



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Sam Gary Jr. & Associates

**27-4S-24W - Norton, KS**

1515 Wynkoop STE #700  
Devver, CO 80202

**Joseph #1-27**

Job Ticket: 58241

**DST#: 2**

ATTN:

Test Start: 2014.07.16 @ 11:23:00

## GENERAL INFORMATION:

Formation: **LKC "D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:26:30

Time Test Ended: 18:45:00

Test Type: Conventional Straddle (Initial)

Tester: Kevin Mack

Unit No: 66

**Interval: 3624.00 ft (KB) To 3664.00 ft (KB) (TVD)**

Reference Elevations: 2475.00 ft (KB)

Total Depth: 3975.00 ft (KB) (TVD)

2465.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

**Serial #: 8874 Inside**

Press @ Run Depth: 45.75 psig @ 3626.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.16

End Date:

2014.07.16

Last Calib.:

2014.07.16

Start Time: 11:24:00

End Time:

18:45:00

Time On Btm:

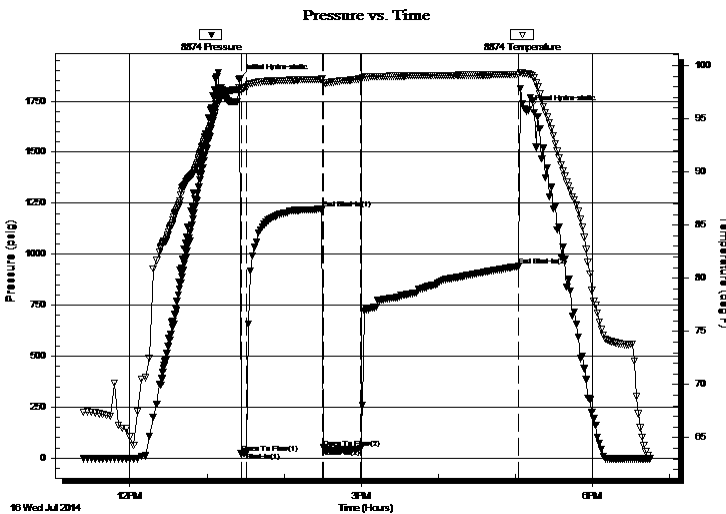
2014.07.16 @ 13:25:30

Time Off Btm:

2014.07.16 @ 17:10:00

**TEST COMMENT:** 5 - IF- Surface Blow built to 3/4"  
60 - IS- No Return  
30 - FF- Surface Blow started at min. Built to 1 1/4"  
120 - FS- No Return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1862.05	97.90	Initial Hydro-static
1	21.39	97.63	Open To Flow (1)
6	30.95	97.99	Shut-In(1)
64	1221.47	98.71	End Shut-In(1)
66	50.21	98.35	Open To Flow (2)
94	45.75	98.73	Shut-In(2)
217	940.31	99.13	End Shut-In(2)
225	1706.68	99.19	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
50.00	mud 100M	0.43

## Gas Rates

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



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ATTN:

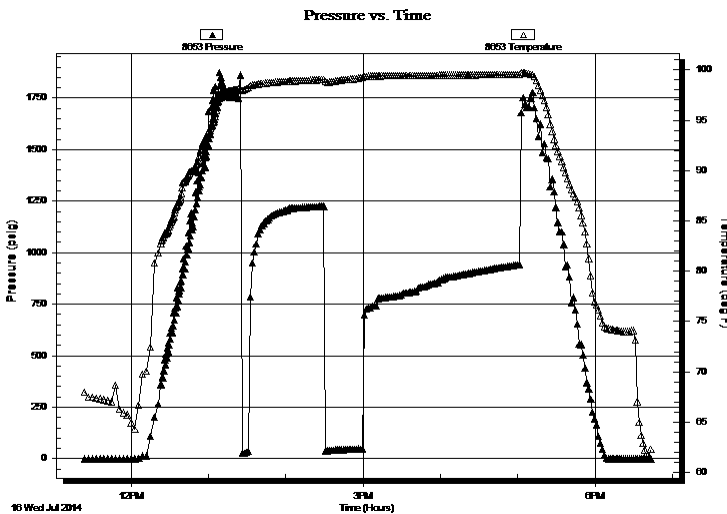
**27-4S-24W - Norton, KS**  
**Joseph #1-27**  
Job Ticket: 58241 **DST#: 2**  
Test Start: 2014.07.16 @ 11:23:00

### GENERAL INFORMATION:

Formation: **LKC "D"**  
Deviated: No Whipstock: ft (KB) Test Type: Conventional Straddle (Initial)  
Time Tool Opened: 13:26:30 Tester: Kevin Mack  
Time Test Ended: 18:45:00 Unit No: 66  
Interval: **3624.00 ft (KB) To 3664.00 ft (KB) (TVD)** Reference Elevations: 2475.00 ft (KB)  
Total Depth: 3975.00 ft (KB) (TVD) 2465.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

**Serial #: 8653 Outside**  
Press @ Run Depth: psig @ 3626.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2014.07.16 End Date: 2014.07.16 Last Calib.: 2014.07.16  
Start Time: 11:24:00 End Time: 18:43:30 Time On Btm:  
Time Off Btm:

TEST COMMENT: 5 - IF- Surface Blow built to 3/4"  
60 - IS- No Return  
30 - FF- Surface Blow started at min. Built to 1 1/4"  
120 - FS- No Return



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
50.00	mud 100M	0.43

### Gas Rates

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



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# DRILL STEM TEST REPORT

Sam Gary Jr. & Associates

**27-4S-24W - Norton, KS**

1515 Wynkoop STE #700  
Devver, CO 80202

**Joseph #1-27**

Job Ticket: 58241

**DST#: 2**

ATTN:

Test Start: 2014.07.16 @ 11:23:00

## GENERAL INFORMATION:

Formation: <b>LKC "D"</b>			
Deviated: No Whipstock:	ft (KB)	Test Type: Conventional Straddle (Initial)	
Time Tool Opened: 13:26:30		Tester: Kevin Mack	
Time Test Ended: 18:45:00		Unit No: 66	
<b>Interval: 3624.00 ft (KB) To 3664.00 ft (KB) (TVD)</b>		Reference Elevations: 2475.00 ft (KB)	
Total Depth: 3975.00 ft (KB) (TVD)		2465.00 ft (CF)	
Hole Diameter: 7.88 inches	Hole Condition: Good	KB to GR/CF: 10.00 ft	

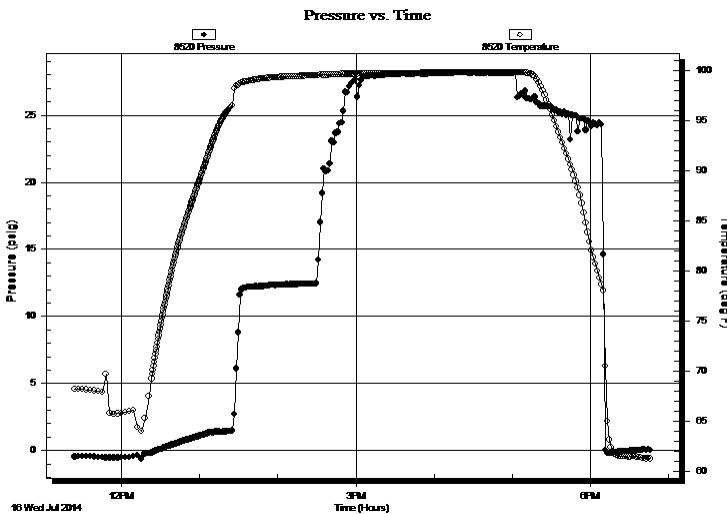
## Serial #: 8520

### Fluid

Press @RunDepth:	psig @ 3588.00 ft (KB)	Capacity:	8000.00 psig
Start Date:	2014.07.16	End Date:	2014.07.16
Start Time:	11:24:00	End Time:	18:46:30
		Last Calib.:	2014.07.16
		Time On Btm:	
		Time Off Btm:	

**TEST COMMENT:** 5 - IF- Surface Blow built to 3/4"  
60 - IS- No Return  
30 - FF- Surface Blow started at min. Built to 1 1/4"  
120 - FS- No Return

## PRESSURE SUMMARY



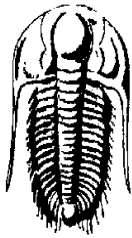
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume (bbl)
50.00	mud 100M	0.43

## Gas Rates

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



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**DRILL STEM TEST REPORT**

Sam Gary Jr. & Associates

**27-4S-24W - Norton, KS**

1515 Wynkoop STE #700  
Denver, CO 80202

**Joseph #1-27**

Job Ticket: 58241

**DST#: 2**

ATTN:

Test Start: 2014.07.16 @ 11:23:00

**GENERAL INFORMATION:**

Formation: **LKC "D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:26:30

Time Test Ended: 18:45:00

Test Type: Conventional Straddle (Initial)

Tester: Kevin Mack

Unit No: 66

**Interval: 3624.00 ft (KB) To 3664.00 ft (KB) (TVD)**

Total Depth: 3975.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2475.00 ft (KB)

2465.00 ft (CF)

KB to GR/CF: 10.00 ft

**Serial #: 8791 Below (Straddle)**

Press @ RunDepth: psig @ 3664.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.16 End Date: 2014.07.16

Last Calib.: 2014.07.16

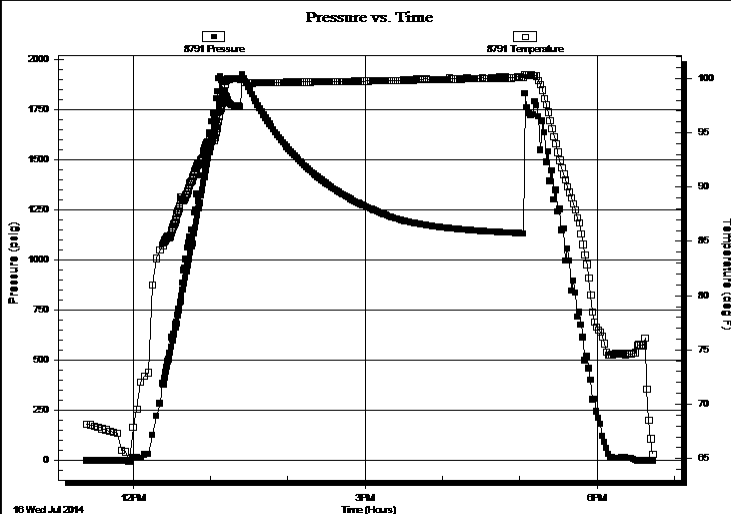
Start Time: 11:24:00 End Time: 18:43:30

Time On Btm:

Time Off Btm:

**TEST COMMENT:** 5 - IF- Surface Blow built to 3/4"  
60 - IS- No Return  
30 - FF- Surface Blow started at min. Built to 1 1/4"  
120 - FS- No Return

**PRESSURE SUMMARY**



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

**Recovery**

Length (ft)	Description	Volume (bbl)
50.00	mud 100M	0.43

**Gas Rates**

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



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

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**27-4S-24W - Norton, KS**

1515 Wynkoop STE #700  
Devver, CO 80202

**Joseph #1-27**

Job Ticket: 58241

**DST#: 2**

ATTN:

Test Start: 2014.07.16 @ 11:23:00

## 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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	mud 100M	0.428

Total Length: 50.00 ft      Total Volume: 0.428 bbl

Num Fluid Samples: 0

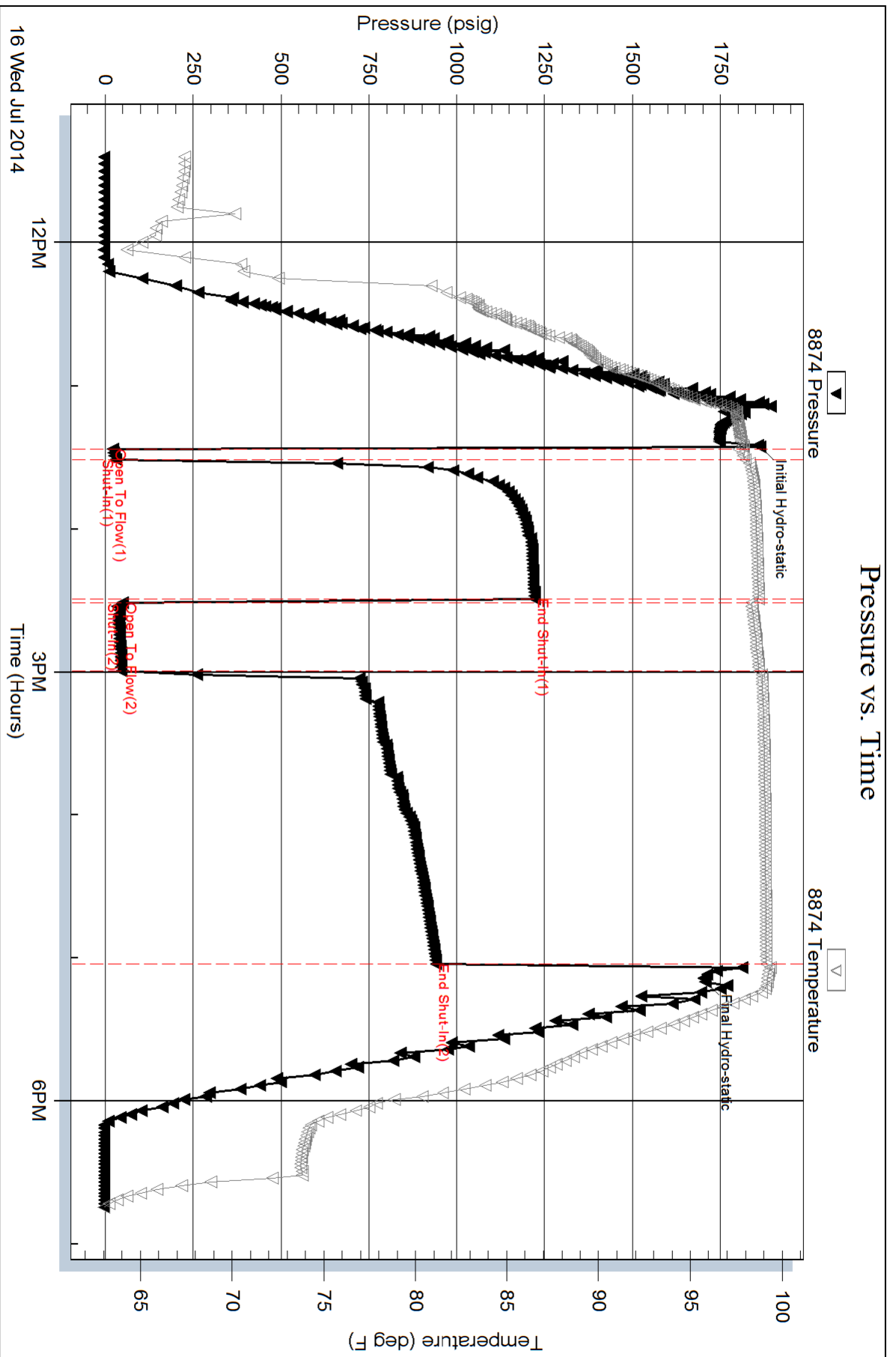
Num Gas Bombs: 0

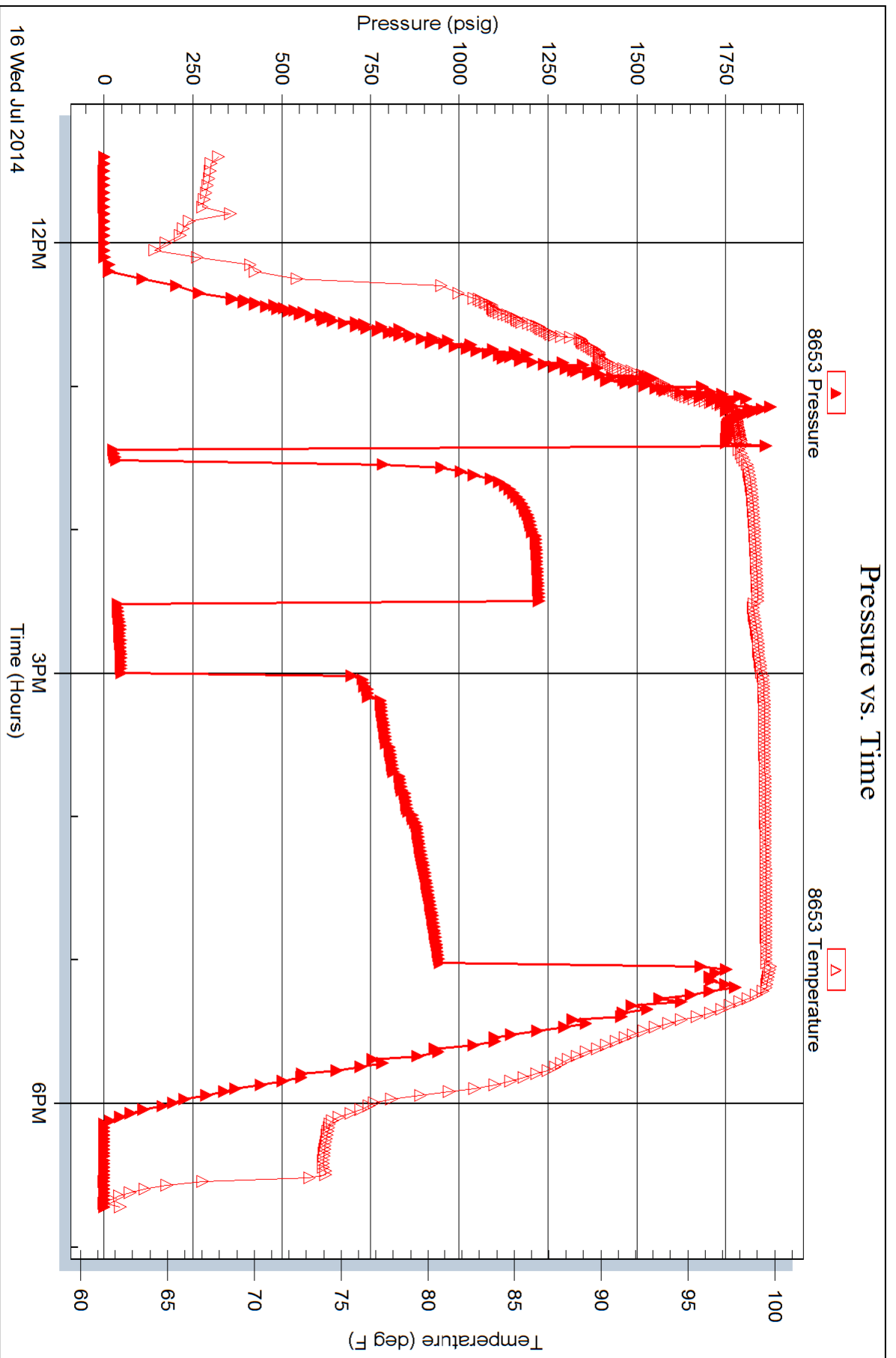
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Show of oil spots in tool and sample chamber





Serial #: 8520

Fluid

Sam Gary Jr. & Associates

Joseph #1-27

DST Test Number: 2

