



DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr. & Ass. Inc,**

1515 Wynkoop St, Ste 700
Denver CO, 80202

ATTN: Clayton Camozzi

21-15S-16W Ellis, Ks

Scurlock #1-21

Start Date: 2011.03.30 @ 23:45:36

End Date: 2011.03.31 @ 07:06:36

Job Ticket #: 42808 DST #: 4

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Samuel Gary Jr. & Ass. Inc,
1515 Wynkoop St, Ste 700
Denver CO, 80202
ATTN: Clayton Camozzi

Scurlock #1-21

21-15S-16W Ellis, Ks

Job Ticket: 42808

DST#: 4

Test Start: 2011.03.30 @ 23:45:36

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:55:36

Time Test Ended: 07:06:36

Test Type: Conventional Bottom Hole

Tester: Cody/Brett

Unit No: 47

Interval: 3526.00 ft (KB) To 3532.00 ft (KB) (TVD)

Total Depth: 3532.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1870.00 ft (KB)

1862.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6719 Inside

Press @ Run Depth: 19.02 psig @ 3527.00 ft (KB)

Start Date: 2011.03.30

End Date: 2011.03.31

Start Time: 23:45:41

End Time: 07:06:35

Capacity: 8000.00 psig

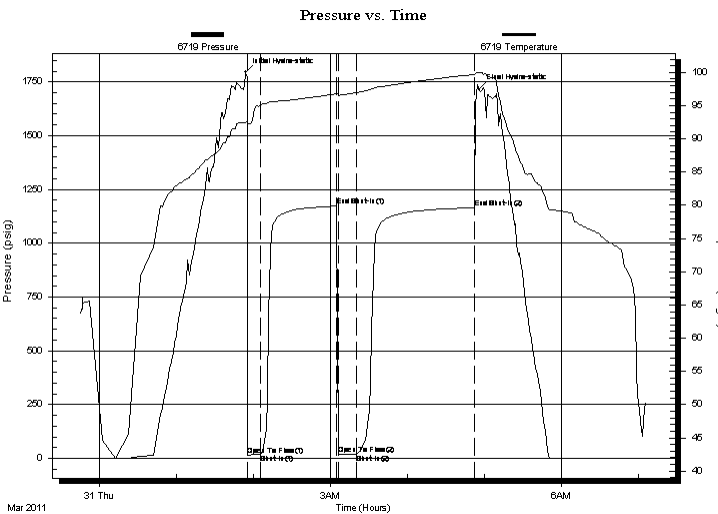
Last Calib.: 2011.03.31

Time On Btm: 2011.03.31 @ 01:54:06

Time Off Btm: 2011.03.31 @ 04:55:36

TEST COMMENT: 10 MIN-IF-Very weak surface blow
60 MIN-ISI-No blow back
15 MIN-FF-Very weak surface blow
90 MIN-FSI-No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1794.05	92.43	Initial Hydro-static
2	14.00	92.24	Open To Flow (1)
12	18.92	95.09	Shut-In(1)
71	1172.30	96.80	End Shut-In(1)
73	18.38	96.57	Open To Flow (2)
86	19.02	96.96	Shut-In(2)
178	1165.15	99.70	End Shut-In(2)
182	1717.62	99.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	FreeOil	0.07
30.00	OCM 35%O 65%M	0.42

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Samuel Gary Jr. & Ass. Inc,
 1515 Wynkoop St, Ste 700
 Denver CO, 80202
 ATTN: Clayton Camozzi

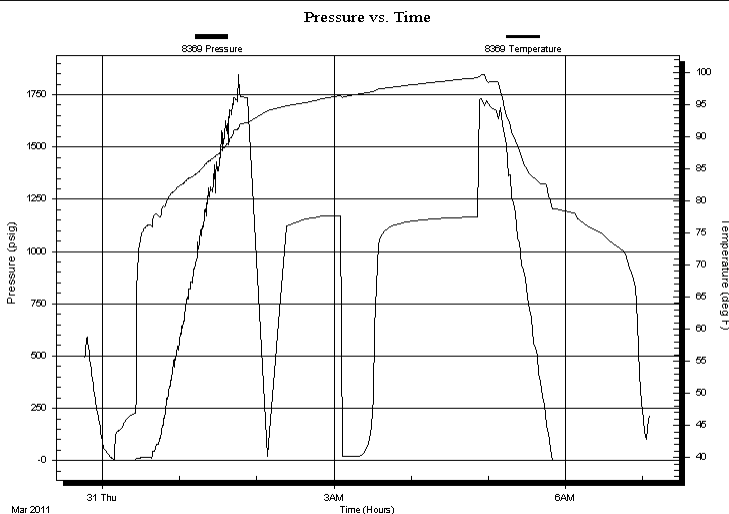
Scurlock #1-21
21-15S-16W Ellis, Ks
 Job Ticket: 42808 **DST#: 4**
 Test Start: 2011.03.30 @ 23:45:36

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole
 Time Tool Opened: 01:55:36 Tester: Cody/Brett
 Time Test Ended: 07:06:36 Unit No: 47
 Interval: **3526.00 ft (KB) To 3532.00 ft (KB) (TVD)** Reference Elevations: 1870.00 ft (KB)
 Total Depth: 3532.00 ft (KB) (TVD) 1862.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8369 Outside
 Press @ Run Depth: psig @ 3527.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2011.03.30 End Date: 2011.03.31 Last Calib.: 2011.03.31
 Start Time: 23:45:58 End Time: 07:06:22 Time On Btm:
 Time Off Btm:

TEST COMMENT: 10 MIN-IF-Very weak surface blow
 60 MIN-ISI-No blow back
 15 MIN-FF-Very weak surface blow
 90 MIN-FSI-No blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	FreeOil	0.07
30.00	OCM 35%O 65%M	0.42

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Samuel Gary Jr. & Ass. Inc.,
1515 Wynkoop St, Ste 700
Denver CO, 80202
ATTN: Clayton Camozzi

Scurlock #1-21
21-15S-16W Ellis, Ks
Job Ticket: 42808 **DST#: 4**
Test Start: 2011.03.30 @ 23:45:36

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:55:36
Time Test Ended: 07:06:36
Interval: **3526.00 ft (KB) To 3532.00 ft (KB) (TVD)**
Total Depth: 3532.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Cody/Brett
Unit No: 47
Reference Elevations: 1870.00 ft (KB)
1862.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8319

Fluid

Press @ Run Depth: psig @ 3497.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.03.30 End Date: 2011.03.31 Last Calib.: 2011.03.31
Start Time: 23:45:58 End Time: 07:05:52 Time On Btm:
Time Off Btm:

TEST COMMENT: 10 MIN-IF-Very weak surface blow
60 MIN-ISI-No blow back
15 MIN-FF-Very weak surface blow
90 MIN-FSI-No blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	FreeOil	0.07
30.00	OCM 35%O 65%M	0.42

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr. & Ass. Inc,

Scurlock #1-21

1515 Wynkoop St, Ste 700
Denver CO, 80202

21-15S-16W Ellis, Ks

Job Ticket: 42808

DST#: 4

ATTN: Clayton Camozzi

Test Start: 2011.03.30 @ 23:45:36

Tool Information

Drill Pipe:	Length: 3512.00 ft	Diameter: 3.80 inches	Volume: 49.26 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 49.26 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3526.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	6.00 ft			
Tool Length:	40.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	5.00			3497.00	
Recorder	0.00	8319	Fluid	3497.00	
Shut In Tool	5.00			3502.00	
Sampler	3.00			3505.00	
Hydraulic tool	5.00			3510.00	
Jars	5.00			3515.00	
Safety Joint	2.00			3517.00	
Packer	5.00			3522.00	34.00 Bottom Of Top Packer
Packer	4.00			3526.00	
Stubb	1.00			3527.00	
Recorder	0.00	6719	Inside	3527.00	
Recorder	0.00	8369	Outside	3527.00	
Perforations	2.00			3529.00	
Bullnose	3.00			3532.00	6.00 Bottom Packers & Anchor

Total Tool Length: 40.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Ass. Inc,
1515 Wynkoop St, Ste 700
Denver CO, 80202
ATTN: Clayton Camozzi

Scurlock #1-21
21-15S-16W Ellis, Ks
Job Ticket: 42808 **DST#: 4**
Test Start: 2011.03.30 @ 23:45:36

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 24 deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl	
Water Loss: 10.39 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 5000.00 ppm		
Filter Cake: inches		

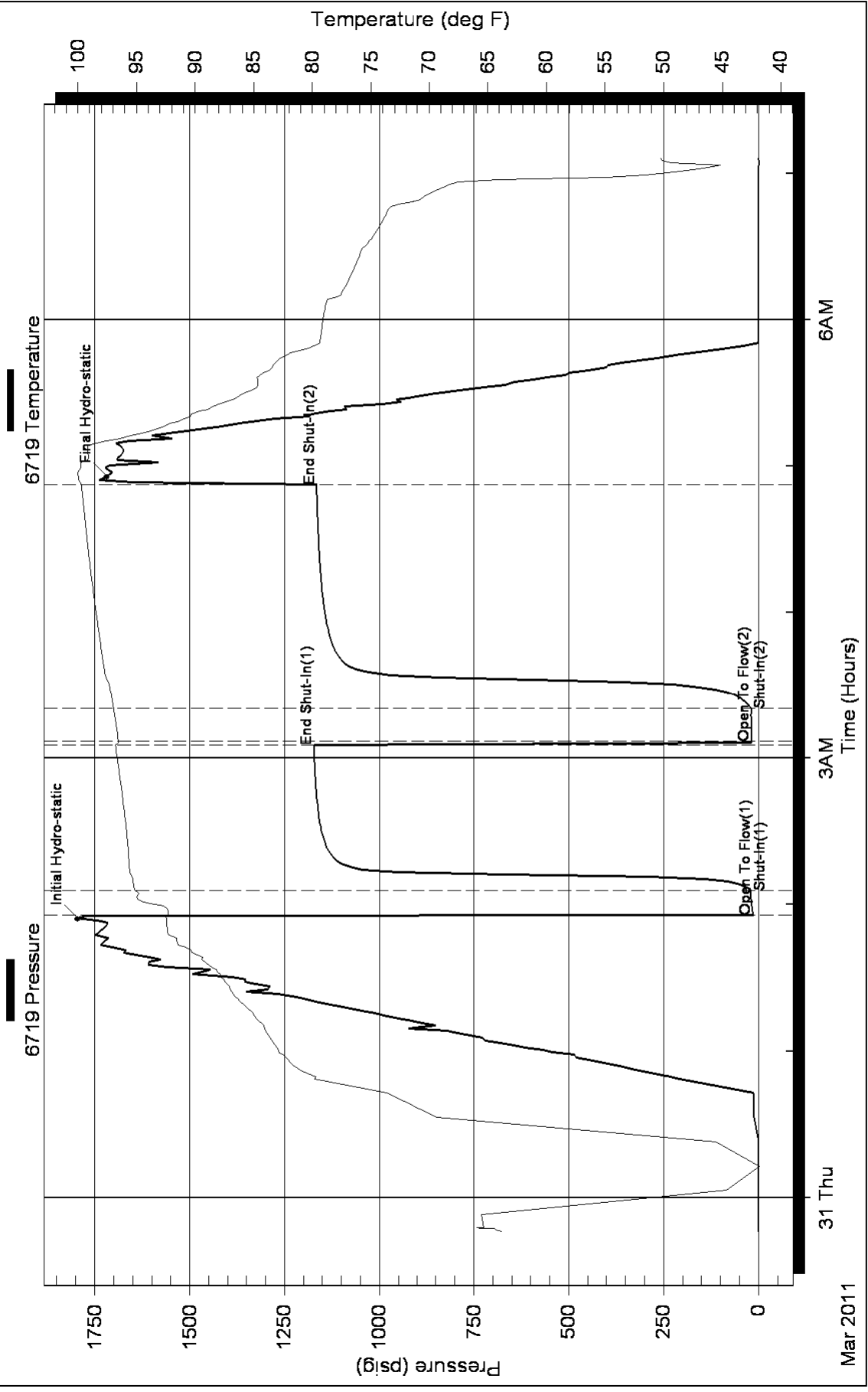
Recovery Information

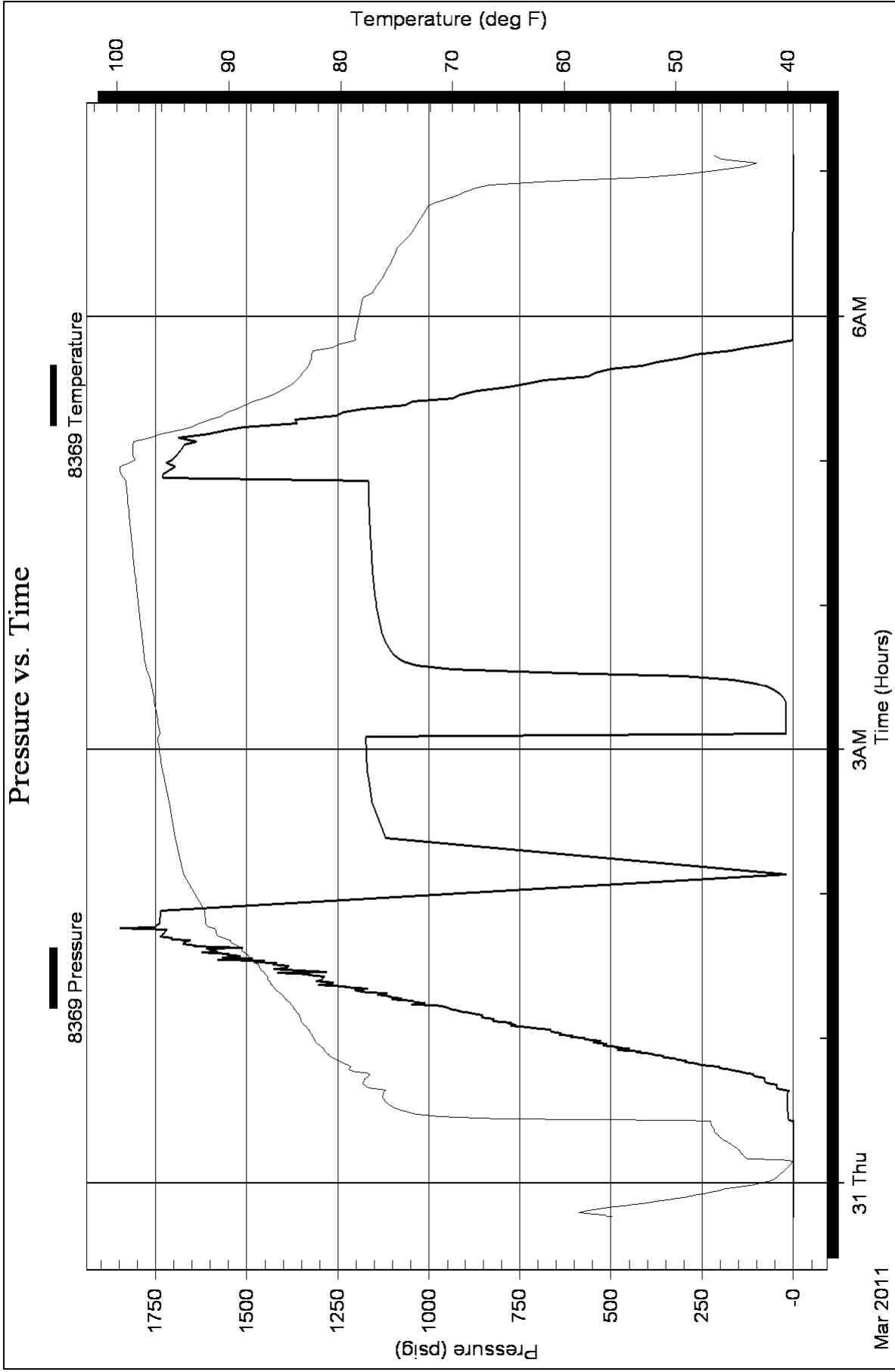
Recovery Table

Length ft	Description	Volume bbl
5.00	FreeOil	0.070
30.00	OCM 35%O 65%M	0.421

Total Length: 35.00 ft Total Volume: 0.491 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: Sampler Data 1500mlOil 2500mlMud 270psi

Pressure vs. Time





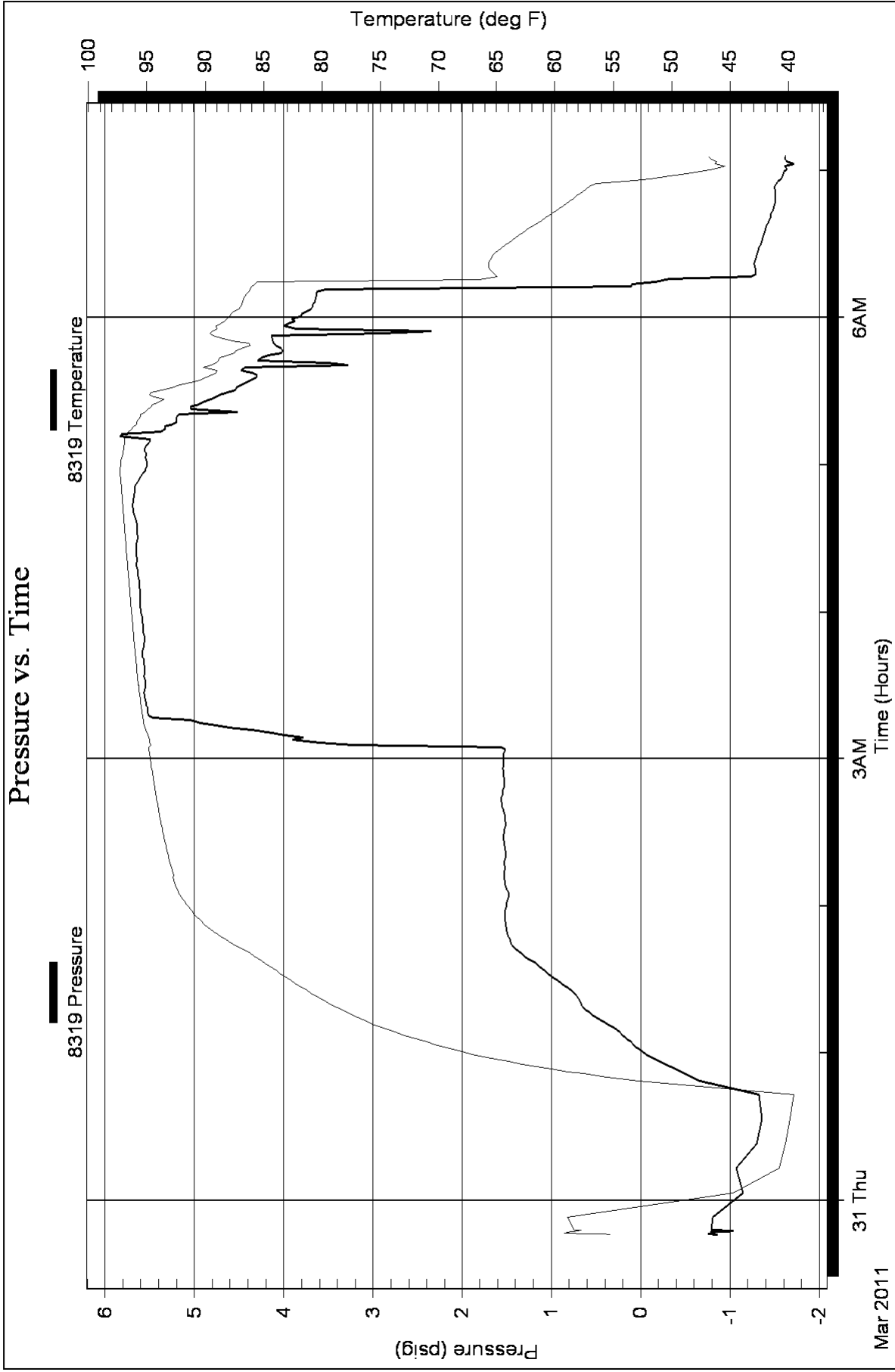
Serial #: 8319

Fluid

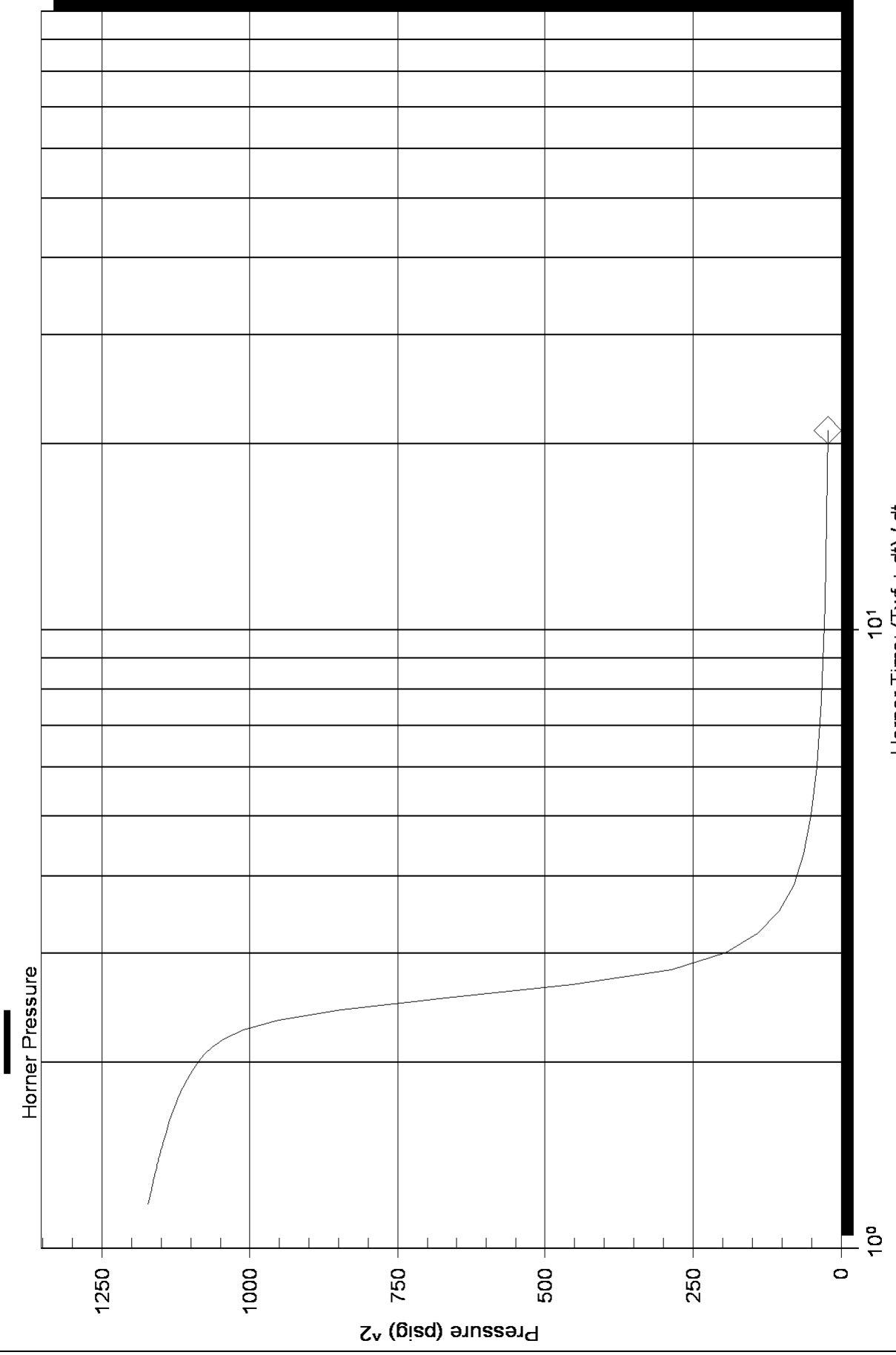
Samuel Gary Jr. & Ass. Inc.

21-15S-16W Ellis, Ks

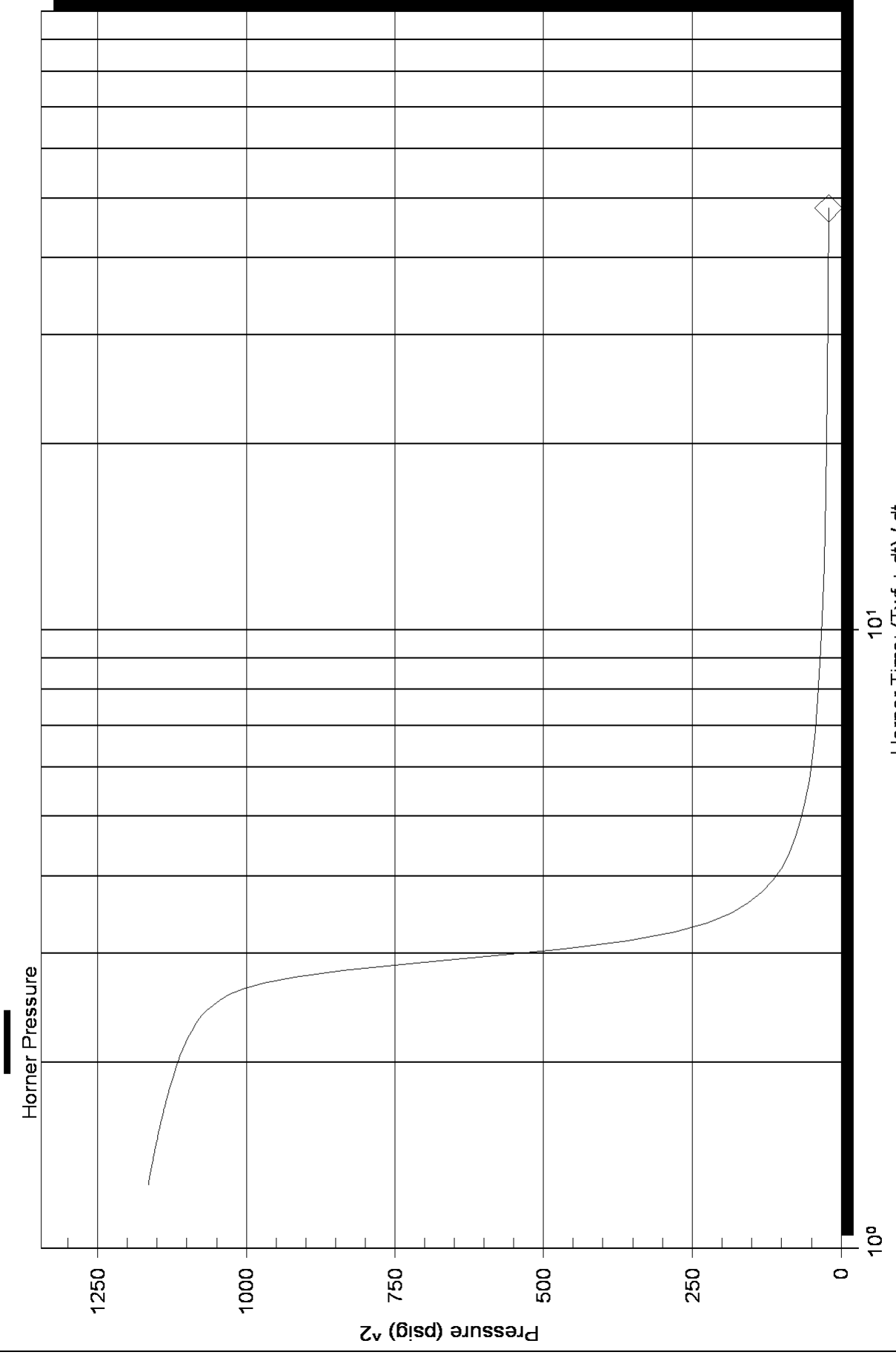
DST Test Number: 4



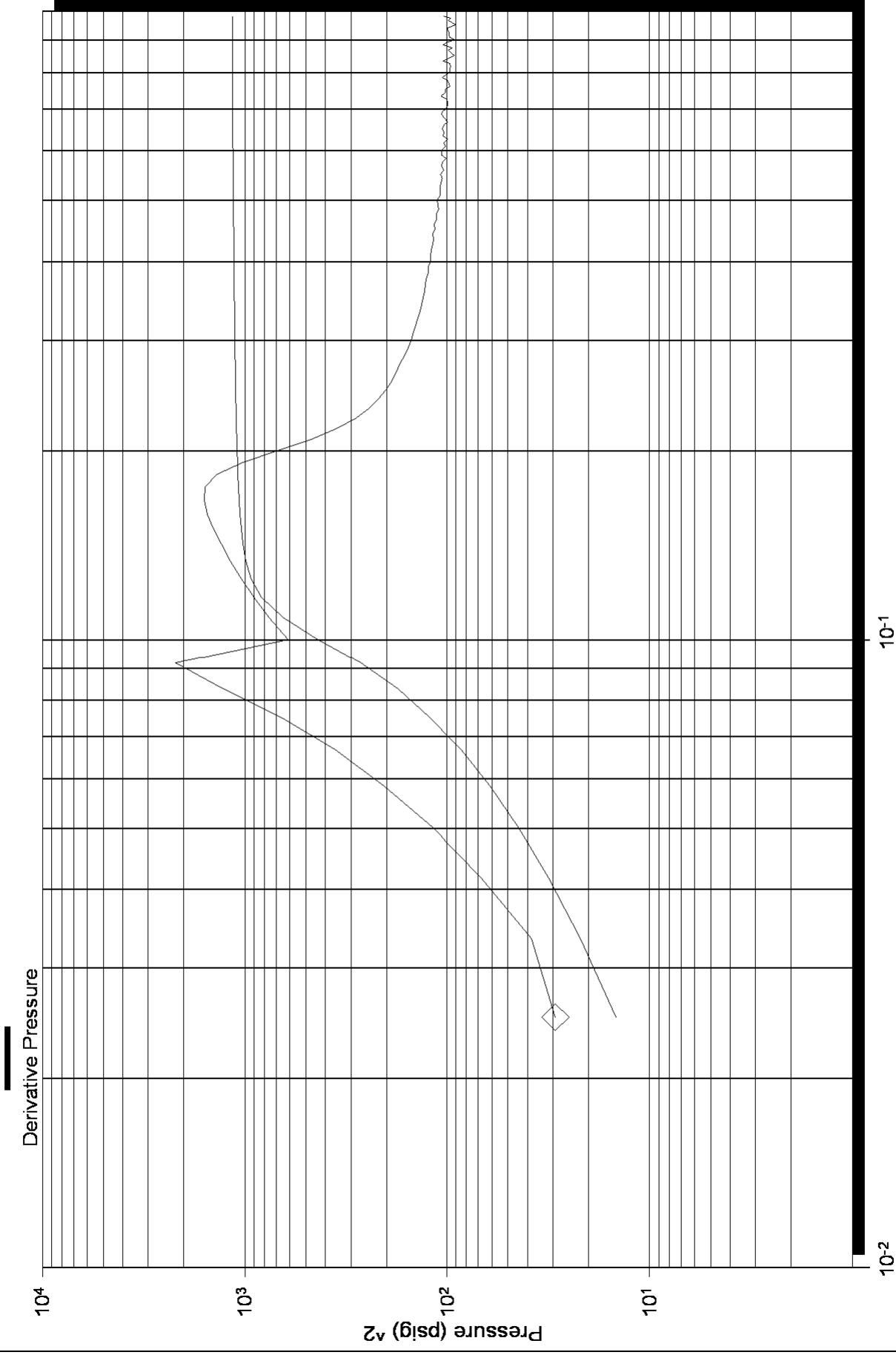
Homer Plot



Homer Plot



Log-Log and Pseudo-Log-Derivative



Log-Log and Pseudo-Derivative

