



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1236386
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

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 SIOW
- 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
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

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
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1236386

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

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				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 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)*

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

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method: Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <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> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Shakespeare Oil Co., Inc.
Well Name	Rudolph 1-23
Doc ID	1236386

All Electric Logs Run

Array Induction
Photo Density
Comp Neutron
Microlog
Sonic

Form	ACO1 - Well Completion
Operator	Shakespeare Oil Co., Inc.
Well Name	Rudolph 1-23
Doc ID	1236386

Tops

Name	Top	Datum
Base Anhydrite	2378	+648
Heebner	3939	-913
Lansing	3984	-958
Muncie Creek	4166	-1140
Stark Shale	4258	-1232
Hushpuckney	4308	-1282
Pawnee	4480	-1454
L. Cherokee Shale	4556	-1530
Johnson	4598	-1572
Mississippian	4701	-1675



PO Box 93999
Southlake, TX 76092

Voice: (817) 546-7282
Fax: (817) 246-3361

INVOICE

Invoice Number: 147339
Invoice Date: Nov 25, 2014
Page: 1

Federal Tax I.D.#: 20-8651475

Bill To:
Shakespeare Oil Co., Inc. 202 West Main St. Salem, IL 62881

Customer ID	Field Ticket #	Payment Terms	
Shak	65145	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Great Bend	Nov 25, 2014	12/25/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	<u>Rudolph #1-23</u>		
185.00	CEMENT MATERIALS	Class A Common	17.90	3,311.50
348.00	CEMENT MATERIALS	Gel	0.50	174.00
522.00	CEMENT MATERIALS	Chloride	1.10	574.20
200.06	CEMENT SERVICE	Cubic Feet Charge	2.48	496.15
319.55	CEMENT SERVICE	Ton Mileage Charge	2.75	878.76
1.00	CEMENT SERVICE	<u>Surface</u> ✓	1,512.25	1,512.25
35.00	CEMENT SERVICE	Pump Truck Mileage	7.70	269.50
35.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	154.00
1.00	CEMENT SUPERVISOR	Joshua Isaac		
1.00	OPERATOR ASSISTANT	Brian Lang		
1.00	OPERATOR ASSISTANT	Kevin Weighous		

INT



10502-5
KW

ALL PRICES ARE NET, PAYABLE
30 DAYS FOLLOWING DATE OF
INVOICE. 1 1/2% CHARGED
THEREAFTER. IF ACCOUNT IS
CURRENT, TAKE DISCOUNT OF

\$ 1,842.59

ONLY IF PAID ON OR BEFORE
Dec 25, 2014

Subtotal	7,370.36
Sales Tax	330.87
Total Invoice Amount	7,701.23
Payment/Credit Applied	
TOTAL	7,701.23

DW



PO Box 93999
Southlake, TX 76092

Voice: (817) 546-7282
Fax: (817) 246-3361

INVOICE

Invoice Number: 147610
Invoice Date: Dec 10, 2014
Page: 1

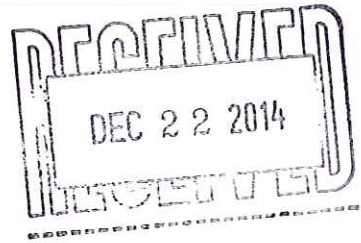
Federal Tax I.D.#: 20-8651475

Bill To:
Shakespeare Oil Co., Inc. 202 West Main St. Salem, IL 62881

Customer ID	Field Ticket #	Payment Terms	
Shak	64372	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-03	Oakley	Dec 10, 2014	1/9/15

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	<u>Rudolph #1-23</u>		
162.00	CEMENT MATERIALS	Class A Common	17.90	2,899.80
108.00	CEMENT MATERIALS	Pozmix	9.35	1,009.80
929.00	CEMENT MATERIALS	Gel	0.50	464.50
68.00	CEMENT MATERIALS	Flo Seal	2.97	201.96
289.98	CEMENT SERVICE	Cubic Feet Charge	2.48	719.15
484.40	CEMENT SERVICE	Ton Mileage Charge	2.75	1,332.10
1.00	CEMENT SERVICE	<u>Plug to Abandon</u> ✓	2,483.59	2,483.59
40.00	CEMENT SERVICE	Pump Truck Mileage	7.70	308.00
40.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	176.00
1.00	CEMENT SUPERVISOR	LaRene Wentz		
1.00	EQUIPMENT OPERATOR	Wayne McGhghy		
1.00	OPERATOR ASSISTANT	Shawn Tatro		

INT



Subtotal	9,594.90
Sales Tax	781.98
Total Invoice Amount	10,376.88
Payment/Credit Applied	
TOTAL	10,376.88

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 1 1/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

\$ 2,398.72

ONLY IF PAID ON OR BEFORE
Jan 9, 2015

DW
10502-5
KW

ALLIED OIL & GAS SERVICES, LLC 064372

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT:
Dickinson, KS

DATE <u>12-10-14</u>	SEC. <u>23</u>	TWP. <u>17</u>	RANGE <u>33</u>	CALLED OUT	ON LOCATION <u>4:50 pm</u>	JOB START <u>7:00 pm</u>	JOB FINISH <u>10:00 pm</u>
LEASE <u>Rudolph</u>	WELL# <u>1-23</u>	LOCATION <u>Scott City N to 210, 210,</u>			COUNTY <u>Scott</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)				<u>V85, E info</u>			

CONTRACTOR H-D 2 OWNER Same

TYPE OF JOB PTA

HOLE SIZE 7 7/8 T.D. 4770 CEMENT AMOUNT ORDERED 220 sks 60/40 490 gal

CASING SIZE DEPTH 4 1/2 DEPTH 2370' Y4 # 510-9 eol

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG.

PERFS.

DISPLACEMENT 26.59 bbl

EQUIPMENT

PUMP TRUCK CEMENTER Lakone & Wank

431 HELPER Wayne McLaughly

BULK TRUCK DRIVER Shawn Tatro

888/287

BULK TRUCK DRIVER Juan Mander (TW)

#

HANDLING 28998.57 @ 2.48 719.15

MILEAGE 12.17m x 40 x 2.75 1332.10

TOTAL

REMARKS:

Mix 50 sks 2370'

Mix 80 sks 1500'

Mix 50 sks 720'

Mix 40 sks 300'

Mix 20 sks 60'

Plug R.H. 30 sks

Thank you

CHARGE TO: Shakespeare

STREET

CITY STATE ZIP

To: Allied Oil & Gas Services, 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 Jeff Brock

SIGNATURE Jeff Brock

COMMON 162 sks @ 17.20 2798.80

POZMIX 108 sks @ 7.35 1009.80

GEL 929 # @ .50 464.50

CHLORIDE @

ASC @

Flowcel 68 # @ 2.77 201.76

Material. Material. 4.38.06

(1114.61 / 25%)

TOTAL

SERVICE

DEPTH OF JOB 2370'

PUMP TRUCK CHARGE 2483.59

EXTRA FOOTAGE @

MILEAGE M.I. 40 @ 7.70 308.00

MANIFOLD @

MANIFOLD 40 @ 4.40 176.00

(1254.11 / 25%)

TOTAL 3012.84

PLUG & FLOAT EQUIPMENT

@

@

@

@

@

TOTAL

SALES TAX (If Any)

TOTAL CHARGES 9,571.90

DISCOUNT 2,390.70 (25%) IF PAID IN 30 DAYS

7,181.20 Net.



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Shakespeare Oil Co. Inc

23-17s-33w Scott Co. KS

202 W. Main St.
Salem IL 62881

Rudolph #1-23

Job Ticket: 58677

DST#: 1

ATTN: Tim Priest

Test Start: 2014.12.03 @ 17:30:00

GENERAL INFORMATION:

Formation: **LKC " B "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:39:40

Time Test Ended: 03:30:25

Test Type: Conventional Bottom Hole (Initial)

Tester: Will MacLean

Unit No: 71

Interval: 4007.00 ft (KB) To 4027.00 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 #: 8674

Inside

Press@RunDepth: 47.97 psig @ 4008.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.12.03

End Date:

2014.12.04

Last Calib.:

2014.12.04

Start Time: 17:30:00

End Time:

03:30:25

Time On Btm:

2014.12.03 @ 21:39:25

Time Off Btm:

2014.12.04 @ 01:16:09

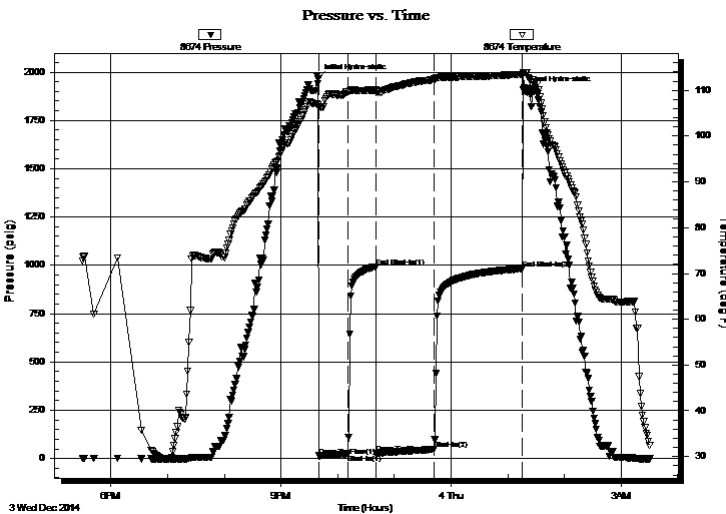
TEST COMMENT: IF- Weak Surface Blow Built to 1"

IS- No Blow

FF- Weak Surface Blow Built to 3/4"

FS- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1968.37	106.85	Initial Hydro-static
1	13.52	106.22	Open To Flow (1)
31	24.04	109.58	Shut-In(1)
61	993.07	110.08	End Shut-In(1)
61	27.15	109.57	Open To Flow (2)
123	47.97	112.38	Shut-In(2)
216	982.83	113.50	End Shut-In(2)
217	1906.36	113.61	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	WCM 47%w 53%w with a Few Oil Sppt0.30	
15.00	WCM 24%w 76%w with a Few Oil Sppt0.07	

Gas Rates

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



**TRILOBITE
TESTING, INC**

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: 58677

DST#: 1

ATTN: Tim Priest

Test Start: 2014.12.03 @ 17:30:00

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:

28000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
62.00	WCM 47%w 53%m w ith a Few Oil Spots	0.305
15.00	WCM 24%w 76%m w ith a Few Oil Spots	0.074

Total Length: 77.00 ft Total Volume: 0.379 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW is .481 @ 34f = 28000

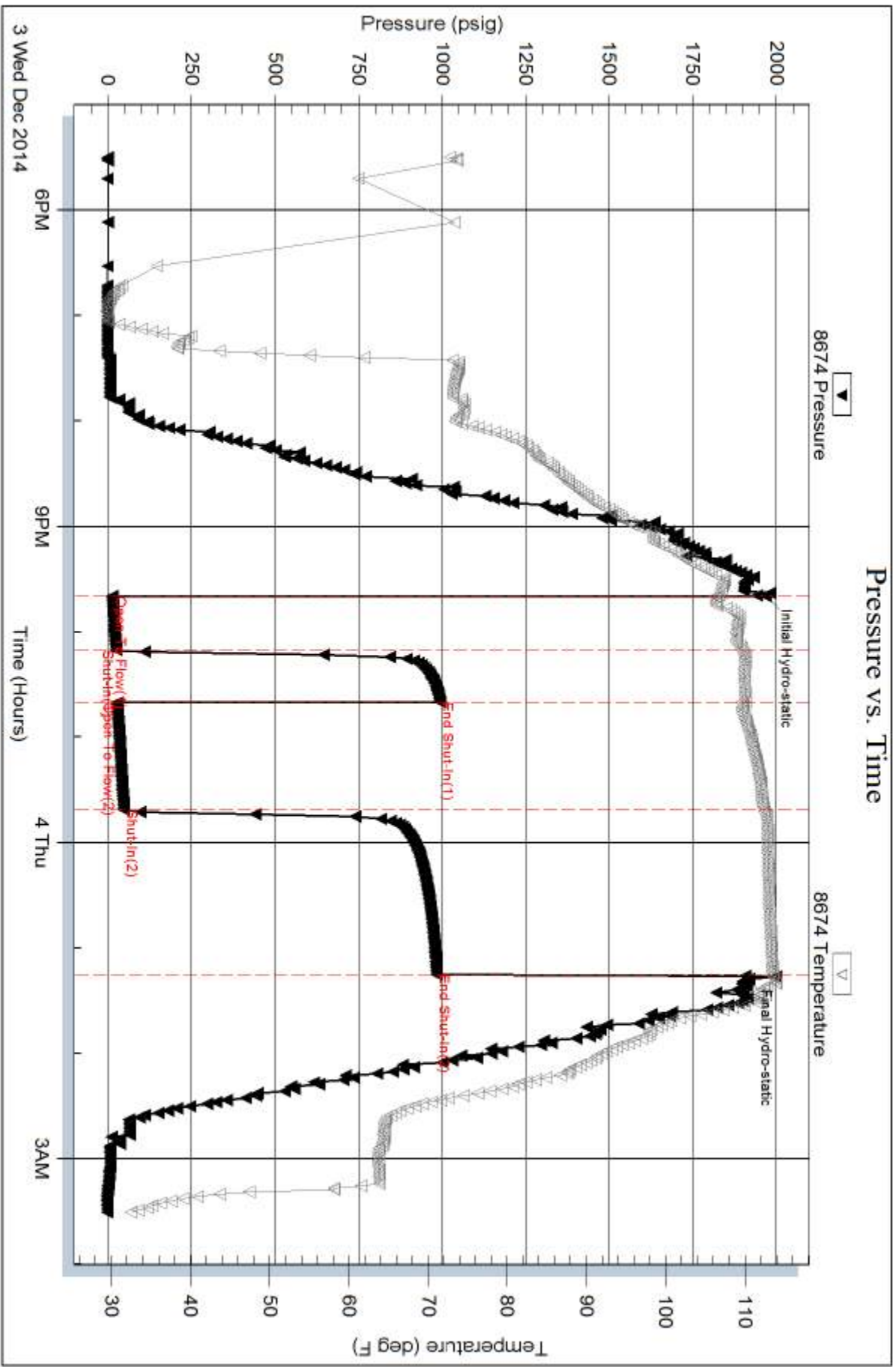
Serial #: 8674

Inside

Shakespeare Oil Co. Inc

Rudolph #1-23

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 58677

Printed: 2014, 12, 04 @ 08:24:26



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Shakespeare Oil Co. Inc

23-17s-33w Scott Co. KS

202 W. Main St.
Salem IL 62881

Rudolph #1-23

Job Ticket: 58678

DST#: 2

ATTN: Tim Priest

Test Start: 2014.12.05 @ 10:44:05

GENERAL INFORMATION:

Formation: **LKC " K "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:52:45

Time Test Ended: 17:55:44

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 71

Interval: 4257.00 ft (KB) To 4277.00 ft (KB) (TVD)

Reference Elevations: 3026.00 ft (KB)

Total Depth: 4277.00 ft (KB) (TVD)

3016.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8674

Inside

Press @ Run Depth: 553.52 psig @ 4258.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.12.05

End Date:

2014.12.05

Last Calib.:

2014.12.05

Start Time:

10:44:05

End Time:

17:55:44

Time On Btm:

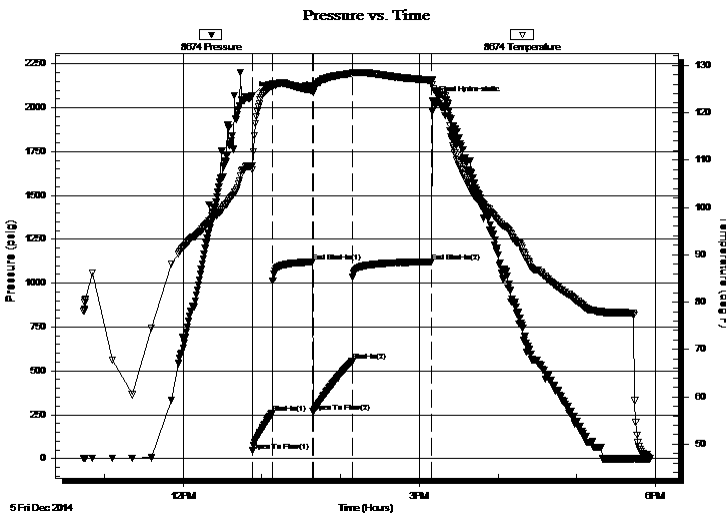
2014.12.05 @ 12:52:30

Time Off Btm:

2014.12.05 @ 15:10:14

TEST COMMENT: IF- Surface Blow Built to BOB in 4min
IS- No Blow
FF- Surface Blow Built to BOB in 4min
FS- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2068.24	108.85	Initial Hydro-static
1	44.97	107.97	Open To Flow (1)
16	260.02	125.75	Shut-In(1)
46	1121.31	124.69	End Shut-In(1)
47	267.50	124.23	Open To Flow (2)
77	553.52	128.27	Shut-In(2)
137	1122.19	126.83	End Shut-In(2)
138	2041.92	125.88	Final Hydro-static

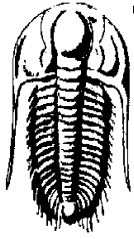
Recovery

Length (ft)	Description	Volume (bbl)
868.00	MCW 5% m 95% w	11.05
248.00	MCW 16% m 84% w	3.48
93.00	MCW 47% m 53% w with a Skim of Oil	1.30

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

23-17s-33w Scott Co. KS

202 W. Main St.
Salem IL 62881

Rudolph #1-23

Job Ticket: 58678

DST#: 2

ATTN: Tim Priest

Test Start: 2014.12.05 @ 10:44:05

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:

50000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
868.00	MCW 5% _m 95% _w	11.046
248.00	MCW 16% _m 84% _w	3.479
93.00	MCW 47% _m 53% _w with a Skim of Oil on T	1.305

Total Length: 1209.00 ft Total Volume: 15.830 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .172 @ 61f = 50000

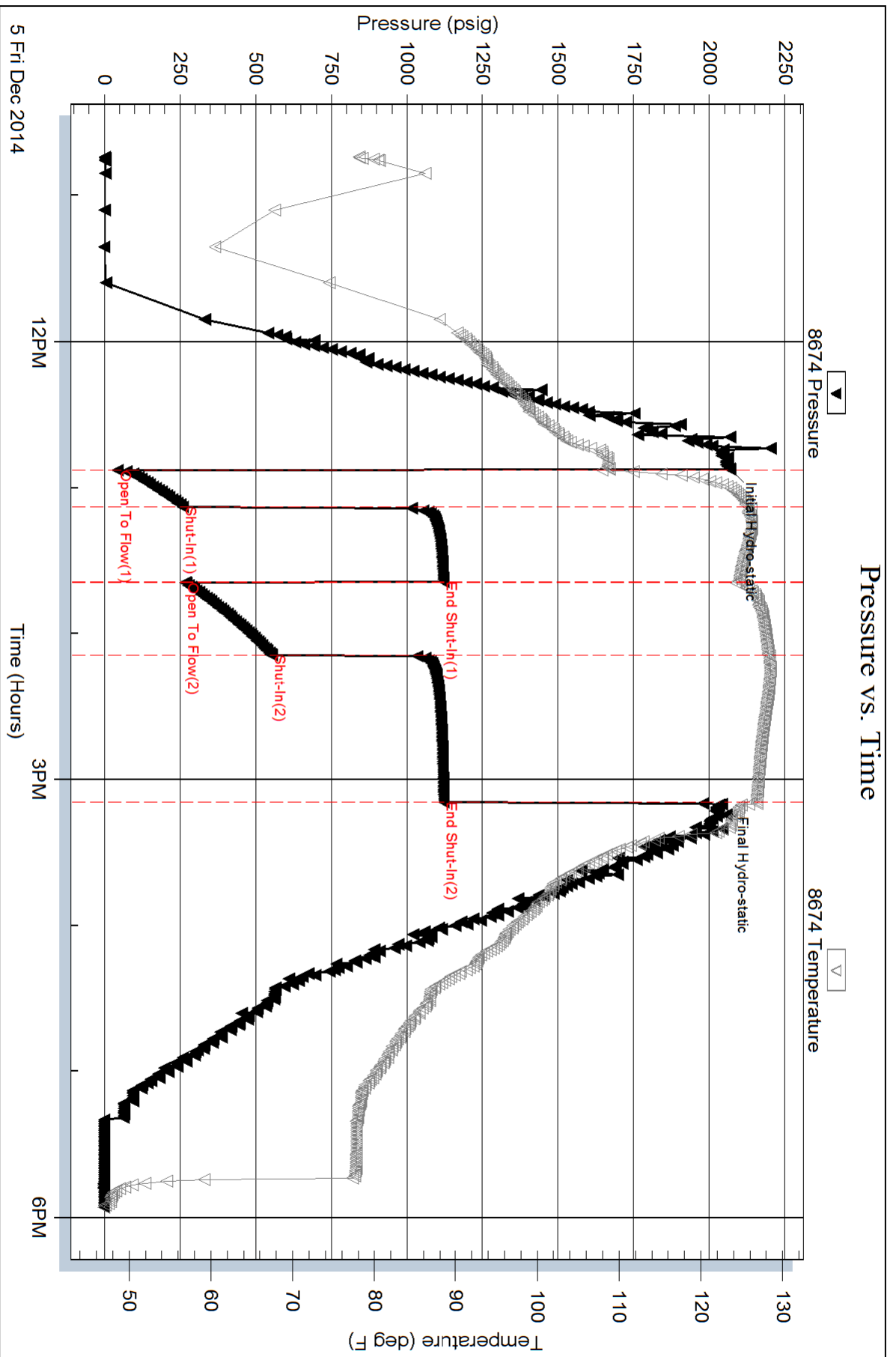
Serial #: 8674

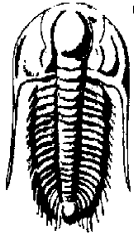
Inside

Shakespeare Oil Co. Inc

Rudolph #1-23

DST Test Number: 2





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

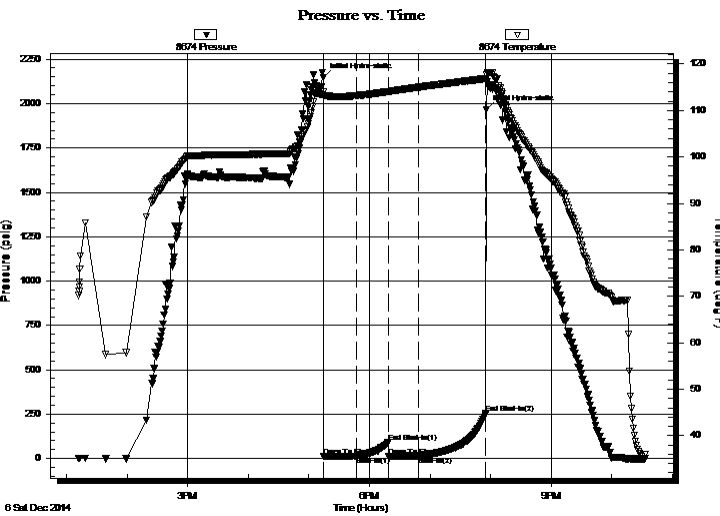
23-17s-33w Scott Co. KS
Rudolph #1-23
 Job Ticket: 58679 **DST#: 3**
 Test Start: 2014.12.06 @ 13:12:00

GENERAL INFORMATION:

Formation: **Marmanton " A "**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 17:14:40 Tester: Will MacLean
 Time Test Ended: 22:33:25 Unit No: 71
 Interval: **4386.00 ft (KB) To 4420.00 ft (KB) (TVD)** Reference Elevations: 3026.00 ft (KB)
 Total Depth: 4420.00 ft (KB) (TVD) 3016.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

Serial #: 8674 Inside
 Press @ Run Depth: 15.41 psig @ 4387.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.12.06 End Date: 2014.12.06 Last Calib.: 2014.12.06
 Start Time: 13:12:00 End Time: 22:33:25 Time On Btm: 2014.12.06 @ 17:14:25
 Time Off Btm: 2014.12.06 @ 19:55:39

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	2144.83	113.92	Initial Hydro-static
1	13.09	113.10	Open To Flow (1)
33	13.77	113.18	Shut-In(1)
64	91.31	114.04	End Shut-In(1)
65	14.66	114.01	Open To Flow (2)
95	15.41	115.01	Shut-In(2)
161	255.53	116.87	End Shut-In(2)
162	1966.38	117.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	OCM 36%oil 64%m	0.01

* 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

23-17s-33w Scott Co. KS

202 W. Main St.
Salem IL 62881

Rudolph #1-23

Job Ticket: 58679

DST#: 3

ATTN: Tim Priest

Test Start: 2014.12.06 @ 13:12:00

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

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
2.00	OCM 36%oil 64%m	0.010

Total Length: 2.00 ft Total Volume: 0.010 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

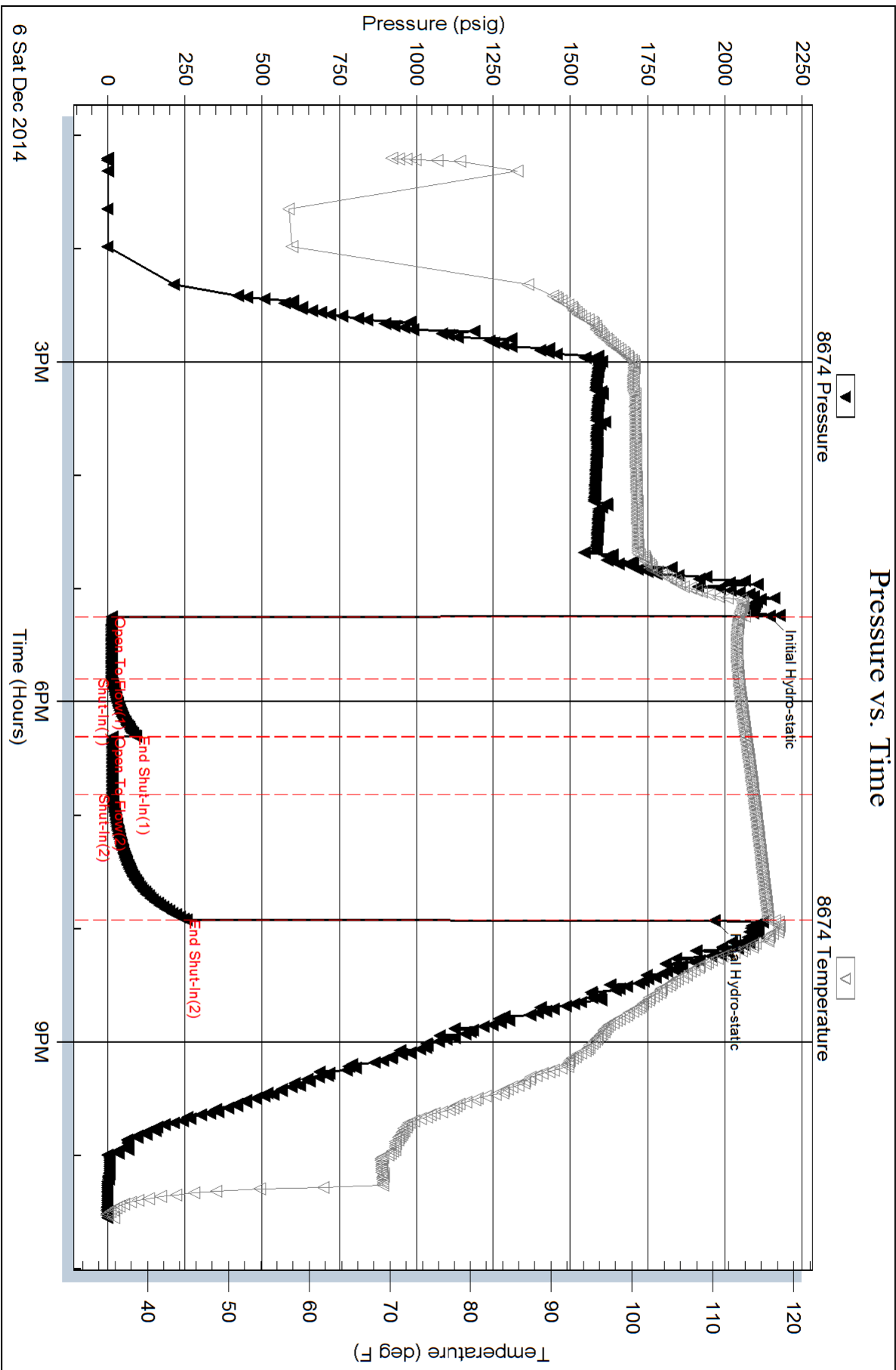
Serial #: 8674

Inside

Shakespeare Oil Co. Inc

Rudolph #1-23

DST Test Number: 3





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

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 #: 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

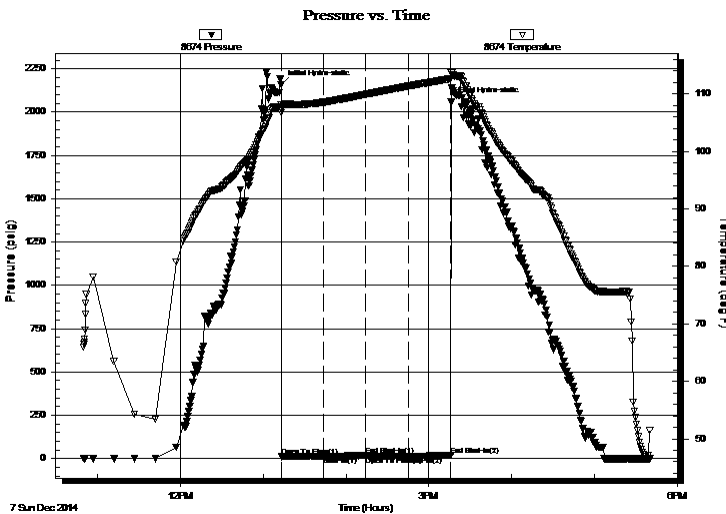
TEST COMMENT: IF- Weak Surface Blow 1/4"

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

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

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:

bbf

Water Loss: 6.39 in³

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 bbf
1.00	WOCM 3%w 6%oil 91%m	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

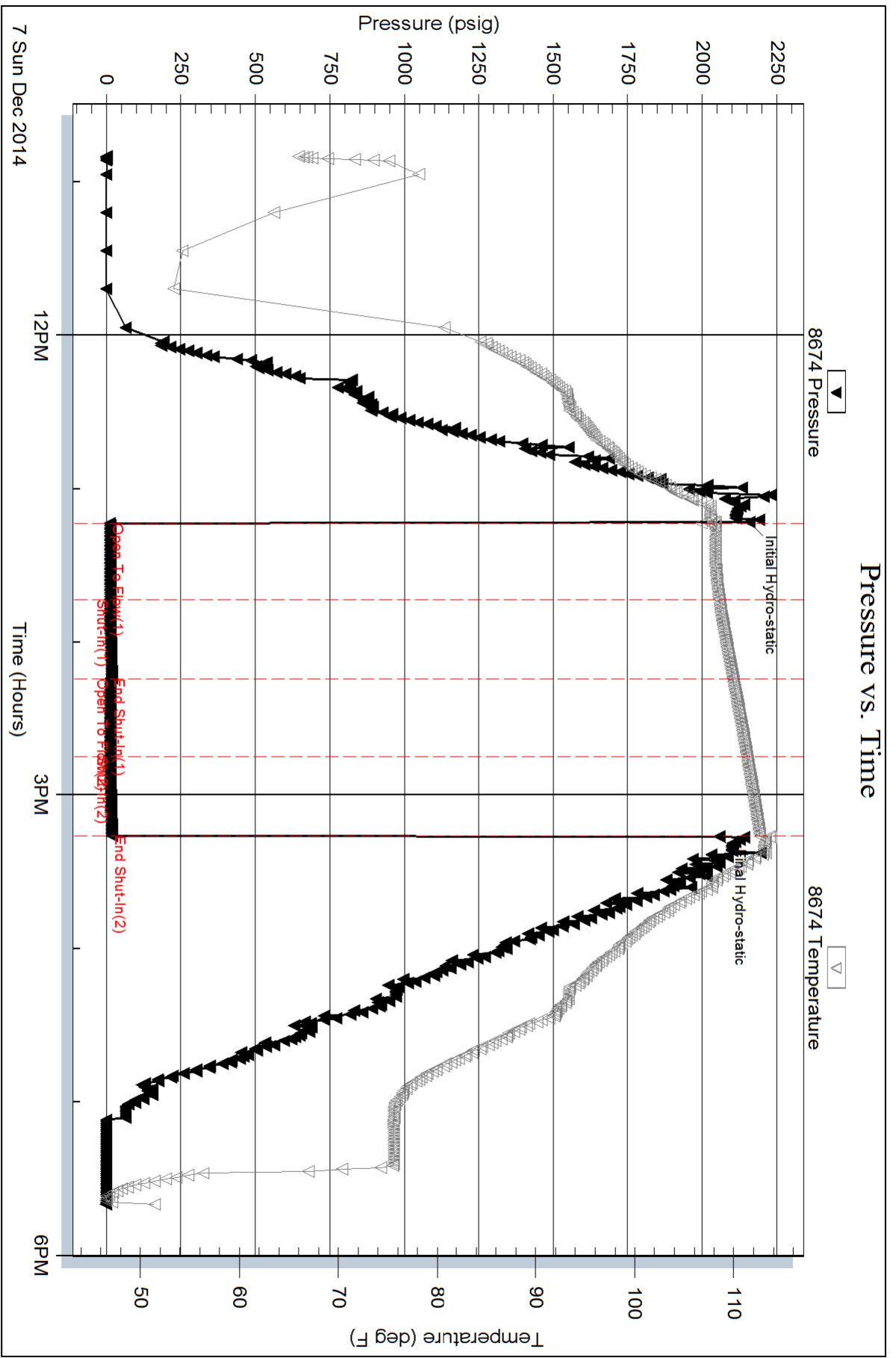
Serial #: 8674

Inside

Shakespeare Oil Co. Inc

Rudolph #1-23

DST Test Number: 4



Triobite Testing, Inc

Ref. No: 58680

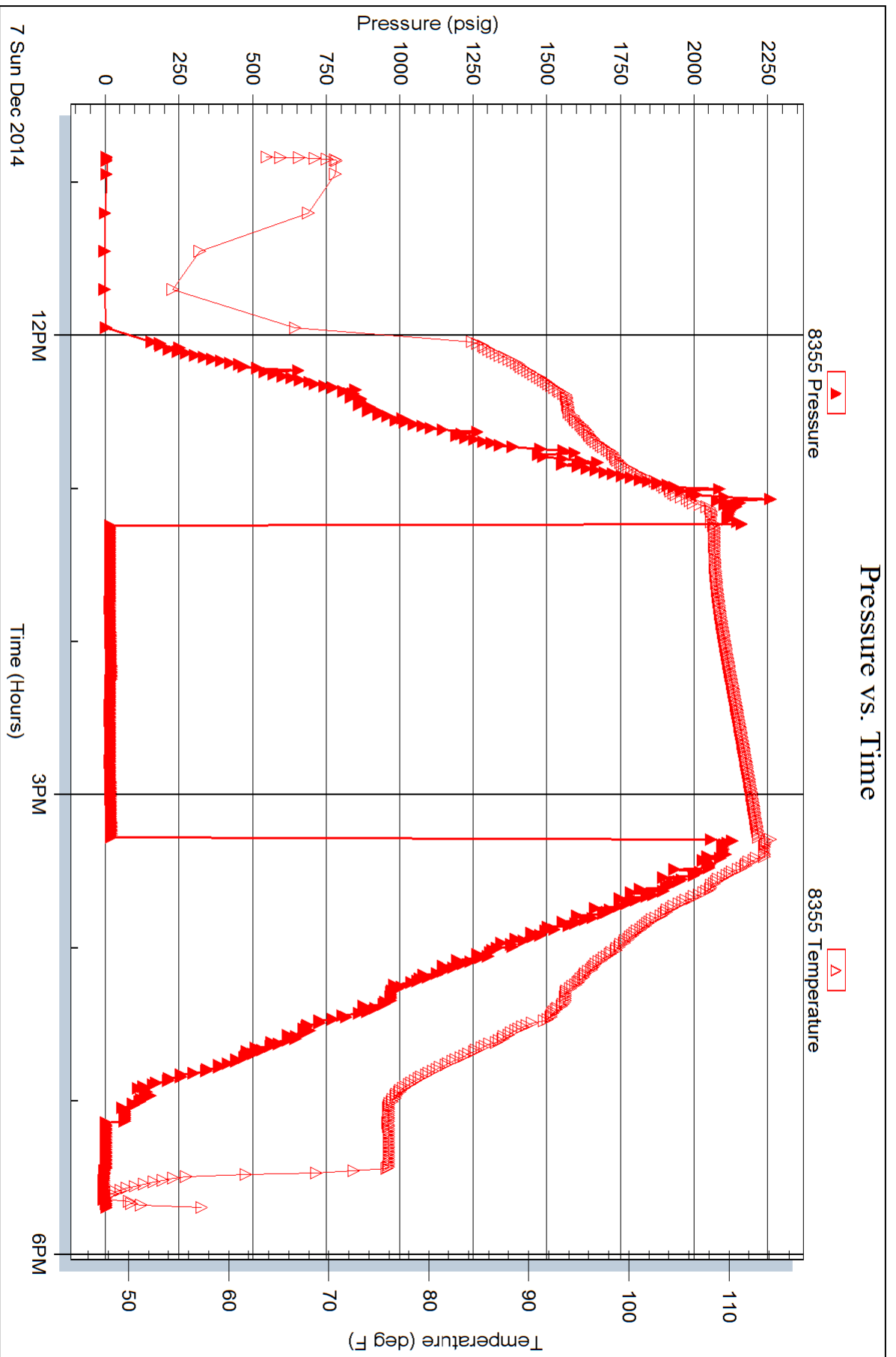
Printed: 2014.12.07 @ 21:04:55

Serial #: 8355

Outside Shakespeare Oil Co. Inc

Rudolph #1-23

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 58680

Printed: 2014.12.07 @ 21:04:55



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co. Inc

23-17s-33w Scott Co. KS

202 W. Main St.
Salem IL 62881

Rudolph #1-23

Job Ticket: 58681

DST#: 5

ATTN: Tim Priest

Test Start: 2014.12.09 @ 01:32:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:39:55

Time Test Ended: 10:51:10

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 71

Interval: 4591.00 ft (KB) To 4660.00 ft (KB) (TVD)

Reference Elevations: 3026.00 ft (KB)

Total Depth: 4660.00 ft (KB) (TVD)

3016.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8674 Inside

Press@RunDepth: 82.88 psig @ 4595.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.12.09

End Date:

2014.12.09

Last Calib.:

2014.12.09

Start Time:

01:32:00

End Time:

10:51:10

Time On Btm:

2014.12.09 @ 04:39:40

Time Off Btm:

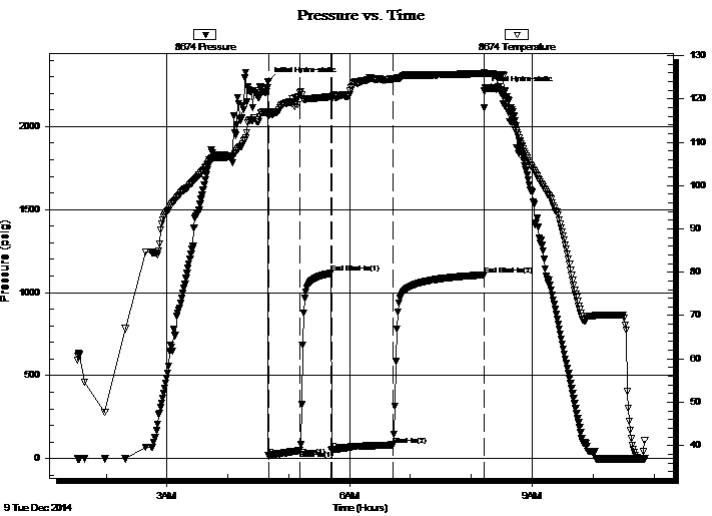
2014.12.09 @ 08:12:54

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

IS- No Blow

FF- Weak Surface Blow Built to 2"

FS- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2269.15	117.07	Initial Hydro-static
1	16.58	116.28	Open To Flow (1)
32	49.46	121.47	Shut-In(1)
63	1116.86	120.53	End Shut-In(1)
63	51.70	119.81	Open To Flow (2)
123	82.88	124.57	Shut-In(2)
213	1107.48	125.88	End Shut-In(2)
214	2214.46	125.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	GWCM 3%g 3%w 94%m w with a Skin	c0.61
25.00	WCM 2%w 98%m	0.35

* 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

23-17s-33w Scott Co. KS

202 W. Main St.
Salem IL 62881

Rudolph #1-23

Job Ticket: 58681

DST#: 5

ATTN: Tim Priest

Test Start: 2014.12.09 @ 01:32:00

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: 52.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
124.00	GWCM 3%g 3%w 94%m with a Skim of Oil	0.610
25.00	WCM 2%w 98%m	0.351

Total Length: 149.00 ft

Total Volume: 0.961 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

