



DRILL STEM TEST REPORT

Prepared For: **Valhalla Exploration LLC.**

133 North Glendale ST.
Wichita Kansas 67208

ATTN: Adam Kennedy

Morgenstern #1-33

33-17s-13w-Barton

Start Date: 2012.10.15 @ 09:15:00

End Date: 2012.10.15 @ 17:20:00

Job Ticket #: 17859 DST #: 4

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

Printed: 2012.10.16 @ 03:42:57



DRILL STEM TEST REPORT

Valhalla Exploration LLC.

33-17s-13w-Barton

133 North Glendale ST.
Wichita Kansas 67208

Morgenstern #1-33

Job Ticket: 17859

DST#: 4

ATTN: Adam Kennedy

Test Start: 2012.10.15 @ 09:15:00

GENERAL INFORMATION:

Formation: **Arbukle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:52:30

Time Test Ended: 17:20:00

Test Type: Conventional Straddle (Initial)

Tester: Dustin Ellis

Unit No: 3315-Great Bend-25

Interval: 3332.00 ft (KB) To 3348.00 ft (KB) (TVD)

Reference Elevations: 1877.00 ft (KB)

Total Depth: 3454.00 ft (KB) (TVD)

1869.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8405 Outside

Press @ Run Depth: 958.74 psia @ 3334.16 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.10.15

End Date:

2012.10.15

Last Calib.:

2012.10.16

Start Time:

09:15:00

End Time:

17:20:00

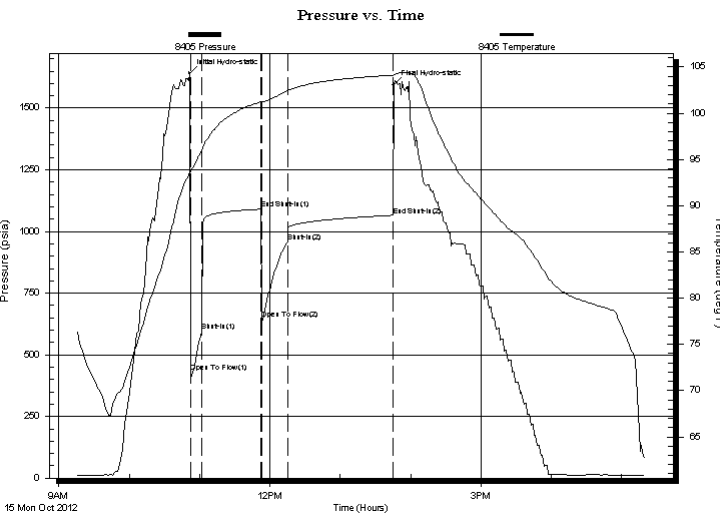
Time On Btm:

2012.10.15 @ 10:51:30

Time Off Btm:

2012.10.15 @ 13:45:30

TEST COMMENT: 1st Open 10 minutes Strong building blow blew bottom bucket 1 minute.
1st Shut in 45 minutes Yes blow back
2nd Open 30 minutes Strong building blow blew bottom bucket 1 minute.
2nd Shut in 90 minutes Yes blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1641.74	93.57	Initial Hydro-static
1	431.20	93.63	Open To Flow (1)
10	597.29	95.94	Shut-In(1)
61	1090.56	101.24	End Shut-In(1)
62	643.24	101.15	Open To Flow (2)
84	958.74	102.42	Shut-In(2)
174	1065.41	104.12	End Shut-In(2)
174	1594.85	104.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2418.00	Clean Gassy oil 95%Oil 5%Gas	33.92
0.00	Gravity of oil 34 corrected	0.00

Gas Rates

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



DRILL STEM TEST REPORT

Valhalla Exploration LLC.
 133 North Glendale ST.
 Wichita Kansas 67208
 ATTN: Adam Kennedy

33-17s-13w-Barton

Morgenstern #1-33

Job Ticket: 17859

DST#: 4

Test Start: 2012.10.15 @ 09:15:00

GENERAL INFORMATION:

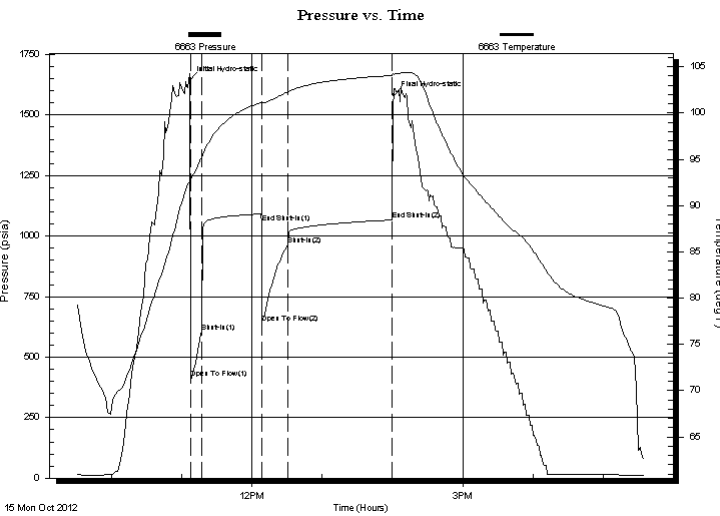
Formation: **Arbukle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:52:30
 Time Test Ended: 17:20:00
 Interval: **3332.00 ft (KB) To 3348.00 ft (KB) (TVD)**
 Total Depth: 3454.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend-25
 Reference Elevations: 1877.00 ft (KB)
 1869.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 6663

Outside

Press @ Run Depth: 1066.44 psia @ 3334.16 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.10.15 End Date: 2012.10.15 Last Calib.: 2012.10.16
 Start Time: 09:30:00 End Time: 17:35:30 Time On Btm: 2012.10.15 @ 11:07:00
 Time Off Btm: 2012.10.15 @ 14:01:00

TEST COMMENT: 1st Open 10 minutes Strong building blow blew bottom bucket 1 minute.
 1st Shut in 45 minutes Yes blow back
 2nd Open 30 minutes Strong building blow blew bottom bucket 1 minute.
 2nd Shut in 90 minutes Yes blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1644.42	92.75	Initial Hydro-static
1	412.03	92.77	Open To Flow (1)
10	605.24	95.22	Shut-In(1)
61	1056.47	101.12	End Shut-In(1)
62	640.47	101.05	Open To Flow (2)
84	962.53	102.28	Shut-In(2)
173	1066.44	104.07	End Shut-In(2)
174	1582.24	104.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2418.00	Clean Gassy oil 95%Oil 5%Gas	33.92
0.00	Gravity of oil 34 corrected	0.00

Gas Rates

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



DRILL STEM TEST REPORT

Valhalla Exploration LLC.
 133 North Glendale ST.
 Wichita Kansas 67208
 ATTN: Adam Kennedy

33-17s-13w-Barton

Morgenstern #1-33

Job Ticket: 17859

DST#: 4

Test Start: 2012.10.15 @ 09:15:00

GENERAL INFORMATION:

Formation: **Arbukle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:52:30

Time Test Ended: 17:20:00

Test Type: Conventional Straddle (Initial)

Tester: Dustin Ellis

Unit No: 3315-Great Bend-25

Interval: 3332.00 ft (KB) To 3348.00 ft (KB) (TVD)

Reference Elevations: 1877.00 ft (KB)

Total Depth: 3454.00 ft (KB) (TVD)

1869.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8400 Below

Press @ Run Depth: psia @ 3351.89 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.10.15

End Date:

2012.10.15

Last Calib.:

2012.10.16

Start Time: 09:15:00

End Time:

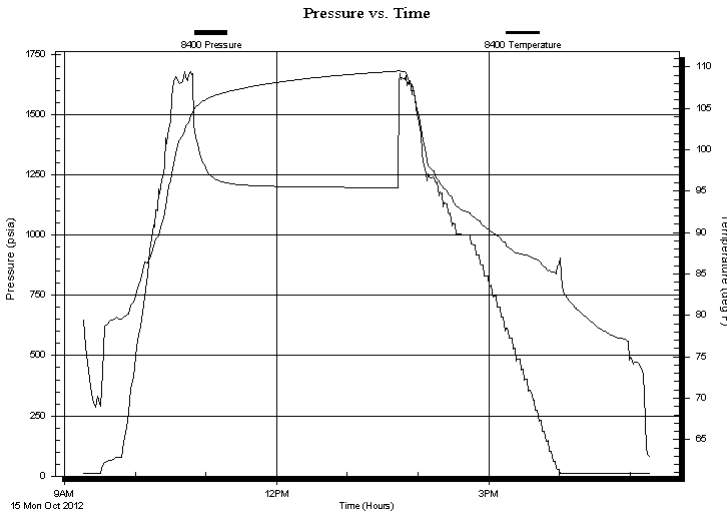
17:17:30

Time On Btm:

Time Off Btm:

TEST COMMENT: 1st Open 10 minutes Strong building blow blew bottom bucket 1 minute.
 1st Shut in 45 minutes Yes blow back
 2nd Open 30 minutes Strong building blow blew bottom bucket 1 minute.
 2nd Shut in 90 minutes Yes blow back

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
2418.00	Clean Gassy oil 95% Oil 5% Gas	33.92
0.00	Gravity of oil 34 corrected	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Valhalla Exploration LLC.

33-17s-13w-Barton

133 North Glendale ST.
Wichita Kansas 67208

Morgenstern #1-33

Job Ticket: 17859

DST#: 4

ATTN: Adam Kennedy

Test Start: 2012.10.15 @ 09:15:00

Tool Information

Drill Pipe:	Length: 3323.00 ft	Diameter: 3.80 inches	Volume: 46.61 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: 62000.00 lb
			Total Volume: 46.61 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.61 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3332.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	3348.37 ft			
Interval between Packers:	16.37 ft			
Tool Length:	43.28 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

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

P.O. Sub	0.31			3309.70	
C.O. Sub	0.31			3310.01	
P.O. Sub	0.31			3310.32	
Recorder	1.80		Fluid	3312.12	
Conv. S.I. Tool	1.52			3313.64	
Sampler	1.10			3314.74	
HMV	2.10			3316.84	
Recorder	1.80		Inside	3318.64	
Telemetry Tool	7.01			3325.65	
Jars	2.05			3327.70	
Bypass Hanger	0.32			3328.02	
Safety Joint	0.78			3328.80	
Packer	1.78			3330.58	22.61 Bottom Of Top Packer
Packer	1.42			3332.00	
Stubb	0.36			3332.36	
Recorder Carrier	1.80			3334.16	
Recorder	0.00	6663	Outside	3334.16	
Recorder	0.00	8405	Outside	3334.16	
Perforations	13.00			3347.16	
Bypass Receiver	0.85			3348.01	
Blank Spacing	0.00			3348.01	
Stubb	0.36			3348.37	16.37 Tool Interval
Packer	1.42			3349.79	
Bypass Hanger	0.30			3350.09	
Recorder	1.80	8400	Below	3351.89	
Collar	0.00			3351.89	



DRILL STEM TEST REPORT

FLUID SUMMARY

Valhalla Exploration LLC.

33-17s-13w-Barton

133 North Glendale ST.
Wichita Kansas 67208

Morgenstern #1-33

Job Ticket: 17859

DST#: 4

ATTN: Adam Kennedy

Test Start: 2012.10.15 @ 09:15:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 51.00 sec/qt

Water Loss: 7.20 in³

Resistivity: ohm.m

Salinity: 6800.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psia

Oil API:

Water Salinity: ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2418.00	Clean Gassy oil 95%Oil 5%Gas	33.918
0.00	Gravity of oil 34 corrected	0.000

Total Length: 2418.00 ft Total Volume: 33.918 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

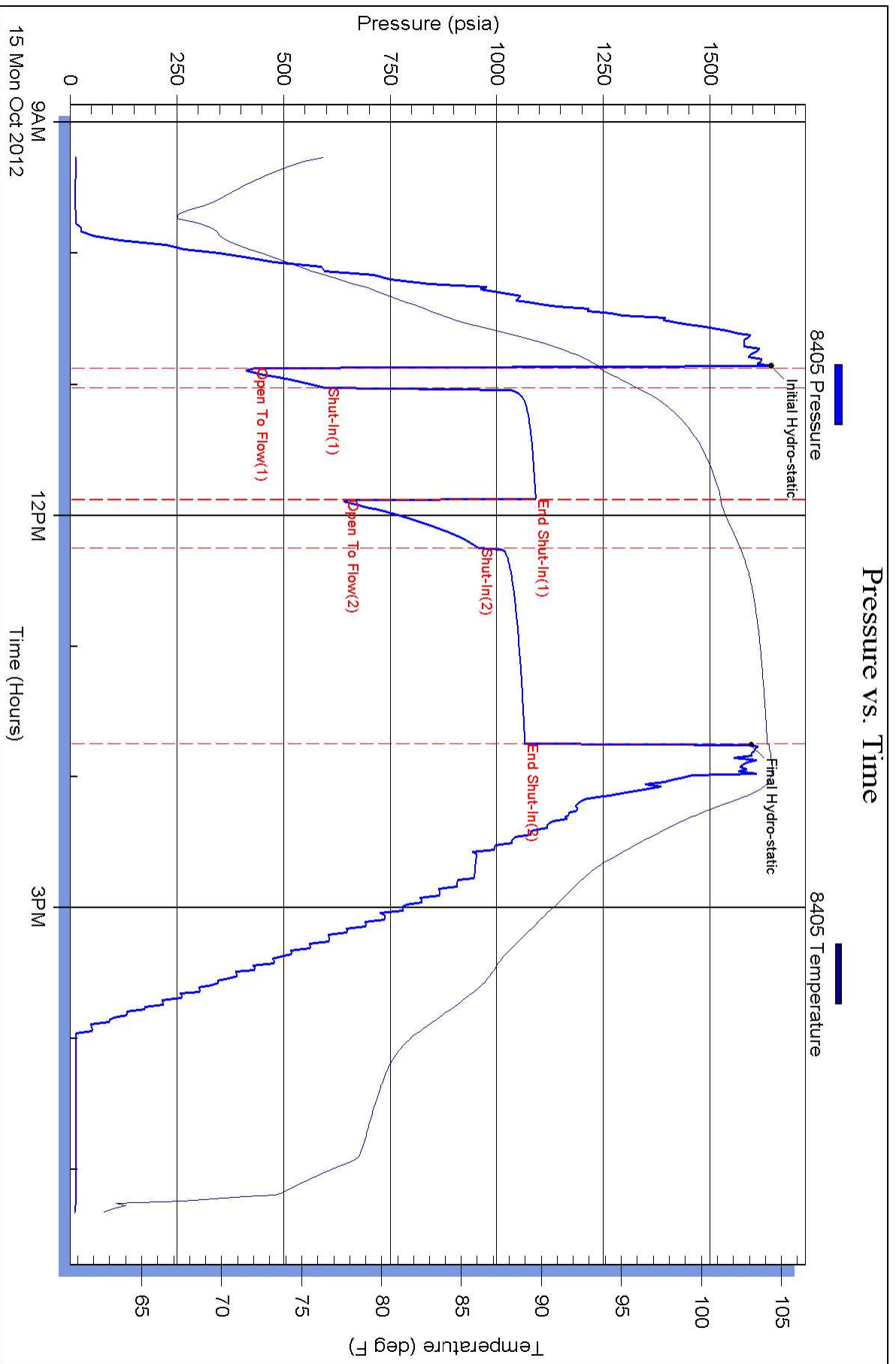
Serial #:

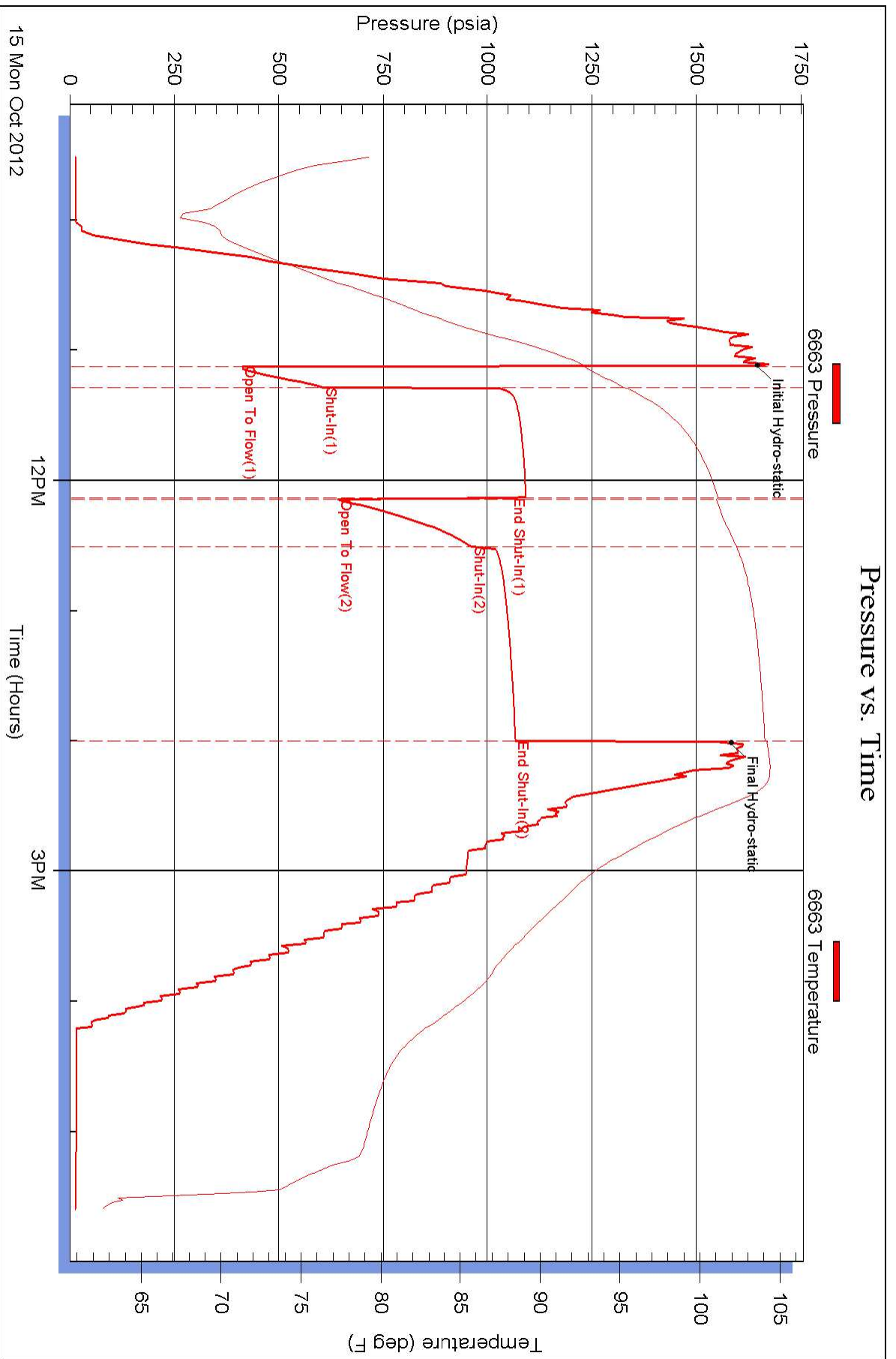
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





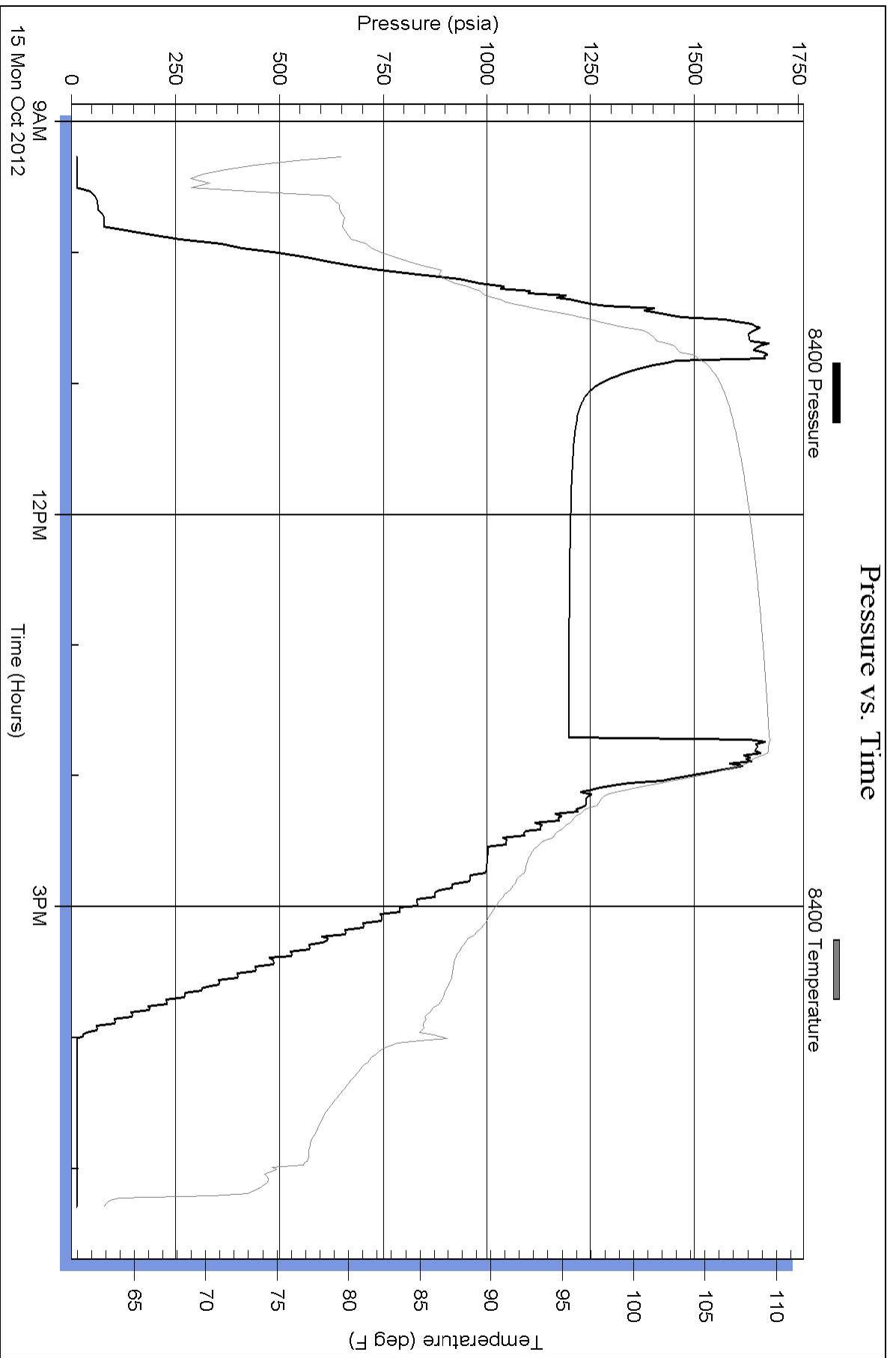
Serial #: 8400

Below

Valhalla Exploration LLC.

Morgenstern #1-33

DST Test Number: 4



Superior Testers Enterprises LLC

Ref. No: 17859

Printed: 2012.10.16 @ 03:42:58