



DRILL STEM TEST REPORT

Prepared For: **F.G.Holl Company LLC**

9431 East Central Suite 100
Wichita, Kansas 67206

ATTN: Reene Husted

Smith D #1-30123

30-20s-15w Barton

Start Date: 2014.01.14 @ 00:00:00

End Date: 2014.01.14 @ 00:00:00

Job Ticket #: 17116 DST #: 2

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2014.01.14 @ 23:55:17



DRILL STEM TEST REPORT

F.G.Holl Company LLC

30-20s-15w Barton

9431 East Central Suite 100
Wichita, Kansas 67206

Smith D #1-30123

Job Ticket: 17116

DST#: 2

ATTN: Reene Hustead

Test Start: 2014.01.14 @ 00:00:00

GENERAL INFORMATION:

Formation: **Red Eagle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No: 3320

Interval: 2517.00 ft (KB) To 2552.00 ft (KB) (TVD)

Reference Elevations: 2033.00 ft (KB)

Total Depth: ft (KB) (TVD)

2025.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8405 Outside

Press@RunDepth: 857.50 psig @ 2549.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.01.13

End Date:

2014.01.13

Last Calib.:

2014.01.14

Start Time: 01:00:00

End Time:

07:04:30

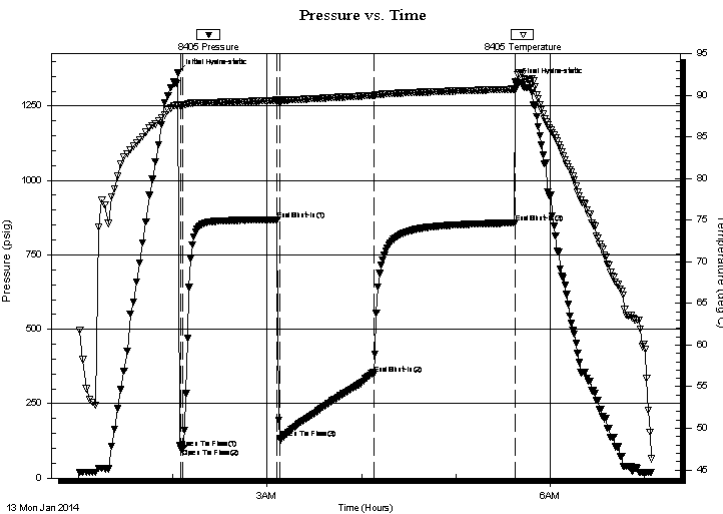
Time On Btm:

2014.01.13 @ 02:03:30

Time Off Btm:

2014.01.13 @ 05:38:00

TEST COMMENT: 1st Opening 3 Minutes strong blow bottom of a 5 gallon bucket in 30 seconds
1st Shut-In 60 Minutes- Fair blow back
2nd Opening 60 Minutes-Strong blow bottom of a 5 gallon bucket in 15 seconds
2nd Shut-In 90 Minutes-Fair blow back



PRESSURE SUMMARY

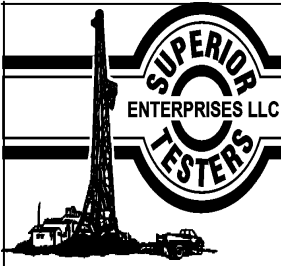
Time (Min.)	Pressure (psig)	Temp (deg C)	Annotation
0	1360.70	88.86	Initial Hydro-static
2	98.79	88.83	Open To Flow (1)
3	99.53	88.85	Open To Flow (2)
63	867.97	89.42	End Shut-In(1)
65	132.80	89.26	Open To Flow (3)
125	350.14	90.00	End Shut-In(2)
214	857.50	90.74	End Shut-In(3)
215	1330.04	90.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	Drilling Mud	2.52
420.00	Water chlorides 94000	5.89

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	19.58	12.72
Last Gas Rate	0.13	21.03	13.26
Max. Gas Rate	0.13	23.93	14.35



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F.G.Holl Company LLC
 9431 East Central Suite 100
 Wichita, Kansas 67206
 ATTN: Reene Hustead

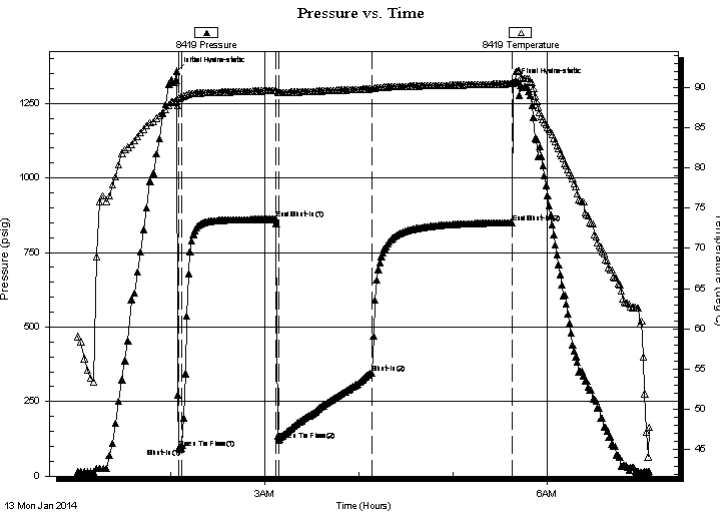
30-20s-15w Barton
Smith D #1-30123
 Job Ticket: 17116 **DST#: 2**
 Test Start: 2014.01.14 @ 00:00:00

GENERAL INFORMATION:

Formation: **Red Eagle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:00:00
 Time Test Ended: 00:00:00
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Gene Budig
 Unit No: 3320
 Interval: **2517.00 ft (KB) To 2552.00 ft (KB) (TVD)**
 Reference Elevations: 2033.00 ft (KB)
 Total Depth: ft (KB) (TVD) 2025.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8419 Inside
 Press@RunDepth: 850.66 psig @ 2548.00 ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.01.13 End Date: 2014.01.13 Last Calib.: 2014.01.14
 Start Time: 01:00:00 End Time: 07:05:30 Time On Btm: 2014.01.13 @ 02:04:00
 Time Off Btm: 2014.01.13 @ 05:39:00

TEST COMMENT: 1st Opening 3 Minutes strong blow bottom of a 5 gallon bucket in 30 seconds
 1st Shut-In 60 Minutes- Fair blow back
 2nd Opening 60 Minutes-Strong blow bottom of a 5 gallon bucket in 15 seconds
 2nd Shut-In 90 Minutes-Fair blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg C)	Annotation
0	1358.26	88.33	Initial Hydro-static
2	94.74	88.64	Open To Flow (1)
3	92.67	88.83	Shut-In(1)
63	861.40	89.61	End Shut-In(1)
65	120.64	89.38	Open To Flow (2)
125	344.90	89.81	Shut-In(2)
214	850.66	90.43	End Shut-In(2)
215	1319.02	90.58	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	Drilling Mud	2.52
420.00	Water chlorides 94000	5.89

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	19.58	12.72
Last Gas Rate	0.13	21.03	13.26
Max. Gas Rate	0.13	23.93	14.35



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TOOL DIAGRAM

F.G.Holl Company LLC

30-20s-15w Barton

9431 East Central Suite 100
Wichita, Kansas 67206

Smith D #1-30123

Job Ticket: 17116

DST#:2

ATTN: Reene Hustead

Test Start: 2014.01.14 @ 00:00:00

Tool Information

Drill Pipe:	Length: 2515.00 ft	Diameter: 3.80 inches	Volume: 35.28 bbl	Tool Weight: 2000.00 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: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 35.28 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	2517.00 ft			Final 33000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	63.00 ft			
Number of Packers:	2	Diameter: 6.88 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			2494.00	
Hydraulic Tool	5.00			2499.00	
Safety Joint	2.00			2501.00	
Jars	6.00			2507.00	
Packer	5.00			2512.00	28.00 Bottom Of Top Packer
Packer	5.00			2517.00	
Anchor	30.00			2547.00	
Recorder	1.00	8419	Inside	2548.00	
Recorder	1.00	8405	Outside	2549.00	
Bullnose	3.00			2552.00	35.00 Bottom Packers & Anchor
Total Tool Length:	63.00				



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FLUID SUMMARY

F.G.Holl Company LLC

30-20s-15w Barton

9431 East Central Suite 100
Wichita, Kansas 67206

Smith D #1-30123

Job Ticket: 17116

DST#: 2

ATTN: Reene Hustead

Test Start: 2014.01.14 @ 00:00:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 10.00 lb/gal
Viscosity: 40.00 sec/qt
Water Loss: 13.59 in³
Resistivity: ohm.m
Salinity: 72000.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	Drilling Mud	2.525
420.00	Water chlorides 94000	5.891

Total Length: 600.00 ft Total Volume: 8.416 bbl

Num Fluid Samples: 0

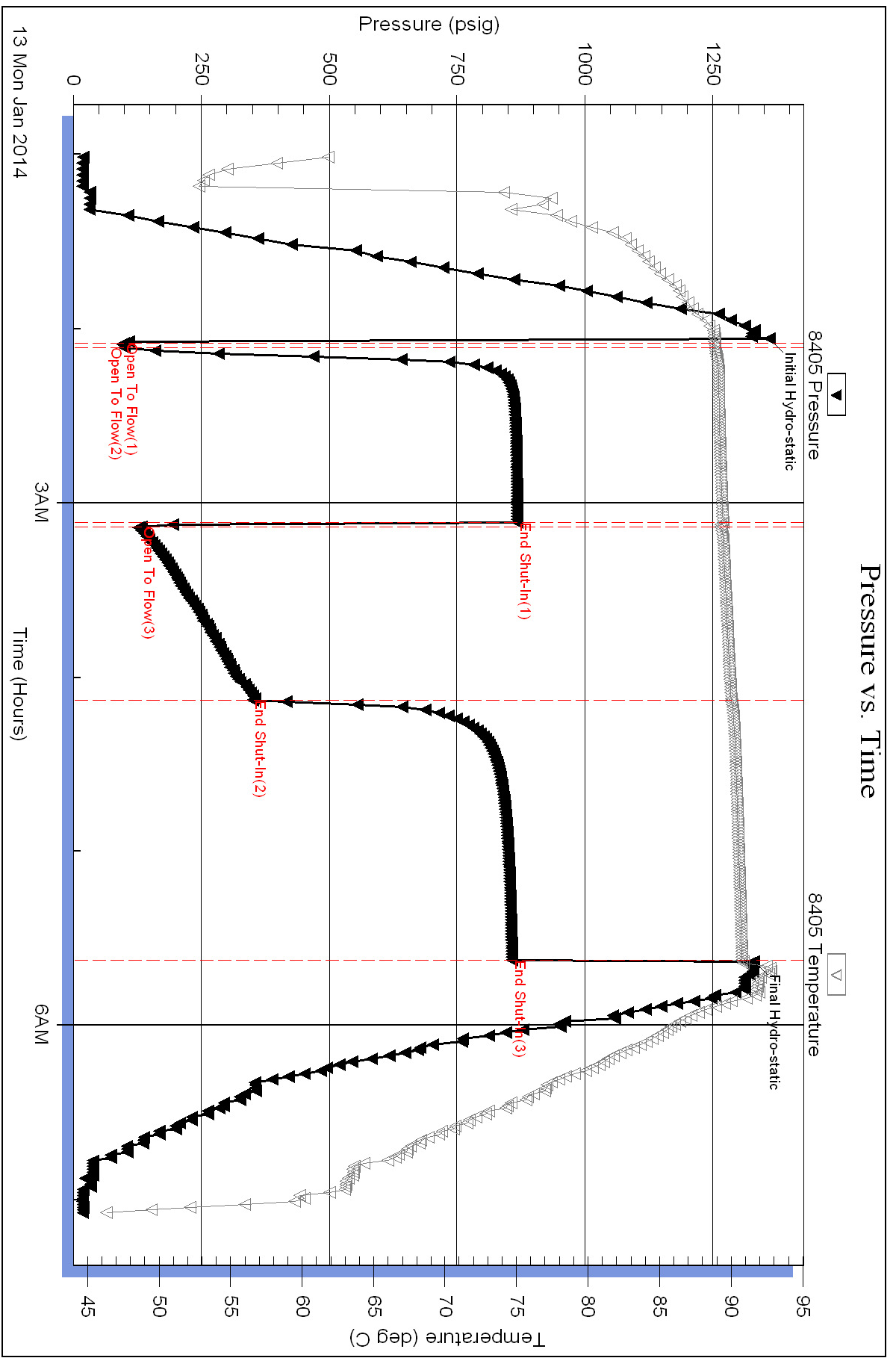
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Serial #: 8419

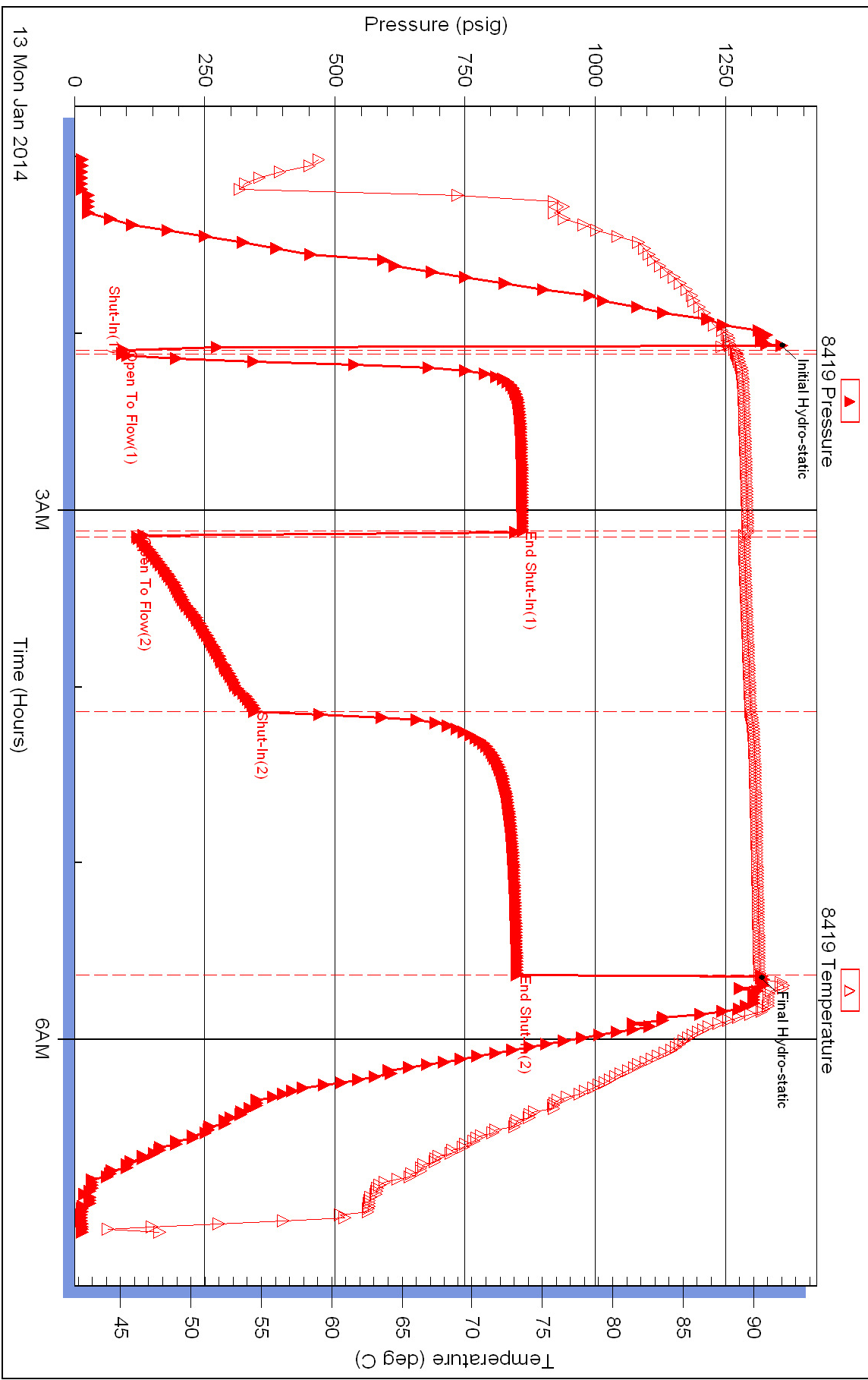
Inside

F.G.Holl Company LLC

Smith D#1-30123

DST Test Number: 2

Pressure vs. Time



Superior Testers Enterprises LLC

Ref. No: 17116

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