

DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr. Associates Inc**

1515 Wynkoop STE 700
Denver CO 80202

ATTN: Clayton Camozzi

Scurlock #3-21

21-15s-16w Ellis,KS

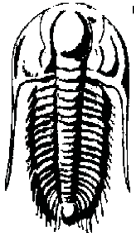
Start Date: 2012.04.17 @ 06:27:15

End Date: 2012.04.17 @ 13:12:15

Job Ticket #: 47217 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.04.19 @ 11:03:43



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Samuel Gary Jr. Associates Inc

21-15s-16w Ellis,KS

1515 Wynkoop STE 700
Denver CO 80202

Scurlock #3-21

Job Ticket: 47217

DST#: 2

ATTN: Clayton Camozzi

Test Start: 2012.04.17 @ 06:27:15

GENERAL INFORMATION:

Formation: **LKC "J-L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:41:45

Time Test Ended: 13:12:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 3398.00 ft (KB) To 3454.00 ft (KB) (TVD)

Reference Elevations: 1948.00 ft (KB)

Total Depth: 3454.00 ft (KB) (TVD)

1940.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8354

Inside

Press@RunDepth: 34.15 psig @ 3402.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.04.17

End Date:

2012.04.17

Last Calib.:

2012.04.17

Start Time: 06:37:15

End Time:

13:12:15

Time On Btm:

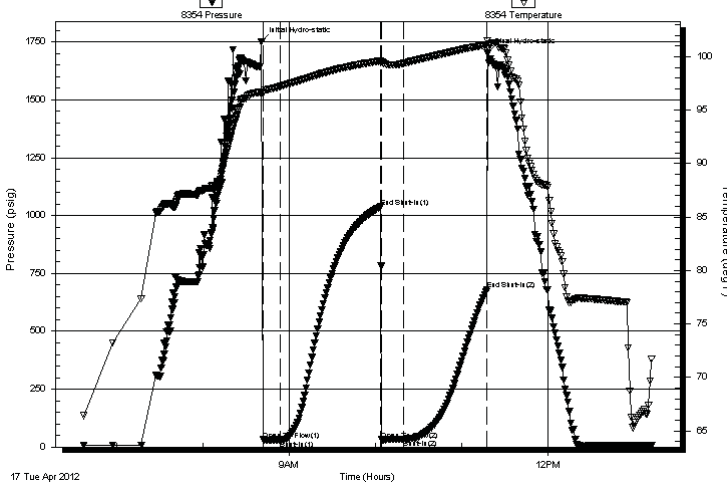
2012.04.17 @ 08:40:45

Time Off Btm:

2012.04.17 @ 11:17:45

TEST COMMENT: IF-Very weak building blow . Built to 1/4 inch.
ISI-No Return.
FF-Very weak surface blow . Died @ 6 minutes.
FSI-No Return. Times-10-60-15-60

Pressure vs. Time



PRESSURE SUMMARY

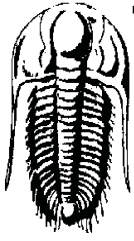
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1752.60	96.71	Initial Hydro-static
1	31.69	96.51	Open To Flow (1)
13	31.10	97.23	Shut-In(1)
83	1037.46	99.60	End Shut-In(1)
84	31.58	99.51	Open To Flow (2)
99	34.15	99.37	Shut-In(2)
157	679.75	101.12	End Shut-In(2)
157	1702.26	101.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
6.00	100%Mud	0.03

Gas Rates

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



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Job Ticket: 47217

DST#: 2

ATTN: Clayton Camozzi

Test Start: 2012.04.17 @ 06:27:15

GENERAL INFORMATION:

Formation: **LKC "J-L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:41:45

Time Test Ended: 13:12:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 3398.00 ft (KB) To 3454.00 ft (KB) (TVD)

Reference Elevations: 1948.00 ft (KB)

Total Depth: 3454.00 ft (KB) (TVD)

1940.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8520 Outside

Press@RunDepth: psig @ 3402.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.04.17

End Date: 2012.04.17

Last Calib.: 2012.04.17

Start Time: 06:37:30

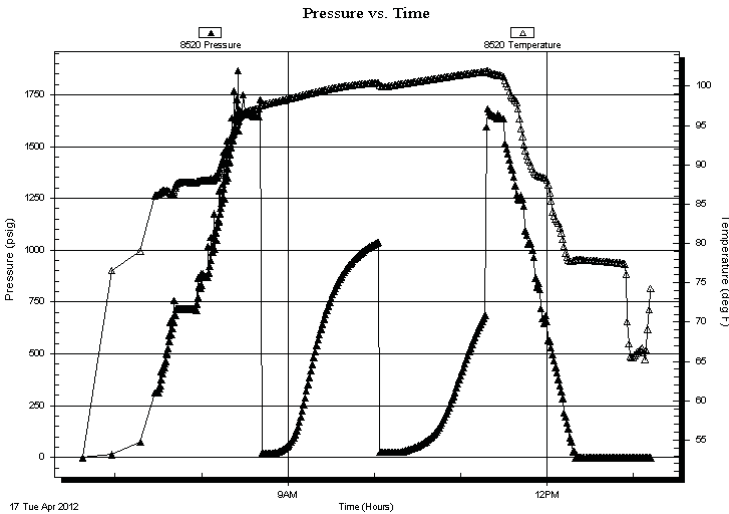
End Time: 13:12:00

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-Very weak building blow . Built to 1/4 inch.
 IS-No Return.
 FF-Very weak surface blow . Died @ 6 minutes.
 FS-No Return. Times-10-60-15-60

PRESSURE SUMMARY



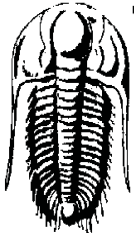
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
6.00	100%Mud	0.03

Gas Rates

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



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Scurlock #3-21

Job Ticket: 47217

DST#: 2

ATTN: Clayton Camozzi

Test Start: 2012.04.17 @ 06:27:15

GENERAL INFORMATION:

Formation: **LKC "J-L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:41:45

Time Test Ended: 13:12:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: **3398.00 ft (KB) To 3454.00 ft (KB) (TVD)**

Total Depth: 3454.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1948.00 ft (KB)

1940.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8653 Fluid

Press@RunDepth: psig @ 3368.00 ft (KB)

Start Date: 2012.04.17

End Date: 2012.04.17

Start Time: 06:27:46

End Time: 13:10:15

Capacity: 8000.00 psig

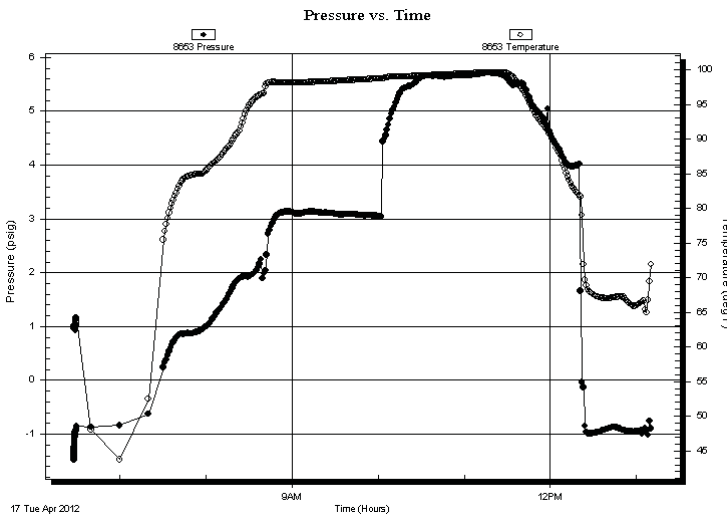
Last Calib.: 2012.04.17

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-Very weak building blow . Built to 1/4 inch.
ISI-No Return.
FF-Very weak surface blow . Died @ 6 minutes.
FSI-No Return. Times-10-60-15-60

PRESSURE SUMMARY



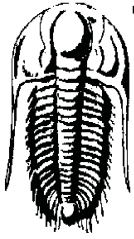
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
6.00	100%Mud	0.03

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr. Associates Inc

21-15s-16w Ellis,KS

1515 Wynkoop STE 700
Denver CO 80202

Scurlock #3-21

Job Ticket: 47217

DST#: 2

ATTN: Clayton Camozzi

Test Start: 2012.04.17 @ 06:27:15

Tool Information

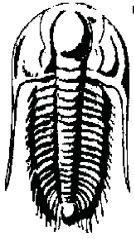
Drill Pipe:	Length: 3348.00 ft	Diameter: 3.80 inches	Volume: 46.96 bbl	Tool Weight: 3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 10000.00 lb
			<u>Total Volume: 47.11 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3398.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	56.00 ft			
Tool Length:	86.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Recorder	0.00	8653	Fluid	3368.00	
Change Over Sub	1.00			3369.00	
Shut In Tool	5.00			3374.00	
Sampler	2.00			3376.00	
Hydraulic tool	5.00			3381.00	
Jars	5.00			3386.00	
Safety Joint	3.00			3389.00	
Packer	5.00			3394.00	30.00 Bottom Of Top Packer
Packer	4.00			3398.00	
Stubb	1.00			3399.00	
Perforations	3.00			3402.00	
Recorder	0.00	8354	Inside	3402.00	
Recorder	0.00	8520	Outside	3402.00	
Change Over Sub	1.00			3403.00	
Drill Pipe	31.00			3434.00	
Change Over Sub	1.00			3435.00	
Perforations	16.00			3451.00	
Bullnose	3.00			3454.00	56.00 Bottom Packers & Anchor

Total Tool Length: 86.00



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FLUID SUMMARY

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Scurlock #3-21

Job Ticket: 47217

DST#: 2

ATTN: Clayton Camozzi

Test Start: 2012.04.17 @ 06:27:15

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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 10000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
6.00	100%Mud	0.030

Total Length: 6.00 ft Total Volume: 0.030 bbl

Num Fluid Samples: 0

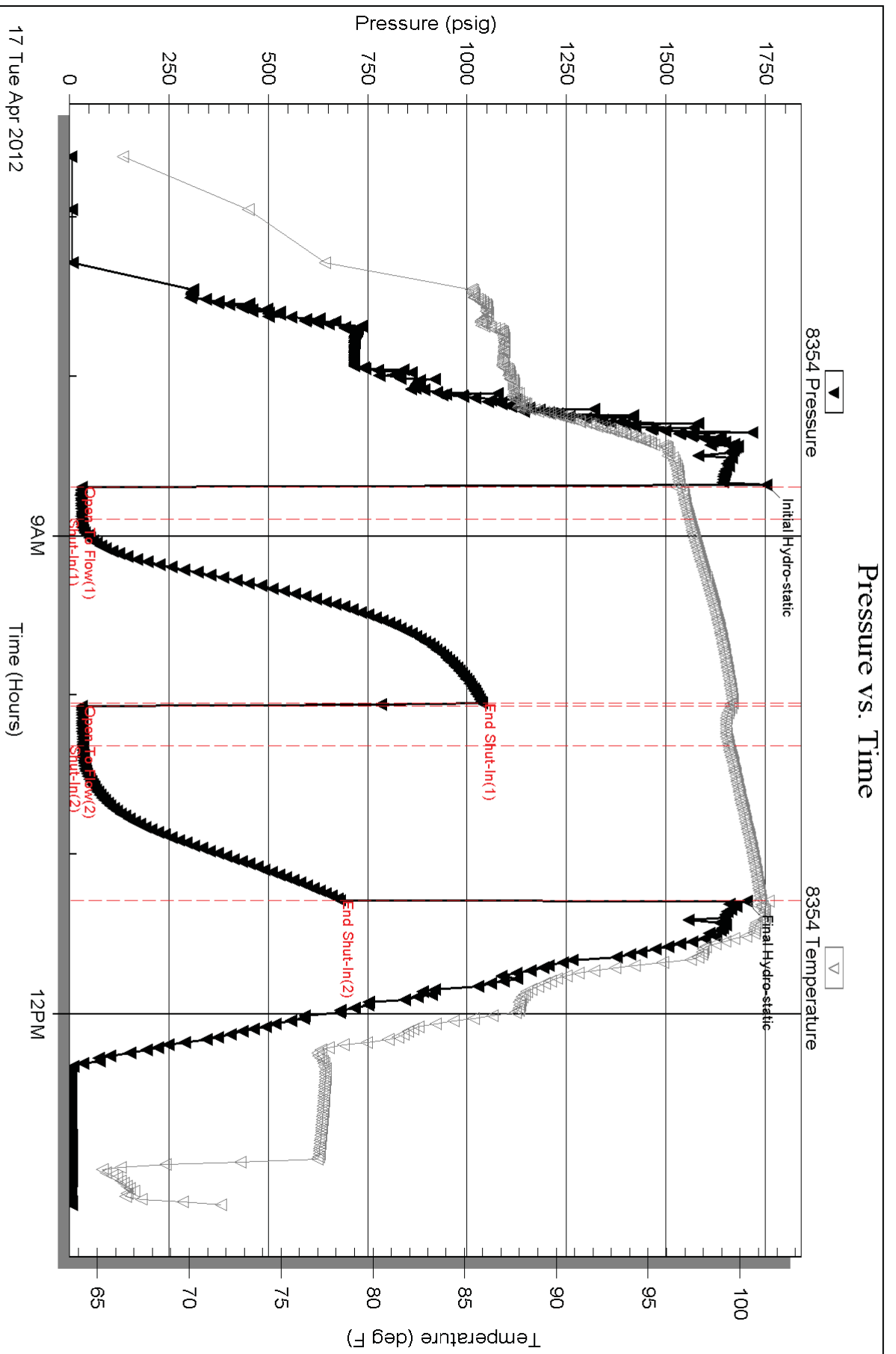
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler- 80# Pressure. 4000 ML total. 4000 ML 100%Mud.

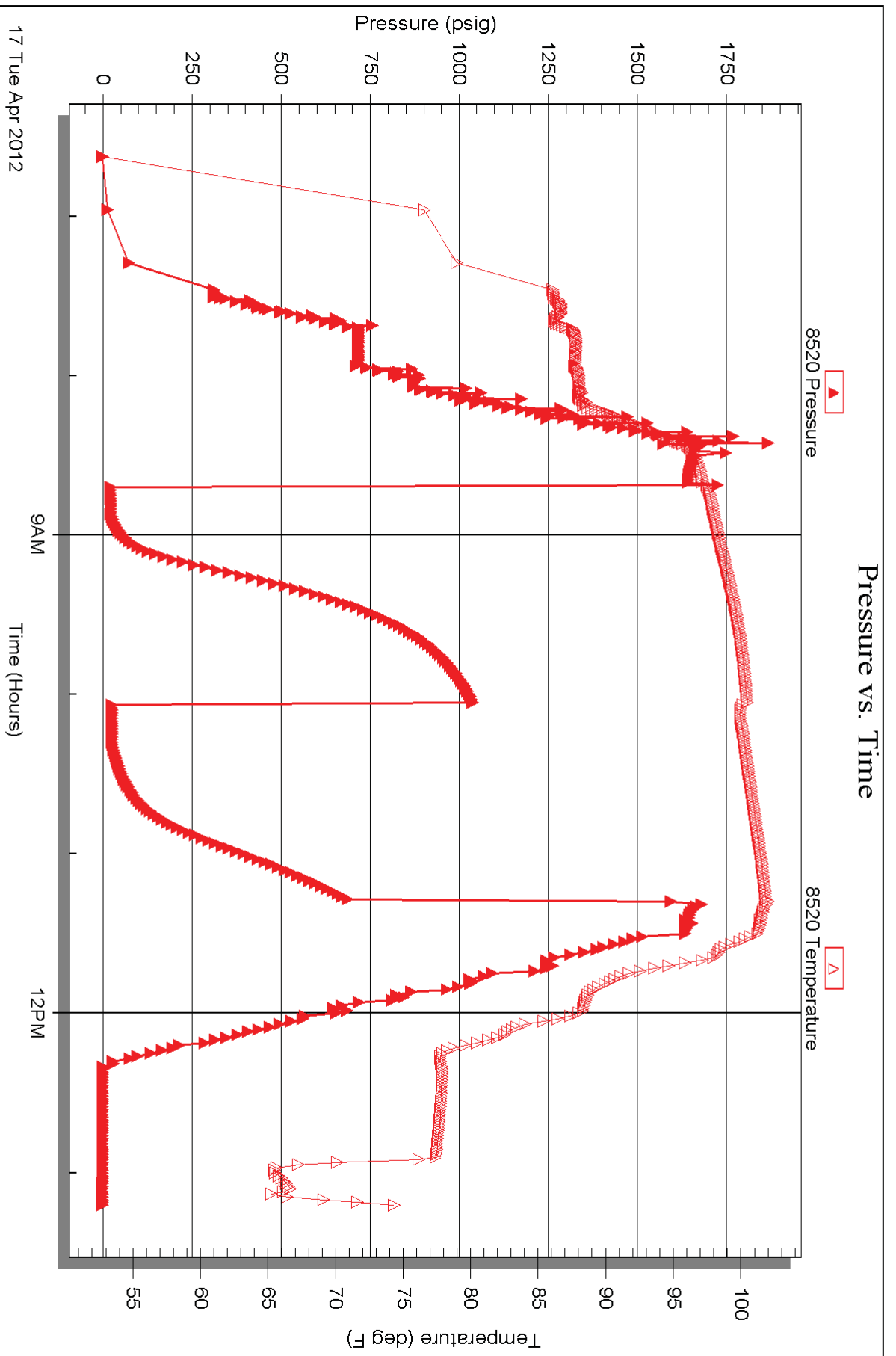


Serial #: 8520

Outside Samuel Gary Jr. Associates Inc

Scurlock #3-21

DST Test Number: 2



Serial #: 8653

Fluid

Samuel Gary Jr. Associates Inc

Scurlock #3-21

DST Test Number: 2

