



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Shakespeare Oil Co. Inc  
 202 W. Main St.  
 Salem IL 62881  
 ATTN: Tim Priest

**23-17s-33w Scott Co. KS**  
**Rudolph #1-23**  
 Job Ticket: 58680 **DST#: 4**  
 Test Start: 2014.12.07 @ 10:50:00

## GENERAL INFORMATION:

Formation: **Marmanton " B - C "**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 13:13:25  
 Time Test Ended: 17:40:09  
 Interval: **4426.00 ft (KB) To 4465.00 ft (KB) (TVD)**  
 Total Depth: 4027.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Will MacLean  
 Unit No: 71  
 Reference Elevations: 3026.00 ft (KB)  
 3016.00 ft (CF)  
 KB to GR/CF: 10.00 ft

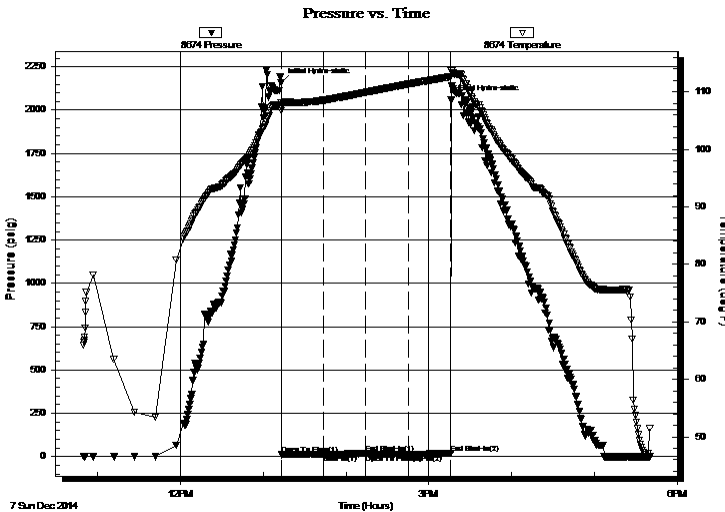
## Serial #: 8674

Inside

Press @ Run Depth: 13.27 psig @ 4427.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.12.07 End Date: 2014.12.07 Last Calib.: 2014.12.07  
 Start Time: 10:50:00 End Time: 17:40:09 Time On Btm: 2014.12.07 @ 13:13:10  
 Time Off Btm: 2014.12.07 @ 15:16:09

TEST COMMENT: IF- Weak Surface Blow 1/4"  
 IS- No Blow  
 FF- No Blow  
 FS- No Blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2158.59	108.14	Initial Hydro-static
1	10.94	106.72	Open To Flow (1)
31	13.04	108.52	Shut-In(1)
61	17.37	109.89	End Shut-In(1)
62	12.71	109.90	Open To Flow (2)
92	13.27	111.31	Shut-In(2)
123	18.25	112.63	End Shut-In(2)
123	2057.78	113.59	Final Hydro-static

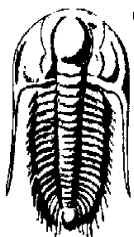
## Recovery

Length (ft)	Description	Volume (bbl)
1.00	WOCM 3%w 6%oil 91%m	0.00

\* Recovery from multiple tests

## Gas Rates

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



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Salem IL 62881

**Rudolph #1-23**

Job Ticket: 58680

**DST#: 4**

ATTN: Tim Priest

Test Start: 2014.12.07 @ 10:50:00

#### GENERAL INFORMATION:

Formation: **Marmanton "B-C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:13:25

Time Test Ended: 17:40:09

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 71

**Interval: 4426.00 ft (KB) To 4465.00 ft (KB) (TVD)**

Reference Elevations: 3026.00 ft (KB)

Total Depth: 4027.00 ft (KB) (TVD)

3016.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

**Serial #: 8355 Outside**

Press @ Run Depth: psig @ 4427.00 ft (KB)

Start Date: 2014.12.07

End Date: 2014.12.07

Capacity: 8000.00 psig

Last Calib.: 2014.12.07

Start Time: 10:50:05

End Time: 17:41:44

Time On Btm:

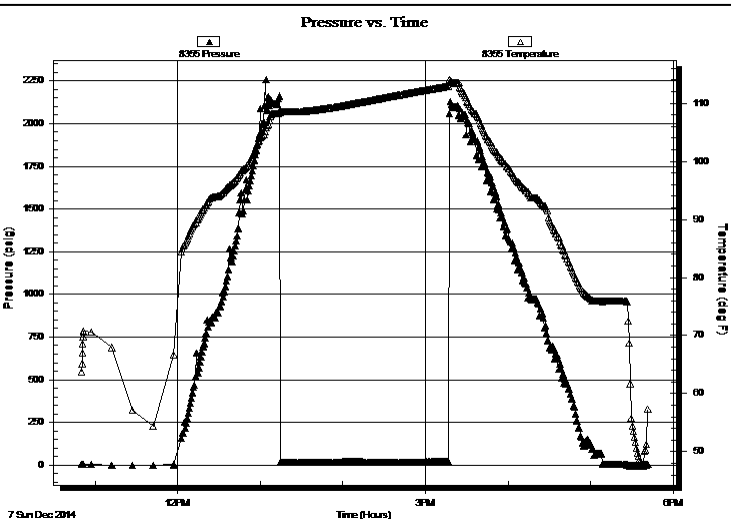
Time Off Btm:

TEST COMMENT: IF- Weak Surface Blow 1/4"

IS- No Blow

FF- No Blow

FS- No Blow



#### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

#### Recovery

Length (ft)	Description	Volume (bbl)
1.00	WOCM 3%w 6%oil 91% m	0.00

#### Gas Rates

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

\* Recovery from multiple tests



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shakespeare Oil Co. Inc

**23-17s-33w Scott Co. KS**

202 W. Main St.  
Salem IL 62881

**Rudolph #1-23**

Job Ticket: 58680

**DST#: 4**

ATTN: Tim Priest

Test Start: 2014.12.07 @ 10:50:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	WOCM 3%w 6%oil 91%m	0.005

Total Length: 1.00 ft      Total Volume: 0.005 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

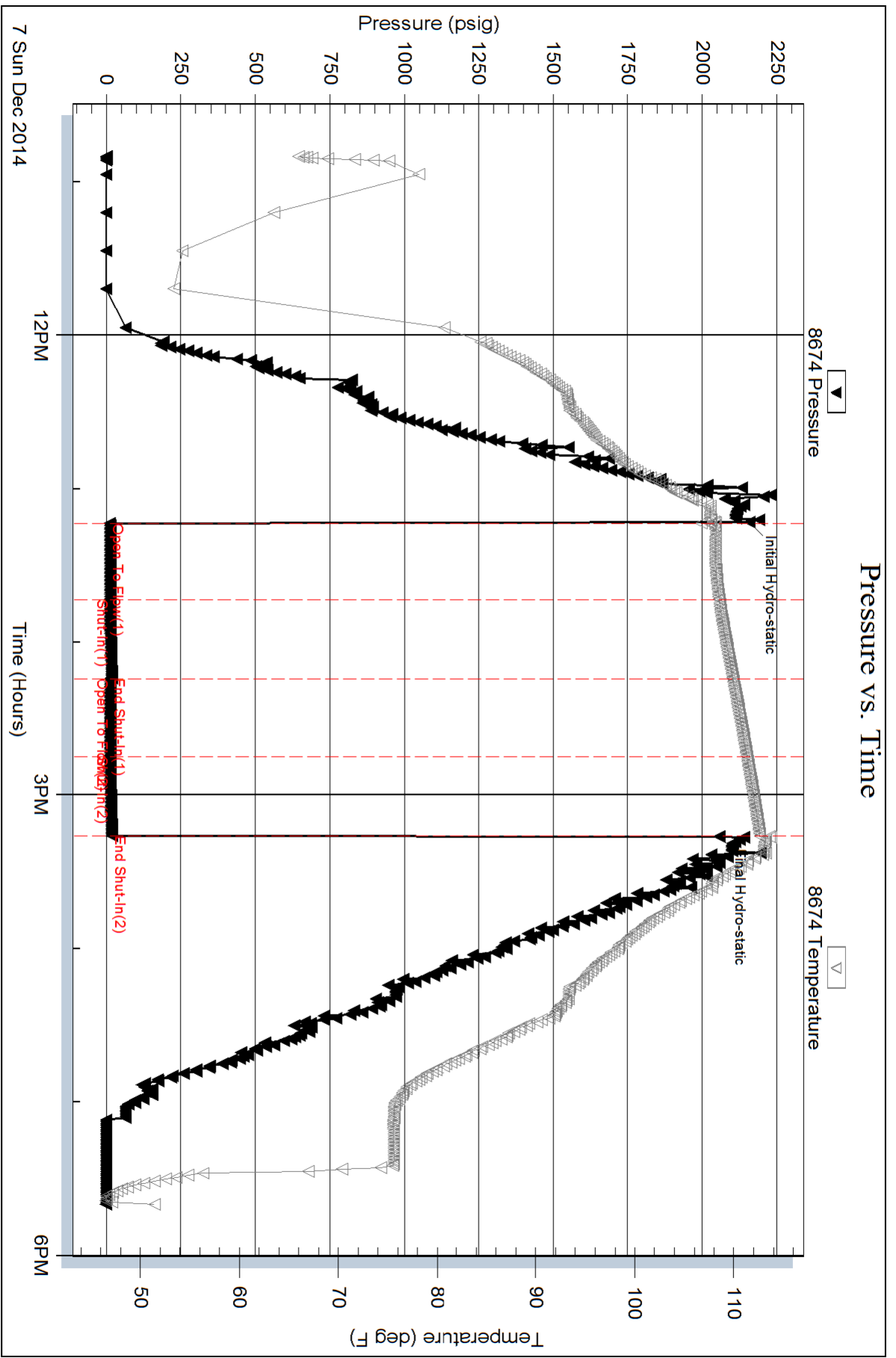
Serial #: 8674

Inside

Shakespeare Oil Co. Inc

Rudolph #1-23

DST Test Number: 4

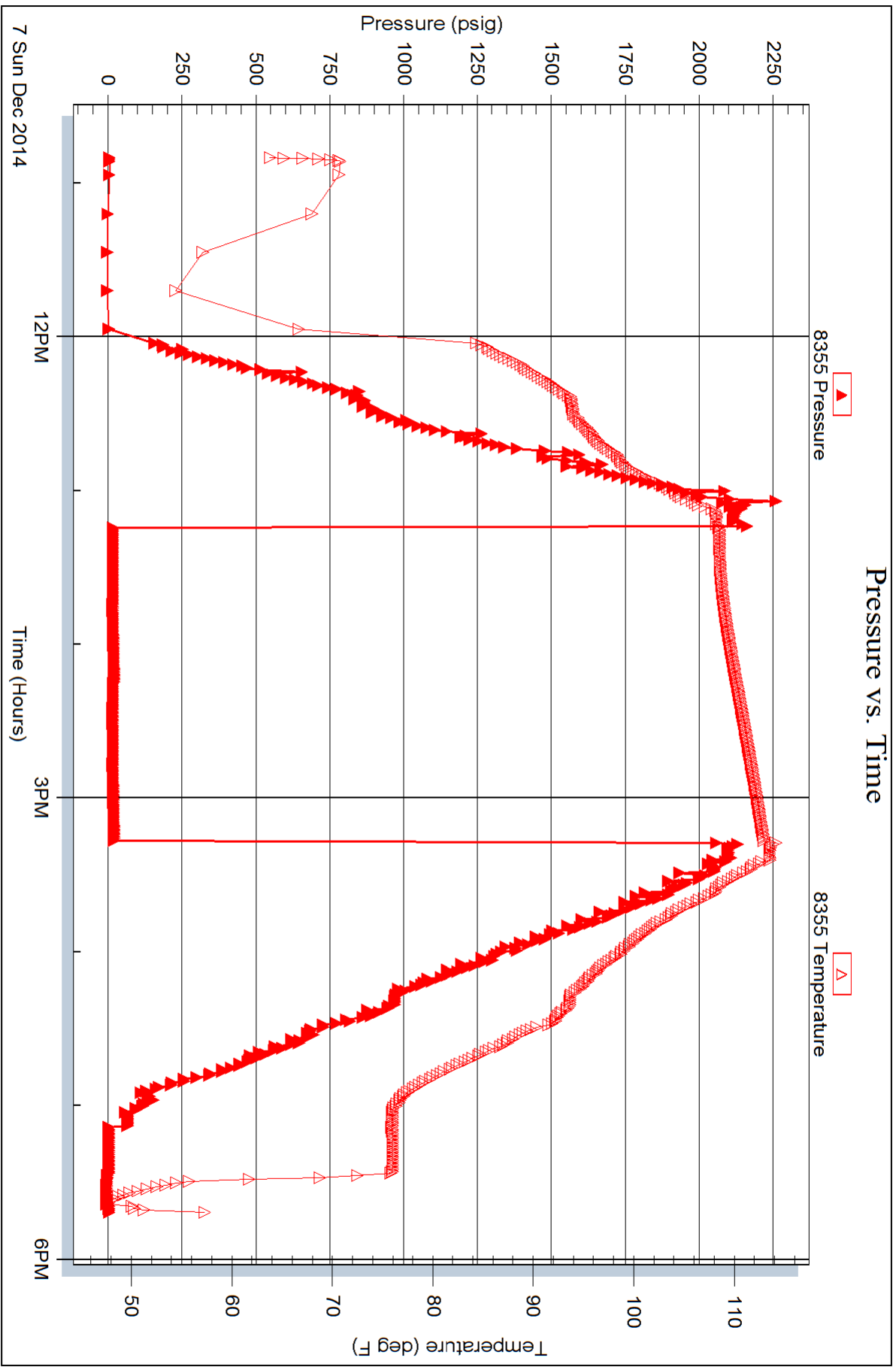


Serial #: 8355

Outside Shakespeare Oil Co. Inc

Rudolph #1-23

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 58680

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