
| 27 | 40.90 | 111.20 | Shut-In(1) |
| 59 | 733.33 | 112.06 | End Shut-In(1) |
| 59 | 36.41 | 111.77 | Open To Flow (2) |
| 90 | 37.36 | 112.49 | Shut-In(2) |
| 127 | 748.59 | 113.28 | End Shut-In(2) |
| 128 | 1898.39 | 113.28 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------------|--------------|
| 5.00 | mud with oil spots 100% m | 0.07 |
| | | |
| | | |
| | | |

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co, Inc

22-14s-32w Logan Co KS

202 W Main St
Salem IL
62881

Ottley 1-22

Job Ticket: 63614

DST#: 3

ATTN: Tim Lauer

Test Start: 2018.06.24 @ 15:30:15

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: ppm

Viscosity: 59.00 sec/qt

Cushion Volume: bbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure: psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---------------------------|---------------|
| 5.00 | mud w ith oil spots 100%m | 0.070 |

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

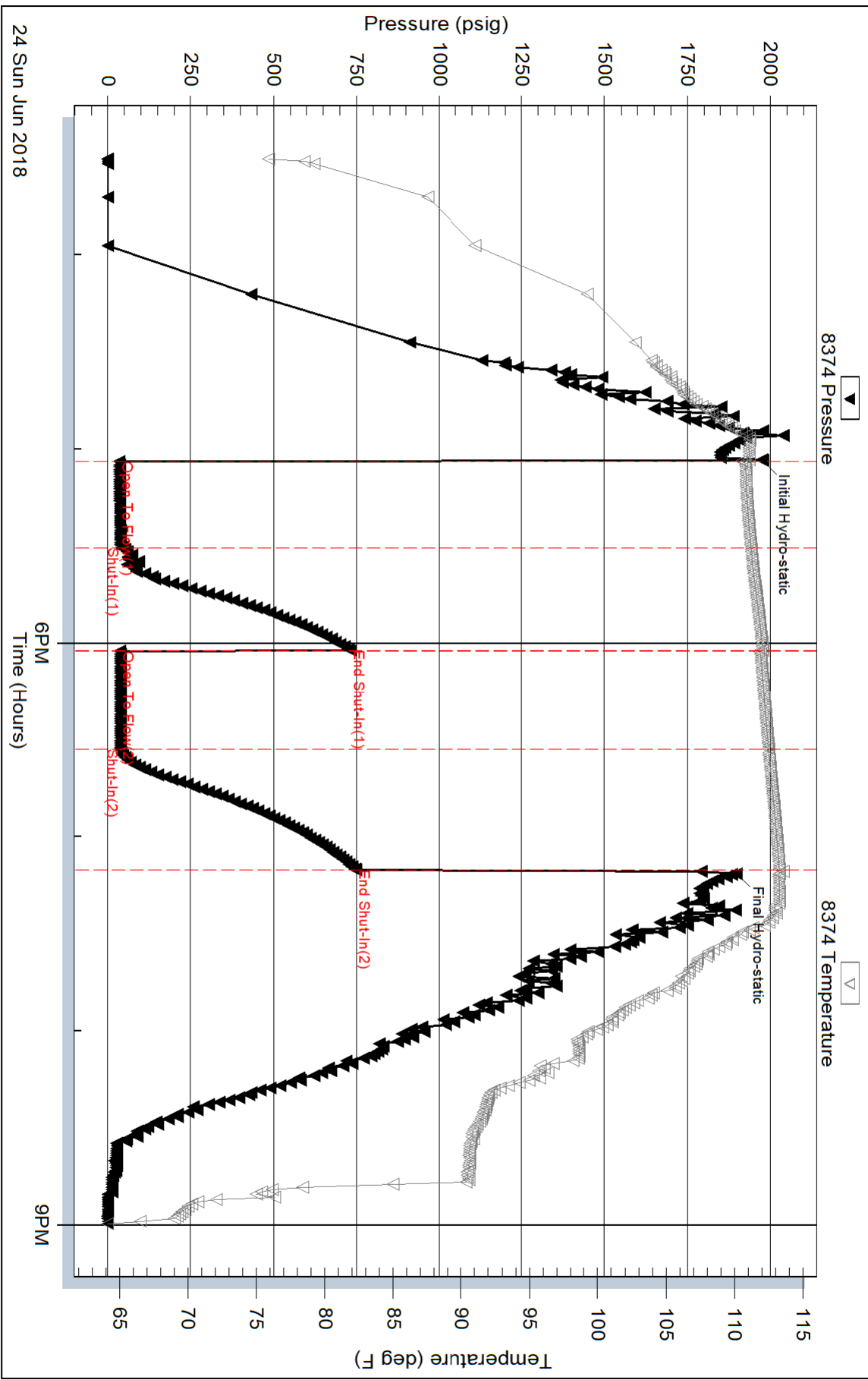
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



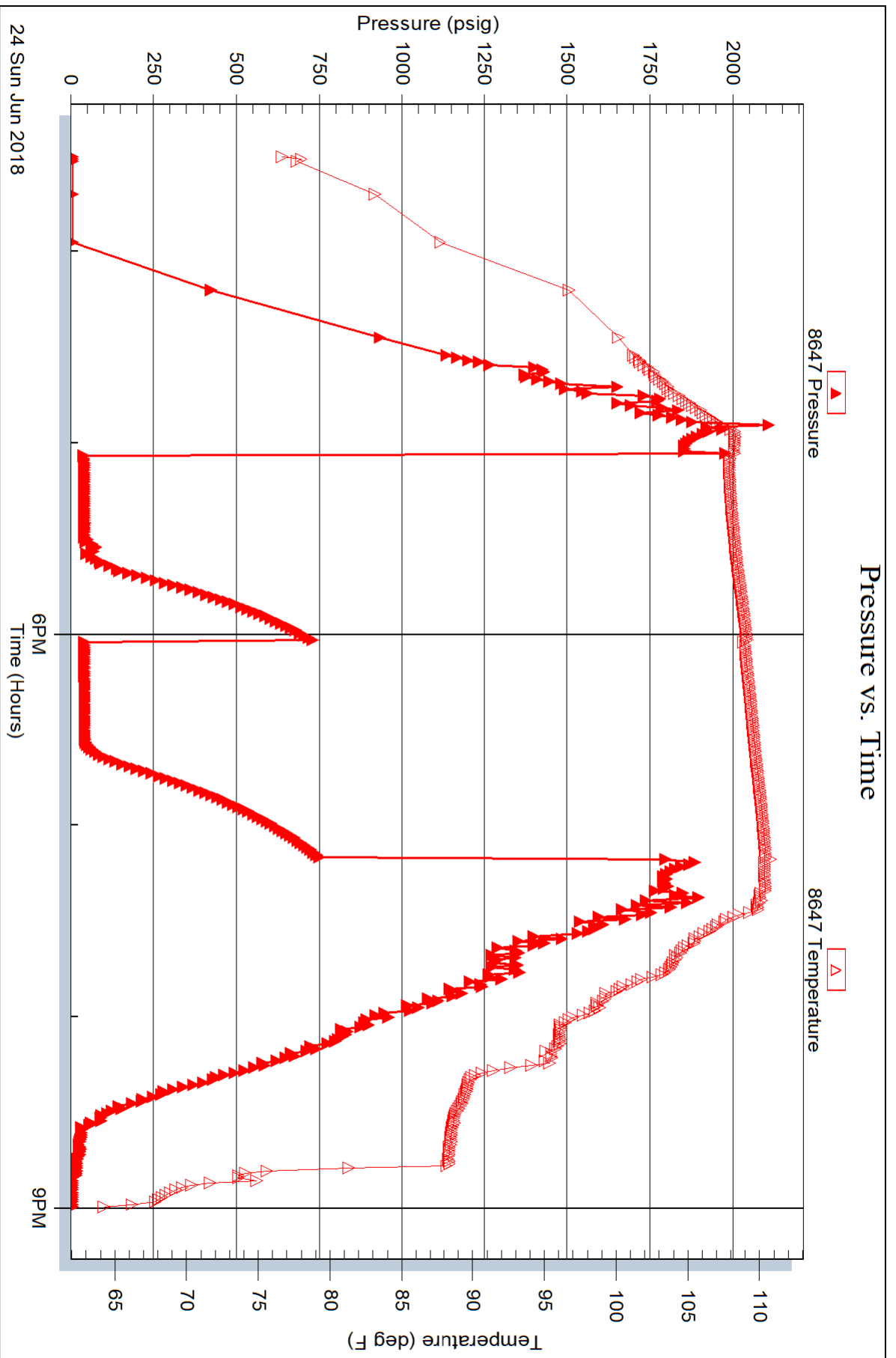
Serial #: 8647

Inside

Shakespeare Oil Co, Inc

Ottley 1-122

DST Test Number: 3





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co, Inc
 202 W Main St
 Salem IL
 62881
 ATTN: Tim Lauer

22-14s-32w Logan Co KS

Ottley 1-22

Job Ticket: 63615

DST#: 4

Test Start: 2018.06.25 @ 09:47:15

GENERAL INFORMATION:

Formation: **K-L**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:13:00
 Time Test Ended: 14:57:15
 Interval: **3988.00 ft (KB) To 4045.00 ft (KB) (TVD)**
 Total Depth: 4045.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Mike Roberts
 Unit No: 81
 Reference Elevations: 2734.00 ft (KB)
 2724.00 ft (CF)
 KB to GR/CF: 10.00 ft

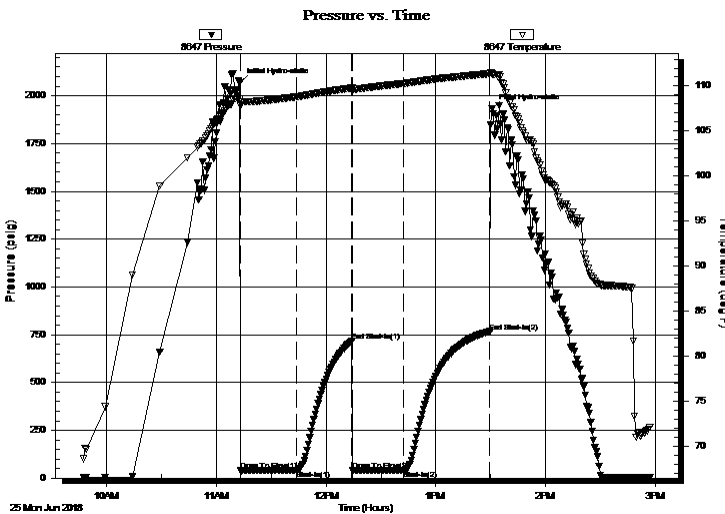
Serial #: 8647

Inside

Press@RunDepth: 40.91 psig @ 4008.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2018.06.25 End Date: 2018.06.25 Last Calib.: 2018.06.25
 Start Time: 09:47:15 End Time: 14:57:15 Time On Btm: 2018.06.25 @ 11:12:45
 Time Off Btm: 2018.06.25 @ 13:30:45

TEST COMMENT: IF: Built to 1/2" blow
 IS: No return blow
 FF: No blow
 FS: No return blow

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2067.90 | 108.55 | Initial Hydro-static |
| 1 | 38.59 | 107.77 | Open To Flow (1) |
| 31 | 39.69 | 108.81 | Shut-In(1) |
| 62 | 717.10 | 109.77 | End Shut-In(1) |
| 62 | 39.64 | 109.52 | Open To Flow (2) |
| 90 | 40.91 | 110.29 | Shut-In(2) |
| 137 | 762.80 | 111.37 | End Shut-In(2) |
| 138 | 1931.02 | 111.31 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 5.00 | mud 100%m | 0.07 |
| | | |
| | | |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co, Inc

22-14s-32w Logan Co KS

202 W Main St
Salem IL
62881

Ottley 1-22

Job Ticket: 63615

DST#: 4

ATTN: Tim Lauer

Test Start: 2018.06.25 @ 09:47:15

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 5.00 | mud 100%m | 0.070 |

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

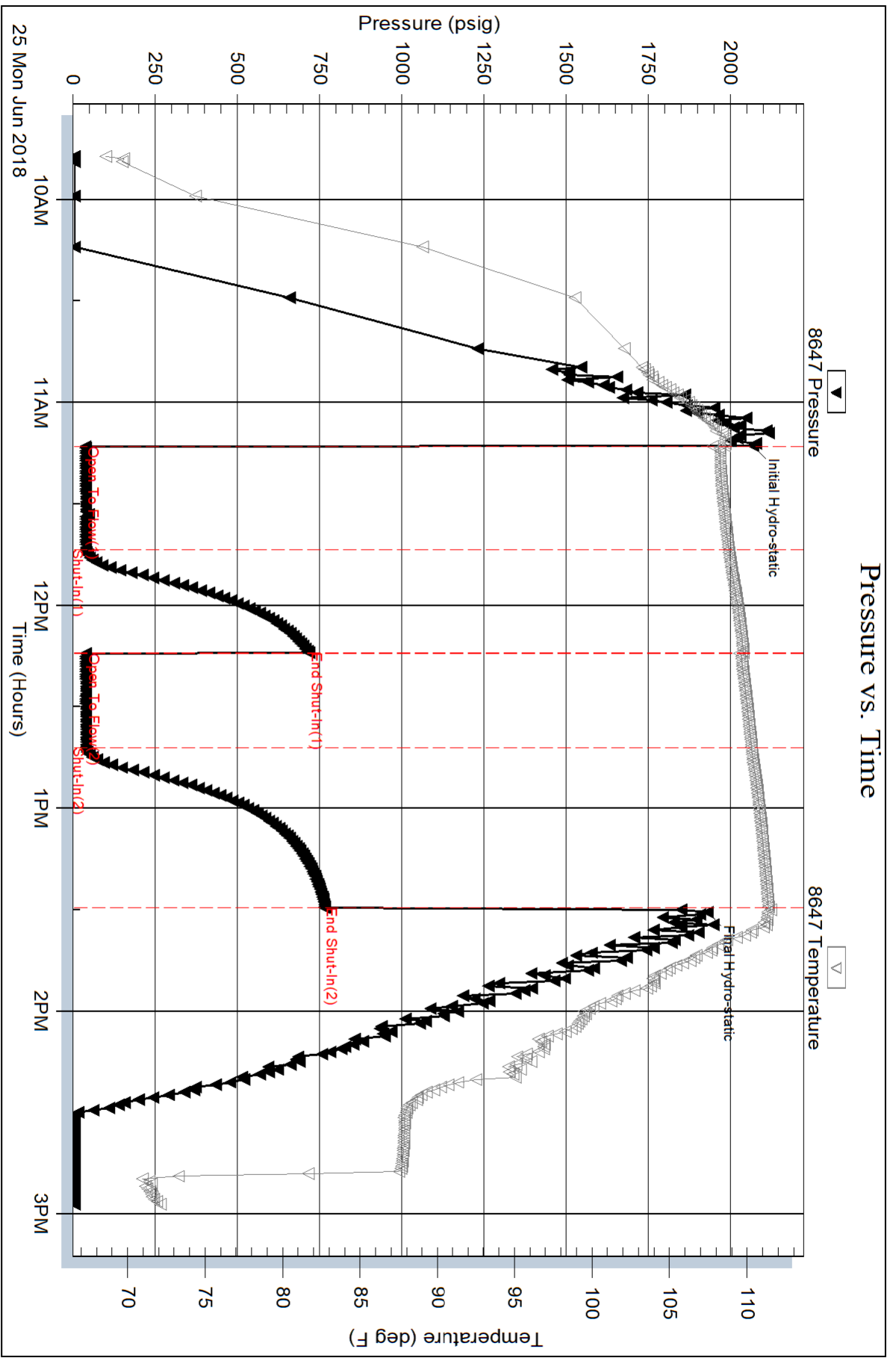
Num Gas Bombs: 0

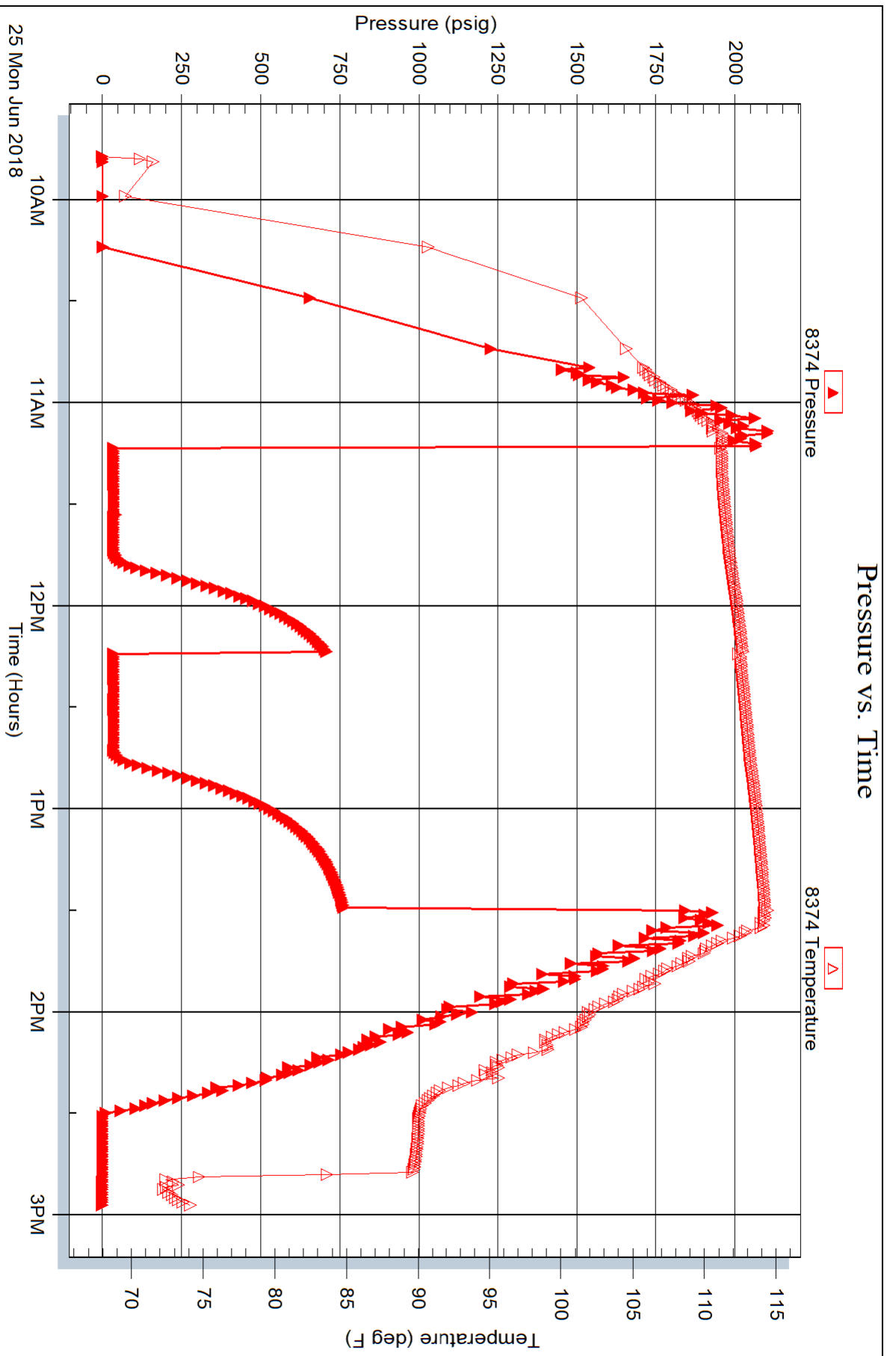
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co, Inc

22-14s-32w Logan Co KS

202 W Main St
Salem IL
62881

Ottley 1-22

Job Ticket: 63616

DST#: 5

ATTN: Tim Lauer

Test Start: 2018.06.26 @ 14:55:15

GENERAL INFORMATION:

Formation: **Marm C- Pawnee**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 16:23:15 Tester: Mike Roberts
 Time Test Ended: 21:31:30 Unit No: 81
 Interval: **4150.00 ft (KB) To 4227.00 ft (KB) (TVD)** Reference Elevations: 2734.00 ft (KB)
 Total Depth: 4227.00 ft (KB) (TVD) 2724.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

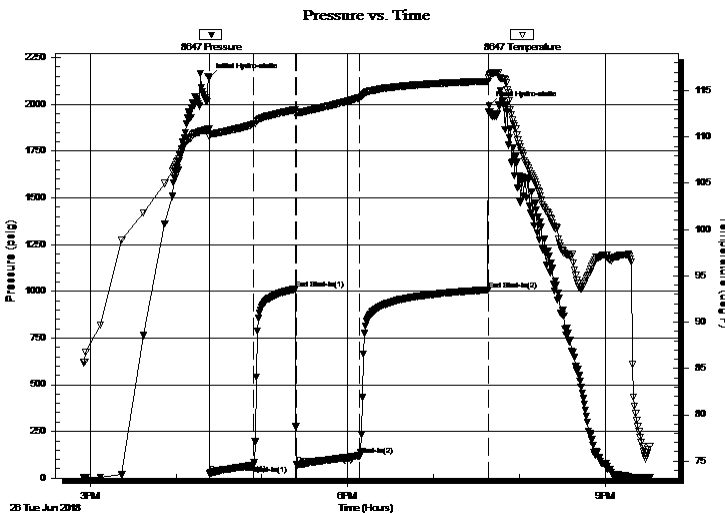
Serial #: 8647

Inside

Press@RunDepth: 120.08 psig @ 4222.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2018.06.26 End Date: 2018.06.26 Last Calib.: 2018.06.26
 Start Time: 14:55:15 End Time: 21:31:30 Time On Btm: 2018.06.26 @ 16:23:00
 Time Off Btm: 2018.06.26 @ 19:39:00

TEST COMMENT: IF: Built to 8" blow
 IS: No return blow
 FF: Built to 8" blow
 FS: No return blow

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2144.64 | 110.88 | Initial Hydro-static |
| 1 | 25.73 | 110.05 | Open To Flow (1) |
| 32 | 69.36 | 111.38 | Shut-In(1) |
| 61 | 1011.79 | 112.94 | End Shut-In(1) |
| 61 | 73.11 | 112.68 | Open To Flow (2) |
| 106 | 120.08 | 114.25 | Shut-In(2) |
| 196 | 1007.70 | 116.03 | End Shut-In(2) |
| 196 | 1994.56 | 116.59 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------------------------|--------------|
| 206.00 | w cm with trace of oil 2% w 98%w | 2.89 |
| 62.00 | w cm 10%w 90%m | 0.87 |
| | | |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co, Inc

22-14s-32w Logan Co KS

202 W Main St
Salem IL
62881

Ottley 1-22

Job Ticket: 63616

DST#: 5

ATTN: Tim Lauer

Test Start: 2018.06.26 @ 14:55:15

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:

16500 ppm

Viscosity: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.97 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|----------------------------------|---------------|
| 206.00 | w cm with trace of oil 2% w 98%w | 2.890 |
| 62.00 | w cm 10%w 90%m | 0.870 |

Total Length: 268.00 ft Total Volume: 3.760 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

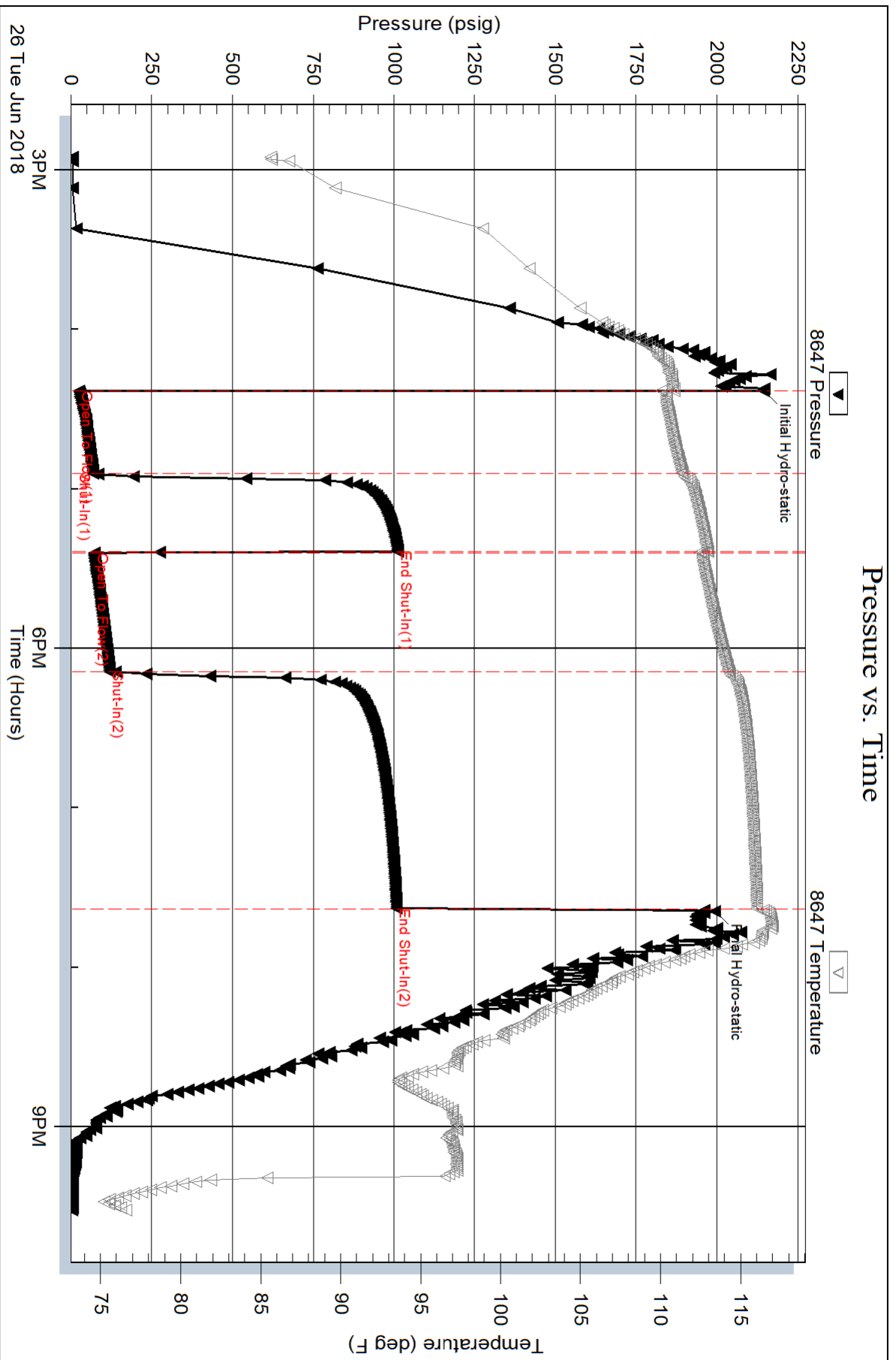
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW= .468@ 74.3= 16,500 ppm

Pressure vs. Time

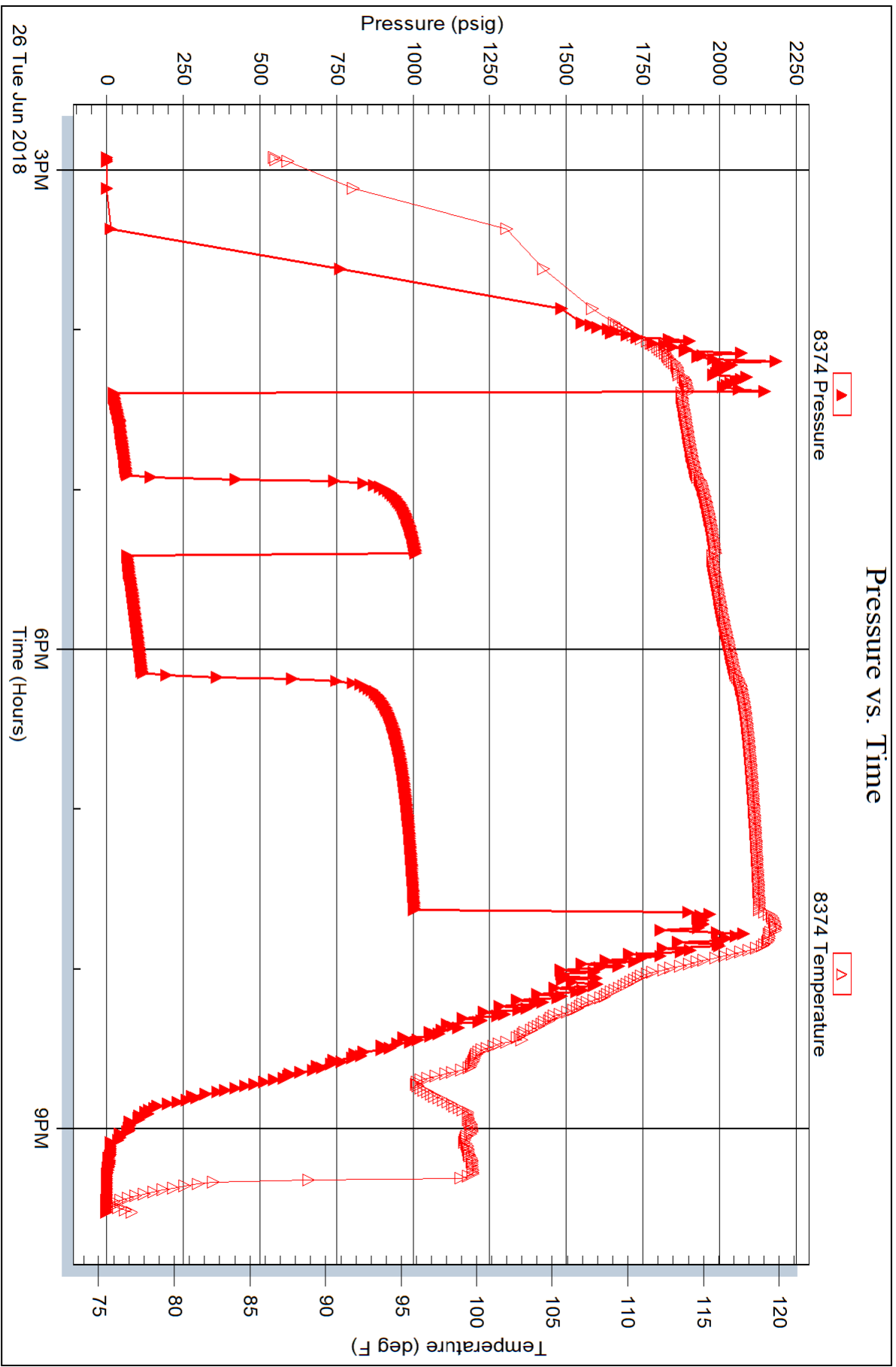


Serial #: 8374

Outside Shakespeare Oil Co, Inc

Ottley 1-122

DST Test Number: 5





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co, Inc

22-14s-32w Logan Co KS

202 W Main St
Salem IL 62881

Ottley 1-22

Job Ticket: 63617

DST#: 6

ATTN: Tim Lauer

Test Start: 2018.06.27 @ 08:29:23

GENERAL INFORMATION:

Formation: **Myrick St-Ft.Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:57:38

Time Test Ended: 14:36:53

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4228.00 ft (KB) To 4280.00 ft (KB) (TVD)

Reference Elevations: 2734.00 ft (KB)

Total Depth: 4280.00 ft (KB) (TVD)

2724.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8374 Outside

Press@RunDepth: 69.27 psig @ 4265.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.06.27

End Date:

2018.06.27

Last Calib.:

2018.06.27

Start Time: 08:29:23

End Time:

14:36:53

Time On Btm:

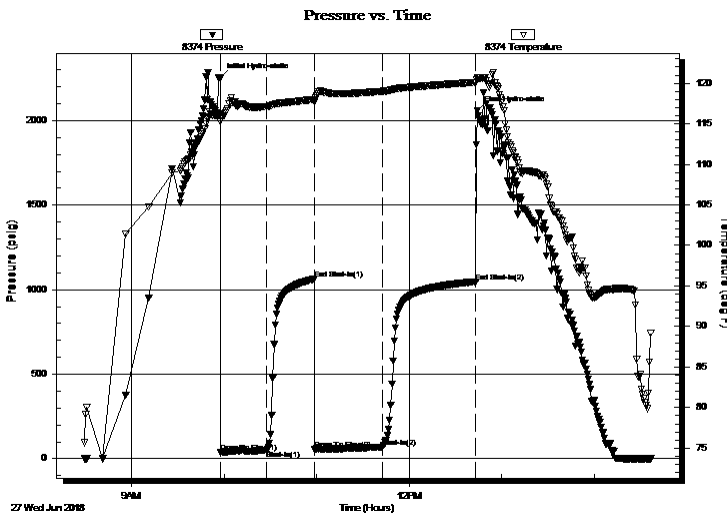
2018.06.27 @ 09:57:23

Time Off Btm:

2018.06.27 @ 12:44:23

TEST COMMENT: IF: Built to 2 1/2" blow
IS: No return blow
FF: Built to 2 1/2" blow
FS: No return blow

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2251.56 | 116.28 | Initial Hydro-static |
| 1 | 36.28 | 115.24 | Open To Flow (1) |
| 31 | 49.96 | 117.13 | Shut-In(1) |
| 61 | 1062.75 | 118.01 | End Shut-In(1) |
| 62 | 56.64 | 117.68 | Open To Flow (2) |
| 106 | 69.27 | 119.00 | Shut-In(2) |
| 166 | 1047.51 | 120.12 | End Shut-In(2) |
| 167 | 2058.48 | 120.64 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|--------------------|--------------|
| 80.00 | ocw m 1%o 2%w 97%m | 1.12 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co, Inc

22-14s-32w Logan Co KS

202 W Main St
Salem IL 62881

Ottley 1-22

Job Ticket: 63617

DST#: 6

ATTN: Tim Lauer

Test Start: 2018.06.27 @ 08:29:23

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:

ppm

Viscosity: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|--------------------|---------------|
| 80.00 | ocw m 1%o 2%w 97%m | 1.122 |

Total Length: 80.00 ft Total Volume: 1.122 bbl

Num Fluid Samples: 0

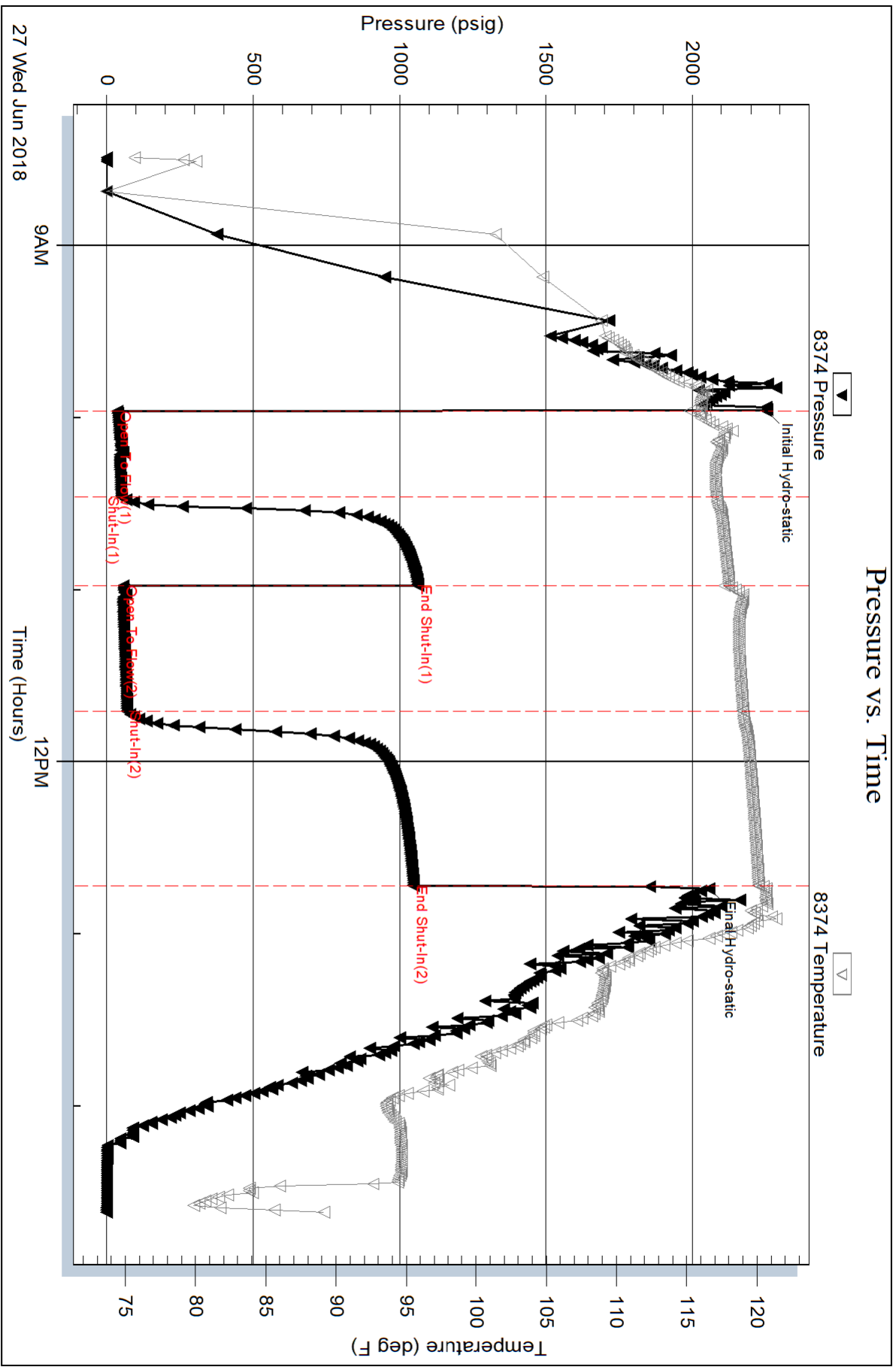
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .479@ 81.3= 17,500 ppm



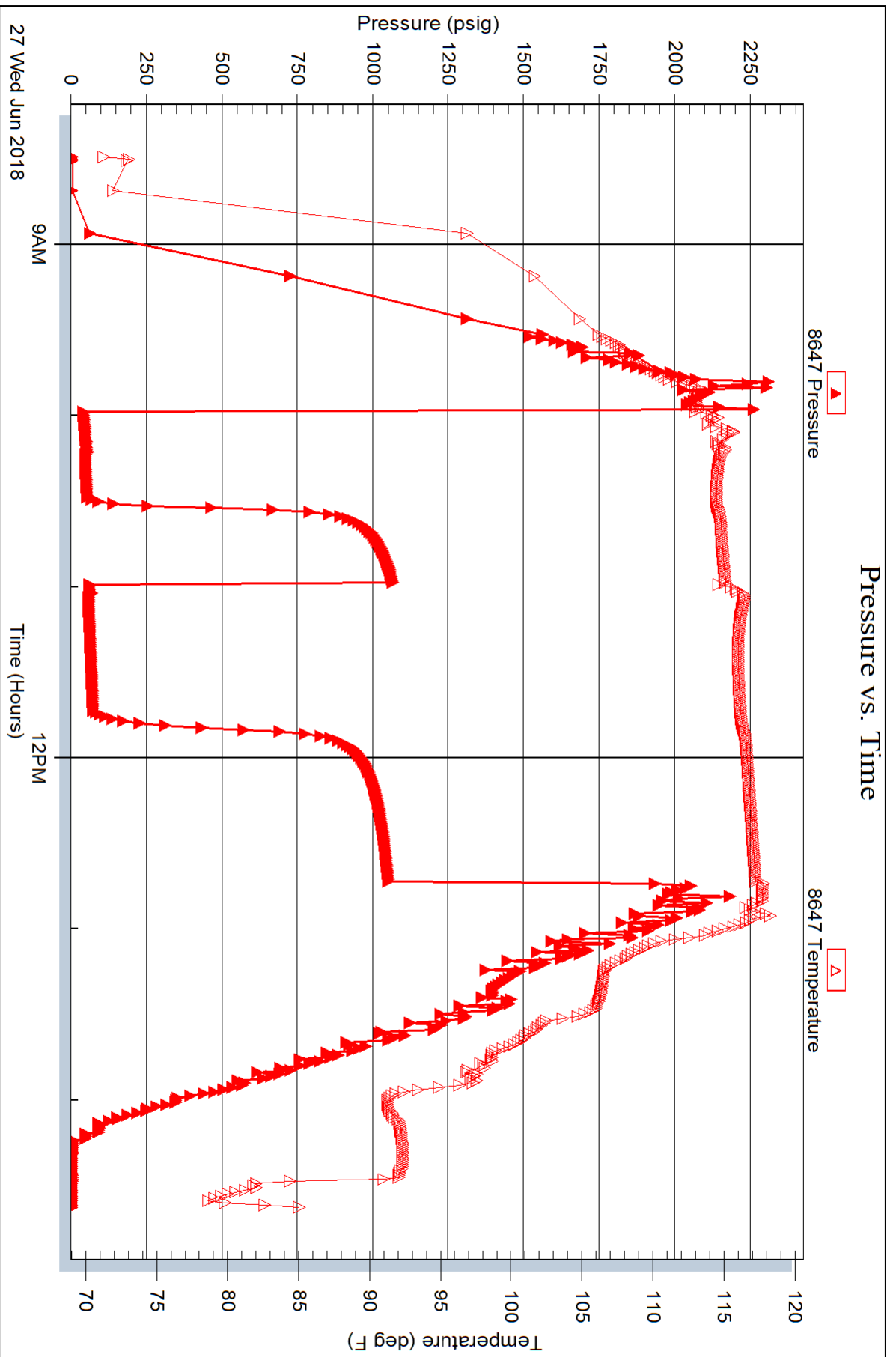
Serial #: 8647

Inside

Shakespeare Oil Co, Inc

Ottley 1-22

DST Test Number: 6





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co, Inc

22-14s-32w Logan Co KS

202 W Main St
Salem IL 62881

Ottley 1-22

Job Ticket: 63884

DST#: 7

ATTN: Tim Lauer

Test Start: 2018.06.28 @ 03:42:50

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:29:50

Time Test Ended: 11:11:20

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 79

Interval: 4294.00 ft (KB) To 4355.00 ft (KB) (TVD)

Reference Elevations: 2734.00 ft (KB)

Total Depth: 4355.00 ft (KB) (TVD)

2724.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8166 Outside

Press@RunDepth: 193.49 psig @ 4299.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.06.28

End Date:

2018.06.28

Last Calib.:

2018.06.28

Start Time: 03:42:55

End Time:

11:11:19

Time On Btm:

2018.06.28 @ 05:28:20

Time Off Btm:

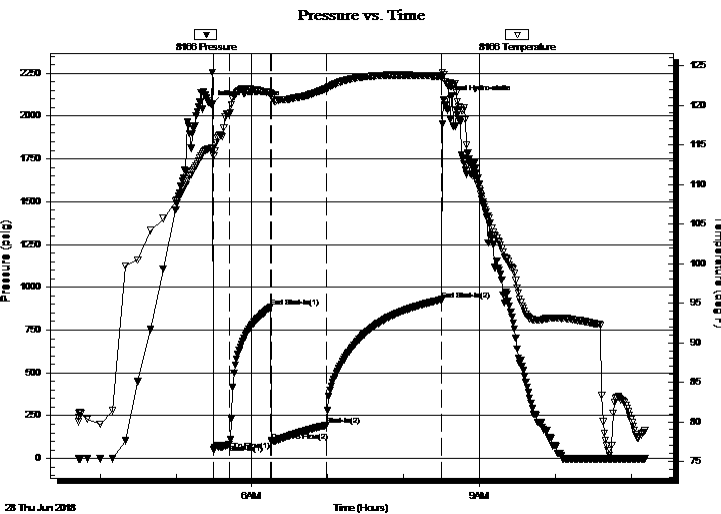
2018.06.28 @ 08:31:50

TEST COMMENT: IF: BOB in 3 min. 64"

IS: 4"

FF: BOB in 4 min. 118"

FS: BOB in 10 min. 34"



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2067.91 | 114.58 | Initial Hydro-static |
| 2 | 50.09 | 113.62 | Open To Flow (1) |
| 14 | 83.60 | 118.95 | Shut-In(1) |
| 47 | 883.72 | 121.57 | End Shut-In(1) |
| 47 | 102.95 | 121.22 | Open To Flow (2) |
| 91 | 193.49 | 122.07 | Shut-In(2) |
| 182 | 927.86 | 123.64 | End Shut-In(2) |
| 184 | 2094.45 | 123.85 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 124.00 | mcgo 40%g 30%o 30%m | 1.74 |
| 124.00 | go 30%g 70%o | 1.74 |
| 217.00 | go 20%g 80%o | 3.04 |
| 0.00 | 1581 GIP | 0.00 |
| | | |
| | | |

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co, Inc

22-14s-32w Logan Co KS

202 W Main St
Salem IL 62881

Ottley 1-22

Job Ticket: 63884

DST#: 7

ATTN: Tim Lauer

Test Start: 2018.06.28 @ 03:42:50

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|---------------------|----------------|
| 124.00 | mcgo 40%g 30%o 30%m | 1.739 |
| 124.00 | go 30%g 70%o | 1.739 |
| 217.00 | go 20%g 80%o | 3.044 |
| 0.00 | 1581 GIP | 0.000 |

Total Length: 465.00 ft

Total Volume: 6.522 bbl

Num Fluid Samples: 0

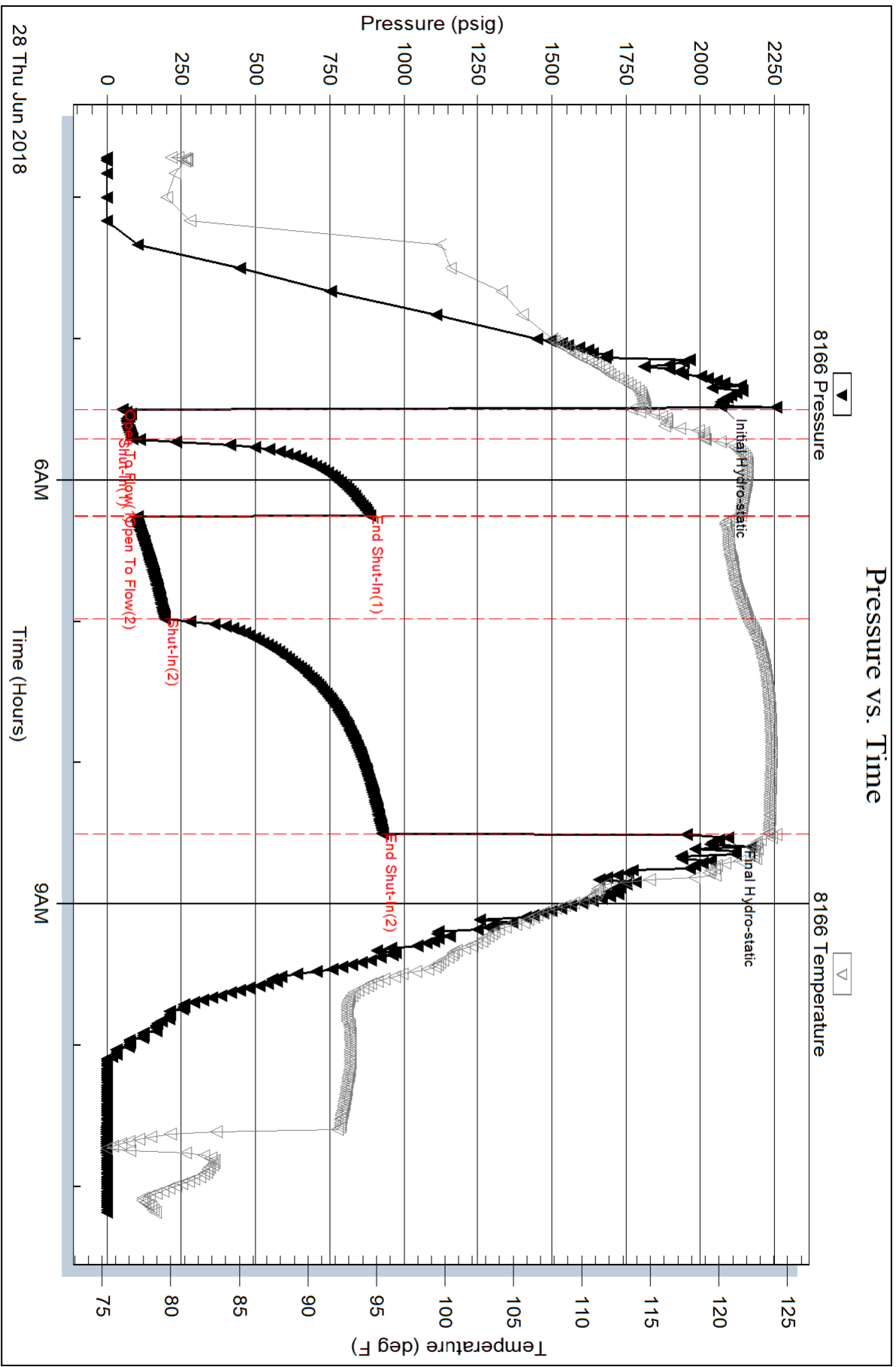
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 36@90=33



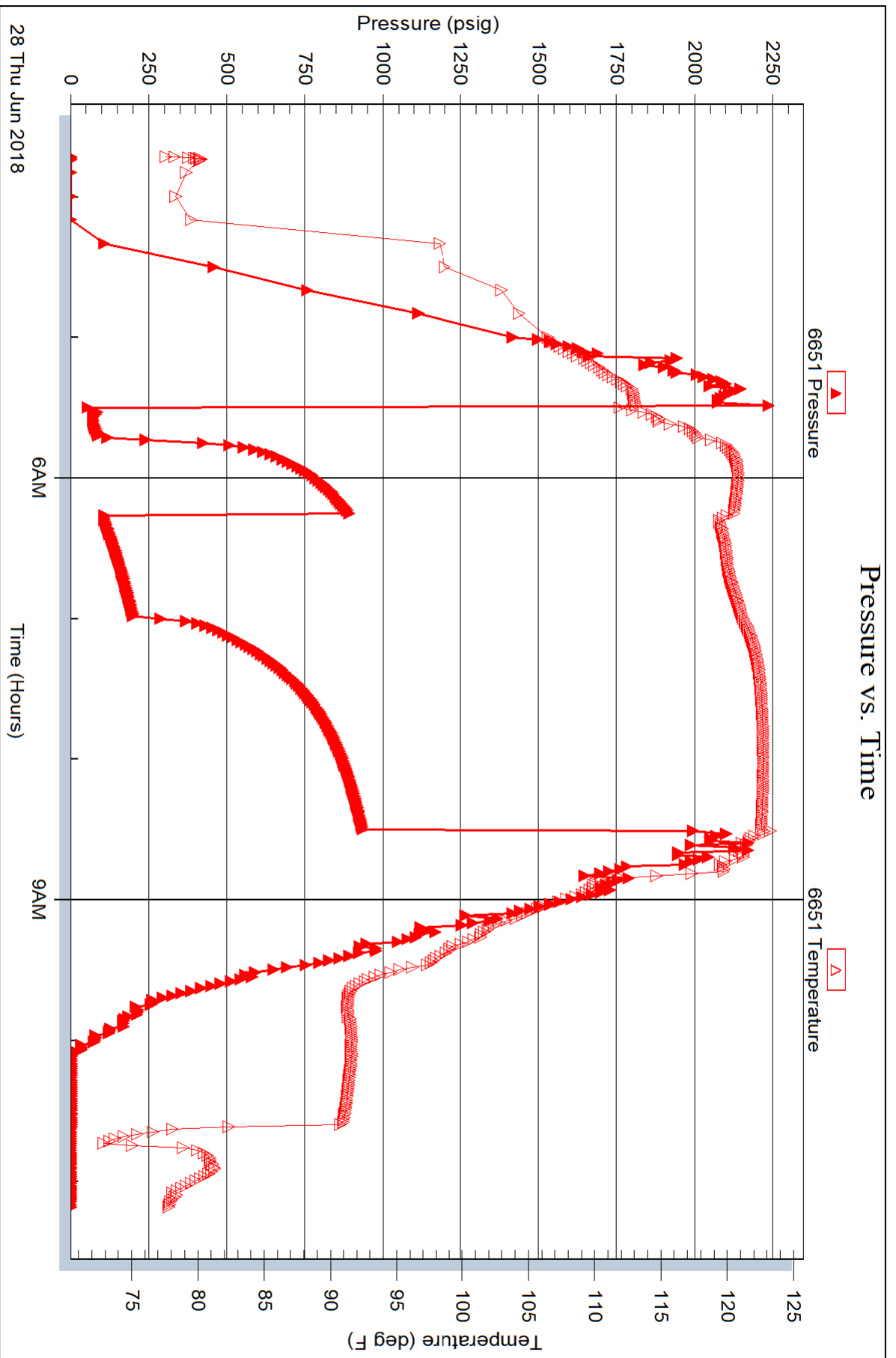
Serial #: 6651

Inside

Shakespeare Oil Co, Inc

Ottley 1-122

DST Test Number: 7





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co, Inc

22-14s-32w Logan Co KS

202 W Main St
Salem IL 62881

Ottley 1-22

Job Ticket: 63885

DST#: 8

ATTN: Tim Lauer

Test Start: 2018.06.28 @ 19:31:41

GENERAL INFORMATION:

Formation: **Morrow Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:00:41

Time Test Ended: 02:39:41

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 79

Interval: 4355.00 ft (KB) To 4400.00 ft (KB) (TVD)

Reference Elevations: 2734.00 ft (KB)

Total Depth: 4400.00 ft (KB) (TVD)

2724.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8166 Outside

Press@RunDepth: 198.70 psig @ 4360.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.06.28

End Date:

2018.06.29

Last Calib.:

2018.06.29

Start Time: 19:31:46

End Time:

02:39:40

Time On Btm:

2018.06.28 @ 20:59:41

Time Off Btm:

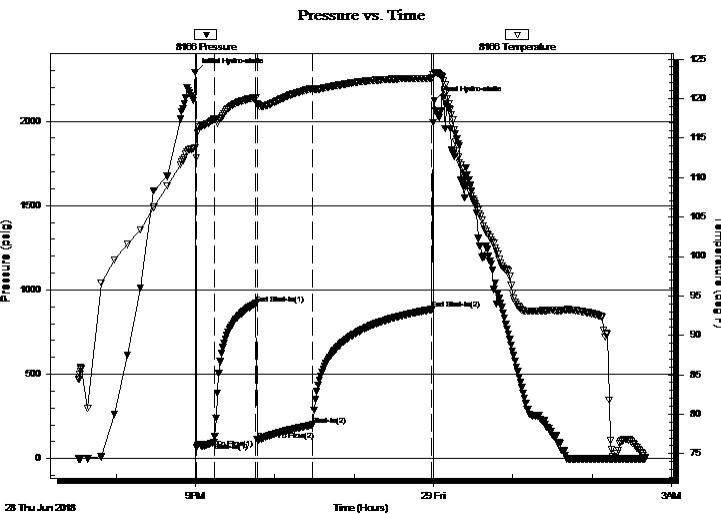
2018.06.29 @ 00:00:41

TEST COMMENT: IF: BOB in 3 1/2 min. 47"

IS: 20"

FF: BOB in 4 min. 85"

FS: 23" BOB in 20 min.



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2289.40 | 113.81 | Initial Hydro-static |
| 1 | 63.59 | 112.55 | Open To Flow (1) |
| 15 | 96.10 | 117.39 | Shut-In(1) |
| 46 | 919.28 | 120.10 | End Shut-In(1) |
| 48 | 110.55 | 119.18 | Open To Flow (2) |
| 89 | 198.70 | 121.27 | Shut-In(2) |
| 179 | 883.93 | 122.59 | End Shut-In(2) |
| 181 | 2121.98 | 123.30 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 124.00 | gocm 20%g 10%o 70%m | 1.74 |
| 392.00 | go 30%g 70%o | 5.50 |
| 0.00 | 1220 GIP | 0.00 |
| | | |
| | | |

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co, Inc

22-14s-32w Logan Co KS

202 W Main St
Salem IL 62881

Ottley 1-22

Job Ticket: 63885

DST#: 8

ATTN: Tim Lauer

Test Start: 2018.06.28 @ 19:31:41

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---------------------|---------------|
| 124.00 | gocm 20%g 10%o 70%m | 1.739 |
| 392.00 | go 30%g 70%o | 5.499 |
| 0.00 | 1220 GIP | 0.000 |

Total Length: 516.00 ft Total Volume: 7.238 bbl

Num Fluid Samples: 0

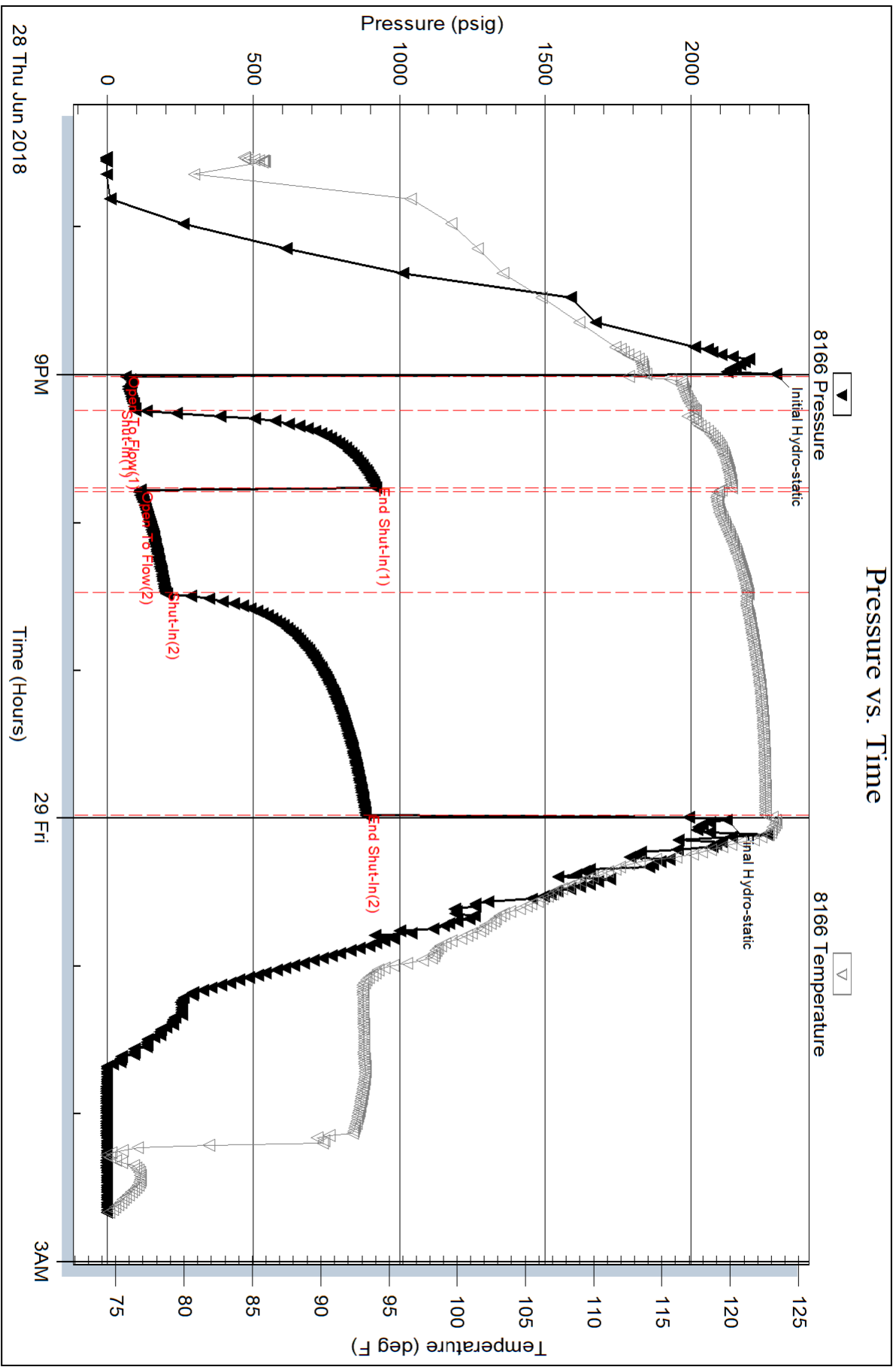
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 35@70=34



Serial #: 6651

Inside

Shakespeare Oil Co, Inc

Ottley 1-122

DST Test Number: 8

