

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
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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
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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:	
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Form	ACO1 - Well Completion
Operator	Shakespeare Oil Co., Inc.
Well Name	EDWARDS 1-21
Doc ID	1314473

All Electric Logs Run

Array Induction
Photo Density
Comp Neutron
Microlog
Sonic

Form	ACO1 - Well Completion
Operator	Shakespeare Oil Co., Inc.
Well Name	EDWARDS 1-21
Doc ID	1314473

Tops

Name	Top	Datum
Base Anhydrite	2453	+687
Heebner	3996	-856
Lansing	4038	-898
Muncie Creek	4228	-1088
Stark Shale	4326	-1186
Hushpuckney	4374	-1234
Marmaton	4474	-1334
Pawnee	4546	-1406
L. Cherokee Shale	4626	-1486
Johnson	4673	-1533
Mississippian	4836	-1696



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Company

21-16s-34w Scott Co KS

202 West Main St
Salem IL
62881
ATTN: Tim Priest

Edwards 1 21

Job Ticket: 64593

DST#: 1

Test Start: 2016.08.02 @ 07:15:15

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:14:30

Time Test Ended: 14:12:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Mike Roberts

Unit No: 81

Interval: 4447.00 ft (KB) To 4485.00 ft (KB) (TVD)

Reference Elevations: 3140.00 ft (KB)

Total Depth: 4485.00 ft (KB) (TVD)

3132.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 8.00 ft

Serial #: 8737 Outside

Press@RunDepth: 39.71 psig @ 4480.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.02

End Date:

2016.08.02

Last Calib.:

2016.08.02

Start Time: 07:15:15

End Time:

14:12:30

Time On Btm:

2016.08.02 @ 09:14:15

Time Off Btm:

2016.08.02 @ 12:15:45

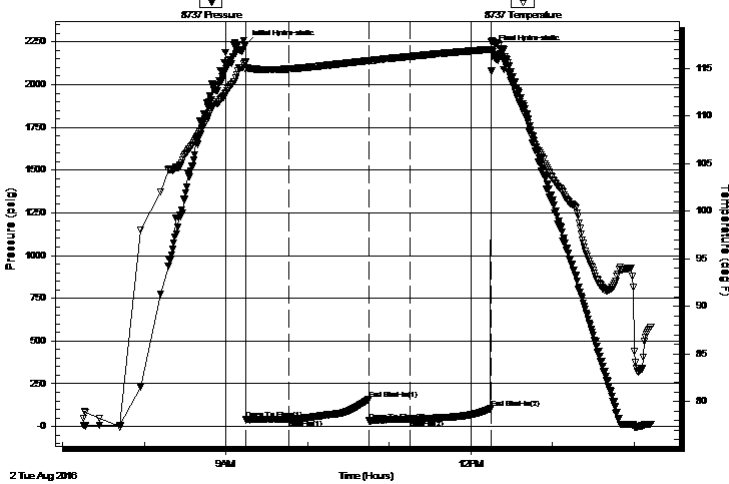
TEST COMMENT: IF:1/8" blow died in 25 min.

IS:No return blow

FF:No blow

FS:No return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2233.81	115.67	Initial Hydro-static
1	40.20	114.85	Open To Flow (1)
33	42.49	114.94	Shut-In(1)
91	158.76	115.81	End Shut-In(1)
91	32.41	115.76	Open To Flow (2)
121	39.71	116.24	Shut-In(2)
181	103.89	117.00	End Shut-In(2)
182	2202.74	117.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	mud 100%m	0.28

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Shakespeare Oil Company

21-16s-34w Scott Co KS

202 West Main St
Salem IL
62881
ATTN: Tim Priest

Edwards 1 21

Job Ticket: 64593

DST#: 1

Test Start: 2016.08.02 @ 07:15:15

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:14:30

Time Test Ended: 14:12:30

Interval: **4447.00 ft (KB) To 4485.00 ft (KB) (TVD)**

Total Depth: 4485.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Test Type: Conventional Bottom Hole (Initial)

Tester: Mike Roberts

Unit No: 81

Reference Elevations: 3140.00 ft (KB)

3132.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8646 Inside

Press@RunDepth: psig @ 4480.00 ft (KB)

Start Date: 2016.08.02

End Date: 2016.08.02

Start Time: 07:15:15

End Time: 14:12:15

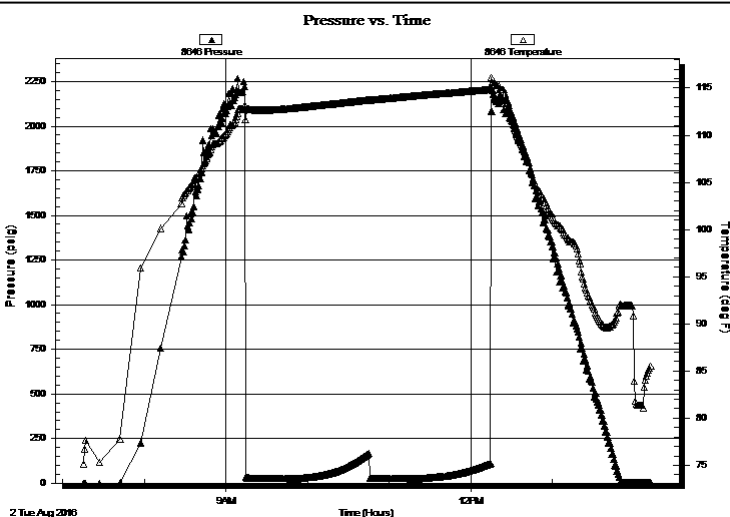
Capacity: 8000.00 psig

Last Calib.: 2016.08.02

Time On Btm:

Time Off Btm:

TEST COMMENT: IF:1/8" blow died in 25 min.
IS:No return blow
FF:No blow
FS:No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	mud 100%m	0.28

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Company

21-16s-34w Scott Co KS

202 West Main St
Salem IL
62881
ATTN: Tim Priest

Edwards 1 21

Job Ticket: 64593

DST#: 1

Test Start: 2016.08.02 @ 07:15:15

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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	mud 100%m	0.281

Total Length: 20.00 ft Total Volume: 0.281 bbl

Num Fluid Samples: 0

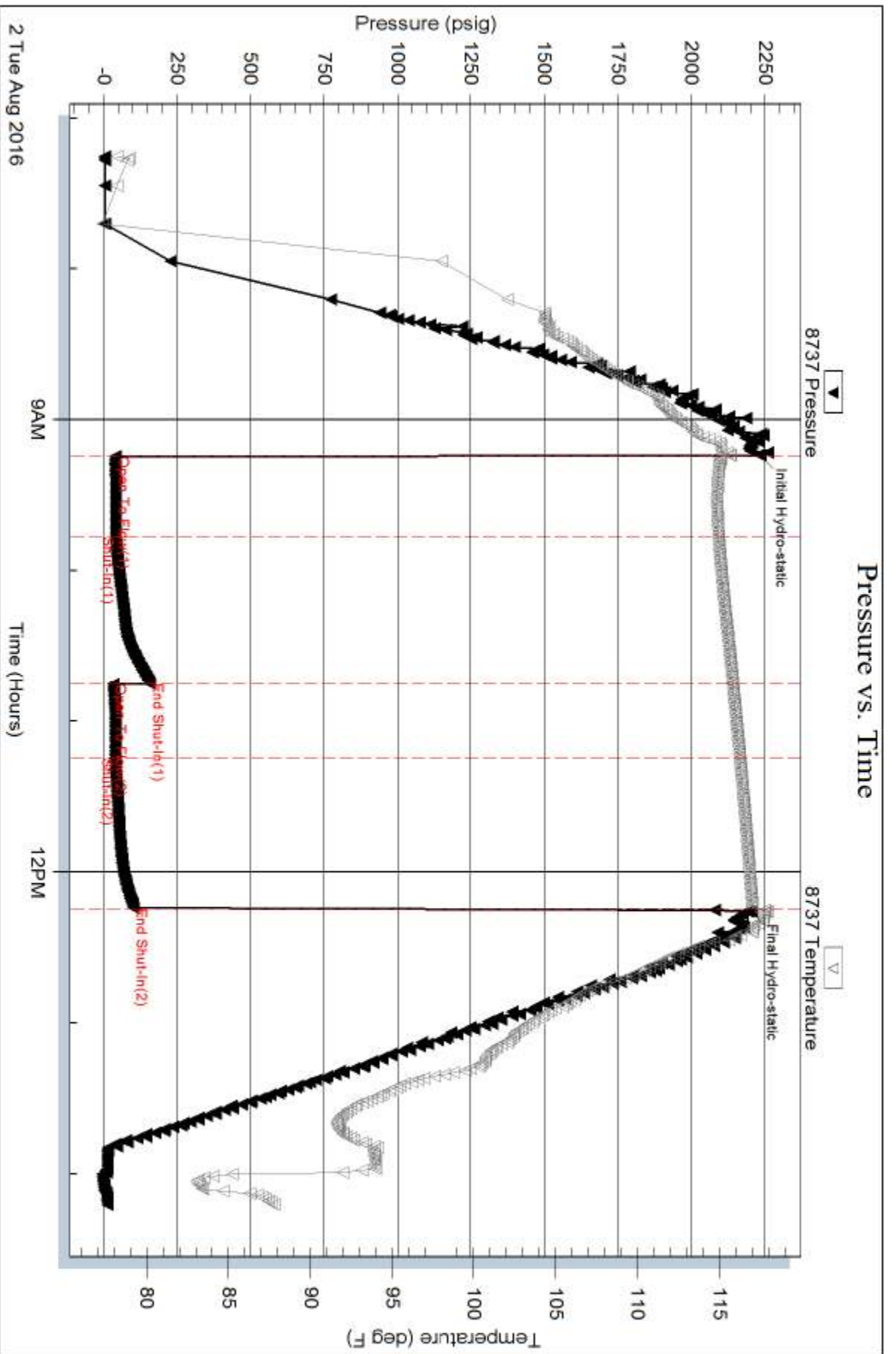
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



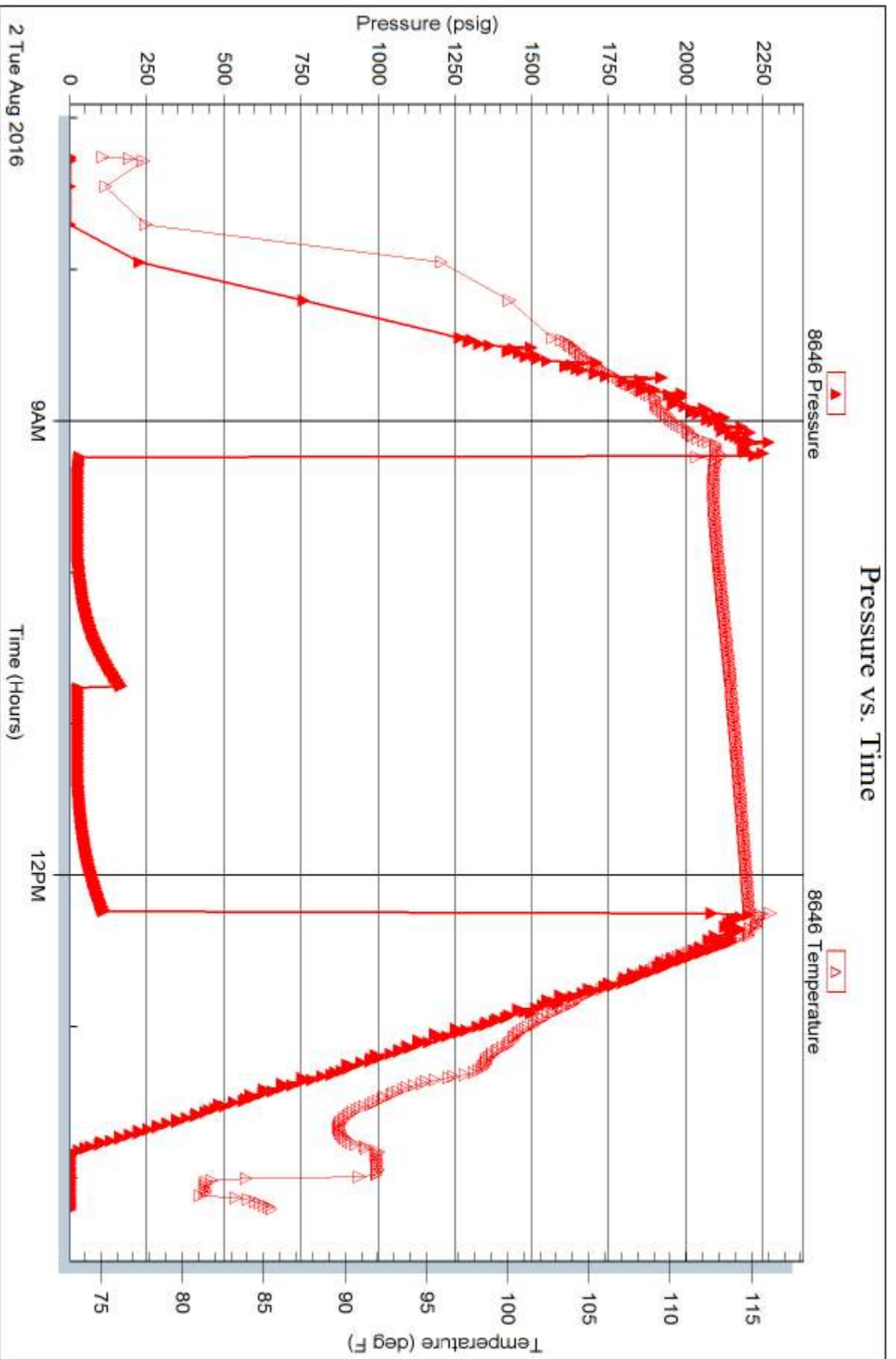
Serial #: 8646

Inside

Shakespeare Oil Company

Edwards 1 21

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 64593

Printed: 2016.08.02 @ 15:10:02



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Company

21-16s-34w Scott Co KS

202 West Main St
Salem IL
62881
ATTN: Tim Priest

Edwards 1 21

Job Ticket: 64594

DST#: 2

Test Start: 2016.08.02 @ 22:23:15

GENERAL INFORMATION:

Formation: **Marmaton B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened:

Time Test Ended: 02:48:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4482.00 ft (KB) To 4505.00 ft (KB) (TVD)

Total Depth: 4505.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3140.00 ft (KB)

3132.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8737 Outside

Press @ Run Depth: psig @ 4500.00 ft (KB)

Start Date: 2016.08.02

End Date:

2016.08.03

Start Time: 22:23:15

End Time:

02:48:45

Capacity: 8000.00 psig

Last Calib.: 2016.08.03

Time On Btm: 2016.08.03 @ 00:19:00

Time Off Btm: 2016.08.03 @ 00:23:30

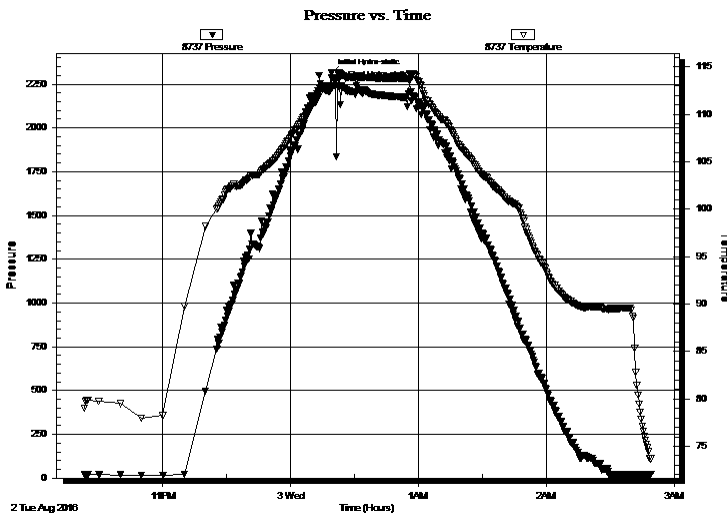
TEST COMMENT: IF:PACKER FAILURE

IS:

FF:

FS:

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2312.84	112.83	Initial Hydro-static
5	2241.64	114.24	Final Hydro-static

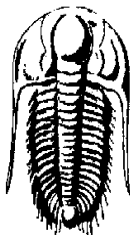
Recovery

Length (ft)	Description	Volume (bbl)
286.00	mud 100% m	4.01

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Company

21-16s-34w Scott Co KS

202 West Main St
Salem IL
62881
ATTN: Tim Priest

Edwards 1 21
Job Ticket: 64594 **DST#: 2**
Test Start: 2016.08.02 @ 22:23:15

GENERAL INFORMATION:

Formation: **Marmaton B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened:

Time Test Ended: 02:48:45

Interval: 4482.00 ft (KB) To 4505.00 ft (KB) (TVD)

Total Depth: 4505.00 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: 3140.00 ft (KB)

3132.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8646

Inside

Press @RunDepth: psig @ 4500.00 ft (KB)

Start Date: 2016.08.02 End Date: 2016.08.03

Start Time: 22:23:15 End Time: 02:48:45

Capacity: 8000.00 psig

Last Calib.: 1899.12.30

Time On Btm:

Time Off Btm:

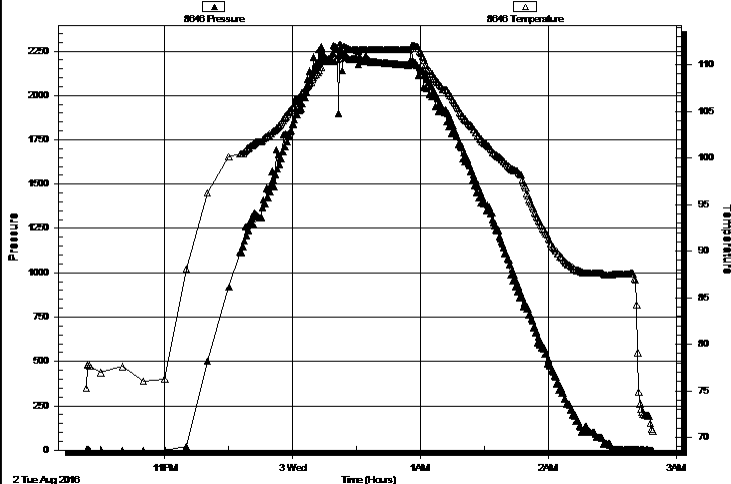
TEST COMMENT: IF:PACKER FAILURE

IS:

FF:

FS:

Pressure vs. Time



PRESSURE SUMMARY

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

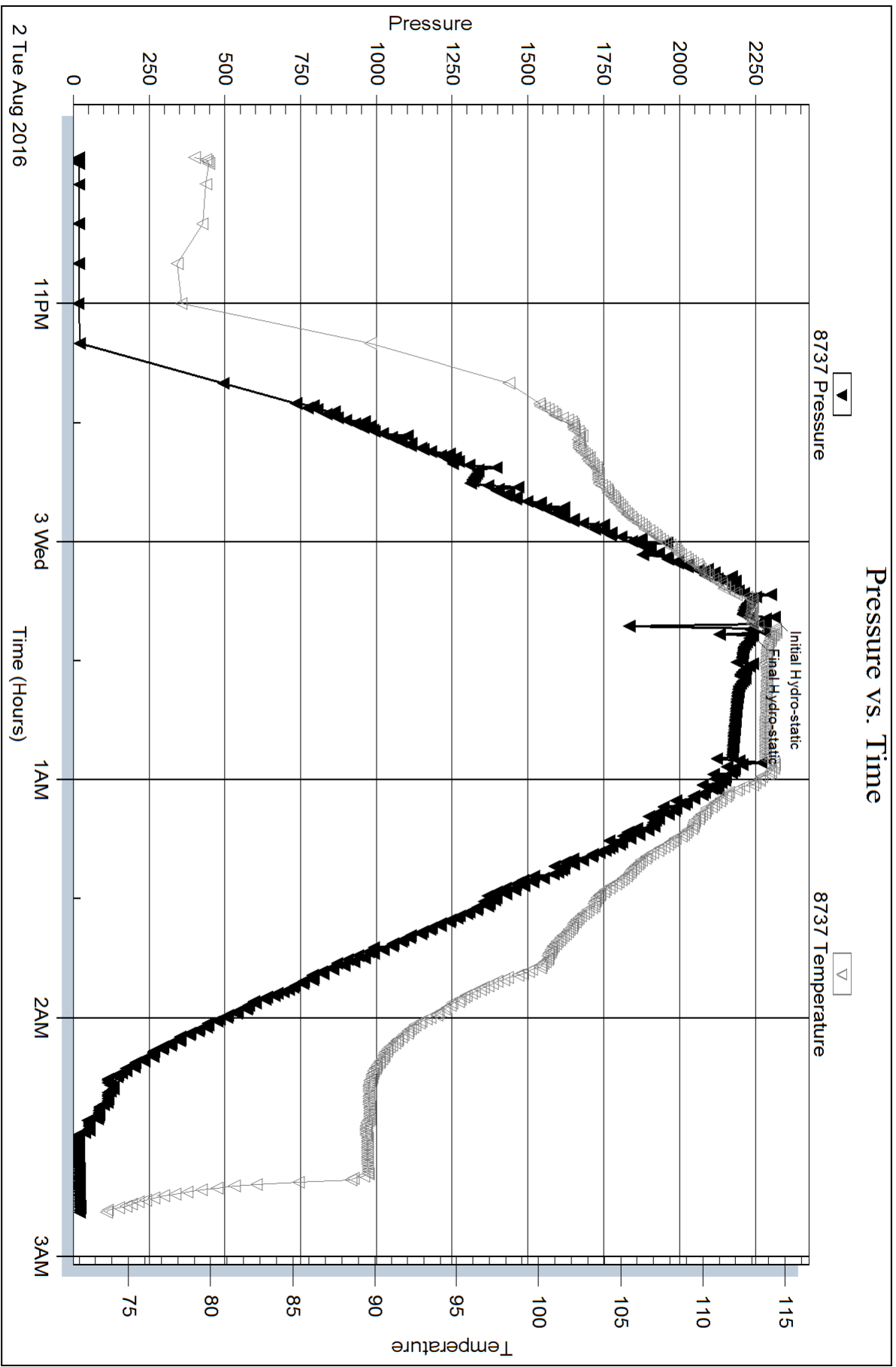
Recovery

Length (ft)	Description	Volume (bbl)
286.00	mud 100% m	4.01

Gas Rates

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

* Recovery from multiple tests



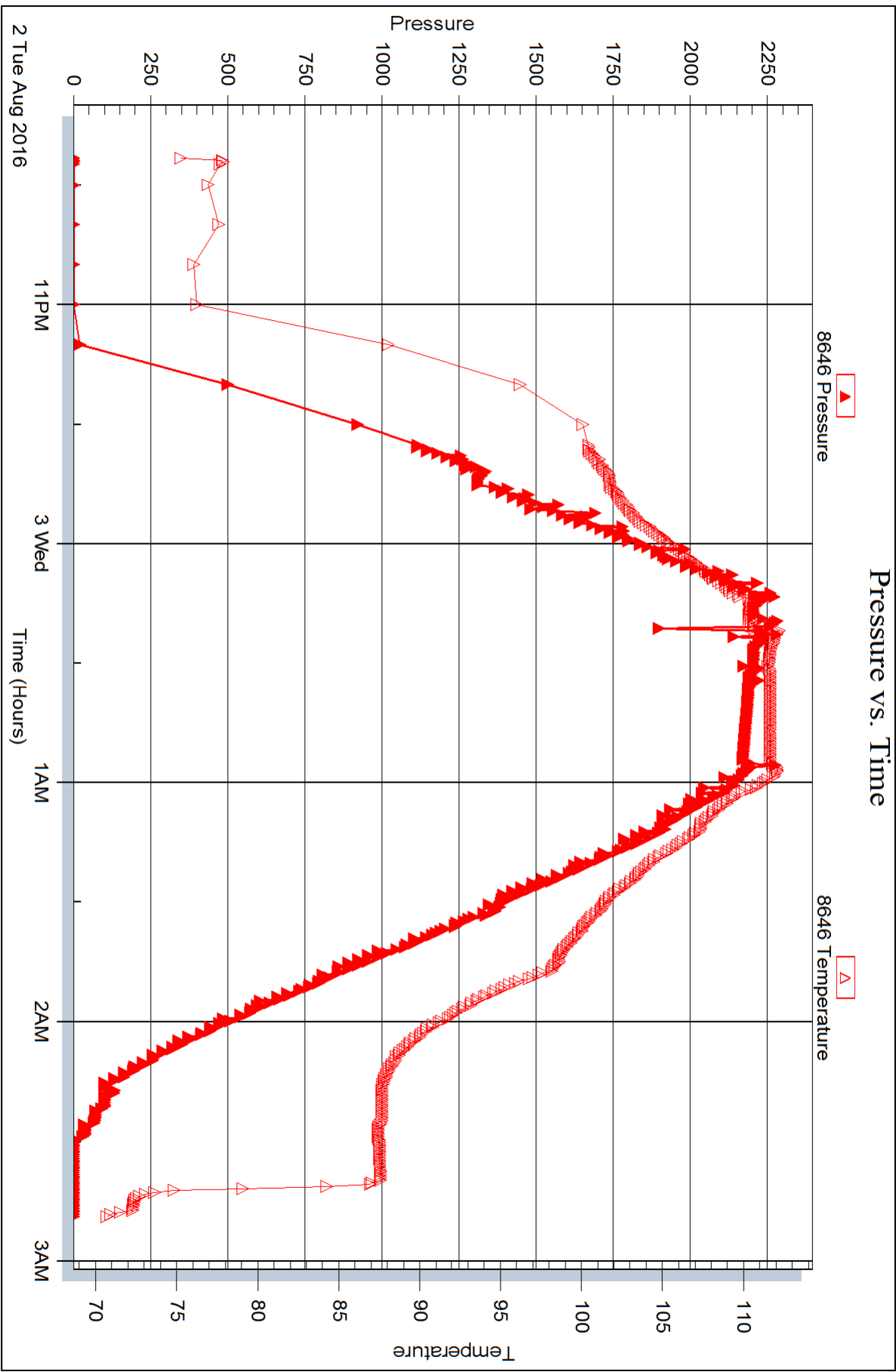
Serial #: 8646

Inside

Shakespeare Oil Company

Edwards 1 21

DST Test Number: 2





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Company

21-16s-34w Scott Co KS

202 West Main St
Salem IL
62881
ATTN: Tim Priest

Edwards 1 21

Job Ticket: 64595

DST#: 3

Test Start: 2016.08.03 @ 03:09:15

GENERAL INFORMATION:

Formation: **Marmaton B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:47:45

Time Test Ended: 09:41:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4447.00 ft (KB) To 4505.00 ft (KB) (TVD)

Reference Elevations: 3140.00 ft (KB)

Total Depth: 4505.00 ft (KB) (TVD)

3132.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8737 Outside

Press@RunDepth: 50.77 psig @ 4450.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.03

End Date:

2016.08.03

Last Calib.:

2016.08.03

Start Time: 03:09:15

End Time:

09:41:15

Time On Btm:

2016.08.03 @ 04:47:15

Time Off Btm:

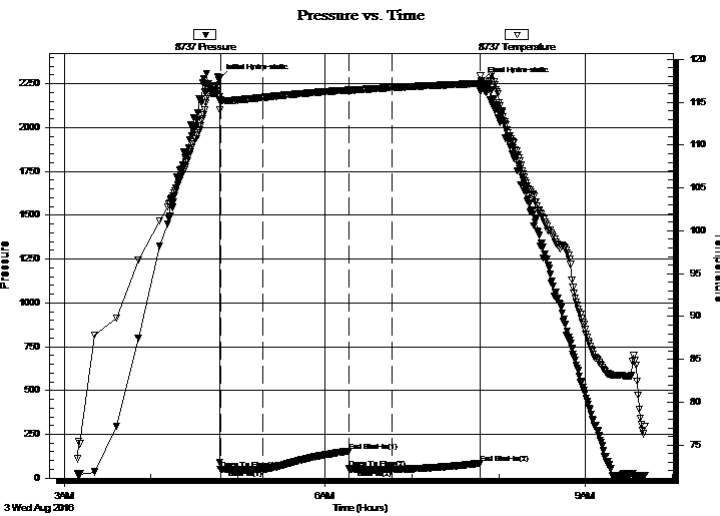
2016.08.03 @ 07:48:00

TEST COMMENT: IF:Weak surface blow that died in 14 min.

IS:No return blow

FF:No blow

FS:No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2281.93	115.65	Initial Hydro-static
1	52.15	115.03	Open To Flow (1)
30	51.17	115.55	Shut-In(1)
90	152.01	116.40	End Shut-In(1)
90	54.57	116.39	Open To Flow (2)
120	50.77	116.71	Shut-In(2)
180	85.61	117.20	End Shut-In(2)
181	2265.32	117.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	mud w ith oil in tool	0.35

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Shakespeare Oil Company

21-16s-34w Scott Co KS

202 West Main St
Salem IL
62881
ATTN: Tim Priest

Edwards 1 21

Job Ticket: 64595

DST#: 3

Test Start: 2016.08.03 @ 03:09:15

GENERAL INFORMATION:

Formation: **Marmaton B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:47:45

Time Test Ended: 09:41:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4447.00 ft (KB) To 4505.00 ft (KB) (TVD)

Total Depth: 4505.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3140.00 ft (KB)

3132.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8646 Inside

Press@RunDepth: psig @ 4450.00 ft (KB)

Start Date: 2016.08.03

End Date:

2016.08.03

Start Time: 03:09:15

End Time:

09:41:15

Capacity: 8000.00 psig

Last Calib.:

2016.08.03

Time On Btm:

Time Off Btm:

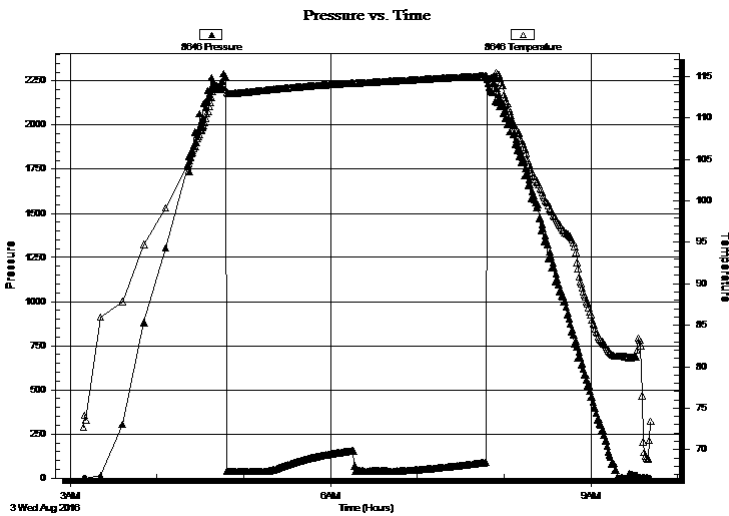
TEST COMMENT: IF:Weak surface blow that died in 14 min.

IS:No return blow

FF:No blow

FS:No return blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
25.00	mud with oil in tool	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 Company

21-16s-34w Scott Co KS

202 West Main St
Salem IL
62881
ATTN: Tim Priest

Edwards 1 21

Job Ticket: 64595

DST#: 3

Test Start: 2016.08.03 @ 03:09:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	mud w ith oil in tool	0.351

Total Length: 25.00 ft Total Volume: 0.351 bbl

Num Fluid Samples: 0

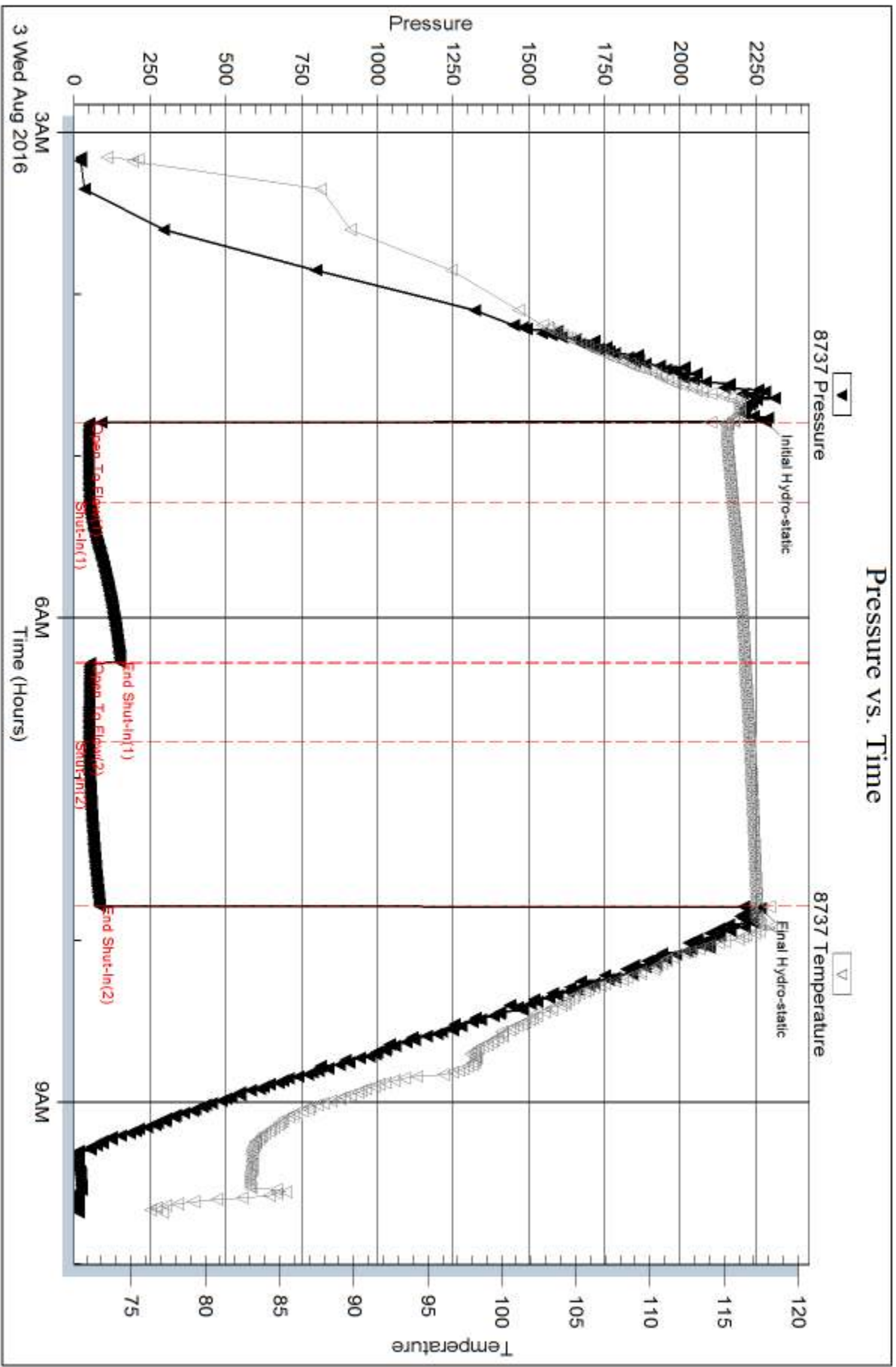
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



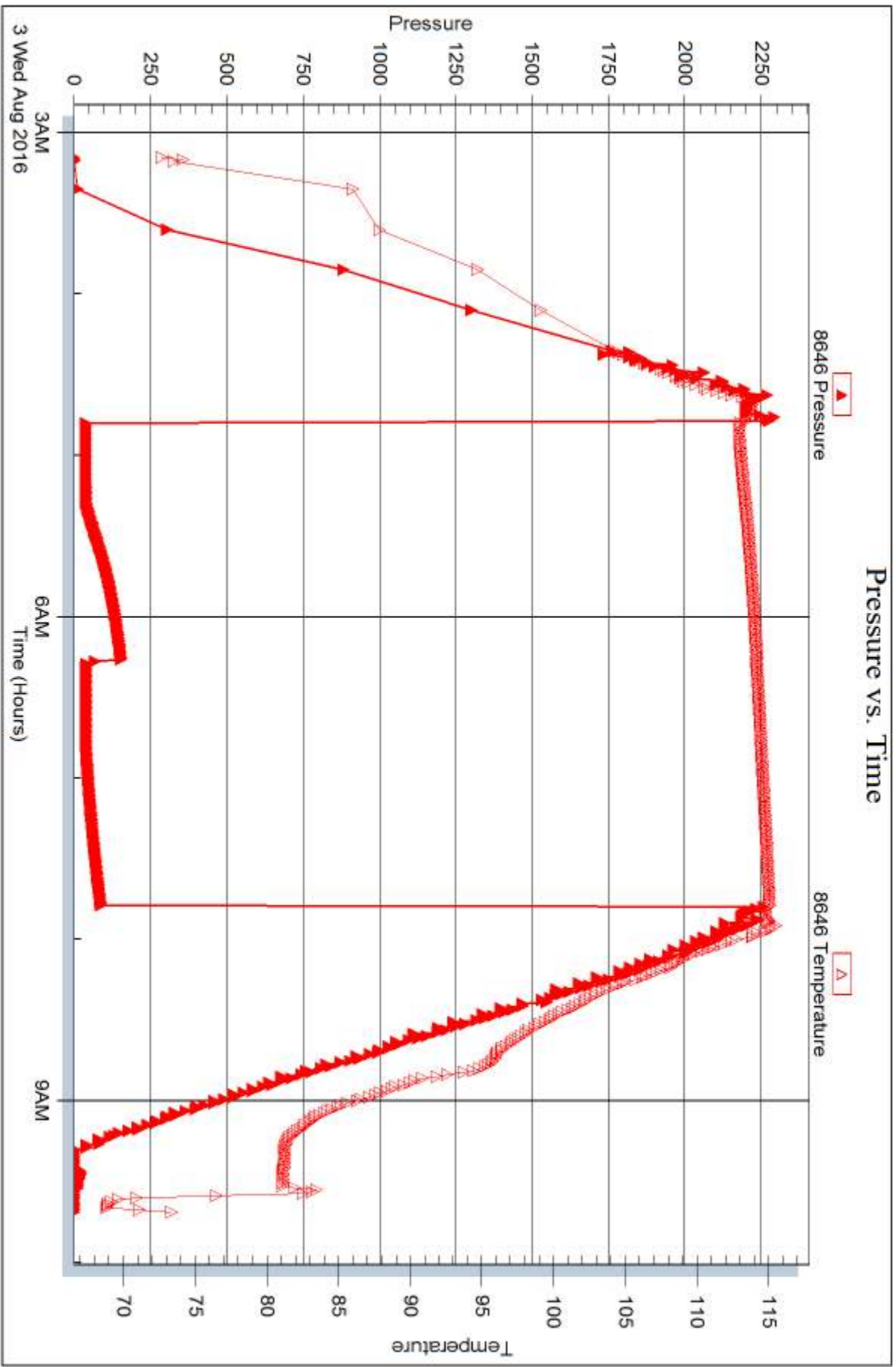
Serial #: 8646

Inside

Shakespeare Oil Company

Edwards 1 21

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 64595

Printed: 2016.08.03 @ 10:04:39



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Shakespeare Oil Company

21-16s-34w Scott Co KS

202 West Main St
Salem IL
62881
ATTN: Tim Priest

Edwards 1 21

Job Ticket: 64596

DST#: 4

Test Start: 2016.08.03 @ 19:44:15

GENERAL INFORMATION:

Formation: **Marmaton C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:59:00

Time Test Ended: 02:54:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4500.00 ft (KB) To 4545.00 ft (KB) (TVD)

Reference Elevations: 3140.00 ft (KB)

Total Depth: 4545.00 ft (KB) (TVD)

3132.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8737 Outside

Press@RunDepth: 47.31 psig @ 4507.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.03

End Date:

2016.08.04

Last Calib.:

2016.08.04

Start Time: 19:44:15

End Time:

02:54:00

Time On Btm:

2016.08.03 @ 21:56:45

Time Off Btm:

2016.08.04 @ 00:57:15

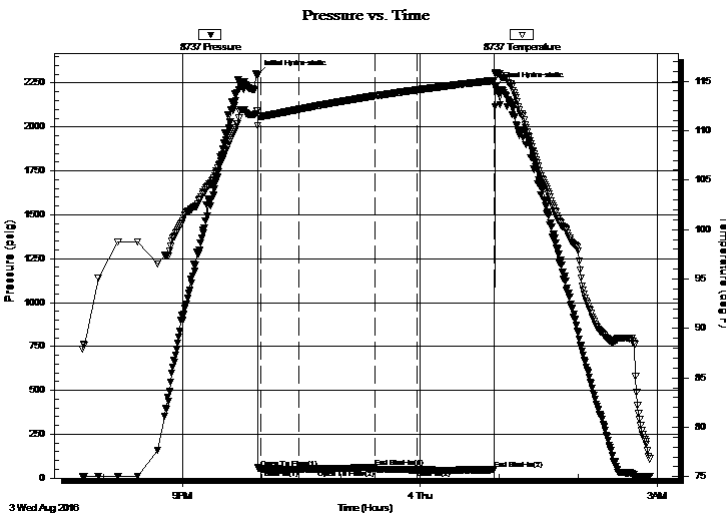
TEST COMMENT: IF:Weak surface blow died in 10 min.

IS:No return blow

FF:No blow

FS:No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2296.42	112.01	Initial Hydro-static
3	53.98	111.45	Open To Flow (1)
32	51.70	112.15	Shut-In(1)
89	62.53	113.51	End Shut-In(1)
90	52.38	113.51	Open To Flow (2)
122	47.31	114.12	Shut-In(2)
180	48.43	115.07	End Shut-In(2)
181	2229.40	115.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud with oil spots 100%m	0.21

* Recovery from multiple tests

Gas Rates

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



DRILL STEM TEST REPORT

Shakespeare Oil Company

21-16s-34w Scott Co KS

202 West Main St
Salem IL
62881
ATTN: Tim Priest

Edwards 1 21

Job Ticket: 64596

DST#: 4

Test Start: 2016.08.03 @ 19:44:15

GENERAL INFORMATION:

Formation: **Marmaton C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:59:00

Time Test Ended: 02:54:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4500.00 ft (KB) To 4545.00 ft (KB) (TVD)

Total Depth: 4545.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3140.00 ft (KB)

3132.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8646 Inside

Press@RunDepth: psig @ 4507.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.03

End Date:

2016.08.04

Last Calib.:

2016.08.04

Start Time: 19:44:15

End Time:

02:54:00

Time On Btm:

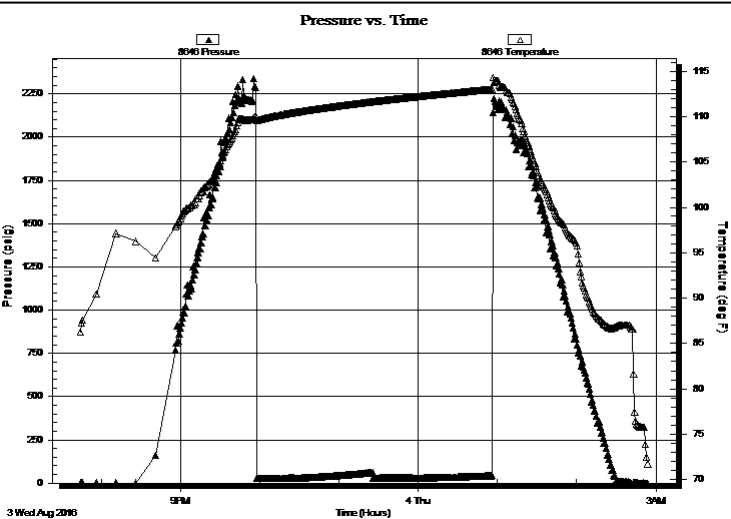
Time Off Btm:

TEST COMMENT: IF:Weak surface blow died in 10 min.

IS:No return blow

FF:No blow

FS:No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud with oil spots 100% m	0.21

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 Company

21-16s-34w Scott Co KS

202 West Main St
Salem IL
62881
ATTN: Tim Priest

Edwards 1 21

Job Ticket: 64596

DST#: 4

Test Start: 2016.08.03 @ 19:44:15

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: 48.00 sec/qt

Cushion Volume:

bbf

Water Loss: 10.37 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
15.00	mud w ith oil spots 100%m	0.210

Total Length: 15.00 ft Total Volume: 0.210 bbf

Num Fluid Samples: 0

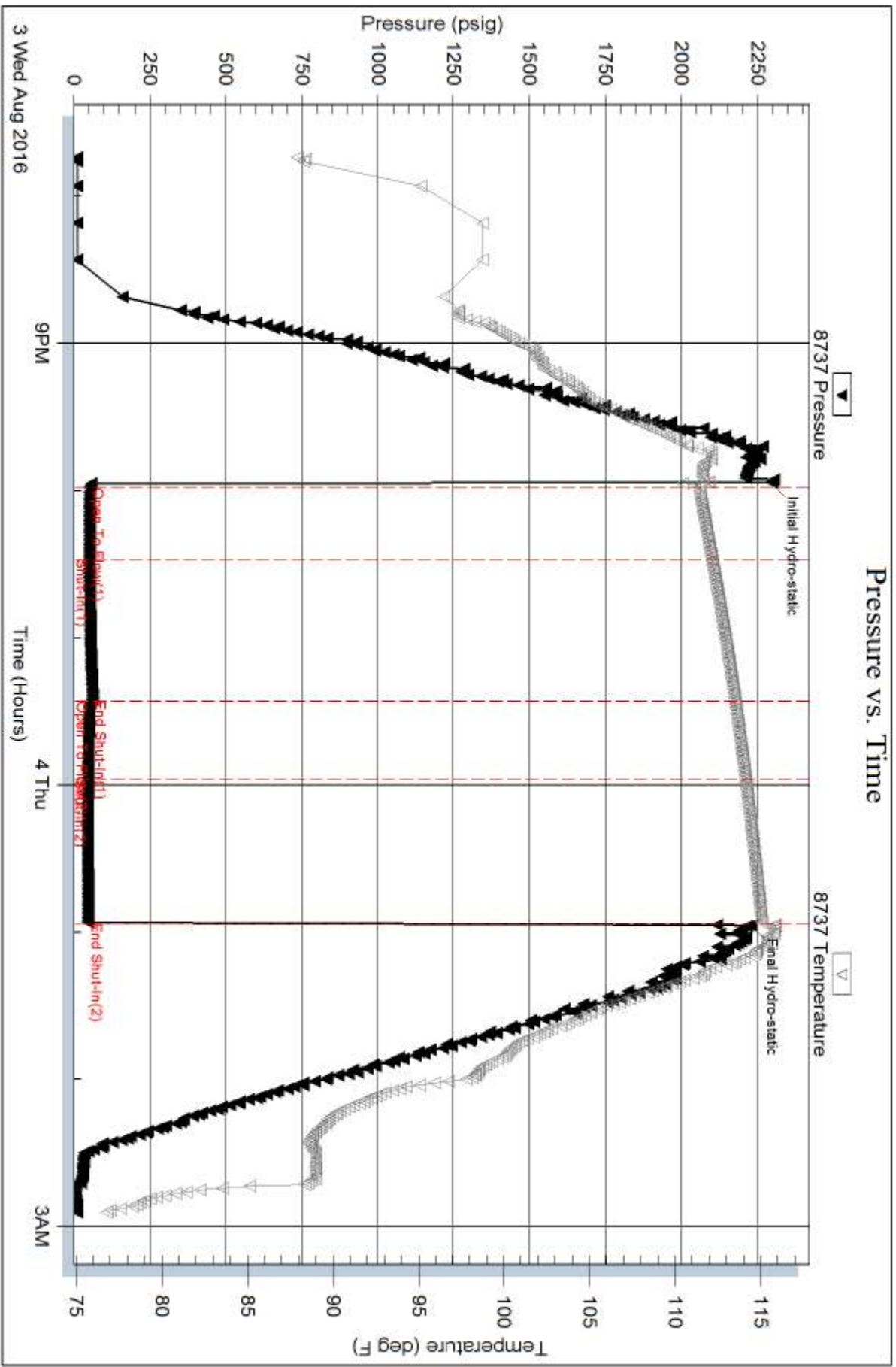
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



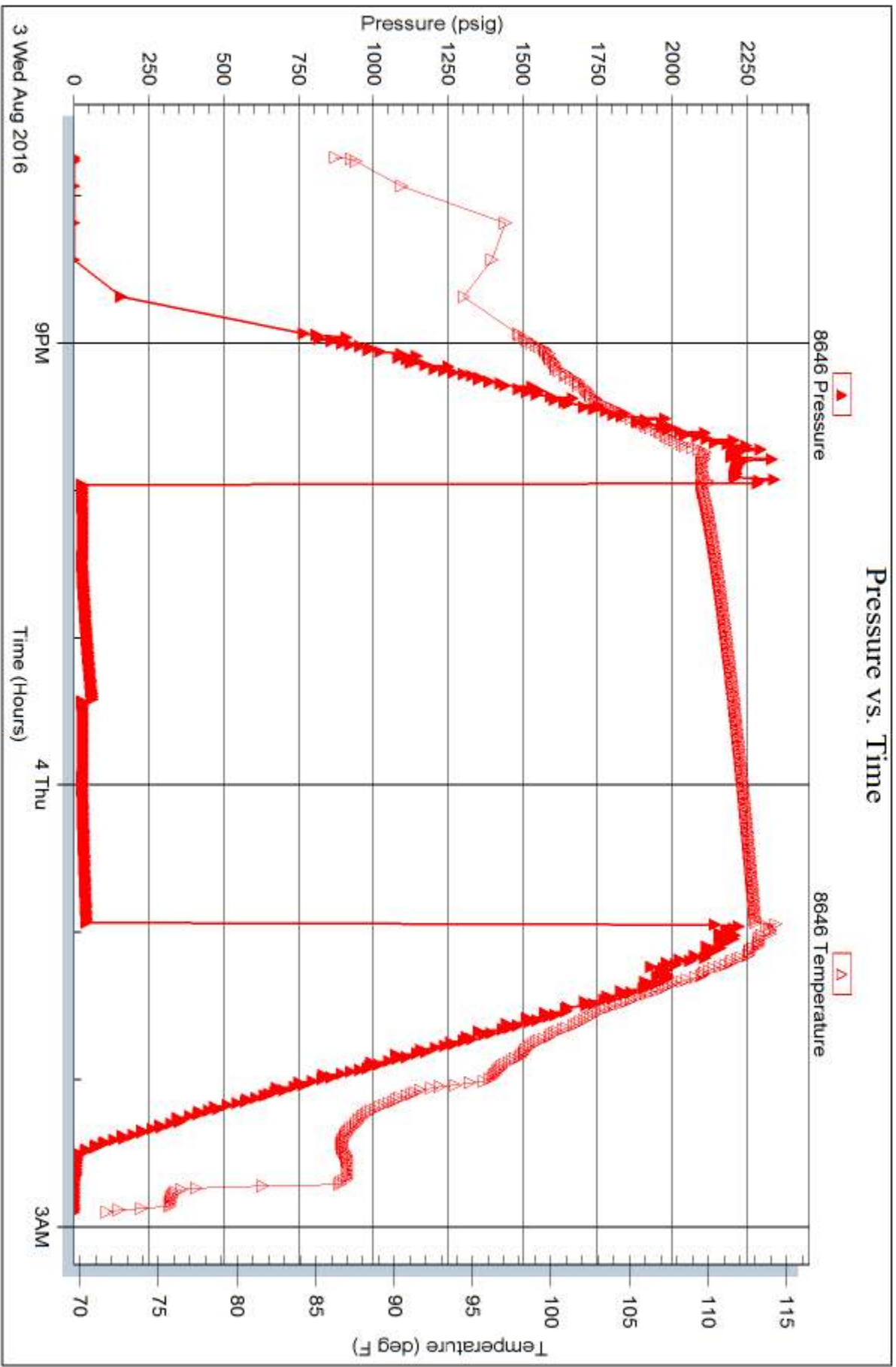
Serial #: 8646

Inside

Shakespeare Oil Company

Edwards 1 21

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 64596

Printed: 2016.08.04 @ 08:04:22

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY **SHAKESPARE OIL CO.** ELEVATIONS
 LEASE **SEWARDS-121** KG 3140'
 FIELD **Pine West** DF _____
 LOCATION **128° 51' E 181° 18' N** SEC _____
 SEC **21** T1MSP **16S** R1E **34W** GL **3132'**
 COUNTY **Scott** STATE **Kansas** Measurements Are All From **KB**

CONTRACTOR **Duke Drilling Rig 2**
 SPUD **7-26-16** COMP **8-6-16**
 RTD **4915'** LTD **4911'** CASING
 MUD UP **3500'** TYPE MUD **Chemical** CONDUCTION **N/A**
 SAMPLES SAVED FROM **3800'** to RTD SURFACE **8-5/8" @ 264'**
 DRILLING TIME KEPT FROM **3800'** to RTD PRODUCTION **None**
 SAMPLES EXAMINED FROM **3800'** to RTD ELECTRICAL
 GEOLOGICAL SUPERVISION FROM **3900'** to RTD CND/D/SP/P/E
 GEOLOGIST ON WELL **Tim Priest** Micro sonic
 By: **Weatherford**

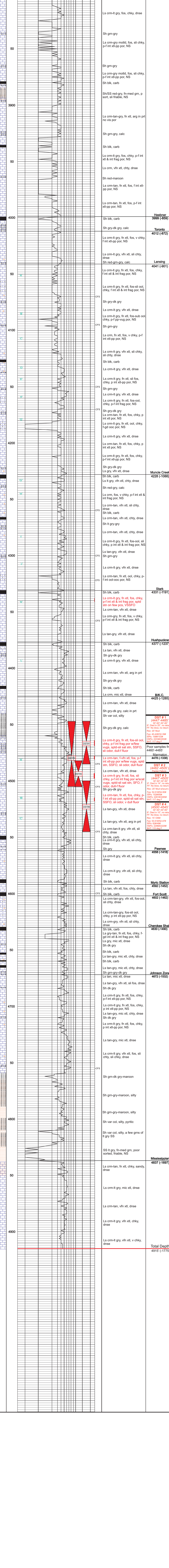
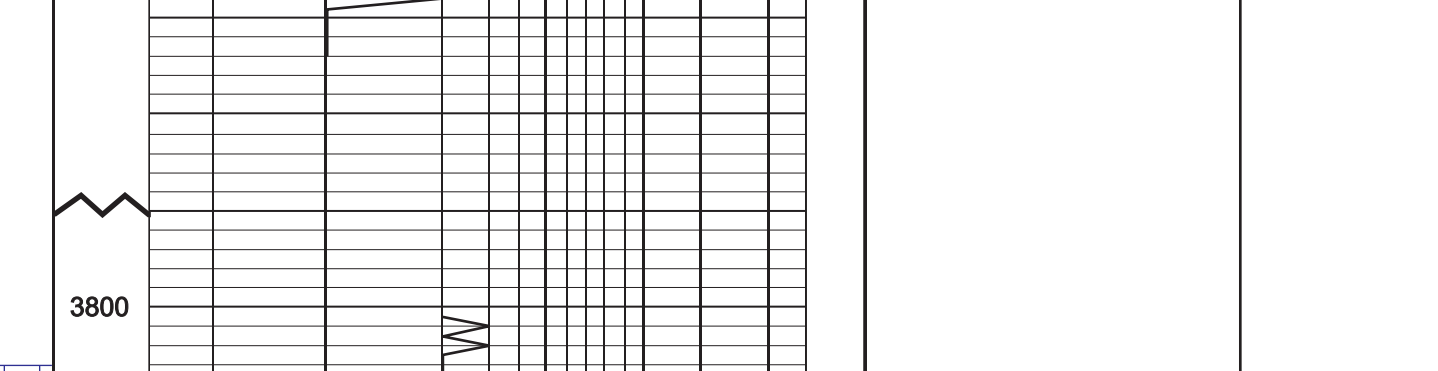
FORMATION TOPS ELECTRIC LOG SAMPLE
 Anhydrite **2444 (+696)** **2449 (+691)**
 Heebner Shale **3996 (-856)** **3999 (-859)**
 Lansing **4038 (-898)** **4041 (-901)**
 Stark **4326 (-1186)** **4331 (-1191)**
 B/K C **4425 (-1285)** **4425 (-1285)**
 Fort Scott **4598 (-1458)** **4602 (-1462)**
 Cherokee Shale **4626 (-1486)** **4630 (-1490)**
 Mississippi **4836 (-1696)** **4837 (-1697)**

REMARKS . . . Due to negative drill stem tests, it was decided to plug and abandon the well.

Respectfully Submitted,
 Tim Priest
 Petroleum Geologist

API #15-171-21174-00-00

LEGEND





INVOICE

P.O. Box 205803
Dallas, TX 75320-5803

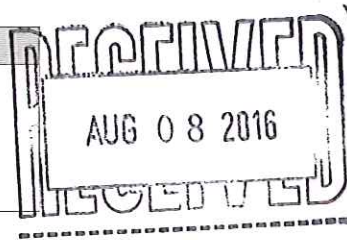
Invoice Number: 152479
Invoice Date: Jul 26, 2016
Page: 1

Voice: (832) 482-3742
Fax: (832) 482-3738

Federal Tax I.D.#: 81-2169190

Bill To:

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



Customer ID	Field Ticket #	Payment Terms	
Shak	68087	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Jul 26, 2016	8/25/16

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Edwards 1-21		
180.00	CEMENT MATERIALS	Class A Common	17.90	3,222.00
338.00	CEMENT MATERIALS	GEL	0.50	169.00
508.00	CEMENT MATERIALS	Calcium Chloride	1.10	558.80
194.64	CEMENT SERVICE	PHDL	2.48	482.71
399.60	CEMENT SERVICE	DRYG	2.75	1,098.90
45.00	CEMENT SERVICE	MILV	4.40	198.00
45.00	CEMENT SERVICE	MIHV	7.70	346.50
1.00	CEMENT SERVICE	Surface Charge	1,512.25	1,512.25
1.00	CEMENT SERVICE	Swedge	275.00	275.00
1.00	JOB DISCOUNT	Job Discount if paid within terms -- Material	1,974.90	-1,974.90
1.00	JOB DISCOUNT	Job Discount if paid within terms -- Cement Service	1,956.68	-1,956.68
1.00	E-FORSLUND.MERRELL	SERVICE SUPERVISOR		
1.00	E-MCGHGHY.WAYNE	EQUIPMENT OPERATOR		
1.00	E-PHILLIPS.MONTY	EQUIPMENT OPERATOR		

INT

10502-5
K

ALL PRICES ARE NET, PAYABLE
30 DAYS FOLLOWING DATE OF
INVOICE. ONLY IF PAID ON OR
BEFORE

Aug 25, 2016

1 1/2% CHARGED
THEREAFTER.

Subtotal	3,931.58
Sales Tax	335.73
Total Invoice Amount	4,267.31
Payment/Credit Applied	
TOTAL	4,267.31

DW



ALLIED OFS, LLC

Federal Tax I.D. #81-2169190

68087

REMIT TO: Allied Ofs, LLC
P.O. Box 205803
Dallas, TX 75320-5803

SERVICE POINT:

Dalway

DATE <u>2-2-16</u>	SEC <u>21</u>	TWP <u>16s</u>	RANGE <u>34w</u>	CALLED OUT	ON LOCATION <u>1:00pm</u>	JOB START <u>4:30pm</u>	JOB FINISH <u>5:00pm</u>
<u>Edwards</u> LEASE	WELL # <u>1-21</u>	LOCATION <u>Pence 345 Winto</u>			COUNTY <u>Scott</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)							

CONTRACTOR Duke 2
 TYPE OF JOB Surface
 HOLE SIZE 12 1/4 T.D. 264'
 CASING SIZE 8 5/8 DEPTH 264'
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT
 CEMENT LEFT IN CSG. 15'
 PERFS.
 DISPLACEMENT 15.86 gal.

OWNER Same
 CEMENT AMOUNT ORDERED 1800 sks Com 3%cc
20 gal
 COMMON 1800 sks @ 17.91 3222.00
 POZMIX @
 GEL 338# @ 1.50 169.00
 CHLORIDE 528# @ 1.10 588.80
 ASC @
 @
 @
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EQUIPMENT
 PUMP TRUCK CEMENTER Andrew Jarstund
 # 431 HELPER Wayne McGandy
 BULK TRUCK
 # 891 DRIVER Monty Phillips
 BULK TRUCK
 # DRIVER

TOTAL 3949.80
DISCOUNT 50% 1,974.90

REMARKS:

Cement in cellar
Thank you

CHARGE TO: shakespeare
 STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE

HANDLING 194.64 cu/ft @ 2.48 482.71
 MILEAGE 2.25 tag/mile @ 8.85/ton 1098.90
 DEPTH OF JOB 264'
 PUMP TRUCK CHARGE 1572.25
 EXTRA FOOTAGE @
 HV MILEAGE 48 miles @ 7.20 346.50
 LV MILEAGE 45 miles @ 4.40 198.00
Swedge @ 275.00
 @
 @
 @
 @
 @
 @

TOTAL 3913.36
DISCOUNT 50% 1,956.68

PLUG & FLOAT EQUIPMENT

@
 @
 @
 @
 @
 @
 @
 @
 @
 @

TOTAL
DISCOUNT %

To: Allied Ofs, 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 Dion Vasquez
SIGNATURE Dion Vasquez

SALES TAX (if Any) _____
TOTAL CHARGES 7,863.16
DISCOUNT 3,931.58 (50%) IF PAID IN 30 DAYS
NET TOTAL 3,931.58 IF PAID IN 30 DAYS



INVOICE

P.O. Box 205803
 Dallas, TX 75320-5803

Invoice Number: 152515
 Invoice Date: Aug 6, 2016
 Page: 1

Voice: (832) 482-3742
 Fax: (832) 482-3738

Federal Tax I.D.#: 81-2169190

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

Customer ID	Field Ticket #	Payment Terms	
Shak	68064	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-03	Oakley	Aug 6, 2016	9/5/16

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Eduardo 1-21 <i>Edwards</i>		
300.00	CEMENT MATERIALS	60-40-4%	18.92	5,676.00
75.00	CEMENT MATERIALS	FloSeal	2.97	222.75
322.20	CEMENT SERVICE	PHDL	2.48	799.06
605.43	CEMENT SERVICE	DRYG	2.75	1,664.93
45.00	CEMENT SERVICE	MILV	4.40	198.00
50.19	CEMENT SERVICE	MIHV	7.70	386.50
1.00	CEMENT SERVICE	Plug to Abandon	2,483.59	2,483.59
1.00	JOB DISCOUNT	Job Discount if paid within terms -- Material	2,949.37	-2,949.37
1.00	JOB DISCOUNT	Job Discount if paid within terms -- Cement Service	2,766.04	-2,766.04
1.00	E-RYAN.ALAN	SERVICE SUPERVISOR		
1.00	E-RYAN.KEVIN	EQUIPMENT OPERATOR		
1.00	E-BROWN.CORY	MECHANIC		

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. ONLY IF PAID ON OR BEFORE Sep 5, 2016 1 1/2% CHARGED THEREAFTER.	Subtotal	5,715.42
	Sales Tax	485.81
	Total Invoice Amount	6,201.23
	Payment/Credit Applied	
	TOTAL	6,201.23



ALLIED OFS, LLC

Federal Tax I.D. #81-2169190

68064

REMIT TO: Allied Ofs, LLC
P.O. Box 205803
Dallas, TX 75320-5803

SERVICE POINT:

Dallas, TX

DATE <i>8/6/16</i>	SEC <i>21</i>	TWP <i>16</i>	RANGE <i>24</i>	CALLED OUT	ON LOCATION	JOB START <i>8:00A</i>	JOB FINISH <i>10:00A</i>
LEASE <i>Edwards</i>	WELL # <i>1-21</i>	LOCATION <i>Pence 345 units</i>	COUNTY <i>SOT</i>	STATE <i>TX</i>			
OLD OR NEW (Circle one)							

CONTRACTOR *Duke 2*

TYPE OF JOB *PTD*

HOLE SIZE *4 1/2* T.D.

CASING SIZE *4 1/2* DEPTH *264'*

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG.

PERFS.

DISPLACEMENT

OWNER *Same*

CEMENT AMOUNT ORDERED *300 60/140 400 gal*

114 P-60

NEW 60/140 470

COMMON *300 SIL* @ *18.92* *5676.00*

POZMIX @

GEL @

CHLORIDE @

ASC @

FluSeal *25/10* @ *7.92* *222.25*

EQUIPMENT

PUMP TRUCK CEMENTER *Alan Ryan*

566281 HELPER *Kevin Ryan*

BULK TRUCK

891-287 DRIVER *Cory Brown*

BULK TRUCK

DRIVER

TOTAL *5,898.25*

DISCOUNT *50%* *2,949.37*

REMARKS:

50 SIL @ 2460'

80 SIL @ 1530'

50 SIL @ 750'

50 SIL @ 300'

20 SIL @ 60'

30 SIL Rat Hole

20 SIL Mouse Hole

+ haul to you Alan, Kevin, Cory

CHARGE TO: *Shelby Pence*

STREET

CITY STATE ZIP

SERVICE

HANDLING *322.2 CP* @ *2.48* *799.26*

MILEAGE *2.78* *700/mile* *13.45470N* *1664.93*

DEPTH OF JOB *2460'*

PUMP TRUCK CHARGE *2483.59*

EXTRA FOOTAGE @

HV MILEAGE *45* @ *7.30* *386.50*

LV MILEAGE *45* @ *4.30* *190.00*

TOTAL *5,532.08*

DISCOUNT *50%* *2,766.04*

PLUG & FLOAT EQUIPMENT

@

@

@

@

@

TOTAL

DISCOUNT %

To: Allied Ofs, 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 *Dion Vasquez*

SIGNATURE *Dion Vasquez*

SALES TAX (If Any)

TOTAL CHARGES *11,430.83*

DISCOUNT *5,715.41 (50%)* IF PAID IN 30 DAYS

NET TOTAL *5,715.41* IF PAID IN 30 DAYS