

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 Recompletion Date _____ 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	TRACTOR 2-13
Doc ID	1641987

Tops

Name	Top	Datum
Base Anhydrite	2304	+667
Heebner	3889	-918
Lansing	3939	-968
Muncie Creek	4113	-1142
Stark Shale	4208	-1237
Hushpuckney	4245	-1274
Pawnee	4413	-1442
Johnson	4525	-1554
Mississippian	4564	-1593

Form	ACO1 - Well Completion
Operator	Shakespeare Oil Co., Inc.
Well Name	TRACTOR 2-13
Doc ID	1641987

Perforations

Shots Per Foot	Perforation Top	Perforation Bottom	BridgePlugType	BridgePlugSet At	Material Record
4	4554	4558			250 gal 15% MCA
4	4546	4552			*500 gal 15% MCA
4	4542	4544			*500 gal 15% MCA
4	4536	4538			*500 gal 15% MCA
4	296	302			250 gal 15% MCA
4	4274	4277			250 gal 15% MCA, 250 gal 15% MCA, 500 gal 20% NEFE



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Shakespeare Oil Company

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68048

DST#: 1

ATTN: Kent Matson

Test Start: 2022.04.03 @ 10:10:00

GENERAL INFORMATION:

Formation: **Lansing " A "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:26:50

Time Test Ended: 16:22:09

Test Type: Conventional Bottom Hole (Initial)

Tester: Martine Salinas

Unit No: 81

Interval: 3938.00 ft (KB) To 3960.00 ft (KB) (TVD)

Reference Elevations: 2971.00 ft (KB)

Total Depth: 3960.00 ft (KB) (TVD)

2960.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8734 Outside

Press@RunDepth: 59.80 psig @ 3939.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.04.03

End Date:

2022.04.03

Last Calib.:

2022.04.03

Start Time: 10:10:01

End Time:

16:22:10

Time On Btm:

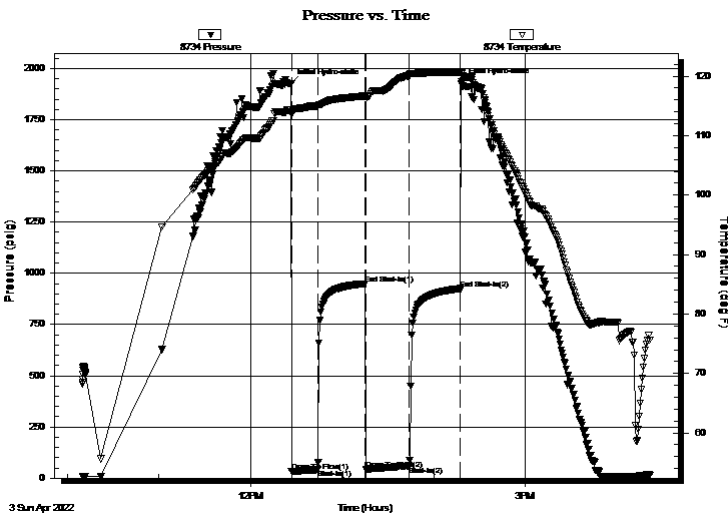
2022.04.03 @ 12:26:40

Time Off Btm:

2022.04.03 @ 14:18:30

TEST COMMENT: 15-IF-Blow built to 2"
30-ISI-No return
30-FF-Blow built to 2 1/4"
30-FSI-No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1926.77	114.30	Initial Hydro-static
1	33.59	113.56	Open To Flow (1)
18	42.19	114.96	Shut-In(1)
49	949.27	116.67	End Shut-In(1)
50	44.00	116.49	Open To Flow (2)
78	59.80	120.13	Shut-In(2)
111	924.94	120.62	End Shut-In(2)
112	1932.93	120.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	100% Mud w /Oil specks	0.98

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Shakespeare Oil Company

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68048

DST#: 1

ATTN: Kent Matson

Test Start: 2022.04.03 @ 10:10:00

GENERAL INFORMATION:

Formation: **Lansing " A "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:26:50

Time Test Ended: 16:22:09

Test Type: Conventional Bottom Hole (Initial)

Tester: Martine Salinas

Unit No: 81

Interval: 3938.00 ft (KB) To 3960.00 ft (KB) (TVD)

Reference Elevations: 2971.00 ft (KB)

Total Depth: 3960.00 ft (KB) (TVD)

2960.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8959 Inside

Press@RunDepth: psig @ 3939.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.04.03

End Date:

2022.04.03

Last Calib.:

2022.04.03

Start Time: 10:10:01

End Time:

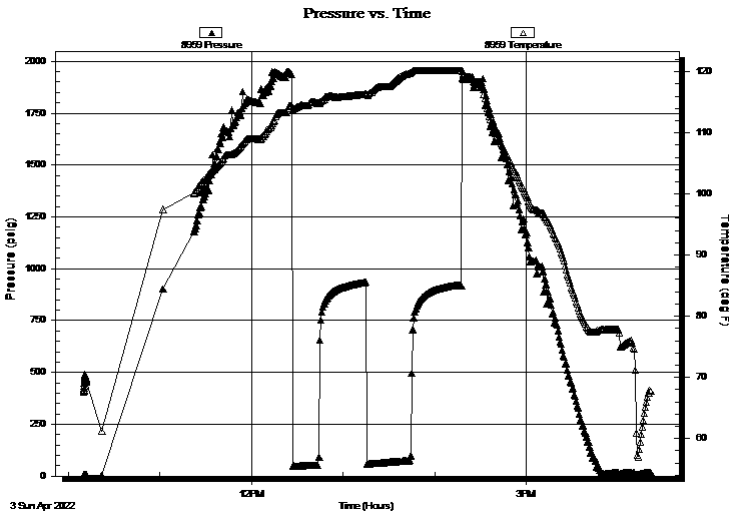
16:22:00

Time On Btm:

Time Off Btm:

TEST COMMENT: 15-IF-Blow built to 2"
30-ISI-No return
30-FF-Blow built to 2 1/4"
30-FSI-No return

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
70.00	100% Mud w /Oil specks	0.98

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Company

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68048

DST#: 1

ATTN: Kent Matson

Test Start: 2022.04.03 @ 10:10:00

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: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	100% Mud w /Oil specks	0.982

Total Length: 70.00 ft Total Volume: 0.982 bbl

Num Fluid Samples: 0

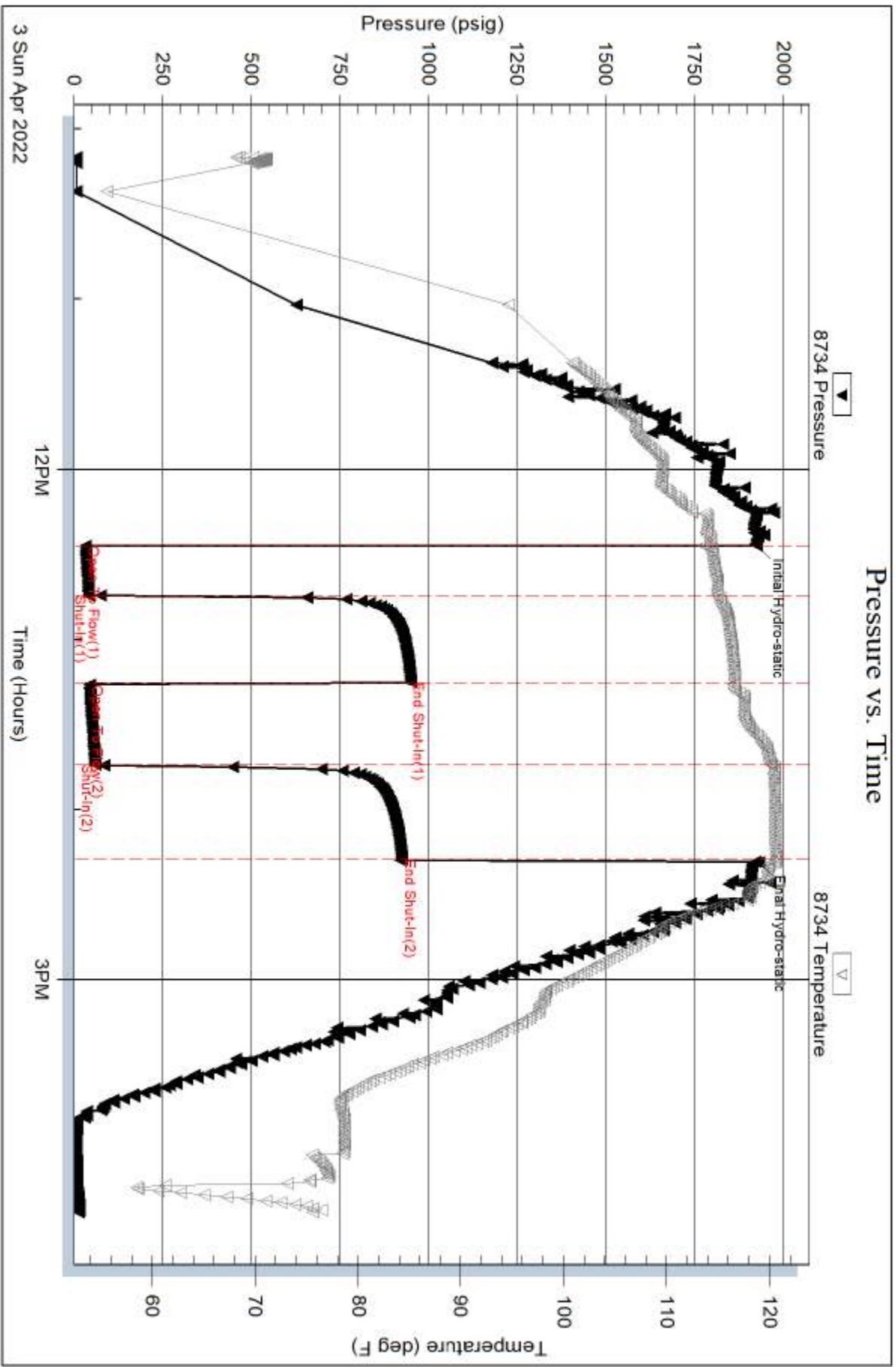
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



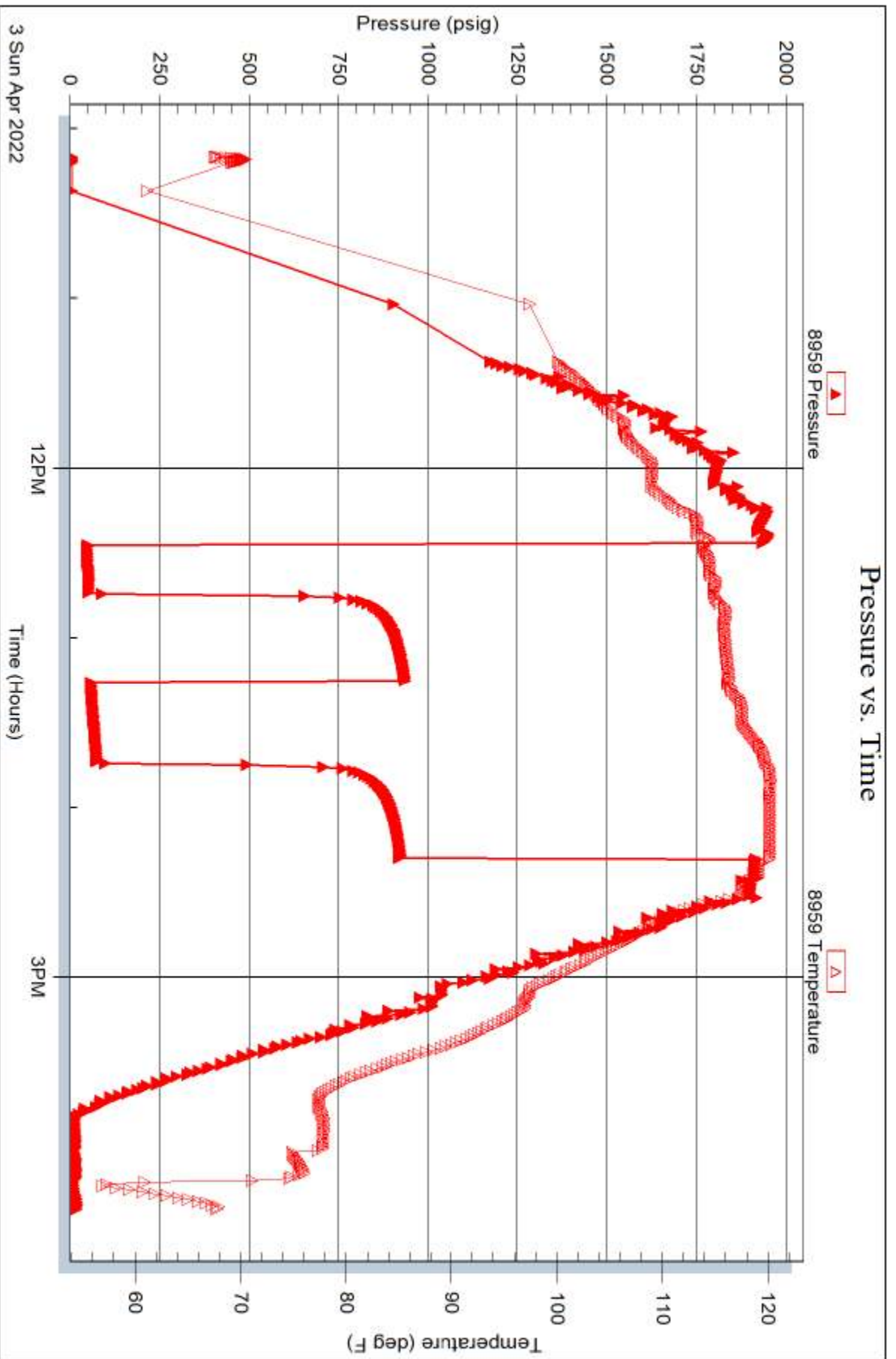
Serial #: 8959

Inside

Shakespeare Oil Company

Tractor # 2-13

DST Test Number: 1





**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Shakespeare Oil Company

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68049

DST#: 2

ATTN: Kent Matson

Test Start: 2022.04.04 @ 21:15:00

GENERAL INFORMATION:

Formation: **Lansing "I & J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:51:00

Time Test Ended: 04:29:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Martine Salinas

Unit No: 81

Interval: 4167.00 ft (KB) To 4210.00 ft (KB) (TVD)

Reference Elevations: 2971.00 ft (KB)

Total Depth: 4210.00 ft (KB) (TVD)

2960.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8734 Outside

Press@RunDepth: 97.95 psig @ 4168.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.04.04

End Date:

2022.04.05

Last Calib.:

2022.04.05

Start Time: 21:15:01

End Time:

04:29:00

Time On Btm:

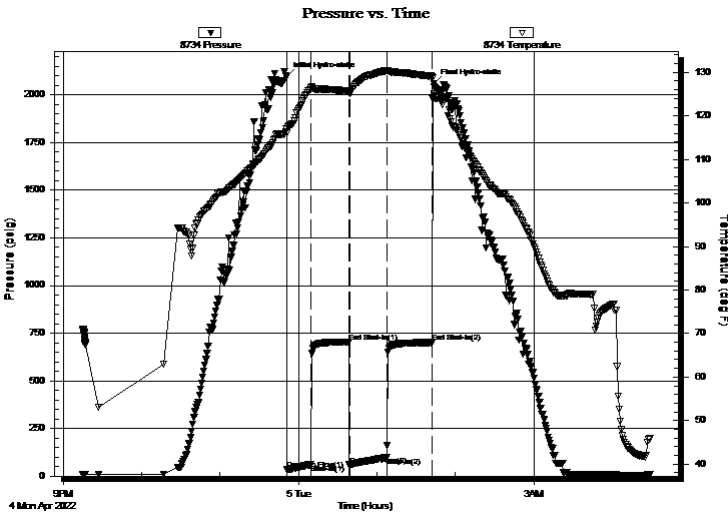
2022.04.04 @ 23:50:50

Time Off Btm:

2022.04.05 @ 01:43:39

TEST COMMENT: 15-IF-Blow built to 5"
30-ISI-No return
30-FF-Blow built to 6 1/4"
30-FSI-No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2094.91	116.93	Initial Hydro-static
1	33.89	115.99	Open To Flow (1)
19	60.36	126.33	Shut-In(1)
48	704.01	125.66	End Shut-In(1)
49	58.43	125.16	Open To Flow (2)
77	97.95	130.36	Shut-In(2)
112	701.03	129.05	End Shut-In(2)
113	2059.26	124.61	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	MCW 25%M, 75%W	2.10

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Shakespeare Oil Company

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68049

DST#: 2

ATTN: Kent Matson

Test Start: 2022.04.04 @ 21:15:00

GENERAL INFORMATION:

Formation: **Lansing " I & J "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:51:00

Time Test Ended: 04:29:00

Interval: 4167.00 ft (KB) To 4210.00 ft (KB) (TVD)

Total Depth: 4210.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Reset)

Tester: Martine Salinas

Unit No: 81

Reference Elevations: 2971.00 ft (KB)

2960.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8959

Inside

Press@RunDepth: psig @ 4168.00 ft (KB)

Start Date: 2022.04.04

End Date:

2022.04.05

Start Time: 21:15:01

End Time:

04:29:00

Capacity: 8000.00 psig

Last Calib.:

2022.04.05

Time On Btm:

Time Off Btm:

TEST COMMENT: 15-IF-Blow built to 5"

30-ISI-No return

30-FF-Blow built to 6 1/4"

30-FSI-No return

PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
150.00	MCW 25%M, 75%W	2.10

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Company

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68049

DST#: 2

ATTN: Kent Matson

Test Start: 2022.04.04 @ 21:15:00

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:

8000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	MCW 25%M, 75%W	2.104

Total Length: 150.00 ft Total Volume: 2.104 bbl

Num Fluid Samples: 0

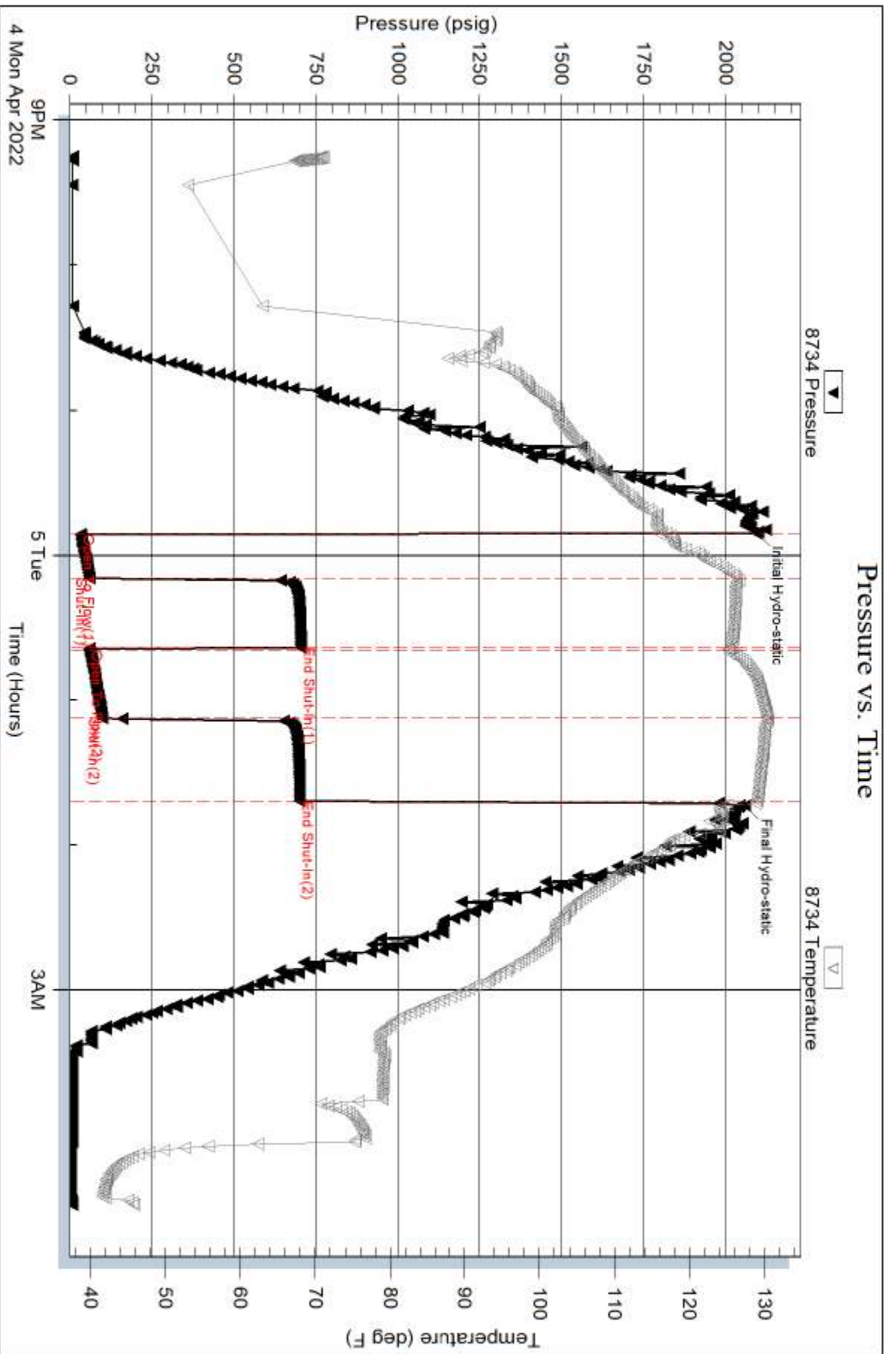
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = 1.13 @ 48.5 degs = 8,000 PPM



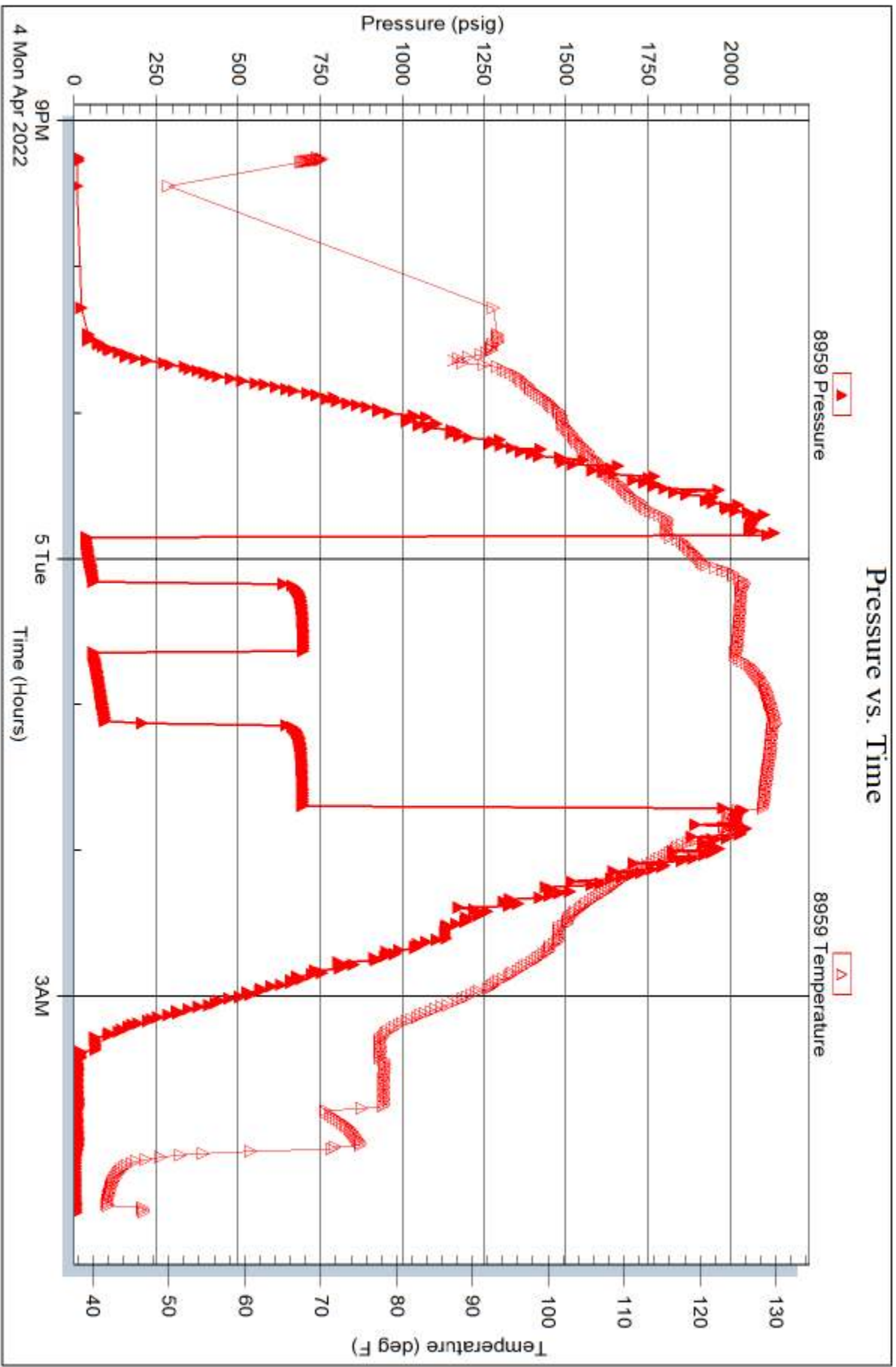
Serial #: 8959

Inside

Shakespeare Oil Company

Tractor # 2-13

DST Test Number: 2



Tribble Testing, Inc

Ref. No: 68049

Printed: 2022.04.05 @ 07:23:07



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Shakespeare Oil Company

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68050

DST#: 3

ATTN: Kent Matson

Test Start: 2022.04.05 @ 17:25:00

GENERAL INFORMATION:

Formation: **Lansing " L "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:22:00

Time Test Ended: 23:42:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Martine Salinas

Unit No: 81

Interval: 4247.00 ft (KB) To 4271.00 ft (KB) (TVD)

Reference Elevations: 2971.00 ft (KB)

Total Depth: 4271.00 ft (KB) (TVD)

2960.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8734 Outside

Press@RunDepth: 56.91 psig @ 4248.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.04.05

End Date:

2022.04.05

Last Calib.:

2022.04.05

Start Time: 17:25:01

End Time:

23:42:40

Time On Btm:

2022.04.05 @ 19:21:50

Time Off Btm:

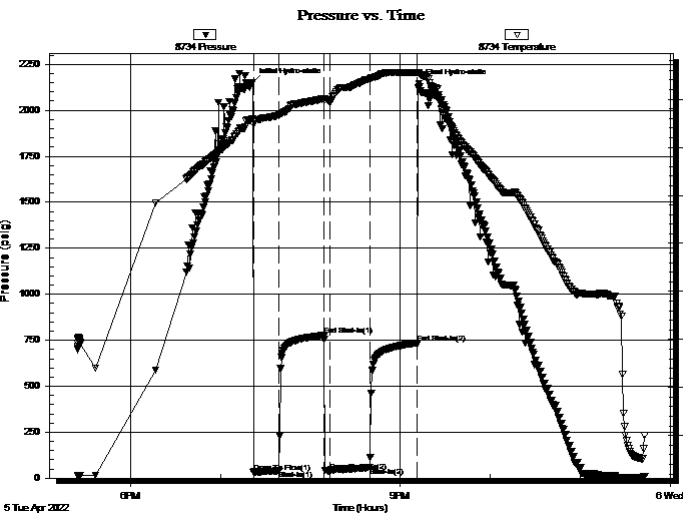
2022.04.05 @ 21:12:20

TEST COMMENT: 15-IF-Blow built to 1 3/4"

30-ISI-No return

30-FF-Blow built to 1"

30-FSI-No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2152.59	115.84	Initial Hydro-static
1	32.68	114.65	Open To Flow (1)
17	40.35	116.65	Shut-In(1)
48	775.59	120.15	End Shut-In(1)
52	37.41	119.50	Open To Flow (2)
78	56.91	124.18	Shut-In(2)
110	735.37	125.49	End Shut-In(2)
111	2146.34	125.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	WCM w/Oil spots 20%W, 80%M	0.84

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Shakespeare Oil Company
202 W. Main St.
Salem, IL 62881
ATTN: Kent Matson

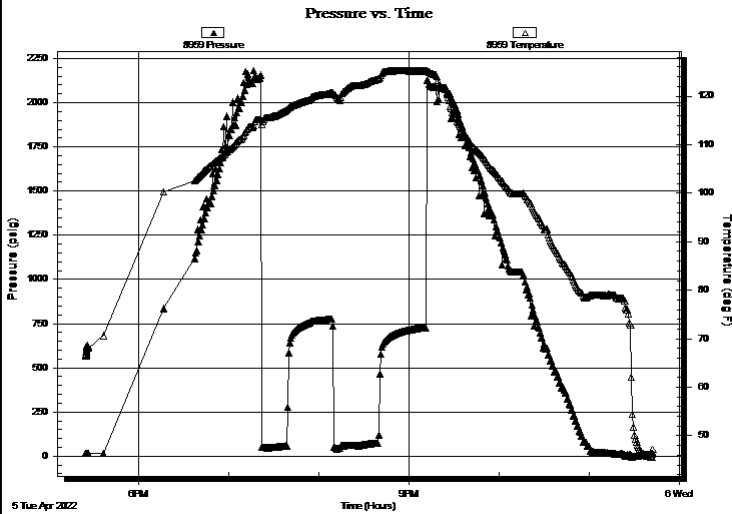
13-18-32 Scott, KS
Tractor # 2-13
Job Ticket: 68050 **DST#: 3**
Test Start: 2022.04.05 @ 17:25:00

GENERAL INFORMATION:

Formation: **Lansing " L "**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:22:00
Time Test Ended: 23:42:39
Interval: 4247.00 ft (KB) To 4271.00 ft (KB) (TVD)
Total Depth: 4271.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Reset)
Tester: Martine Salinas
Unit No: 81
Reference Elevations: 2971.00 ft (KB)
2960.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8959 Inside
Press@RunDepth: psig @ 4248.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2022.04.05 End Date: 2022.04.05 Last Calib.: 2022.04.05
Start Time: 17:25:01 End Time: 23:42:30 Time On Btm:
Time Off Btm:

TEST COMMENT: 15-IF-Blow built to 1 3/4"
30-ISI-No return
30-FF-Blow built to 1"
30-FSI-No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	WCM w/Oil spots 20%W, 80%M	0.84

* 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

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68050

DST#: 3

ATTN: Kent Matson

Test Start: 2022.04.05 @ 17:25:00

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:

14000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	WCM w /Oil spots 20%W, 80%M	0.842

Total Length: 60.00 ft Total Volume: 0.842 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

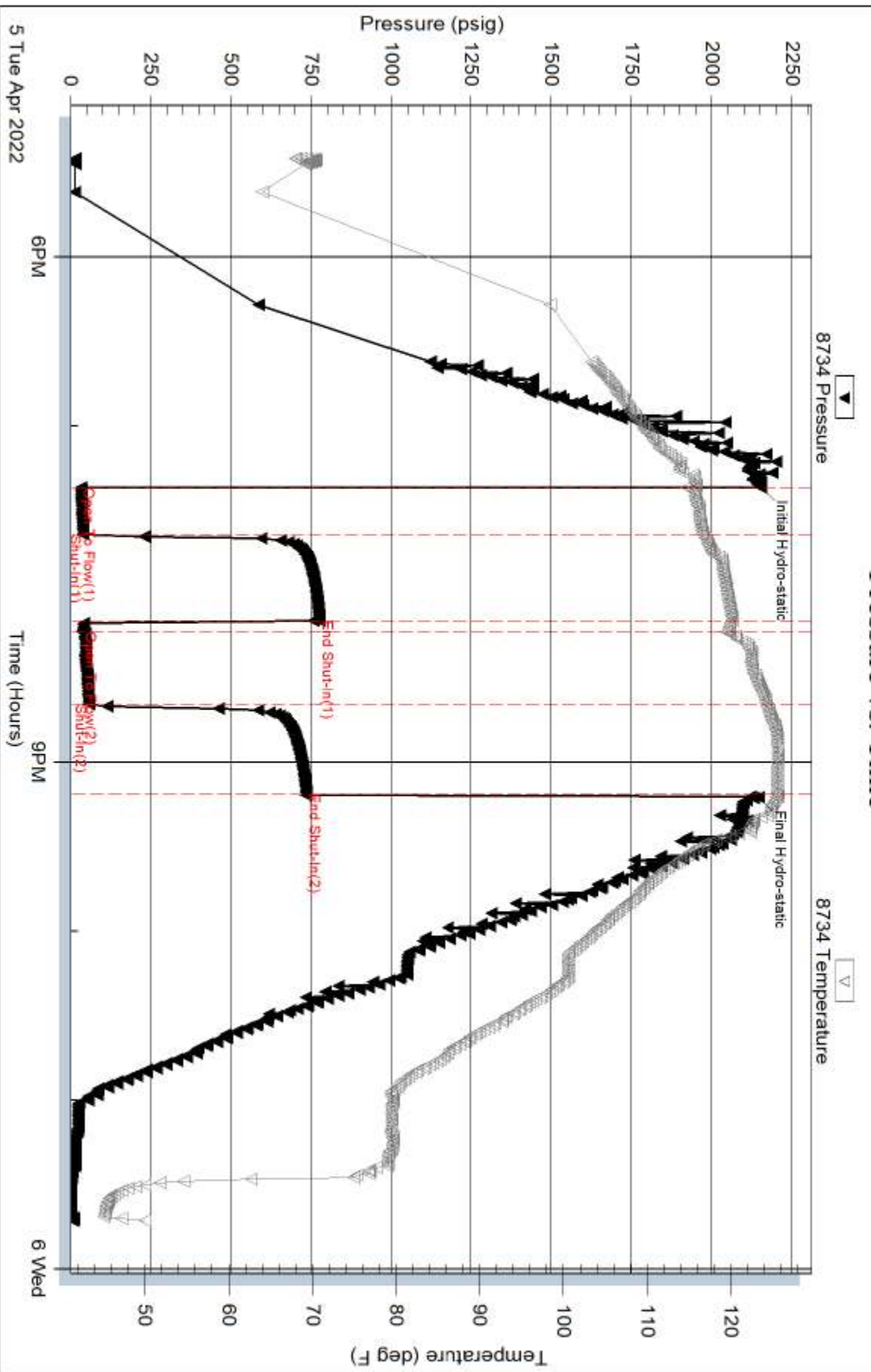
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW= .60 @ 55.5 degs = 14,000 PPM

Pressure vs. Time



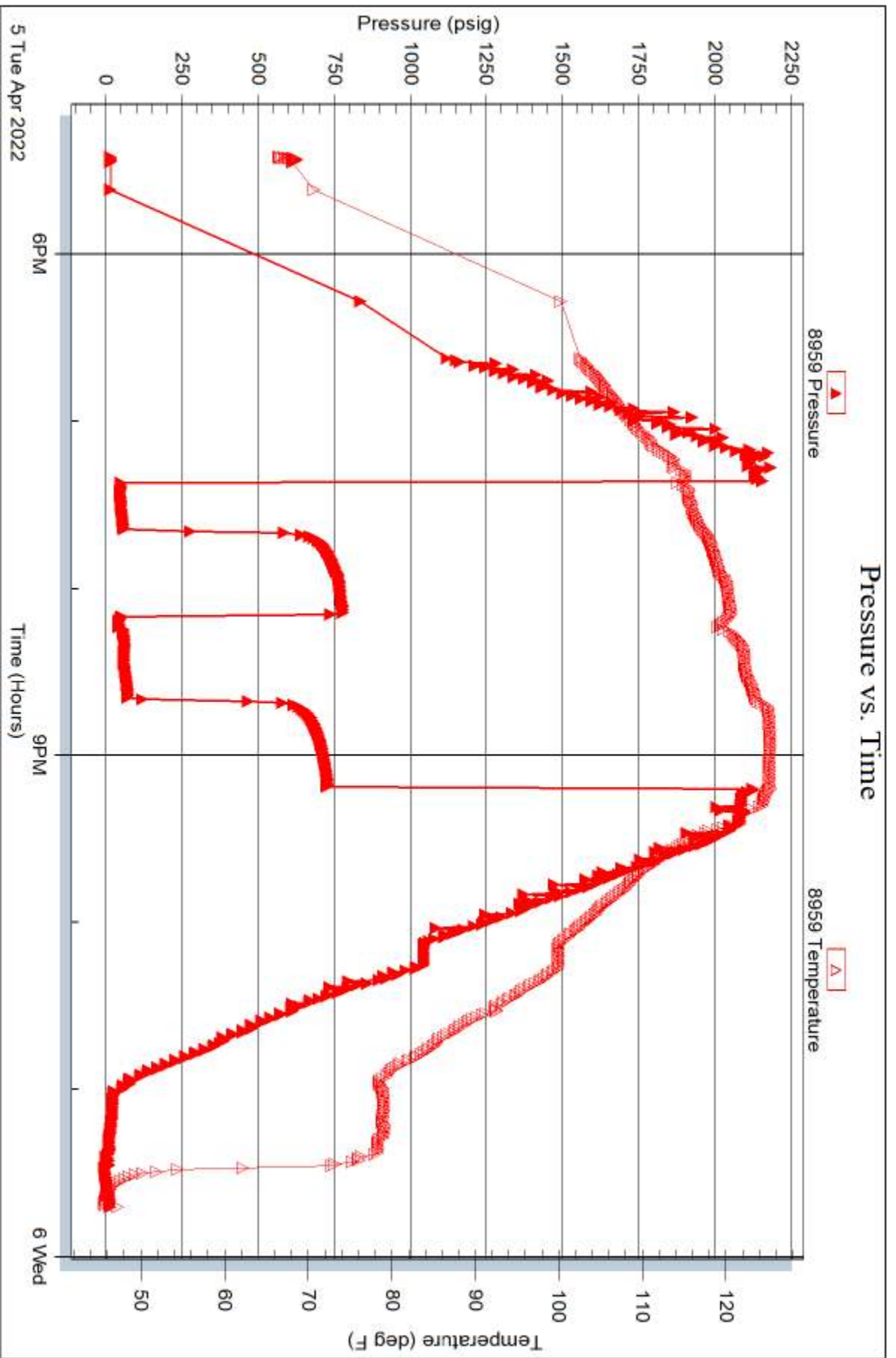
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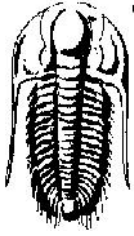
Inside

Shakespeare Oil Company

Tractor # 2-13

DST Test Number: 3





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Company

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68426

DST#: 4

ATTN: Kent Matson

Test Start: 2022.04.06 @ 10:50:00

GENERAL INFORMATION:

Formation: **Pleasanton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:03:10

Time Test Ended: 17:32:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Martine Salinas

Unit No: 81

Interval: 4286.00 ft (KB) To 4310.00 ft (KB) (TVD)

Reference Elevations: 2971.00 ft (KB)

Total Depth: 4310.00 ft (KB) (TVD)

2960.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8734 Outside

Press @ Run Depth: 33.55 psig @ 4287.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.04.06

End Date: 2022.04.06

Last Calib.: 2022.04.06

Start Time: 10:50:01

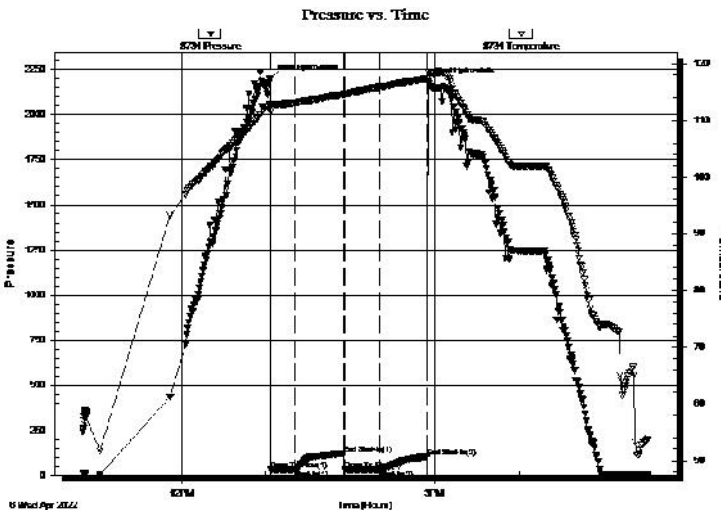
End Time: 17:32:30

Time On Btm: 2022.04.06 @ 13:03:00

Time Off Btm: 2022.04.06 @ 14:55:20

TEST COMMENT: 15-IF-Blow built to 1/2"
30-ISI-No return
30-FF-No blow
30-FSI-No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2197.93	112.81	Initial Hydro-static
1	32.34	111.52	Open To Flow (1)
17	32.20	113.07	Shut-In(1)
53	121.58	114.63	End Shut-In(1)
53	34.12	114.59	Open To Flow (2)
78	33.55	115.90	Shut-In(2)
112	105.11	117.35	End Shut-In(2)
113	2184.85	118.61	Final Hydro-static

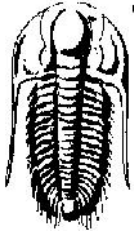
Recovery

Length (ft)	Description	Volume (bbl)
5.00	OSM 2%O, 98%M	0.07

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Company
 202 W. Main St.
 Salem, IL 62881
 ATTN: Kent Matson

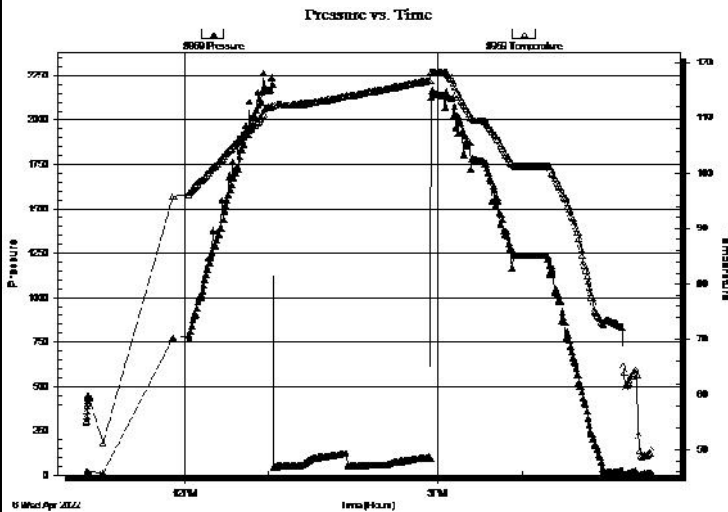
13-18-32 Scott, KS
Tractor # 2-13
 Job Ticket: 68426 **DST#: 4**
 Test Start: 2022.04.06 @ 10:50:00

GENERAL INFORMATION:

Formation: **Pleasanton**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 13:03:10
 Time Test Ended: 17:32:30
 Interval: **4286.00 ft (KB) To 4310.00 ft (KB) (TVD)**
 Total Depth: 4310.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Martine Salinas
 Unit No: 81
 Reference Elevations: 2971.00 ft (KB)
 2960.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8959 Inside
 Press@RunDepth: psig @ 4287.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2022.04.06 End Date: 2022.04.06 Last Calib.: 2022.04.06
 Start Time: 10:50:01 End Time: 17:32:30 Time On Btm:
 Time Off Btm:

TEST COMMENT: 15-IF-Blow built to 1/2"
 30-ISI-No return
 30-FF-No blow
 30-FSI-No return



PRESSURE SUMMARY

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

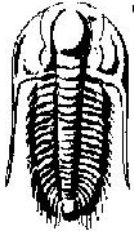
Recovery

Length (ft)	Description	Volume (bbl)
5.00	OSM 2%O, 98%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 Company

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68426

DST#: 4

ATTN: Kent Matson

Test Start: 2022.04.06 @ 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: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2100.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	OSM 2%O, 98%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:

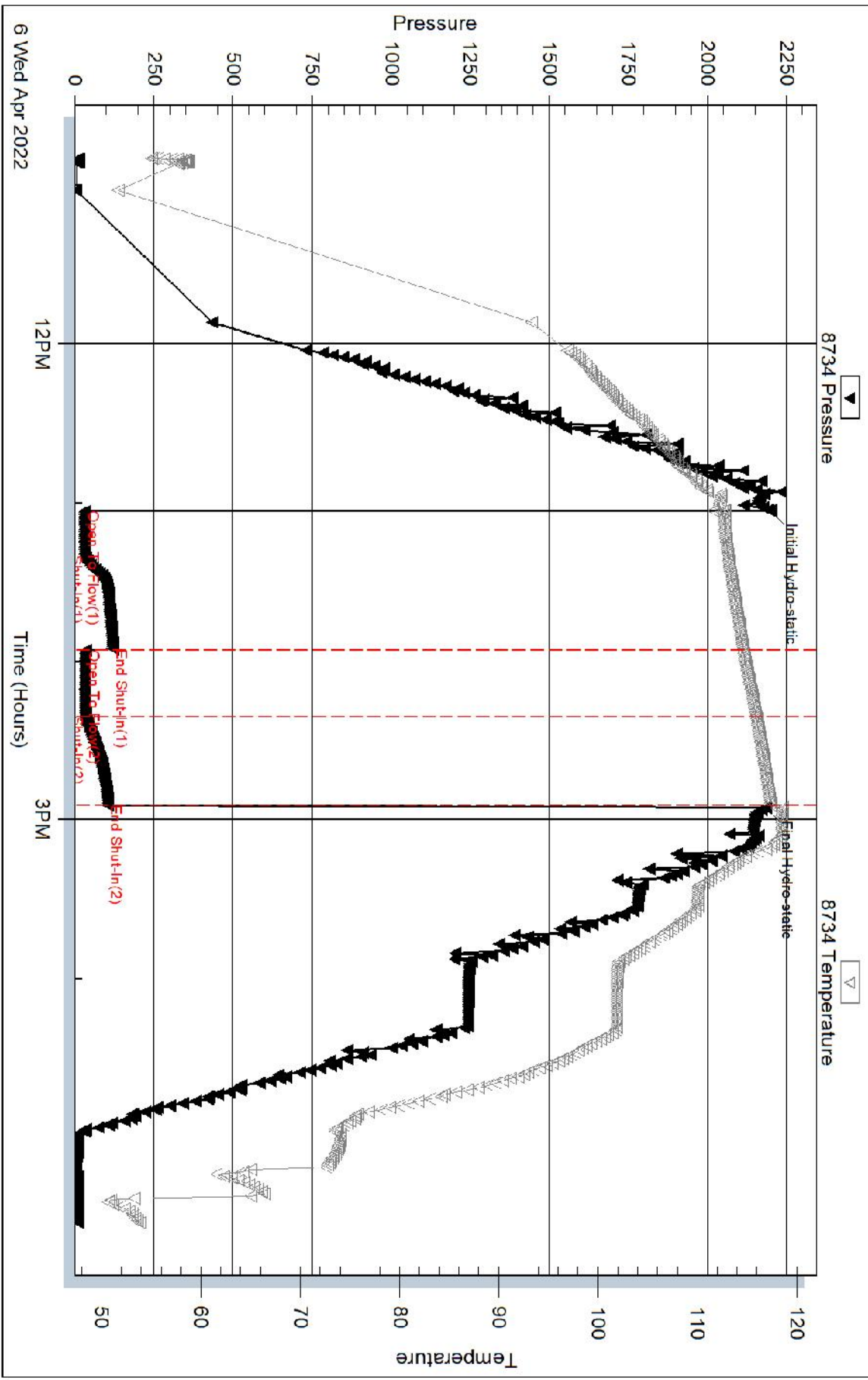
Serial #: 8734

Outside Shakespeare Oil Company

Tractor # 2-13

DST Test Number: 4

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 68426

Printed: 2022.04.06 @ 20:20:59

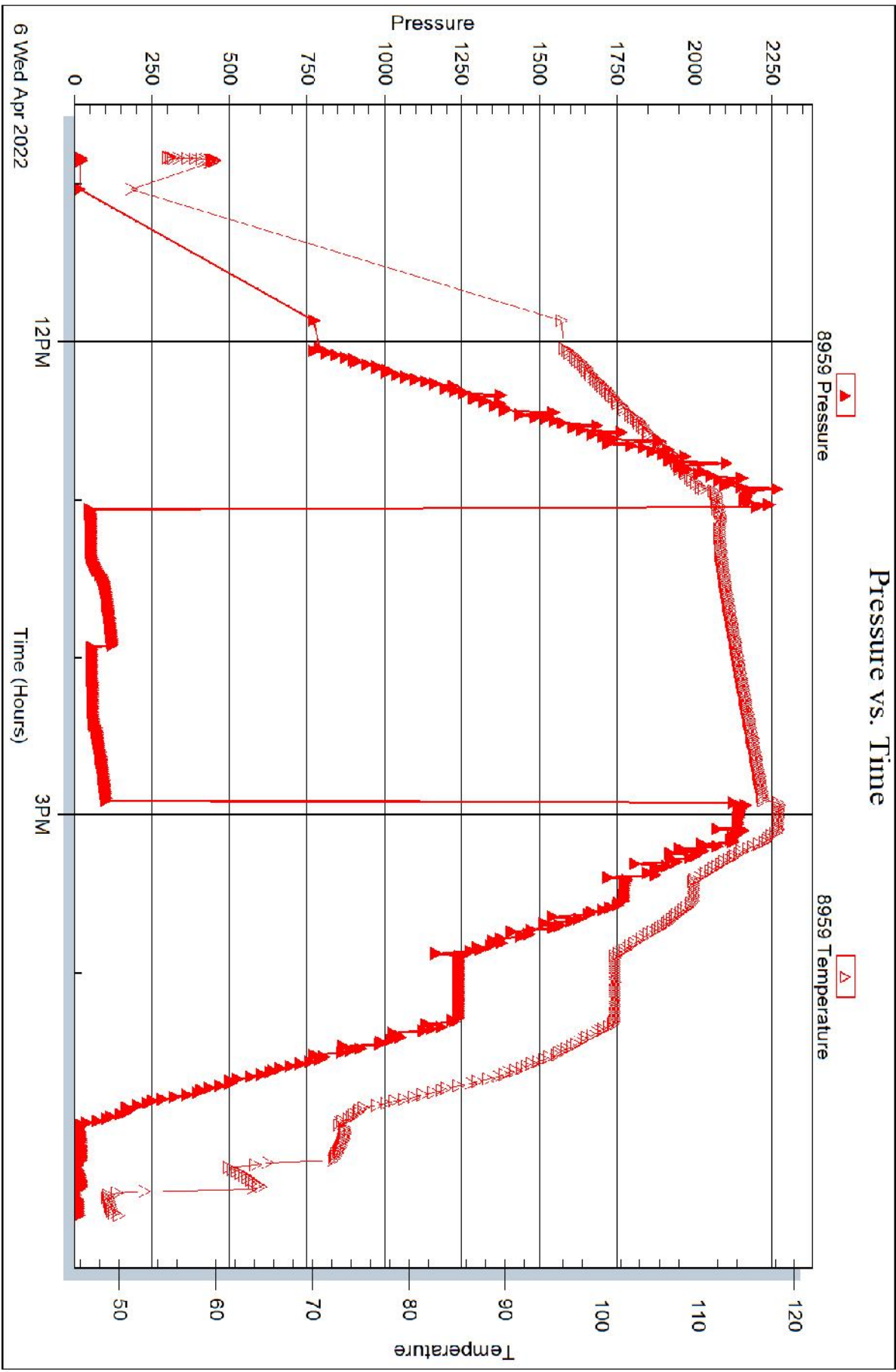
Serial #: 8959

Inside

Shakespeare Oil Company

Tractor # 2-13

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 68426

Printed: 2022.04.06 @ 20:20:59



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Shakespeare Oil Company

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68427

DST#: 5

ATTN: Kent Matson

Test Start: 2022.04.08 @ 09:25:00

GENERAL INFORMATION:

Formation: **Myric, Ft. Scott, Chero**

Deviated: No Whipstock: ft (KB)

Time Tool Opened:

Time Test Ended: 14:51:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Martine Salinas

Unit No: 81

Interval: **4446.00 ft (KB) To 4510.00 ft (KB) (TVD)**

Total Depth: 4510.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2971.00 ft (KB)

2960.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8734 Outside

Press@RunDepth: psig @ 4447.00 ft (KB)

Start Date: 2022.04.08

End Date:

2022.04.08

Capacity: 8000.00 psig

Last Calib.:

2022.04.08

Start Time: 09:25:01

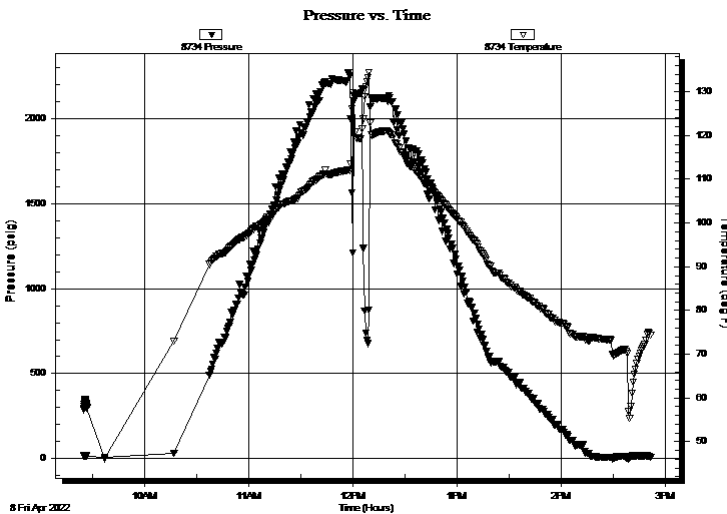
End Time:

14:51:40

Time On Btm:

Time Off Btm:

TEST COMMENT: Lost fluid 2 mins after being on bottom
Tried to re-seat packers & w as steadily losing fluid
Mis-Run, Pull Tools



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
1150.00	100% Mud	16.13

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Shakespeare Oil Company

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68427

DST#: 5

ATTN: Kent Matson

Test Start: 2022.04.08 @ 09:25:00

GENERAL INFORMATION:

Formation: **Myric, Ft. Scott, Chero**

Deviated: No Whipstock: ft (KB)

Time Tool Opened:

Time Test Ended: 14:51:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Martine Salinas

Unit No: 81

Interval: **4446.00 ft (KB) To 4510.00 ft (KB) (TVD)**

Total Depth: 4510.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2971.00 ft (KB)

2960.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8959

Inside

Press@RunDepth: psig @ 4447.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.04.08

End Date:

2022.04.08

Last Calib.:

2022.04.08

Start Time: 09:25:01

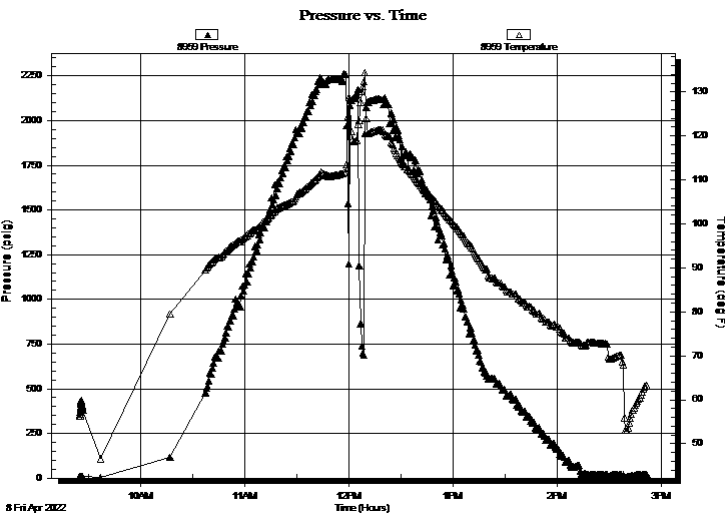
End Time:

14:51:40

Time On Btm:

Time Off Btm:

TEST COMMENT: Lost fluid 2 mins after being on bottom
Tried to re-seat packers & w as steadily losing fluid
Mis-Run, Pull Tools



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
1150.00	100% Mud	16.13

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

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68427

DST#: 5

ATTN: Kent Matson

Test Start: 2022.04.08 @ 09:25:00

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: 60.00 sec/qt

Cushion Volume: bbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1150.00	100% Mud	16.131

Total Length: 1150.00 ft Total Volume: 16.131 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

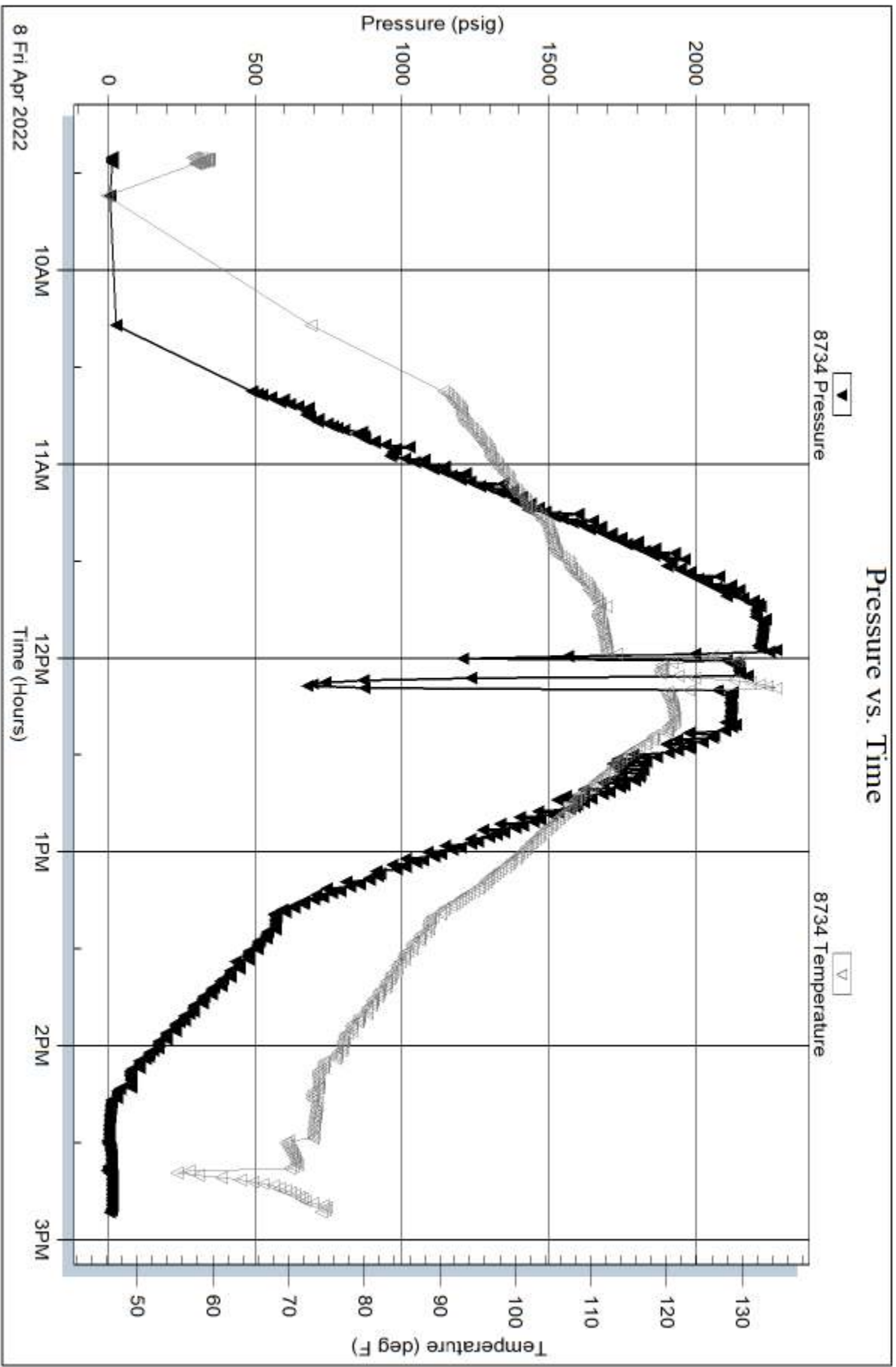
Recovery Comments:

Serial #: 8734

Outside Shakespeare Oil Company

Tractor # 2-13

DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 68427

Printed: 2022.04.08 @ 15:28:52

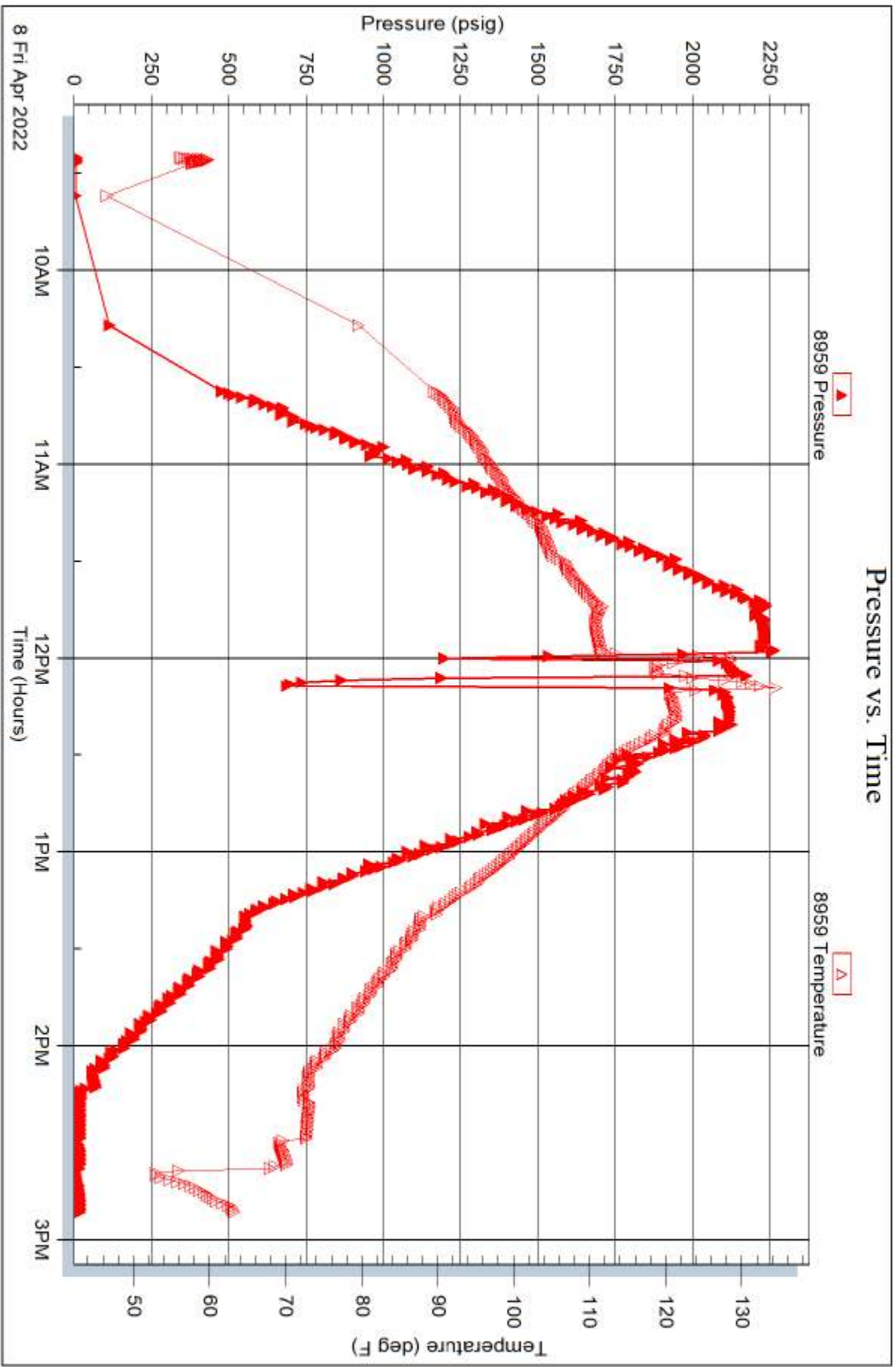
Serial #: 8959

Inside

Shakespeare Oil Company

Tractor # 2-13

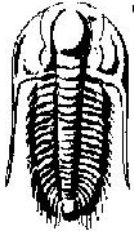
DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 68427

Printed: 2022.04.08 @ 15:28:52



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Company

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

ATTN: Kent Matson

Job Ticket: 68428

DST#: 6

Test Start: 2022.04.09 @ 03:40:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:14:50

Time Test Ended: 11:46:50

Interval: 4526.00 ft (KB) To 4566.00 ft (KB) (TVD)

Total Depth: 4566.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Reset)

Tester: Martine Salinas

Unit No: 81

Reference Elevations: 2971.00 ft (KB)

2960.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8734 Outside

Press @ Run Depth: psig @ 4527.00 ft (KB)

Start Date: 2022.04.09

End Date: 2022.04.09

Start Time: 03:40:01

End Time: 11:46:50

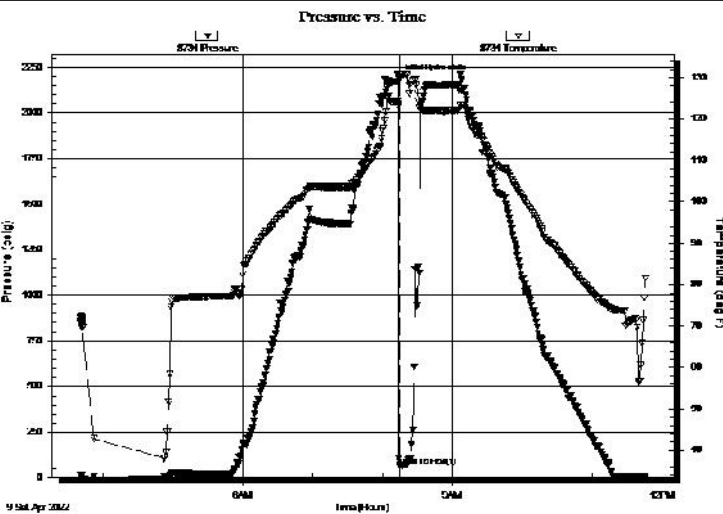
Capacity: 8000.00 psig

Last Calib.: 2022.04.09

Time On Btm: 2022.04.09 @ 08:13:39

Time Off Btm:

TEST COMMENT: Packer held for 13 mins, Lost fluid in hole, Mis-Run pull tools



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2187.09	124.08	Initial Hydro-static
2	67.24	129.71	Open To Flow (1)

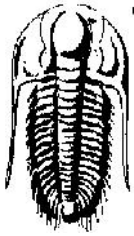
Recovery

Length (ft)	Description	Volume (bbl)
1371.00	GM w/Oil scum 3%G, 97%M	19.23

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Company
202 W. Main St.
Salem, IL 62881
ATTN: Kent Matson

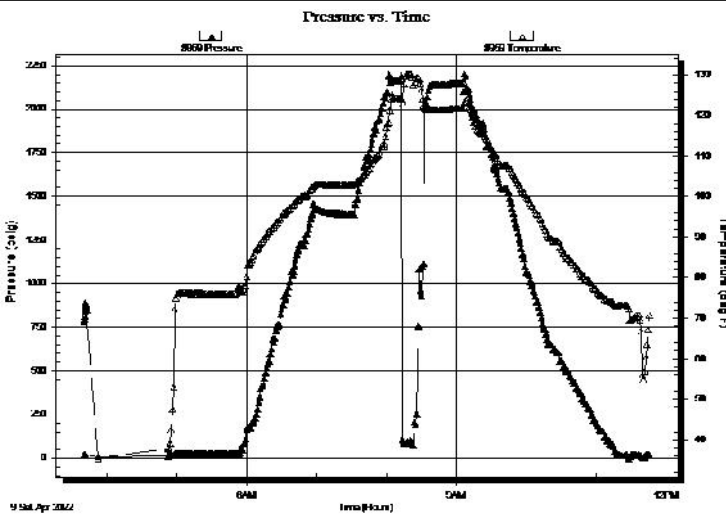
13-18-32 Scott, KS
Tractor # 2-13
Job Ticket: 68428 **DST#: 6**
Test Start: 2022.04.09 @ 03:40:00

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:14:50
Time Test Ended: 11:46:50
Interval: 4526.00 ft (KB) To 4566.00 ft (KB) (TVD)
Total Depth: 4566.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Reference Elevations: 2971.00 ft (KB)
2960.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8959 Inside
Press @ Run Depth: psig @ 4527.00 ft (KB)
Start Date: 2022.04.09 End Date: 2022.04.09 Capacity: 8000.00 psig
Start Time: 03:40:01 End Time: 11:46:50 Last Calib.: 2022.04.09
Time On Btm:
Time Off Btm:

TEST COMMENT: Packer held for 13 mins, Lost fluid in hole, Mis-Run pull tools



PRESSURE SUMMARY

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

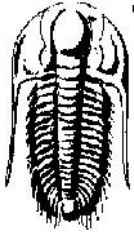
Recovery

Length (ft)	Description	Volume (bbl)
1371.00	GM w/Oil scum 3%G, 97%M	19.23

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

13-18-32 Scott, KS

202 W. Main St.
Salem, IL 62881

Tractor # 2-13

Job Ticket: 68428

DST#: 6

ATTN: Kent Matson

Test Start: 2022.04.09 @ 03:40:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 53.00 sec/qt

Water Loss: 7.99 in³

Resistivity: ohm.m

Salinity: 2800.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1371.00	GM w/Oil scum 3%G, 97%M	19.232

Total Length: 1371.00 ft Total Volume: 19.232 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

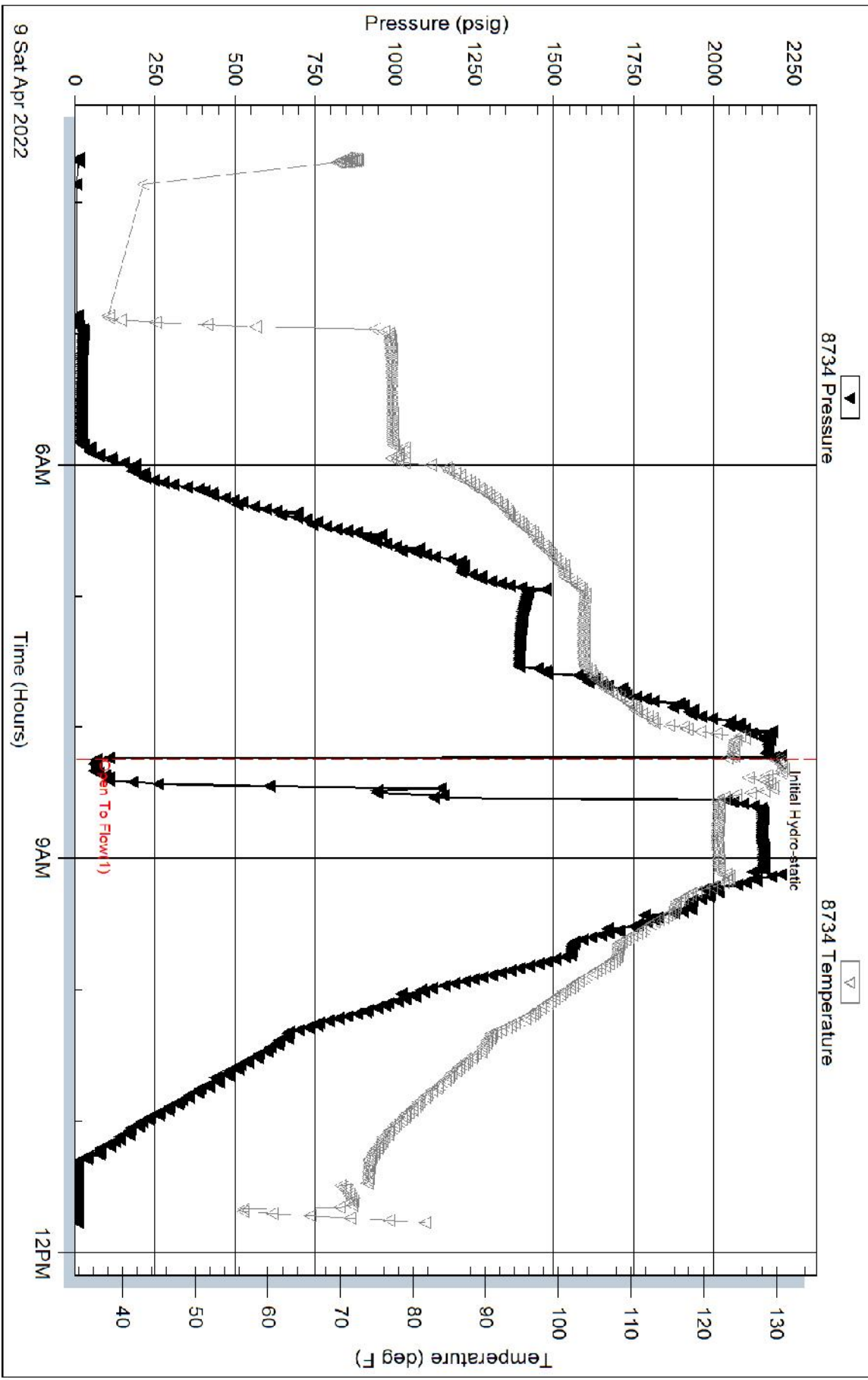
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



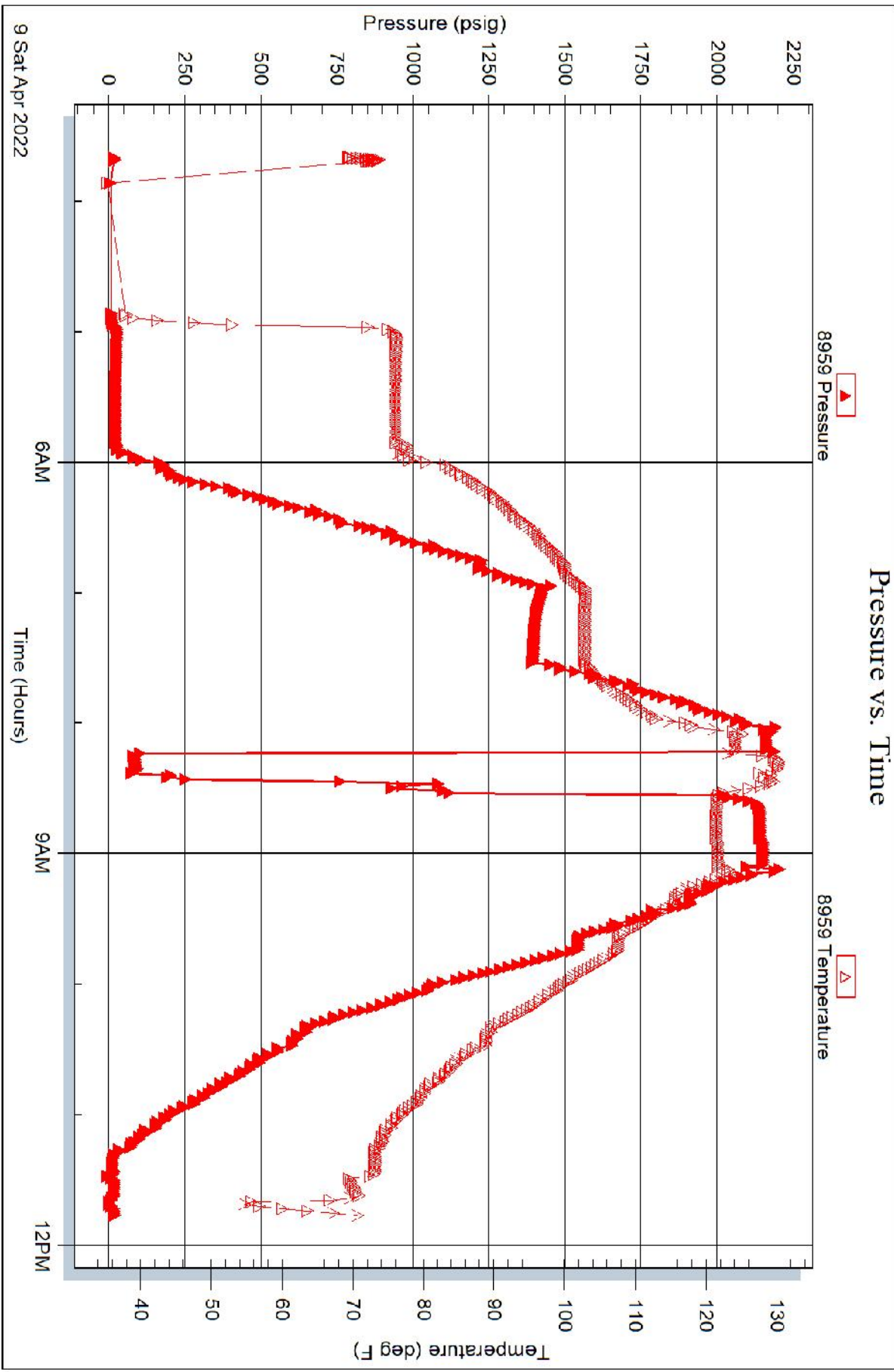
Serial #: 8959

Inside

Shakespeare Oil Company

Tractor # 2-13

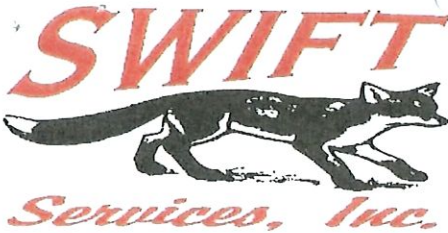
DST Test Number: 6



Trilobite Testing, Inc

Ref. No: 68428

Printed: 2022.04.09 @ 12:03:54



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



Invoice

DATE	INVOICE #
3/30/2022	34315

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	#2-13	Tractor	Scott	Duke Drilling	Oil	Development	Surface Job	Preston
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				55	Miles	6.00	330.00
576D-S	Pump Charge - <u>Shallow Surface (< 500 Ft.)</u>				1	Job	1,000.00	1,000.00
325	Standard Cement				170	Sacks	14.50	2,465.00T
279	Bentonite Gel				3	Sack(s)	30.00	90.00T
278	Calcium Chloride				5	Sack(s)	40.00	200.00T
276	Flocele				85	Lb(s)	3.00	255.00T
290	D-Air				2	Gallon(s)	42.00	84.00T
581D	Service Charge Cement				170	Sacks	2.00	340.00
583D	Drayage				461	Ton Miles	1.00	461.00
	Subtotal							5,225.00
	Sales Tax Scott County						8.50%	262.99

302-5
gr

RECEIVED
APR 04 2022

We Appreciate Your Business!

Total

\$5,487.99

DW



TICKET 34315

CHARGE TO: *Shakespeare oil*
 ADDRESS
 CITY, STATE, ZIP CODE

PAGE 1 OF 1

SERVICE LOCATIONS
 1. *Ness City KS*
 2. *Duke*
 3. *Duke*
 4. *Duke*

WELL/PROJECT NO. *2-13*
 LEASE *Tractor*
 COUNTY/PARISH *Scott*
 CITY *Scott*
 STATE *KS*

TICKET TYPE
 SERVICE SALES
 SALES

CONTRACTOR *Duke*
 RIG NAME/NO.
 DELIVERED TO *location*

WELL TYPE *Dil*
 WELL CATEGORY *Development*
 JOB PURPOSE *Surface Job*
 WELL PERMIT NO.

INVOICE INSTRUCTIONS
 REFERRAL LOCATION

DATE *3-30-22*
 OWNER
 ORDER NO.
 WELL LOCATION *Scott city 6-E 1/2-N, W-into*

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING		DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT PRICE	AMOUNT
		LOC	ACCT							
<i>575</i>		<i>1</i>			<i>55</i>	<i>mi</i>			<i>6.00</i>	<i>330.00</i>
<i>5765</i>		<i>1</i>		<i>Pump Charge shallow surface</i>	<i>1</i>	<i>Job</i>			<i>1000.00</i>	<i>1000.00</i>
<i>325</i>		<i>1</i>		<i>Standard CMT</i>	<i>170</i>	<i>SK</i>			<i>14.50</i>	<i>2465.00</i>
<i>279</i>		<i>1</i>		<i>Bentonite Gel</i>	<i>3</i>	<i>SK</i>			<i>30.00</i>	<i>90.00</i>
<i>278</i>		<i>1</i>		<i>Calcium Chloride</i>	<i>5</i>	<i>SK</i>			<i>40.00</i>	<i>200.00</i>
<i>276</i>		<i>1</i>		<i>Floccle</i>	<i>85</i>	<i>lb</i>			<i>3.00</i>	<i>255.00</i>
<i>581</i>		<i>1</i>		<i>CMT Service Charge</i>	<i>170</i>	<i>SK</i>			<i>2.00</i>	<i>340.00</i>
<i>583</i>		<i>1</i>		<i>Prayage</i>	<i>16268</i>	<i>lbs</i>	<i>461</i>	<i>TM</i>	<i>1.00</i>	<i>461.00</i>
<i>290</i>		<i>1</i>		<i>D-Air</i>	<i>2</i>	<i>gal</i>			<i>43.00</i>	<i>86.00</i>

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

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

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

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

SURVEY
 OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?
 WE UNDERSTOOD AND MET YOUR NEEDS?
 OUR SERVICE WAS PERFORMED WITHOUT DELAY?
 WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?
 ARE YOU SATISFIED WITH OUR SERVICE?
 YES NO
 CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL \$ *5225.00*

Scott *2/2/09*
 TOTAL *5487.00*

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

SWIFT OPERATOR *Scott* APPROVAL *Scott*
 Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 3-30-22	PAGE NO. 1
TICKET NO. 34315	

CUSTOMER		WELL NO.		LEASE		JOB TYPE		DESCRIPTION OF OPERATION AND MATERIALS	
Shakespeare oil		2-13		Tractor		Surface			
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)			
				T	C	TUBING	CASING		
	14:00								ON location 8 ^{5/8} 2316
	14:35								Hook up to circulate
	15:00	4	42		✓		100		mix 170 S/KS of 5td 2% Gel, 3% cc at 14.7 ppg displacement
	15:20	4	16		✓		100 150		
	15:25								shut valve Release psi
	15:30								wash truck
	15:45								Job complete Thanks! Preston, Kirby, Isaac



HURRICANE SERVICES INC

RECEIVED
APR 25 2022

Remit To: Hurricane Services, Inc.
250 N. Water, Suite 200
Wichita, KS 67202
316-303-9515

Customer:
SHAKESPEARE OIL CO INC
202 W MAIN
SALEM, IL 62881

INT

Invoice Date: 4/10/2022
Invoice #: 0359941
Lease Name: Tractor
Well #: 2-13 (New)
County: Scott, Ks
Job Number: WP2656
District: Oakley

Date/Description	HRS/QTY	Rate	Total
Longstring	0.000	0.000	0.00
H-Long	125.000	33.250	4,156.25
H-Long	75.000	33.250	2,493.75
Depth Charge 4001'-5000'	1.000	2,375.000	2,375.00
Mud flush	500.000	0.950	475.00
KCL-CS701	5.000	28.500	142.50
Light Eq Mileage	55.000	2.000	110.00
Heavy Eq Mileage	55.000	4.000	220.00
Ton Mileage	603.000	1.500	904.50
Cement plug container	1.000	237.500	237.50
Cement Blending & Mixing	200.000	1.330	266.00
Service Supervisor	1.000	261.250	261.25
Casing Swivel	1.000	285.000	285.00

502-5 [Signature]

Total 11,926.75

DW

TERMS: Net 30 days. Interest may be charged on past due invoice at rate of 1 ½% per month or maximum allowed by applicable state or federal laws. HSI has right to revoke any discounts applied in arriving at net invoice price if invoice is past due. If revoked, full invoice price without discount plus additional sales tax, as applicable, is due immediately and subject to interest charges. Customer agrees to pay all collection costs directly or indirectly incurred by HSI in the event HSI engages a third party to pursue collection of past due invoice.

SALES TAX: Services performed on oil, gas and water wells in Kansas are subject to sales tax, with certain exceptions. HSI relies on the well information provided by the customer in identifying whether the services performed on wells qualify for exemption.

WE APPRECIATE YOUR BUSINESS!



Customer	Shakespeare Oil Inc.	Lease & Well #	Tractor #2-13	Date	4/10/2022
Service District	Oakley KS	County & State	Scott KS	Legals S/T/R	13-18S-32W
Job Type	Long String	<input checked="" type="checkbox"/> PROD	<input type="checkbox"/> INJ	<input type="checkbox"/> SWD	Job #
Equipment #	Driver	Job Safety Analysis - A Discussion of Hazards & Safety Procedures			
64	John	<input checked="" type="checkbox"/> Hard hat	<input checked="" type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging
208	Jose V	<input checked="" type="checkbox"/> H2S Monitor	<input checked="" type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection
205	Kale	<input checked="" type="checkbox"/> Safety Footwear	<input type="checkbox"/> Respiratory Protection	<input checked="" type="checkbox"/> Slip/Trip/Fall Hazards	<input checked="" type="checkbox"/> Specific Job Sequence/Expectations
		<input checked="" type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input checked="" type="checkbox"/> Overhead Hazards	<input checked="" type="checkbox"/> Muster Point/Medical Locations
		<input type="checkbox"/> Hearing Protection	<input checked="" type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below	
Comments					

Product/Service Code	Description	Unit of Measure	Quantity	Net Amount
CP030	H-Long	sack	125.00	\$4,166.25
CP030	H-Long	sack	75.00	\$2,493.75
D015	Depth Charge: 4001'-5000'	job	1.00	\$2,375.00
CP170	Mud Flush	gal	500.00	\$475.00
AF055	Liquid KCL Substitute	gal	5.00	\$142.50
M015	Light Equipment Mileage	mi	55.00	\$110.00
M010	Heavy Equipment Mileage	mi	55.00	\$220.00
M020	Ton Mileage	tm	603.00	\$904.50
C050	Cement Plug Container	job	1.00	\$237.50
C060	Cement Blending & Mixing Service	sack	200.00	\$266.00
R061	Service Supervisor	day	1.00	\$261.25
C040	Casing Swivel	job	1.00	\$285.00

Customer Section: On the following scale how would you rate Hurricane Services Inc.?		Net:	\$11,926.75
Based on this job, how likely is it you would recommend HSI to a colleague?		Total Taxable	\$ -
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <i>Extremely Likely</i>		Tax Rate:	
State tax laws deem certain products and services used on new wells to be sales tax exempt. Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.		Sale Tax:	\$ -
		Total:	\$ 11,926.75
		HSI Representative:	<i>John Polley</i>

TERMS: Cash in advance unless Hurricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 1 1/2% per month or the maximum allowable by applicable state or federal laws. In the event it is necessary to employ an agency and/or attorney to affect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts previously applied in arriving at net invoice price. Upon revocation, the full invoice price without discount is immediately due and subject to collection. Prices quoted are estimates only and are good for 30 days from the date of issue. Pricing does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Any discount is based on 30 days net payment terms or cash. **DISCLAIMER NOTICE:** Technical data is presented in good faith, but no warranty is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results from the use of any product or service. The information presented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no guarantee of future production performance. Customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Likewise, the customer guarantees proper operational care of all customer owned equipment and property while HSI is on location performing services. The authorization below acknowledges the receipt and acceptance of all terms/conditions stated above, and Hurricane has been provided accurate well information in determining taxable services.

X _____ **CUSTOMER AUTHORIZATION SIGNATURE**

SWIFT



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

Invoice

DATE	INVOICE #
4/14/2022	34242

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

- Acidizing
- Cement
- Tool Rental

INT

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#2-13	Tractor	Scott	Cheyenne	Oil	Development	Port Collar	Gideon
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				55	Miles	6.00	330.00
576D-D	Pump Charge - Deep Surface (> 500 Ft.) & Port Collars				1	Job	1,500.00	1,500.00
329-8	60/40 Pozmix (8% Gel)				355	Sacks	12.00	4,260.00T
290	D-Air				5	Gallon(s)	42.00	210.00T
275	Cotton Seed Hulls				1	Sack(s)	35.00	35.00T
581D	Service Charge Cement				400	Sacks	2.00	800.00
583D	Drayage				968	Ton Miles	1.00	968.00
	Subtotal							8,103.00
	Sales Tax Scott County						8.50%	382.93

502-5 Gy

RECEIVED
APR 25 2022

We Appreciate Your Business!

Total

\$8,485.93

DW



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

TICKET **34242**

PAGE 1 OF 1

SERVICE LOCATIONS
 1. Ness City, KS WELL/PROJECT NO. 2-13 LEASE Tractor COUNTY/PARISH Scott STATE KS CITY _____ DATE 4-14-2022 OWNER _____
 2. Cheyenne CONTRACTOR Cheyenne RIG NAME/NO. _____ SHIPPED VIA CT DELIVERED TO Location ORDER NO. _____
 3. Oil WELL TYPE _____ WELL CATEGORY Development JOB PURPOSE Port Collar WELL PERMIT NO. _____ WELL LOCATION Gingston, 4-42, 1-1N
 4. _____ INVOICE INSTRUCTIONS _____ REFERRAL LOCATION W-1NR2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING		DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT PRICE	AMOUNT
		LOC	ACCT							
575		1					55	MI	6.00	330.00
576D		1					1	job	1,500.00	1,500.00
329-8		1					356	tsks	12.00	4272.00
290		1					5	gal	42.00	210.00
275		1					1	sk	35.00	35.00
581		1					400	sks	2.00	800.00
583		1					968	TM	1.00	968.00

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

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

DATE SIGNED 4-14-2022 TIME SIGNED 1:00 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? YES NO
 WE UNDERSTOOD AND MET YOUR NEEDS? YES NO
 OUR SERVICE WAS PERFORMED WITHOUT DELAY? YES NO
 WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY? YES NO
 ARE YOU SATISFIED WITH OUR SERVICE? YES NO
 CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL 1
 8079.00
 8103.00

Scott
 382.93

TOTAL
 8485.93

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

SWIFT OPERATOR Graham Funch APPROVAL

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 4-14-2022 PAGE NO. 1

CUSTOMER Shakespeare Oil & Gas WELL NO. 2-13 LEASE Tractor JOB TYPE Post Cellar TICKET NO. 34242

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0900							ON LOCATION 2 3/8" x 4 1/2"
								PC: 2,271'
	0930	Ø			✓		1,000	P Test BS to 1,000 PSI *Hold*
	0945							Open PC
	1000	3 1/2	4		✓		450	INJECTION RATE
	1010	3 1/2	117		✓		400	Mix 355 sks of 60/40 Pozmix 8% gel @ 12.24 ppg w/ 50# of Hulls in first 50 sks
	1045	3 1/2	8		✓		600	Displace CEMENT
	1050							Close PC
	1055	Ø	-		✓		1,000	P Test tb to 1,000 PSI *Hold*
	1100							Run 5 JTs
	1115	3	25		✓		450	Reverse CLEAN
	1135							Wash up Trk #115
	1220							Job Complete
								355 sks of 60/40 Pozmix 8% gel used
								Thanks!
								Gudean, MARK, John



**Scale 1:240 (5"=100') Imperial
Measured Depth Log**

Well Name: TRACTOR
Well Id: #2-13
Location: 1070' FNL, 1220' FEL, NE/4 Sec 13-T18S-R32W, Scott County, Kansas
License Number: API: 15-171-21286 **Region:** Scott County
Spud Date: 03/30/2022 **Drilling Completed:** 04/09/2022
Surface Coordinates: NAD83
Lat: 38.494519, **Long:** -100.8003489
Bottom Hole Vertical hole
Coordinates:
Ground Elevation (ft): 2960' **K.B. Elevation (ft):** 2971'
Logged Interval (ft): 3750' **To:** RTD **Total Depth (ft):** 4640'
Formation: Mississippian at RTD
Type of Drilling Fluid: Chemical

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

OPERATOR

Company: SHAKESPEARE OIL COMPANY, INC.
Address: 202 West Main Street
Salem, IL 62881
618-548-1585

WELLSITE GEOLOGIST

Name: Kent R. Matson
Company: Matson Geological Services, LLC
Address: 33300 W. 15th Street S.
Garden Plain, Kansas 67050
316-644-1975; kent4m@hotmail.com



COMMENTS

Shakespeare Oil Company, Inc., Geologist: Toby Eck, 316-305-0572 (cell).

Contractor: Duke Drilling Company, Inc.: Rig #4.

Tool Pusher: Hector Torres, 620-682-3927 (cell).

Surface Casing: 8 5/8" set at 265' (KB) w/170sx cement.

Production Casing: Based on field observations of drill cuttings, DST results and electric log evaluation, 4.5" production casing was installed.

Mud by: Mud-Co/Service Mud, Inc., Reid Atkins, 785-694-3741 (cell); Tony Maestas, 316-772-6679 (cell).

DST's by: Trilobite Testing, Martine Salinas, 785-639-2040 (cell).

Logs by: ELI Wireline (DI w/GR, CND, Micro), Jeff Luebbers, 785-735-7112 (office).

RTD= 4640'

LTD= 4640'

FORMATION TOPS

FORMATION	SAMPLE TOPS		LOG TOPS	
	Depth	Datum	Depth	Datum
Heebner Shale	3895'	-924	3890'	-919
Lansing	3943'	-972	3939'	-968
Muncie Creek Shale	4117'	-1146	4113'	-1142
Stark Shale	4212'	-1241	4209'	-1238
Hushpuckney Shale	4249'	-1278	4246'	-1275
Base of KC	4286'	-1315	4285'	-1314
Marmaton	4333'	-1362	4330'	-1359
Pawnee	4416'	-1445	4414'	-1443
Myrick Station	4450'	-1479	4446'	-1475
Fort Scott	4468'	-1497	4464'	-1493
Cherokee Shale	4490'	-1519	4485'	-1514
Johnson	4529'	-1558	4524'	-1553
Mississippian	4568'	-1597	4564'	-1593
RTD	4640'	-1669		
LTD			4640'	-1669

ROCK TYPES

LITHOLOGY

	Anhy
	Cht
	Coal
	Congl
	Dol
	Gyp
	Lmst
	Salt
	Shale
	Shcol
	Shgy
	Sltst
	Ss
	Carb sh
	Dol
	Dtd
	Gry sh
	Sandy lms
	Shale
	Sltstn
	Shlyslts

	Sitysh
	Sdy dolo
	Silty dolo
	Shy dolo
	Shaly ls

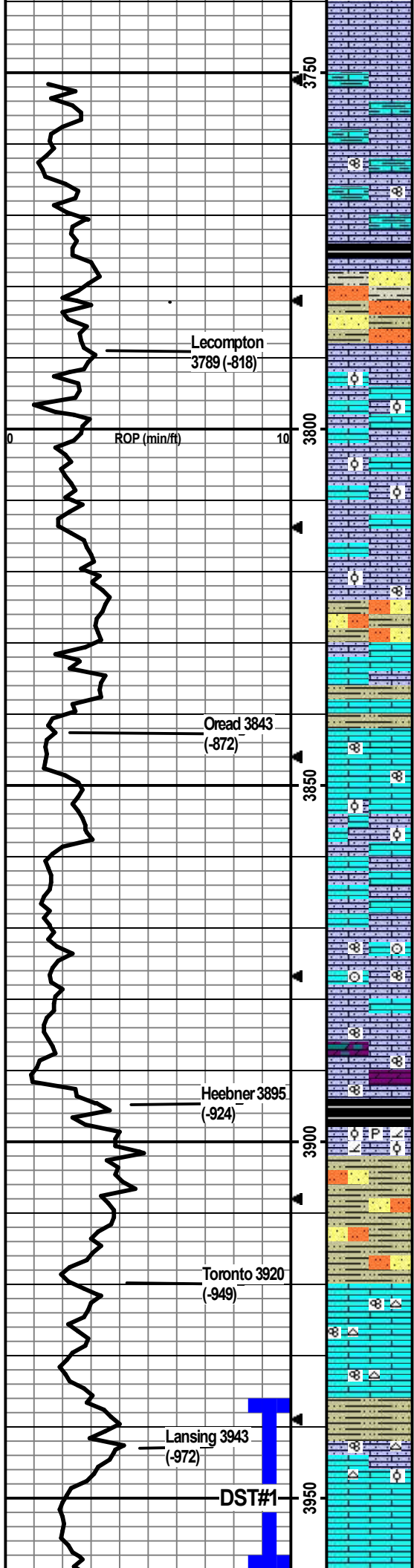
FOSSIL

	Algae
	Amph
	Belm
	Bioclst
	Brach
	Bryozoa
	Cephal
	Coral
	Crin
	Echin
	Fish
	Foram
	Fossil
	Gastro
	Oolite

MINERAL

	Ostra
	Pelec
	Pellet
	Pisolite
	Plant
	Strom
	Fuss
	Oomold
	Anhy
	Arggrn
	Arg
	Bent
	Bit
	Brecfrag
	Calc
	Carb
	Chtdk
	Chtlt
	Dol
	Feldspar

	Ferrpel
	Ferr
	Glau
	Gyp
	Hvymin
	Kaol
	Marl
	Minxl
	Nodule
	Phos
	Pyr
	Salt
	Sandy
	Silt
	Sil
	Sulphur
	Tuff
	Chlorite
	Dol
	Sand
	Sly



LS: lt bm/lt-m gry, micro-m xtal, silty/sndy, chalky, min foss frags, no vis por, no odor, ns.

LS: cm/lt bm/lt-m gry/lt gry-bm, micro-m xtal, silty/sndy/arg, chalky, foss frags, no vis por, no odor, ns.

LS: cm/lt bm/lt gry-bm, micro-m xtal, silty/sndy/arg, chalky, foss frags/fusln, min ppt-vf in-xtal por, no odor, ns.

SH: m-dk gry/blk, silty, carb, soft-firm.

Sitstn/SS: lt gry/lt bm/lt red-bm, vf-f, well sorted, pred qtz, carb, arg, friable, no odor, ns.

LS: cm/lt bm/lt gry-bm, micro-m xtal, vry silty/sndy, some arg, chalky, foss frags/grainy, no vis por, no odor, ns.

LS: wht/cm/lt bm/lt gry, some silty/sndy, some chalky, micro-m xtal, foss frags/min dense fn ool, no vis por, no odor, ns.

LS: cm/lt-m bm, micro-m w/min crs xtal, some silty/sndy, foss frags/dense fn ool, no vis por, no odor, ns.

LS: cm/lt-m bm/lt gry-bm, micro-m w/min crs xtal, some silty/sndy, some chalky, foss frags, no vis por, no odor, ns.

LS: cm/lt-m bm, micro-m xtal, vry silty/sndy, chalky, foss frags/fusln/fn ool/grainy, some fn oo-castic por, no odor, ns.

Sitstn/SS: lt-m gry, pred qtz, some glauc, vf-f, carb, arg, friable, no odor.

LS: cm/lt-m bm, micro-m xtal, min silty/sndy, some chalky, foss frags, no vis por, no odor, ns.

SH: lt-dk gry/lt gry-green, some vry silty/sndy, carb, soft-firm.

LS: cm/lt-m bm, micro-m xtal, some chalky, foss frags/fusln/grainy, min vf-f in-xtal por, no odor, ns.

LS: cm/lt-m bm, micro-m xtal, some silty, some chalky, foss frags/dense ool, no vis por, no odor, ns.

LS: cm/lt gry/lt-m bm, micro-m, some vry silty, chalky, foss frags, min ppt-f in-xtal por, no odor, ns.

LS: cm/lt bm/lt gry, micro-m xtal, some vry silty/sndy, chalky, foss frags/fusln/crin, some vf-f in-xtal and fusln por, no odor, ns.

LS: cm/lt bm, micro-m xtal, some silty/sndy, chalky, some bm sucrosic Dolo, foss frags/fusln, some ppt-f in-xtal/fusln por, no odor, ns.

SH: blk, slt silty, carb, firm, fissile.

LS: wht/cm/lt bm, micro-m xtal, silty/sndy, chalky, pyritic, some bm sucrosic Dolo, foss frags/ool, some ppt-f in-xtal por, no odor, ns.

SH: lt-dk gry/blk, some vry silty/sndy, slt carb, soft-firm; some Sitstn/SS: lt gry, vf-f, pred qtz, friable, no odor, ns.

LS: wht/cm, micro-f xtal, some chalky, wht/cm chert w/fusln, min foss frags, no vis por, no odor, ns.

LS: wht/cm/lt gry, micro-f xtal, some chalky, wht/cm/lt bm chert w/fusln, min foss frags, some ppt-vf in-xtal por, no odor, ns.

SH: m-dk gry/red bm/maroon, silty/sndy, slt carb, soft-firm.

LS: cm/lt bm/min lt gry, micro-m xtal, some chalky, some silty, wht/cm chert, foss frags/fusln/dense ool, min vf-f in-xtal por, no odor, ns.

LS: cm/lt bm/min lt gry, micro-m xtal, some chalky, min foss frags, 31 pcs w/mostly dk bm/blk tar w/some bm fluid oil, dul yel fluor/cut, ppt-f in-xtal por, slt odor, sfo.

Mud-Co/Service Mud Inc. Check #12 @ 4640' 04/10/22 08:20am
wt vis pH chl
9.2 49 10.0 2200
Filt LCM
8.0 4

**Survey Record
Deg @ Ft**
0.25 @ 265'
0.25 @ 2220'
0.50 @ 3751'
1.00 @ 4640'

Bit Trip @ 3751'
conn; replaced PDC bit with Tricone Button bit.

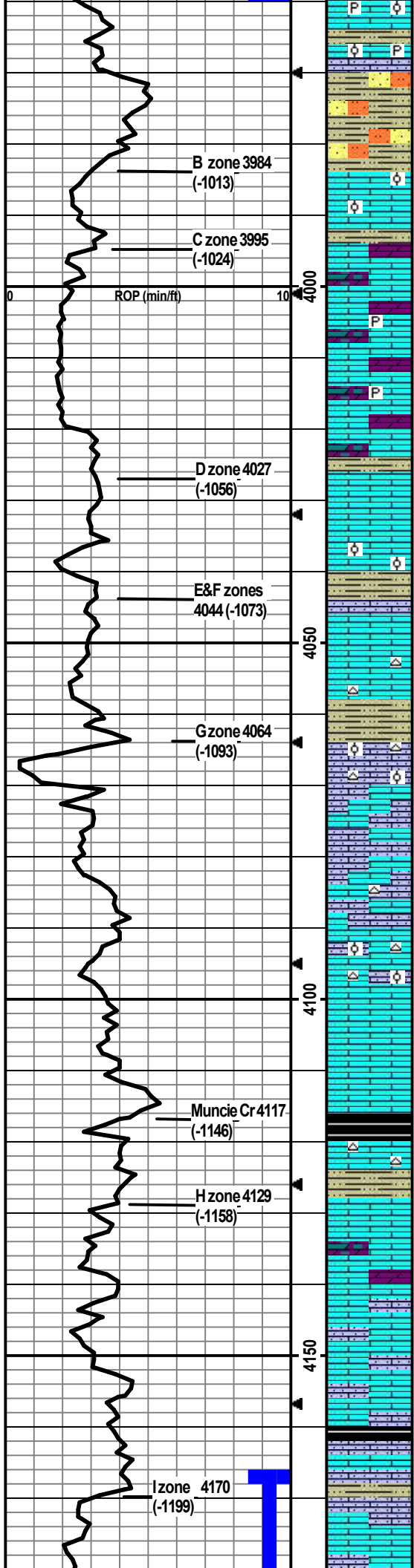
Pipe strap TOH for Bit Trip at 3751'
was 1.64' short to the board.

CFS @ 3880'
Stop/30"/60"

**DST1) 3938-3960
Lansing A-zone
15/30/30/30**
1st) Blow built to 2"; no BB.
2nd) Blow built to 2.25"; no BB.
IFP 34-42#
ISIP 949#
FFP 44-60#
FSIP 925#
HP 1927-1933#
Recvd: 70' Mud w/Oil Specks.

CFS @ 3940'
Stop/30"/60"

CFS @ 3960' Stop/30"/60"



LS: cm/lt-m bm, micro-m w/2ndary crs xtal, some chalky, min pyritic, foss frags/dense ool, no vis por, no odor, ns.

SH: lt-dk gry/red-bm/bm, vry silty, carb, soft-firm. Some Siltstr/SS: gry, vf-m, pred qtz, glauc, friable, no odor, ns.

LS: cm, micro-f xtal, some chalky, min foss frags/min ool, no vis por, no odor, ns.

LS: cm/lt-m bm, micro-m xtal, some chalky, some dolomitic, foss frags, no vis por, no odor, ns.

LS: cm/lt bm/min med bm, micro-f w/crs wht xtal, smpl vry chalky, dolomitic, min pyritic, min foss frags, no vis por, no odor, ns.

LS: cm/lt bm, micro-f xtal, smpl vry chalky, dolomitic, min pyritic, min foss frags, no vis por, no odor, ns.

LS: cm/lt bm/lt gry, micro-m xtal, vry chalky, foss frags, 12 pcs w/mostly sfo, some blk tar, ppt-f w/min med in-xtal por, no fluor but dul yel cut, silt odor, sfo.

LS: cm/lt bm/lt gry/gry mottling, micro-m xtal, some chalky, foss frags/dense ool, 6 pcs w/sfo w/some blk tar, w/ppt-m in-xtal por, silt odor, no fluor w/dul yel cut, sfo.

SH: gry/gry-green w/dk gry mottling, silt silty, greasy, silt carb, soft-firm.

LS: cm/lt bm/lt gry/gry mottling, micro-m xtal, chalky, some sndy, foss frags, no vis por, no odor, ns.

LS: cm/lt bm, micro-m xtal, chalky, wht/cm/lt bm chert, min foss frags, no vis por, no odor, ns.

SH: m-dk gry/maroon/lt green-gry/red brn, some silty/sndy, silt carb, soft-firm.

LS: cm/lt bm, micro-m xtal, chalky, some silty/sndy, wht/cm chert, foss frags/ool, m-crs oo-castic por, no odor, ns.

LS: cm/lt bm/lt gry, micro-crs w/2ndry xtal, some silty/sndy, smpl vry chalky, foss frags (ool from above), some vf-m in-xtal por, no odor, ns.

LS: cm w/min lt gry, micro-m xtal, some chalky, min foss frags, min wht/cm chert, min ppt-f in-xtal por, no odor, ns.

LS: cm/lt bm/lt gry, micro-m xtal, chalky, min sndy, wht/lt gry/lt bm chert, foss frags/ool, vf-crs oo-castic/in-xtal por, no odor, ns.

LS: cm/lt gry, micro-f xtal, smpl vry chalky, min foss frags, no vis por, no odor, ns.

LS: cm/lt-m bm/lt gry, micro-f xtal, chalky, min foss frags, no vis por, no odor, ns.

SH: m-dk gry/blk, silt carb, firm, fissile.

LS: cm/lt-m bm/lt gry, micro-m xtal, some chalky, min wht/bm chert, foss frags, no vis por, no odor, ns.

SH: m-dk gry/blk, silt silty, silt carb, soft-firm.

LS: cm/lt-m bm, micro-m xtal, some chalky, some dolomitic, foss frags, min vf-m in-xtal por in dolo, no odor, ns.

LS: cm/lt-m bm/lt gry, micro-m xtal, min silty/sndy, some chalky, foss frags, no vis por, no odor, ns.

LS: cm/lt-m bm, micro-m xtal, some silty, chalky, foss frags, no vis por, no odor, ns.

SH: dk gry/blk, silt silty, carb, firm, fissile.

LS: cm/lt-m bm/lt gry, micro-m xtal, some vry silty/sndy, some chalky, foss frags, no vis por, no odor, ns.

SH: lt-dk gry/red-brn, silty, carb, soft-firm.

LS: cm/lt-m bm, micro-m xtal, some silty/sndy, some chalky, foss frags/grainy, 6 pcs w/sfo, some thicker oil, ppt-m in-xtal por, dul yel fluor, silt odor, sfo.

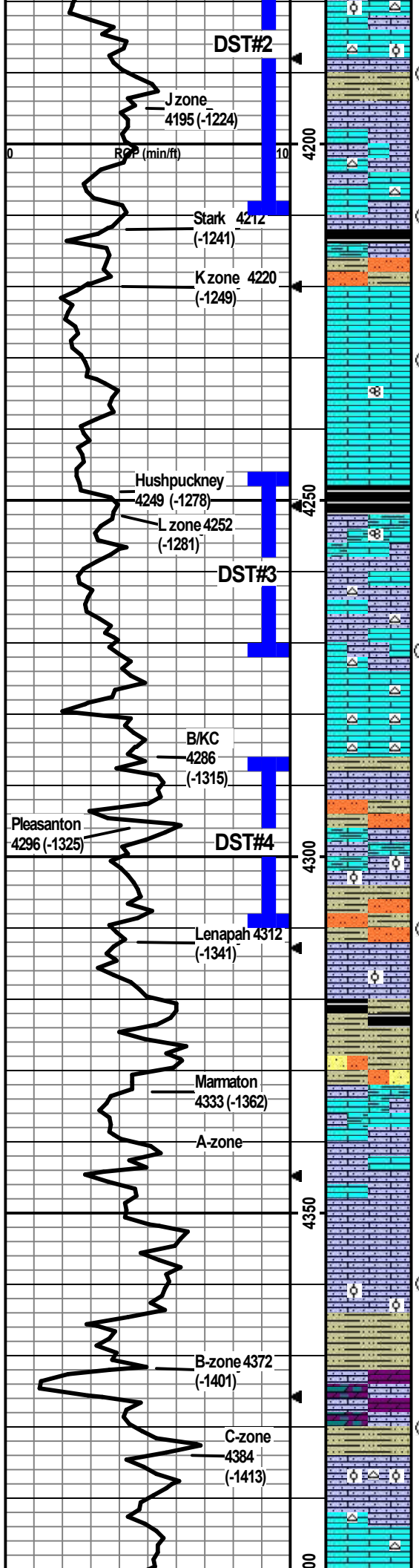
CFS @ 3985
Stop/30"/60"

CFS @ 4040
Stop/30"/60"

CFS @ 4058
Stop/30"/60"

**DST2) 4167-4210
Lansing I & J
zones**
15/30/30/30
1st) Blow built to 5"; no BB.
2nd) Blow built to 6.25"; no BB.
IFP 34-60#
ISIP 704#
FFP 58-98#
FSIP 701#
HP 2095-2059#
Recvd: 150' MCW (25%/M, 75%/W).

CFS @ 4150
Stop/30"/60"



LS: cm/lt bm/lt gry, micro-m xtal, some chalky/silty/sndy, wht/lt bm foss chert, foss frags/dense ool/grainy, 4 pcs w/sfo w/ppt-f in-xtal por, dul yel fluor, slit odor, sfo.
 SH: lt-dk gry/blk, some silty/sndy, slit carb, soft-firm.
 LS: cm/lt bm/lt gry, micro-m xtal, chalky, some silty/sndy, foss frags, 7 pcs w/sfo w/ppt-f in-xtal por, dul yel fluor, gd odor, sfo.

LS: cm/lt bm/lt gry, micro-m xtal, some chalky, some silty, wht/lt gry chert, foss frags, 15 pcs w/sfo w/ppt-f in-xtal por, no fluor, yel cut, slit odor, sfo.

SH: lt-dk gry/blk/gry-green/red-brn/maroon, silty, slit carb, firm, fissile; min slitstn/SS: lt gry, vf, pred qtz, glauc, friable.
 LS: cm/lt bm/lt gry, micro-m xtal, some arg/silty/sndy/chalky, foss frags, 3 pcs w/sfo w/ppt-f in-xtal por, dul yel fluor, slit odor, sfo.

LS: cm/lt-m bm, micro-m xtal, chalky, foss frags, 5-10% of smpl w/sfo w/mostly ppt-f w/some med in-xtal por, slit dul fluor, gd odor, vgsfo.

LS: cm/lt-m bm/lt gry, micro-m xtal, chalky, foss frags/min fusln, no vis por, no odor, ns. (3 pcs w/show assume from above).

LS: cm/lt bm/lt gry, micro-m xtal, chalky, foss frags, no vis por, no odor, ns. (2 pcs w/show assume from above).

SH: m-dk gry/blk/gry-green, some silty, slit carb, firm, fissile.
 LS: cm/lt-m bm/gry, micro-m xtal, some silty/sndy/arg, chalky, foss frags/min fusln, 18 pcs w/sfo w/ppt-f in-xtal por, dul yel fluor/cut, gd odor, sfo.

LS: cm/lt-m bm/lt gry, micro-m xtal, some silty/sndy/chalky, some wht chert, foss frags, 31 pcs w/sfo w/ppt-m in-xtal por, dul yel fluor, gd odor, sfo.

LS: cm/lt-m bm/lt gry-brn, micro-m xtal, some chalky, min sndy, wht chert, foss frags, no vis por, no odor, ns. (2 pcs w/sfo assume from above).

LS: cm/lt-m bm, micro-m xtal, some chalky, incrise from above in cm/lt bm chert, foss frags, no vis por, no odor, ns.

SH: lt-dk gry/blk/brn, some vry silty, carb, soft-firm. Some slitstn: lt gry/lt green, vf, carb, friable.
 LS: cm/lt gry/lt brn, micro-m xtal, some silty/sndy/arg/chalky, foss frags, 17 pcs w/sfo w/ppt-f in-xtal por, no fluor/yel cut, slit odor, sfo.

LS: cm/lt-m bm/lt gry-brn, micro-m xtal, some vry silty/sndy/arg, chalky, foss frags/min ool, 9 pcs w/sfo, thick oil, w/vf-m in-xtal/in-ool por, no fluor, no odor, sfo.

SH: lt-dk gry/dk brn, some vry silty/sndy, slit carb, firm. Some slitstn: lt gry, vf, pred qtz, slit carb, ns. (Few pcs LS w/show oil from above).
 LS: cm/lt bm, micro-m xtal, some silty/sndy/chalky, foss frags/min ool, 10 pcs w/sfo, f-m in-xtal por, dul yel fluor, no odor, sfo.

SH: lt-dk gry/blk/lt green/brn, some silty, slit carb, soft-firm. slitstn/SS: lt gry, vf, arg/chalky, carb, friable.

LS: cm/lt-m bm/lt gry, micro-m xtal, some vry silty/sndy/arg/chalky, foss frags, 3 pcs w/sfo, w/ppt-m in xtal por, dul yel fluor, no odor, sfo.

LS: cm/lt gry/lt brn, micro-m xtal, some vry sndy, chalky, foss frags, no vis por, no odor, ns.

LS: cm/lt gry/lt brn, micro-m xtal, some vry silty/sndy, some chalky, foss frags, no vis por, no odor, ns.

LS: cm/lt bm, min lt gry, micro-m xtal, some vry silty/sndy, chalky, foss frag/min ool, 5 pcs w/sfo wf-crs in-xtal/oo-castic por, no fluor, no odor, sfo.

SH: lt-m gry/lt gry-green/lt brn, some vry silty/sndy, slit carb, soft-firm.
 LS: cm/lt bm, micro-m, some vry silty/sndy, chalky, dolomitic, min foss frags, 3 LS pcs w/sfo, dk bm fo/blk tar, vf-m in-xtal por, no fluor, no odor, slit sfo.

SH: m-dk gry/bm, some vry silty, carb, firm.
 LS: cm/lt bm, micro-m xtal, some chalky, wht/cm/lt bm chert, foss frags/dense ool, 16 pcs w/sfo, some fluid some thk blk tar, ppt-f in-xtal por, no fluor, yel cut, no odor, sfo.

LS: cm/lt bm, micro-m xtal, cm/lt-m bm chert, foss frags, 8 pcs w/sfo, some fluid some thk blk tar, ppt-f in-xtal por, no fluor, yel cut, no odor, sfo.

CFS @ 4190'
Stop/30"/60"

CFS @ 4210'
Stop/30"/60"

CFS @ 4230'
Stop/30"/60"

DST3) 4247-4271
Lansing L-zone
 15/30/30/30
 1st) Blow built to 1.75"; no BB.
 2nd) Blow built to 1"; no BB.
 IFP 33-40#
 ISIP 776#
 FFP 37-57#
 FSIP 735#
 HP 2153-2146#
 Recvd: 60' WCM w/oil spots (20%W, 80%M).

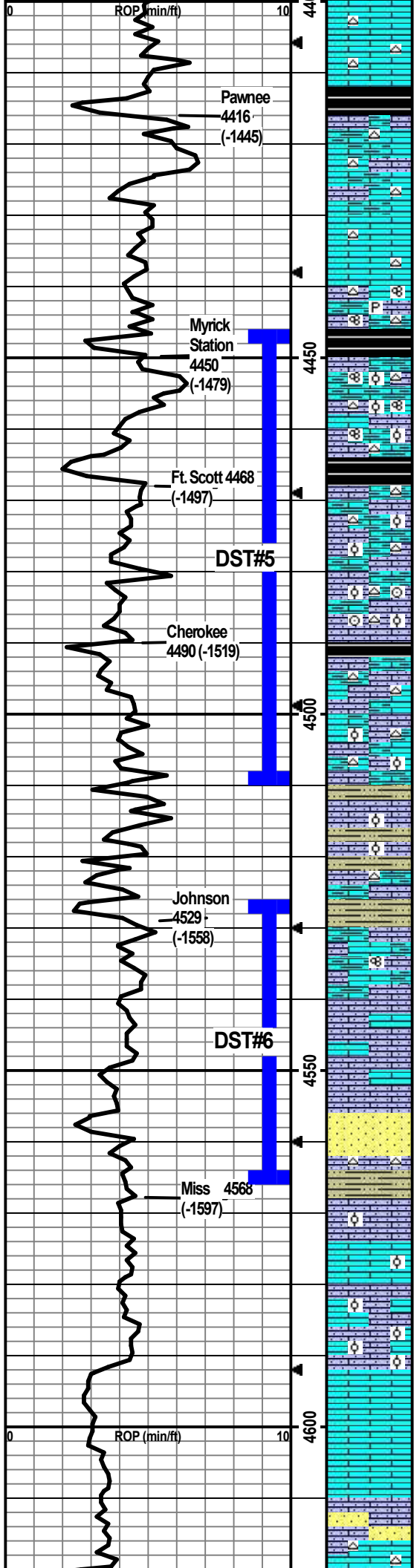
CFS @ 4271'
Stop/30"/60"

CFS @ 4310'
Stop/30"/60"

DST4) 4286-4310
Pleasanton
 15/30/30/30
 1st) Blow built to 1/2"; no BB.
 2nd) No blow; no BB.
 IFP 32-32#
 ISIP 122#
 FFP 34-34#
 FSIP 105#
 HP 2198-2185#
 Recvd: 5' OSM (2%O, 98%M).

CFS @ 4360'
Stop/30"/60"

CFS @ 4380'
Stop/30"/60"



LS: cm/lt-dk bm, micro-m xtal, some chalky, wht/lt bm chert, foss frags, no vis por, no odor, ns.

SH: dk gry/blk/bm, some silty, slt carb, soft-firm.

LS: cm/lt-m bm/lt-dk gry, micro-m xtal, some silty/sndy/arg/chalky, min wht/cm chert, foss frags, 3 pcs w/sfo w/blk tar, ppt-crs in-xtal por, no fluor, yel cut, no odor, sfo.

LS: crm/lt-m brn/lt gry, micro-m xtal, some silty/sndy/arg/chalky, lt wht/lt gry chert, min foss frags, 2 pcs w/blk tar oil, no fluor, yel cut, ppt-vf in-xtal por, no odor, show tar oil.

LS: crm/lt-m brn, micro-m xtal, some silty, chalky, arg, wht/cm chert, foss frags, 10 pcs w/blk tar oil, no fluor, yel cut, ppt-vf in-xtal por, no odor, show tar oil.

LS: lt-dk brn/lt-dk gry-brn, micro-m xtal, some silty/sndy/arg, some chalky, crm/lt brn chert, min pyritic, foss frags/fusln, no vis por; 3 pcs w/sfo w/ppt-f in-xtal por, no fluor, yel cut, no odor, sfo.

SH: blk, some silty, slt carb, firm, fissile.

LS: cm/lt-dk brn/lt-dk gry-brn, micro-m xtal, some silty/sndy/arg, chalky, wht/lt gry/lt bm chert, foss frags/fusln/ool, 12 pcs w/sfo w/ppt-m in-xtal/in-ool por, some thin frac por, no fluor, yel cut, no odor, sfo.

LS: same as above w/15 pcs sfo.

SH: blk, slt silty, carb, firm, fissile.

LS: lt-dk brn/m-dk gry, micro-m xtal, silty, arg, wht/lt gry/lt bm chert, foss frags/fusln/ool, 7 pcs w/sfo, ppt-f in-xtal/in-ool por, dul yel fluor, no odor, sfo.

LS: cm/lt-m bm/lt gry, micro-m xtal, some silty/arg, chalky, wht/cm/lt brn chert, foss frags/crn/min dense ool, no vis por, no odor, ns.

SH: dk gry/blk, slt silty, carb, firm, fissile.

LS: cm/lt-m brn, micro-m xtal, some silty/arg/chalky, cm/lt brn chert, foss frags, 10 pcs w/sfo w/vf-m in-xtal por, some staining on xtal lining, slt odor, sfo.

LS: cm/lt-m bm/lt gry, micro-m xtal, some silty/sndy/arg, chalky, wht/lt gry/brn chert, foss frags/dense ool, 5-10% of smpl w/sfo, ppt-crs/vug in-xtal por, dul yel fluor, slt odor, sfo.

SH: m-dk gry/blk/dk brn, some silty, carb, firm, fissile.

LS: lt-dk brn/lt-m brn-gry, micro-m xtal, some vry silty/sndy/arg, foss frags/min dense ool, 7 pcs w/sfo w/f-crs in-xtal por, dul yel fluor, no odor, sfo.

SH: lt-dk gry/blk/bm, some vry silty, carb, soft-firm.

LS: crm/lt-m brn/lt-m brn-gry, micro-m xtal, some vry silty/arg/chalky, min lt brn chert, foss frags, no vis por, no odor, ns.

LS: cm/lt-m brn/min dk brn, micro-m xtal, silty/sndy/arg/chalky, foss frags/min fusln, 10 pcs w/sfo/staining, fo on break, dul yel fluor/cut, ppt-m in-xtal por, no odor, sfo.

LS: crm/lt-m brn/lt gry, micro-m xtal, some silty/chalky, foss frags, 29 pcs w/sfo/staining, some thk dk brn, dul yel fluor/cut, ppt-crs in-xtal por, slt odor, gsfo.

LS: as above, 30+ pcs w/sfo, black tar oil w/fo droplets on break, gd odor.

SS: 24 clusters w/sfo, lt gry/lt brn, opaque, f-m grained, sr-wr, friable, oil droplets on break, dul yel fluor/cut, gd odor, gsfo.

LS: crm/lt brn/lt gry, micro-m xtal, some vry silty/sndy, some chalky, wht/cm/lt brn chert, foss frags, 28 pcs w/sfo, mostly blk tar w/some brn fo, ppt-m in-xtal por, gd odor, gsfo. (Flood SS w/sfo).

LS: cm/lt brn, micro-m xtal, some vry sndy/chalky, foss frags/dense ool, no vis por, no odor, ns.

LS: wht/cm/lt brn, micro-m xtal, some vry silty/sndy, some vry chalky, foss frags/dense oolitic, no vis por, no odor, ns.

LS: as above w/increase in cm micro xtaline, no odor, ns.

LS: cm, micro xtal, 3 pcs w/bm oil frac staining and min blk tar, no in-xtal por, no odor, nsfo.

Min SS: wht/lt green-wht, vf-f, sr-wr, qtz w/carb matrix, chalky, friable.

LS: cm/lt brn, micro-m xtal, some vry sndy, some chalky, wht chert, no vis por, no odor, ns.

CFS @ 4410'
Stop/30"/60"

CFS @ 4440'
Stop/30"/60"

CFS @ 4460'
Stop/30"/60"

CFS @ 4480'
Stop/30"/60"

Lost circulation during short trip for DST #5. Healed fluid loss and CTCH on bottom, then TOH w/bit for DST #5.

CFS @ 4510'
Stop/30"/60"

DST5) 4446-4510 Myrick Station, Ft Scott & Cherokee

FAILED TEST: Opened DST tool for DST #5, packer appeared to initially hold but began to loose fluid in hole. Unknown if fluid loss was due to packer failure or formation conditions. Tried to re-seal packer but steadily losing fluid. Declared mis-run, pulled tools.

CFS @ 4566'
Stop/30"/60"

DST6) 4526-4566 Johnson

FAILED TEST: Opened DST tool for DST #6, packer appeared to hold for first 13 min w/BOB at 10min with IF at 67 #. Then lost fluid in hole. Attempted to fill hole w/dril fluid but couldn't fill. Unknown if fluid loss was due to packer failure of formation conditions. Declared mis-run, pulled tools.

Dolo: cm/lt bm, vf grained, sndy, ool, 10-15% of smpl w/sfo w/m-crs/vug
oo-castic por, f-crs in-xtal por, no fluor, gd odor, sfo.

LS: cm/lt-m bm, micro-m xtal, some sndy, some chalky, min foss frags, no
vis por, slit odor, ns in LS. (Numerous dolo pcs w/show from above).

TD @4640'

CFS @4640'
Stop/30"/60"
Reamed bottom of hole, CTCH
1.5 hr total then TOH for
logging.

RTD 4640', -1669
LTD 4640', -1669

4650

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