

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

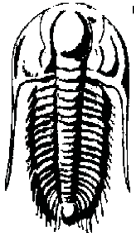
Start Date: 2012.04.16 @ 12:11:15

End Date: 2012.04.16 @ 18:22:45

Job Ticket #: 46496 DST #: 1

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

Printed: 2012.04.19 @ 11:11:53



**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: 46496

DST#: 1

ATTN: Clayton Camozzi

Test Start: 2012.04.16 @ 12:11:15

GENERAL INFORMATION:

Formation: **F- Middle G**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:50:30

Time Test Ended: 18:22:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Mike Roberts

Unit No: 48

Interval: 3280.00 ft (KB) To 3334.00 ft (KB) (TVD)

Reference Elevations: 1948.00 ft (KB)

Total Depth: 3334.00 ft (KB) (TVD)

1940.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6668 Outside

Press@RunDepth: 32.40 psig @ 3291.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.04.16

End Date: 2012.04.16

Last Calib.: 2012.04.16

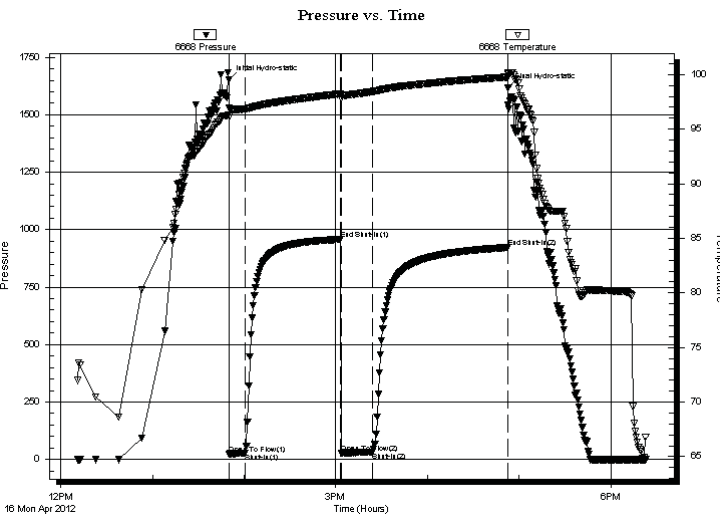
Start Time: 12:11:15

End Time: 18:22:45

Time On Btm: 2012.04.16 @ 13:50:15

Time Off Btm: 2012.04.16 @ 16:52:45

TEST COMMENT: IF: Built to 1" blow
IS: No return blow
FF: Built to weak surface blow
FS: No return blow Time: 10-60-20-90



PRESSURE SUMMARY

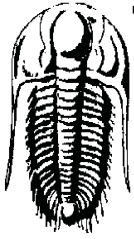
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1652.92	96.97	Initial Hydro-static
1	23.69	96.18	Open To Flow (1)
11	27.78	96.86	Shut-In(1)
73	958.38	98.24	End Shut-In(1)
74	27.65	97.78	Open To Flow (2)
94	32.40	98.44	Shut-In(2)
182	922.17	99.77	End Shut-In(2)
183	1616.77	100.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	mud 100% m	0.42

Gas Rates

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



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Tester: Mike Roberts

Unit No: 48

Interval: **3280.00 ft (KB) To 3334.00 ft (KB) (TVD)**

Reference Elevations: 1948.00 ft (KB)

Total Depth: 3334.00 ft (KB) (TVD)

1940.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8646 Fluid

Press@RunDepth: psig @ 3247.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.04.16

End Date:

2012.04.16

Last Calib.:

2012.04.16

Start Time:

12:11:15

End Time:

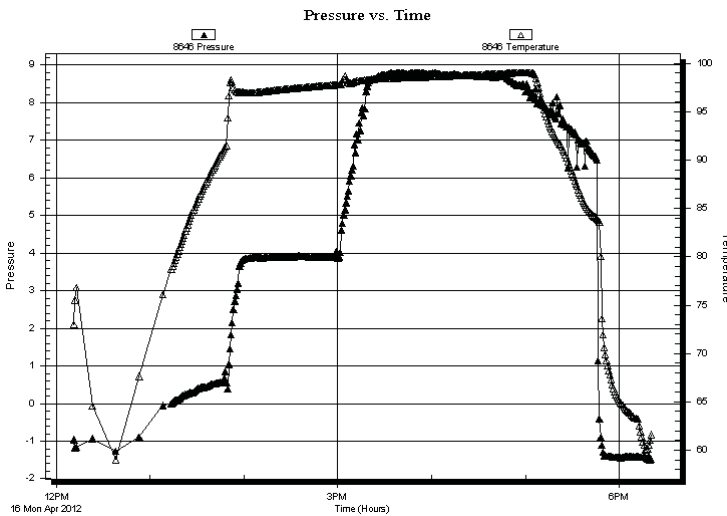
18:20:30

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Built to 1" blow
IS: No return blow
FF: Built to weak surface blow
FS: No return blow Time: 10-60-20-90

PRESSURE SUMMARY



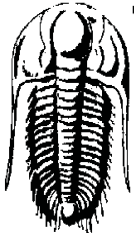
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
30.00	mud 100% m	0.42

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



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Denver CO 80202

Scurlock #3-21

Job Ticket: 46496 **DST#: 1**

ATTN: Clayton Camozzi

Test Start: 2012.04.16 @ 12:11:15

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 Time Test Ended: 18:22:45

Test Type: Conventional Bottom Hole (Initial)
 Tester: Mike Roberts
 Unit No: 48

Interval: **3280.00 ft (KB) To 3334.00 ft (KB) (TVD)**
 Total Depth: 3334.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

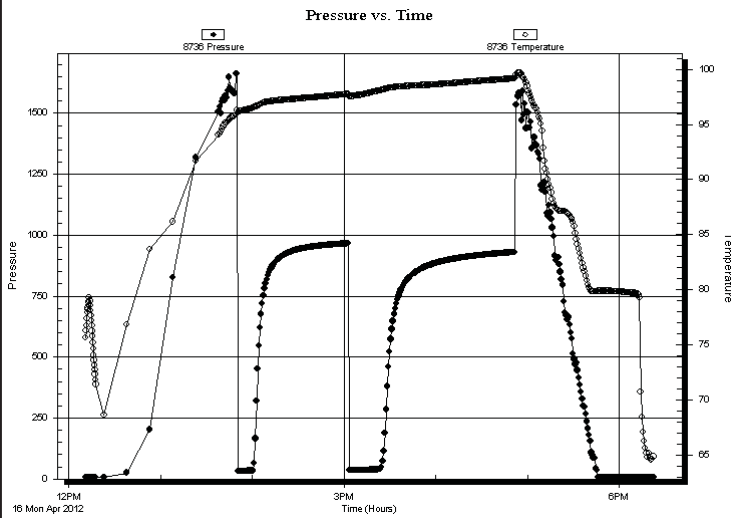
Reference Elevations: 1948.00 ft (KB)
 1940.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8736

Inside

Press@RunDepth: psig @ 3291.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.04.16 End Date: 2012.04.16 Last Calib.: 2012.04.16
 Start Time: 12:11:05 End Time: 18:22:29 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF:Built to 1" blow
 IS:No return blow
 FF:Built to weak surface blow
 FS:No return blow Time: 10-60-20-90



PRESSURE SUMMARY

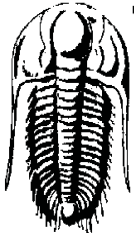
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
30.00	mud 100% m	0.42

Gas Rates

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



**TRILOBITE
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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: 46496

DST#: 1

ATTN: Clayton Camozzi

Test Start: 2012.04.16 @ 12:11:15

Tool Information

Drill Pipe:	Length: 3260.00 ft	Diameter: 3.80 inches	Volume: 45.73 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 45.73 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3280.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.00 ft			
Tool Length:	87.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

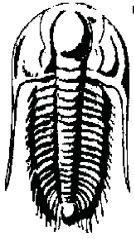
Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Recorder	0.00	8646	Fluid	3247.00		
Blank Spacing	5.00			3252.00		
Change Over Sub	1.00			3253.00		
Shut In Tool	5.00			3258.00		
Hydraulic tool	5.00			3263.00		
Jars	5.00			3268.00		
Safety Joint	3.00			3271.00		
Packer	5.00			3276.00	33.00	Bottom Of Top Packer
Packer	4.00			3280.00		
Stubb	1.00			3281.00		
Perforations	10.00			3291.00		
Recorder	0.00	8736	Inside	3291.00		
Recorder	0.00	6668	Outside	3291.00		
Change Over Sub	1.00			3292.00		
Drill Pipe	31.00			3323.00		
Change Over Sub	1.00			3324.00		
Perforations	5.00			3329.00		
Bullnose	5.00			3334.00	54.00	Bottom Packers & Anchor

Total Tool Length: 87.00



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FLUID SUMMARY

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Scurlock #3-21

Job Ticket: 46496

DST#: 1

ATTN: Clayton Camozzi

Test Start: 2012.04.16 @ 12:11:15

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: 10.36 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 10000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	mud 100% m	0.421

Total Length: 30.00 ft Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

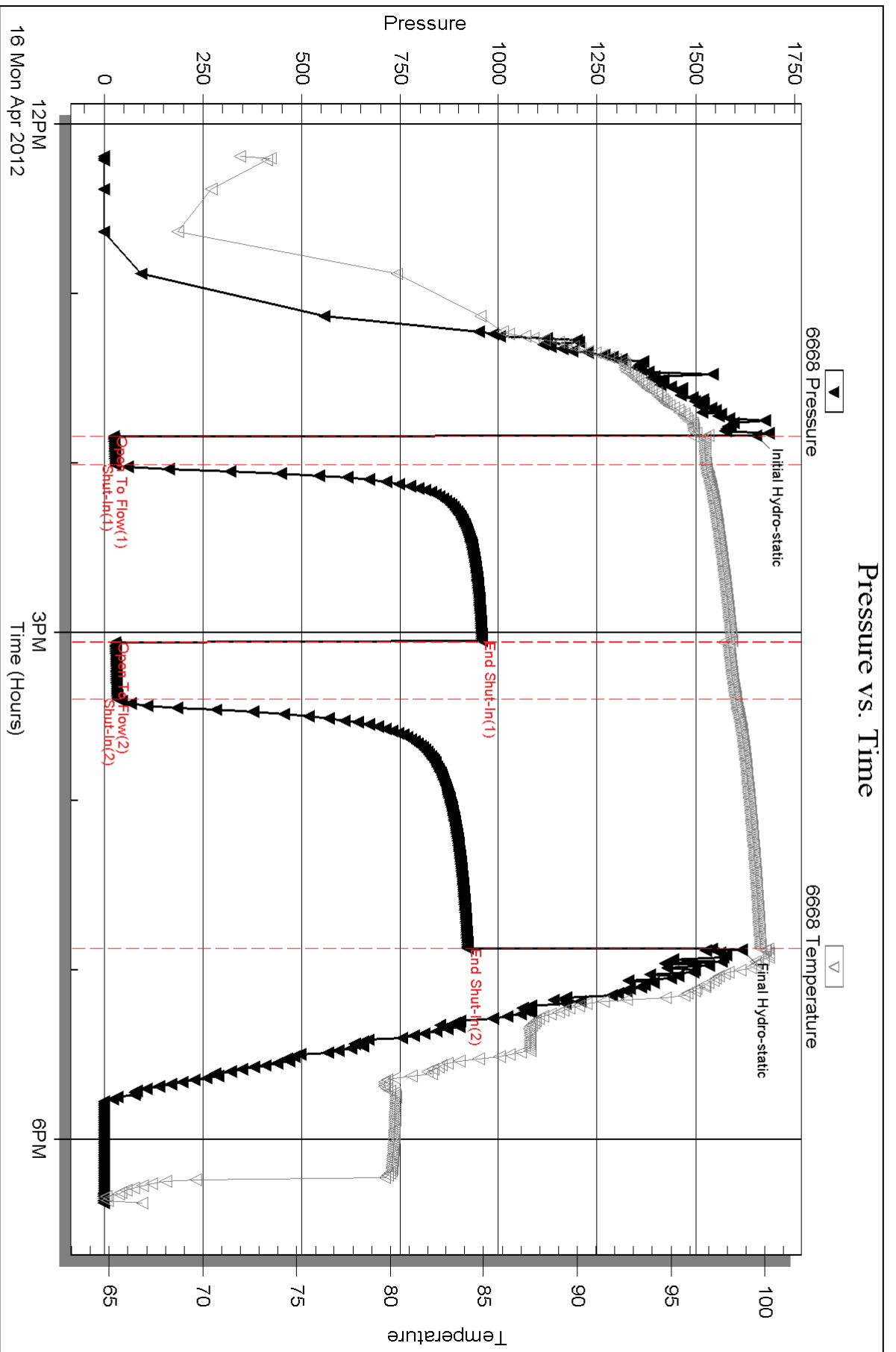
Recovery Comments:

Serial #: 6668

Outside Samuel Gary Jr. Associates Inc

Scurlock #3-21

DST Test Number: 1



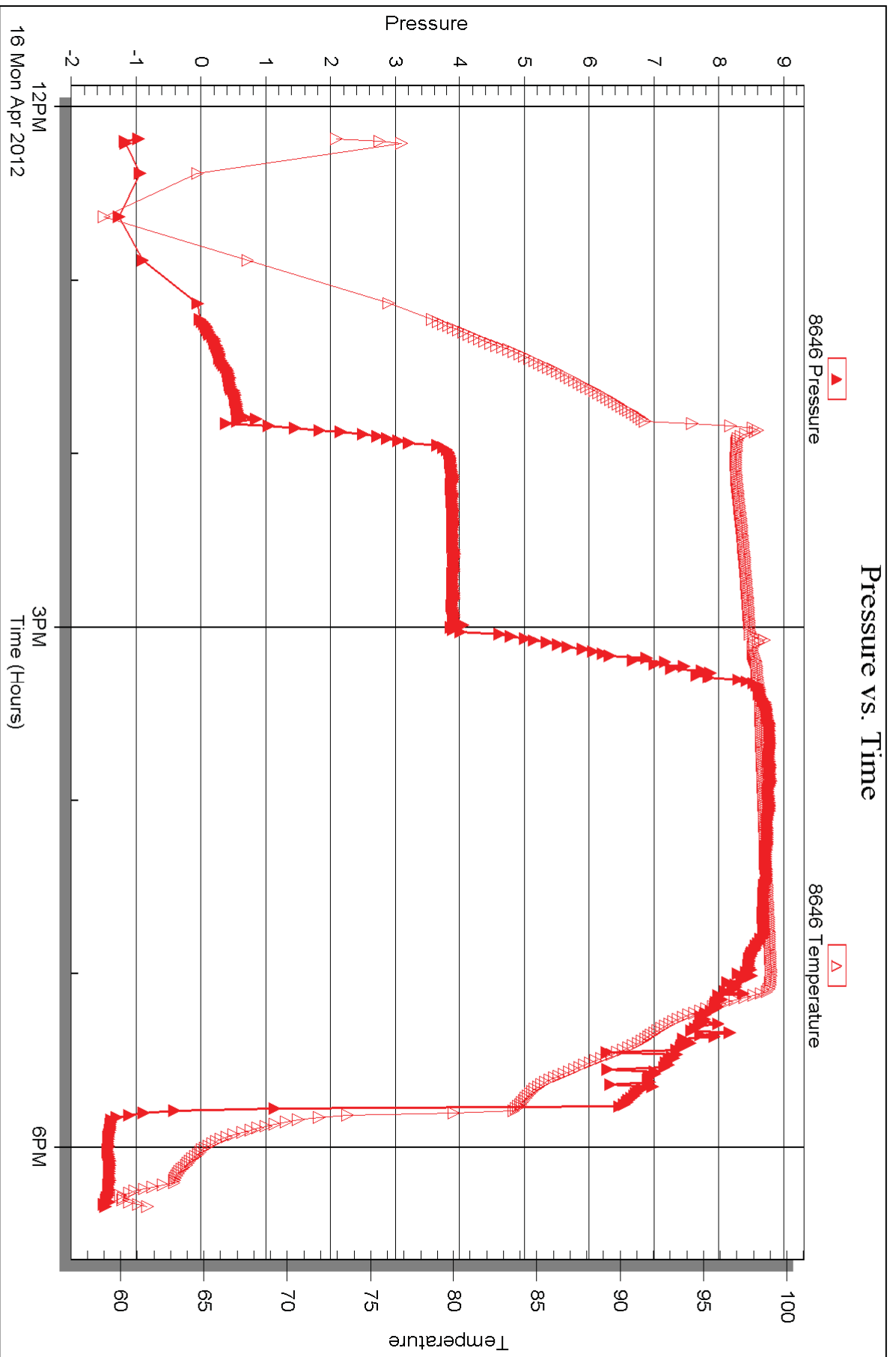
Serial #: 8646

Fluid

Samuel Gary Jr. Associates Inc

Scurlock #3-21

DST Test Number: 1



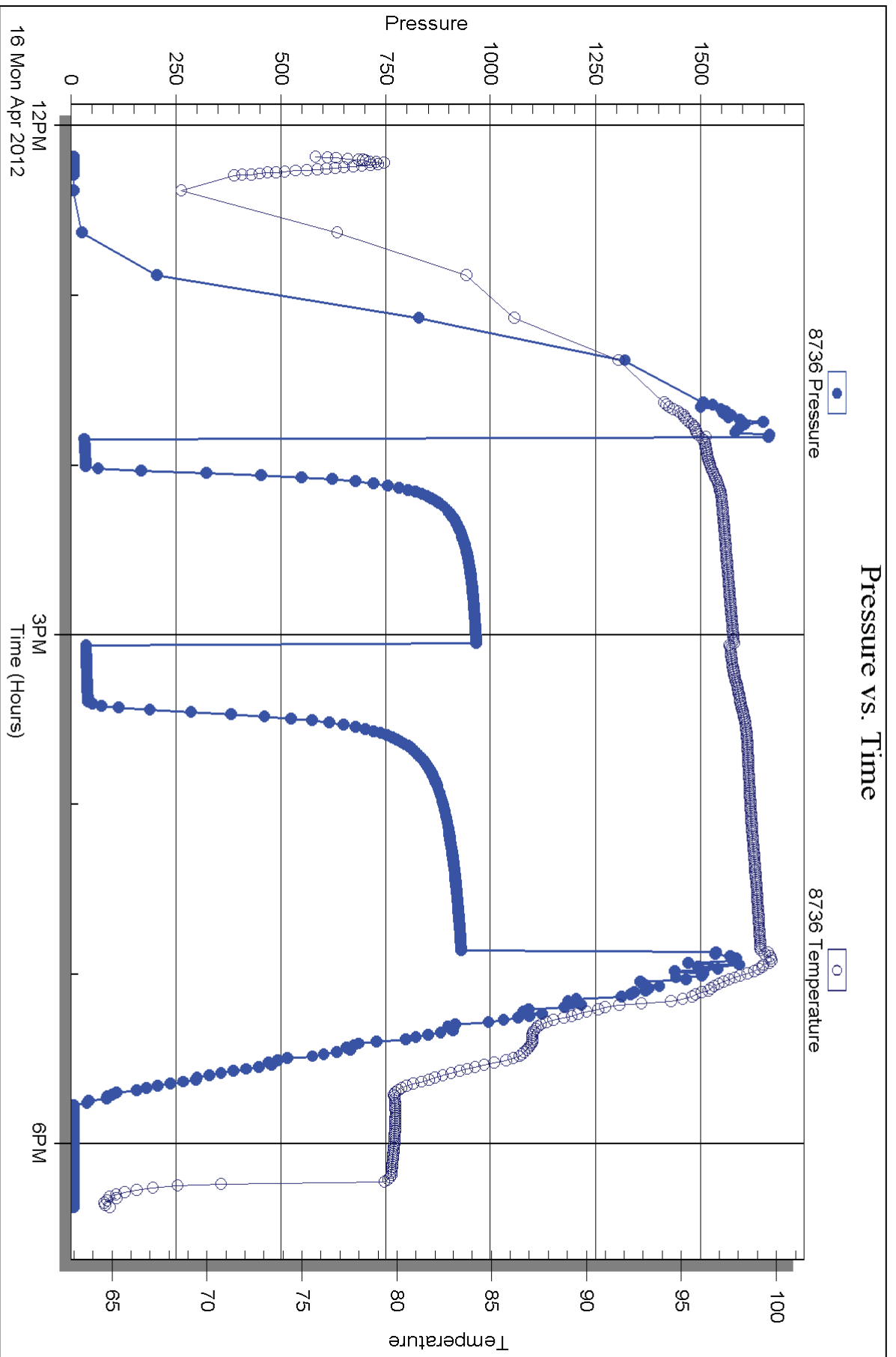
Serial #: 8736

Inside

Samuel Gary Jr. Associates Inc

Scurlock #3-21

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 46496

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