

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Deutsch Oil Co.

8100 E 22nd St N
Wichita KS 67226

ATTN: Keith Reavis

31-21s-23w Hodgeman Co KS

McGaughey # 1-31

Job Ticket: 45902

DST#: 1

Test Start: 2012.06.15 @ 10:50:00

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:11:10

Time Test Ended: 19:37:55

Test Type: Conventional Bottom Hole (Initial)

Tester: Will MacLean

Unit No: 40

Interval: 4536.00 ft (KB) To 4604.00 ft (KB) (TVD)

Reference Elevations: 2366.00 ft (KB)

Total Depth: 4604.00 ft (KB) (TVD)

2356.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8652 Inside

Press @ Run Depth: 76.77 psig @ 4539.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.15

End Date:

2012.06.15

Last Calib.:

2012.06.15

Start Time:

10:50:00

End Time:

19:37:55

Time On Btm:

2012.06.15 @ 13:08:25

Time Off Btm:

2012.06.15 @ 17:03:54

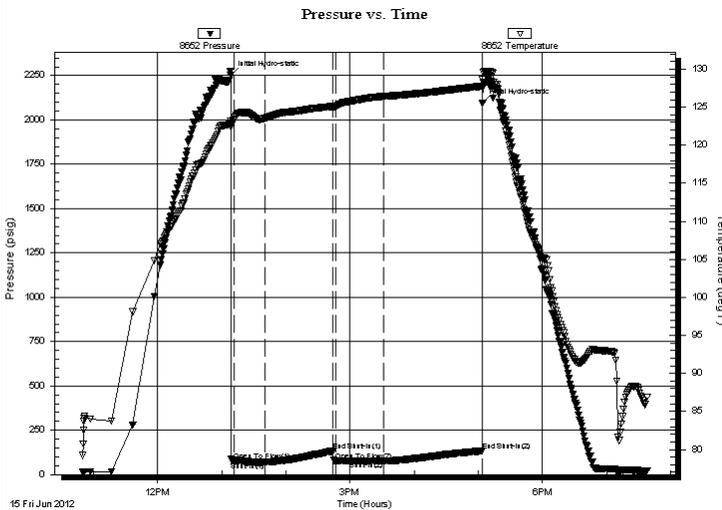
TEST COMMENT: IF- Weak Surface Blow Built to 3/4"

IS- No Blow

FF- Weak Surface Blow Died in 8min Flushed Tool at 30min Weak Surface Blow Died in 2min

FS- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2251.29	123.14	Initial Hydro-static
3	77.26	123.28	Open To Flow (1)
32	70.07	123.54	Shut-In(1)
96	132.49	125.12	End Shut-In(1)
98	76.71	125.13	Open To Flow (2)
144	76.77	126.43	Shut-In(2)
236	133.80	127.78	End Shut-In(2)
236	2095.80	128.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	GO 5%g 95%oil	0.01
30.00	GOCM 2%g 8%oil 90%m	0.42

Gas Rates

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

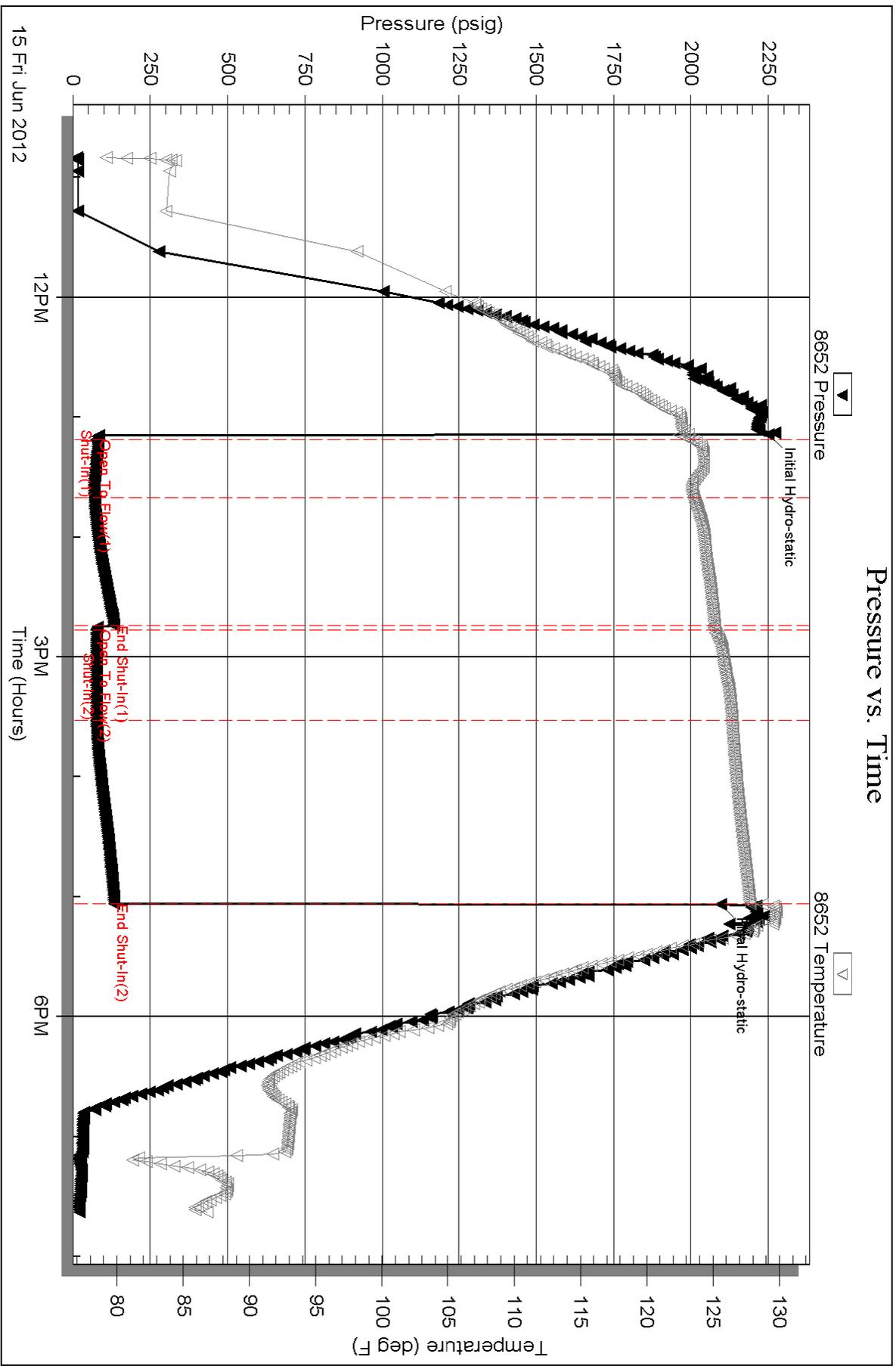
Serial #: 8652

Inside

Deutsch Oil Co.

McGaughey # 1-31

DST Test Number: 1

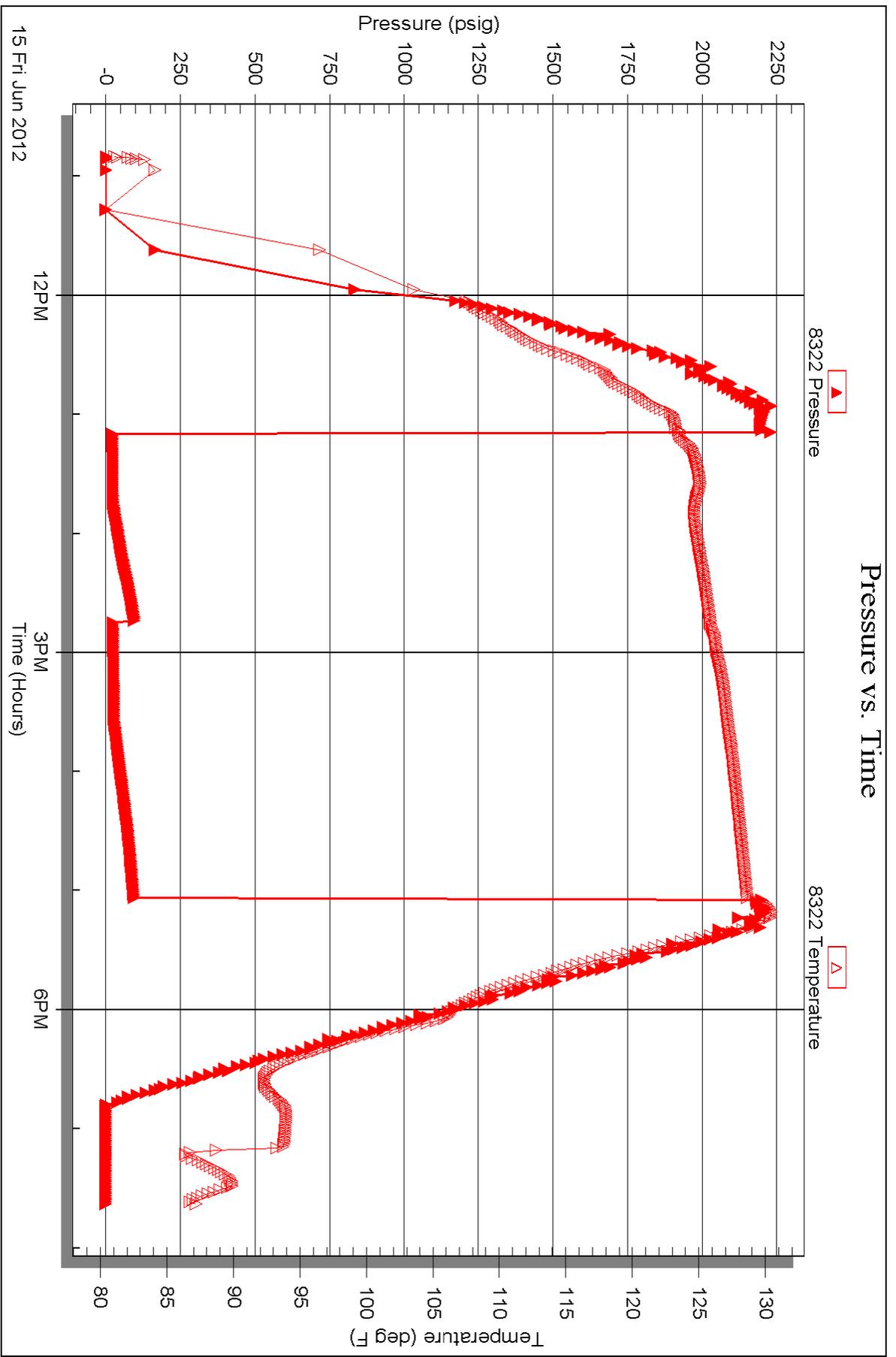


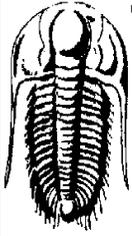
Serial #: 8322

Outside Deutsch Oil Co.

McGaughey # 1-31

DST Test Number: 1





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Deutsch Oil Co.

8100 E 22nd St N
Wichita KS 67226

ATTN: Keith Reavis

31-21s-23w Hodgeman Co KS

McGaughey # 1-31

Job Ticket: 45903

DST#: 2

Test Start: 2012.06.16 @ 05:44:00

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:25:55

Time Test Ended: 14:50:40

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 40

Interval: 4604.00 ft (KB) To 4624.00 ft (KB) (TVD)

Reference Elevations: 2366.00 ft (KB)

Total Depth: 4624.00 ft (KB) (TVD)

2356.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 10.00 ft

Serial #: 8652 Inside

Press @ Run Depth: 73.84 psig @ 4606.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.16

End Date:

2012.06.16

Last Calib.:

2012.06.16

Start Time: 05:44:00

End Time:

14:50:40

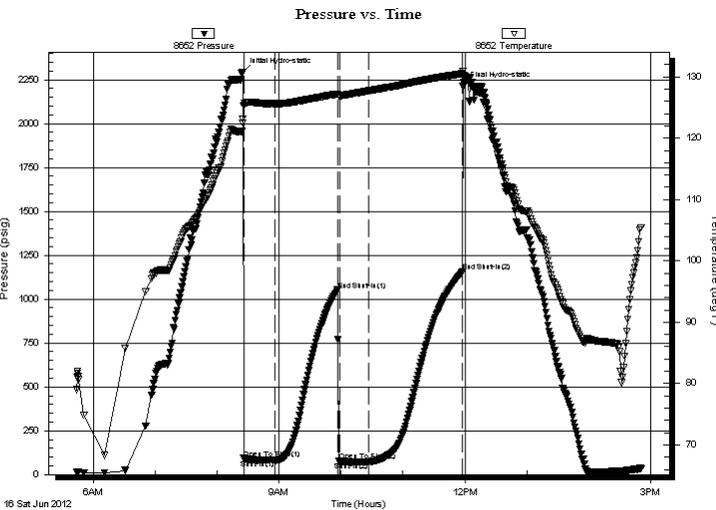
Time On Btm:

2012.06.16 @ 08:24:55

Time Off Btm:

2012.06.16 @ 11:58:09

TEST COMMENT: IF- 2" Blow Chased the Tool to Bottom 5 to 6'
IS- No Blow
FF- Weak Surface Blow Died in 26min
FS- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2294.59	123.08	Initial Hydro-static
1	90.86	125.41	Open To Flow (1)
31	82.40	125.61	Shut-In(1)
92	1052.34	127.20	End Shut-In(1)
94	76.66	126.95	Open To Flow (2)
123	73.84	127.72	Shut-In(2)
213	1154.53	130.51	End Shut-In(2)
214	2211.21	130.95	Final Hydro-static

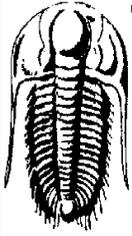
Recovery

Length (ft)	Description	Volume (bbl)
40.00	100% m with Skim of Oil on Top	0.56

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Deutsch Oil Co.

31-21s-23w Hodgeman Co KS

8100 E 22nd St N
Wichita KS 67226

McGaughey # 1-31

Job Ticket: 45903

DST#: 2

ATTN: Keith Reavis

Test Start: 2012.06.16 @ 05:44:00

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: 44.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.16 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3900.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	100% m with Skim of Oil on Top	0.561

Total Length: 40.00 ft Total Volume: 0.561 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

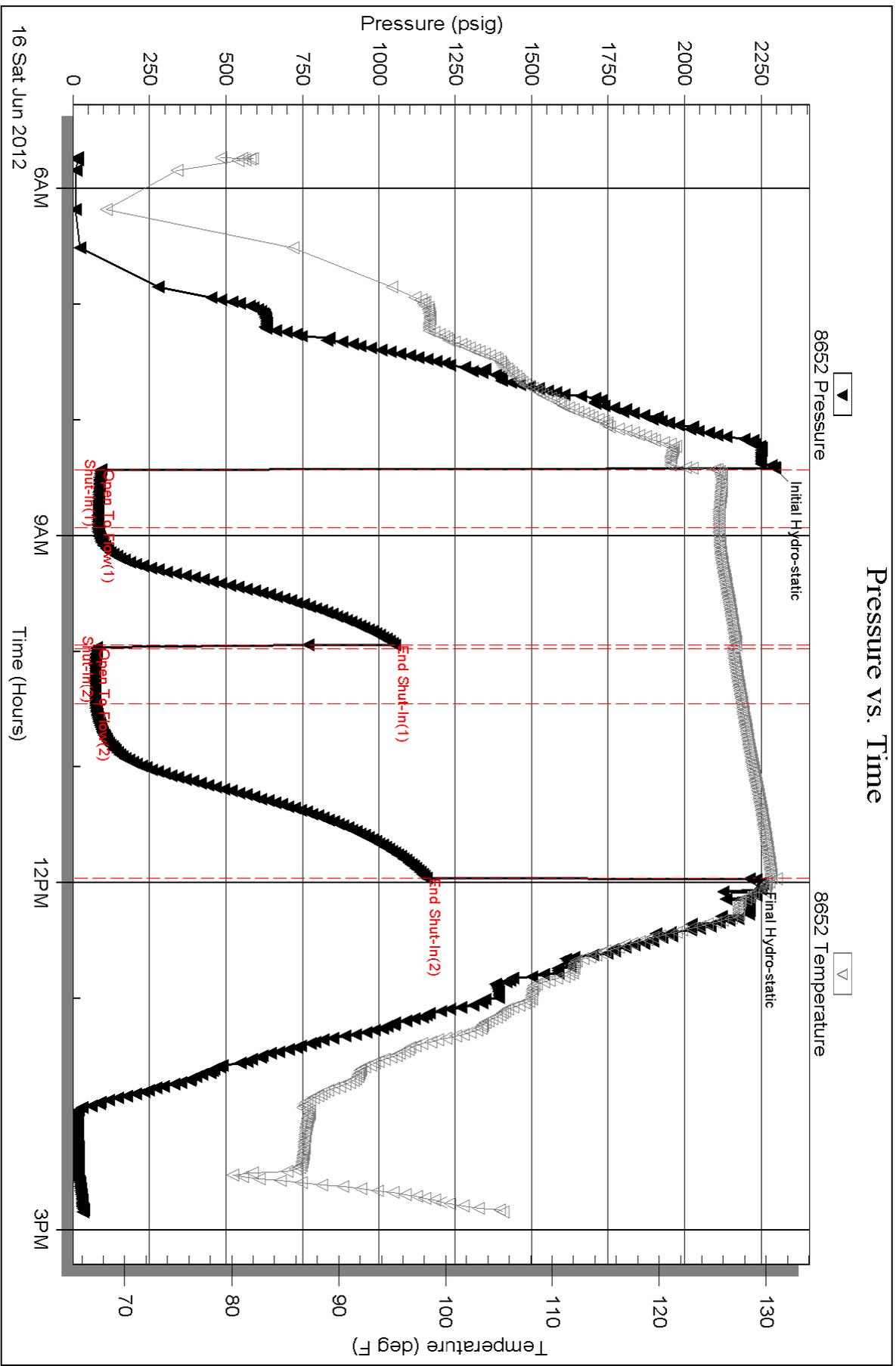
Serial #: 8652

Inside

Deutsch Oil Co.

McGaughey # 1-31

DST Test Number: 2



Serial #: 8322

Outside Deutsch Oil Co.

McGaughey # 1-31

DST Test Number: 2

