



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Hess Oil Company
P.O. Box 1009
Mcperson, KS 67460
ATTN: Jamie Hess

Angela #1

25-23-24 Hodgeman, KS

Job Ticket: 042076

DST#: 1

Test Start: 2011.04.07 @ 02:46:53

GENERAL INFORMATION:

Formation: **Cherokee Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:46:48

Time Test Ended: 09:37:02

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: 4640.00 ft (KB) To 4669.00 ft (KB) (TVD)

Total Depth: 4669.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2418.00 ft (KB)

2413.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8373 Inside

Press@RunDepth: 40.17 psig @ 4641.00 ft (KB)

Start Date: 2011.04.07

End Date:

2011.04.07

Start Time: 02:46:53

End Time:

09:37:02

Capacity: 8000.00 psig

Last Calib.: 2011.04.07

Time On Btm: 2011.04.07 @ 04:45:48

Time Off Btm: 2011.04.07 @ 07:48:17

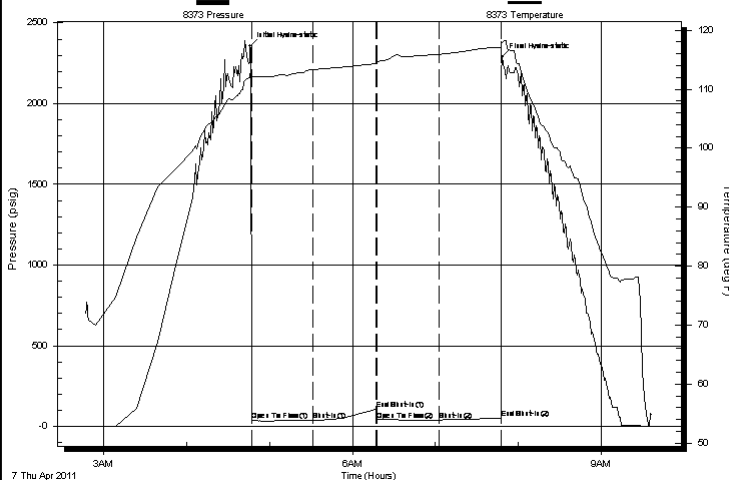
TEST COMMENT: IF: 1/4 blow built to 1 1/4 in 45 min.

IS: No return.

FF: No blow.

FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

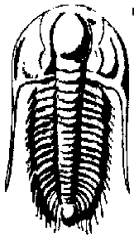
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2354.87	112.64	Initial Hydro-static
1	35.93	111.75	Open To Flow (1)
46	38.86	113.31	Shut-In(1)
92	109.54	114.35	End Shut-In(1)
92	41.01	114.40	Open To Flow (2)
137	40.17	115.92	Shut-In(2)
182	52.48	117.13	End Shut-In(2)
183	2288.07	117.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	ocm 5%o 95% m	0.15

Gas Rates

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

Hess Oil Company

Angela #1

P.O. Box 1009
Mcpherson, KS 67460

25-23-24 Hodgeman, KS

Job Ticket: 042076

DST#: 1

ATTN: Jamie Hess

Test Start: 2011.04.07 @ 02:46:53

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: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 14.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	ocm 5%o 95%m	0.148

Total Length: 30.00 ft

Total Volume: 0.148 bbl

Num Fluid Samples: 0

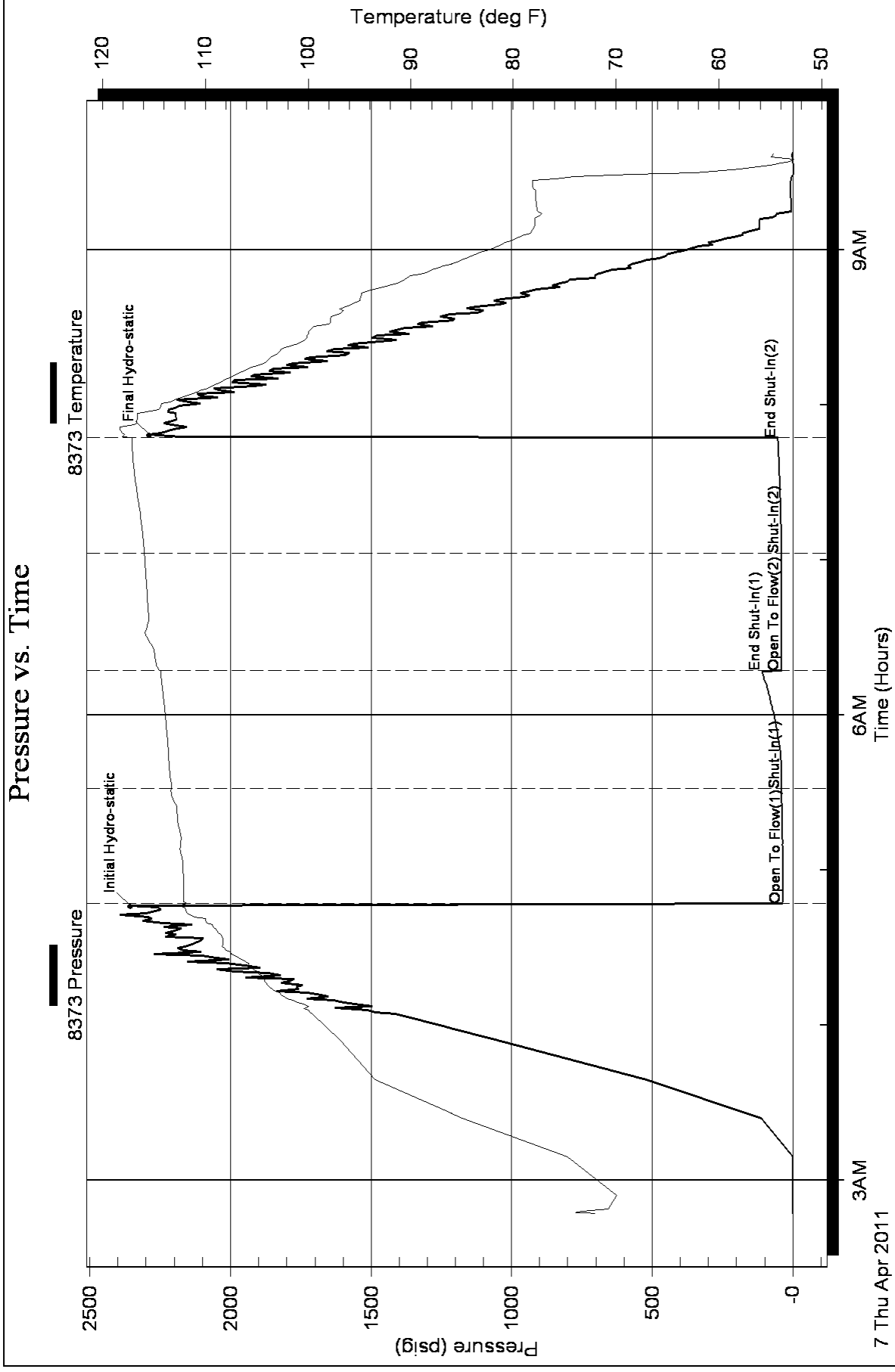
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





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Hess Oil Company
P.O. Box 1009
Mcpherson, KS 67460
ATTN: Jamie Hess

Angela #1

25-23-24 Hodgeman, KS

Job Ticket: 042077

DST#: 2

Test Start: 2011.04.07 @ 14:52:34

GENERAL INFORMATION:

Formation: **Cherokee Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:37:44

Time Test Ended: 19:37:13

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: 4640.00 ft (KB) To 4675.00 ft (KB) (TVD)

Total Depth: 4675.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2418.00 ft (KB)

2413.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8373 Inside

Press@RunDepth: 31.67 psig @ 4641.00 ft (KB)

Start Date: 2011.04.07

End Date:

2011.04.07

Start Time: 14:52:34

End Time:

19:37:13

Capacity: 8000.00 psig

Last Calib.: 2011.04.07

Time On Btm: 2011.04.07 @ 16:36:14

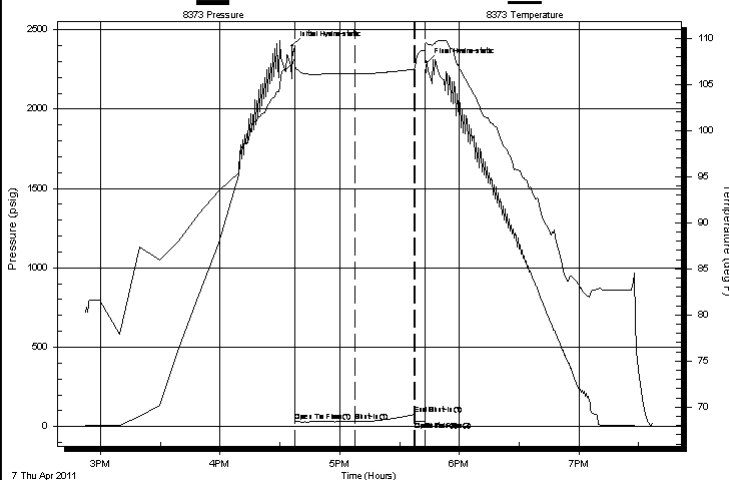
Time Off Btm: 2011.04.07 @ 17:43:44

TEST COMMENT: IF: 1/4 blow died back to a surface blow in 30 min.

IS: No reutrn.

FF: No blow. Pulled the tool.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2398.64	107.07	Initial Hydro-static
2	31.19	107.01	Open To Flow (1)
32	31.67	106.14	Shut-In(1)
62	75.07	106.65	End Shut-In(1)
62	35.76	106.82	Open To Flow (2)
67	35.14	108.72	Shut-In(2)
68	2295.52	109.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud oil spots 100%m	0.05

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Angela #1

P.O. Box 1009
Mcpherson, KS 67460

25-23-24 Hodgeman, KS

Job Ticket: 042077

DST#: 2

ATTN: Jamie Hess

Test Start: 2011.04.07 @ 14:52:34

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: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 14.96 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	mud oil spots 100% m	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

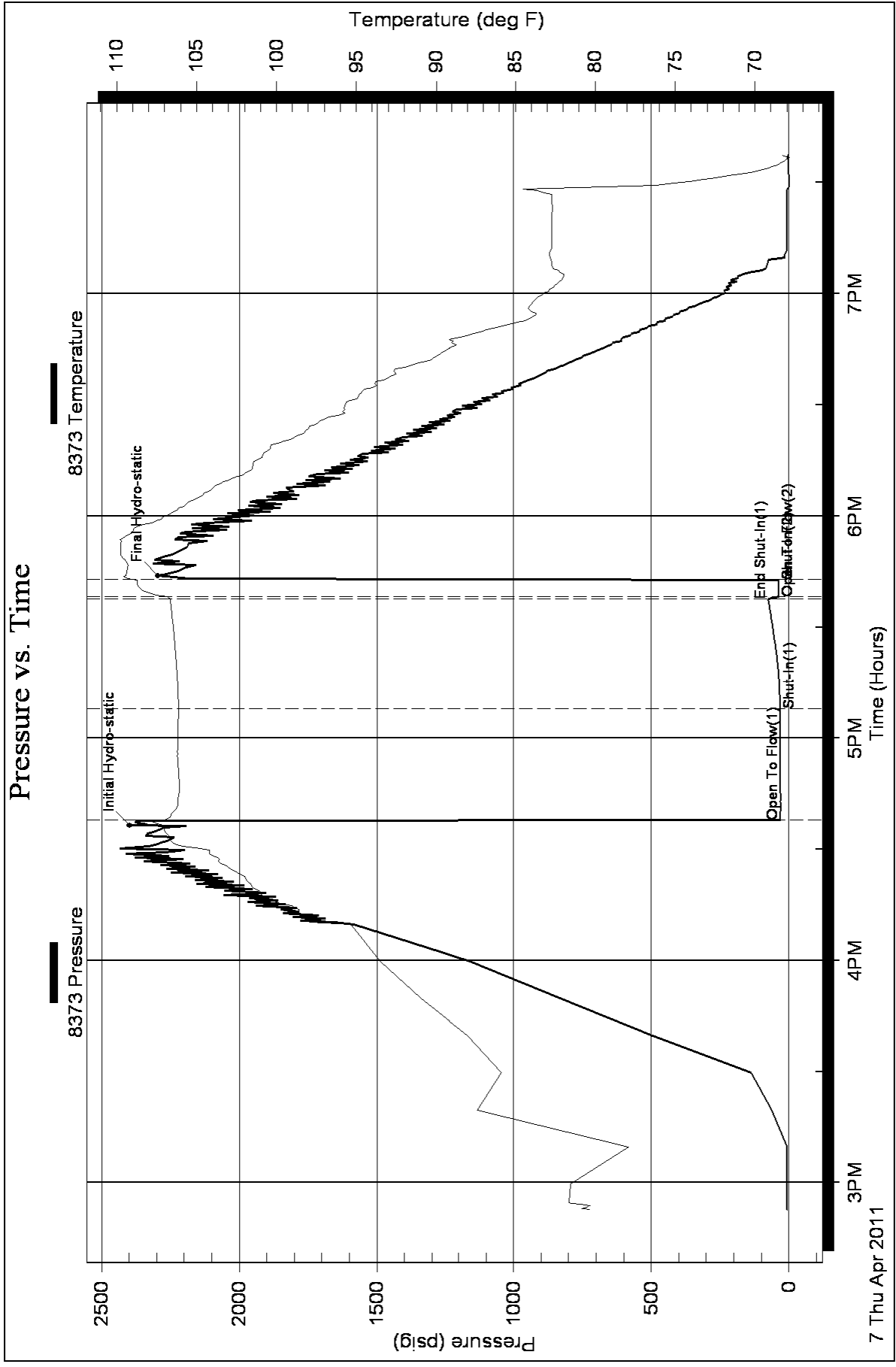
Num Gas Bombs: 0

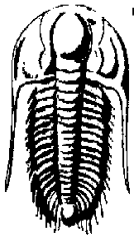
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





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ATTN: Jamie Hess

Angela #1

25-23-24 Hodgeman, KS

Job Ticket: 042078

DST#: 3

Test Start: 2011.04.08 @ 01:50:30

GENERAL INFORMATION:

Formation: **Cherokee Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:56:25

Time Test Ended: 06:51:54

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: 4660.00 ft (KB) To 4692.00 ft (KB) (TVD)

Total Depth: 4692.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2418.00 ft (KB)

2413.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8373 Inside

Press@RunDepth: psig @ 4661.00 ft (KB)

Start Date: 2011.04.08

End Date:

2011.04.08

Start Time: 01:50:30

End Time:

06:51:54

Capacity: 8000.00 psig

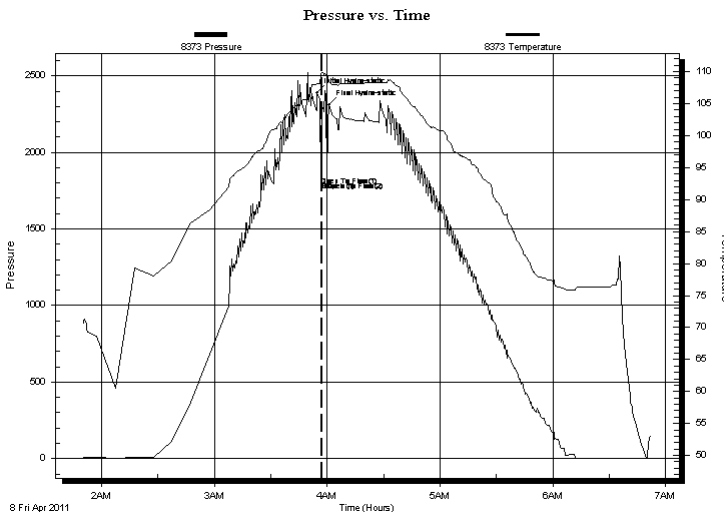
Last Calib.: 2011.04.08

Time On Btm: 2011.04.08 @ 03:54:40

Time Off Btm: 2011.04.08 @ 04:00:55

TEST COMMENT: Packer failed at open.

PRESSURE SUMMARY



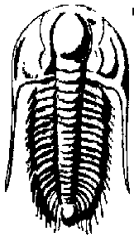
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2388.10	108.13	Initial Hydro-static
2	1779.58	109.51	Open To Flow (1)
3	1809.86	109.80	Shut-In(1)
6	1810.15	109.27	Open To Flow (2)
7	2309.26	108.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
620.00	mud 100% m	6.49

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Hess Oil Company

Angela #1

P.O. Box 1009
Mcpherson, KS 67460

25-23-24 Hodgeman, KS

Job Ticket: 042078

DST#: 3

ATTN: Jamie Hess

Test Start: 2011.04.08 @ 01:50:30

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: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 14.92 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
620.00	mud 100%m	6.492

Total Length: 620.00 ft

Total Volume: 6.492 bbl

Num Fluid Samples: 0

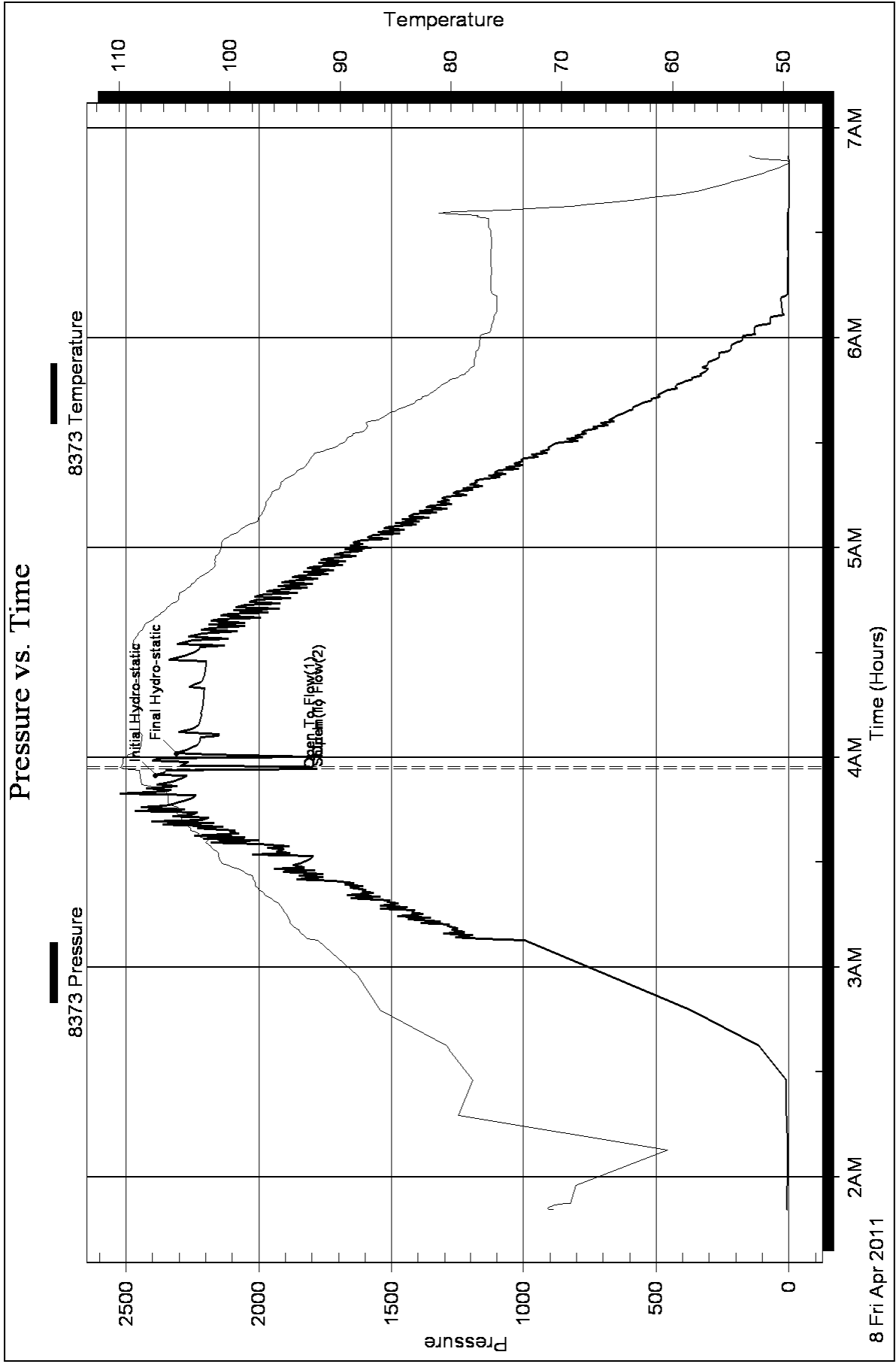
Num Gas Bombs: 0

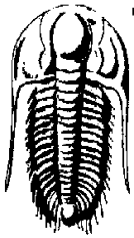
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





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ATTN: Jamie Hess

Angela #1

25-23-24 Hodgeman, KS

Job Ticket: 042079

DST#: 4

Test Start: 2011.04.08 @ 07:18:30

GENERAL INFORMATION:

Formation: **Cherokee Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:03:10

Time Test Ended: 13:57:39

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: 4638.00 ft (KB) To 4692.00 ft (KB) (TVD)

Total Depth: 4692.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2418.00 ft (KB)

2413.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8373 Inside

Press@RunDepth: 56.07 psig @ 4639.00 ft (KB)

Start Date: 2011.04.08

End Date:

2011.04.08

Start Time: 07:18:30

End Time:

13:57:39

Capacity: 8000.00 psig

Last Calib.: 2011.04.08

Time On Btm: 2011.04.08 @ 09:02:10

Time Off Btm: 2011.04.08 @ 12:04:54

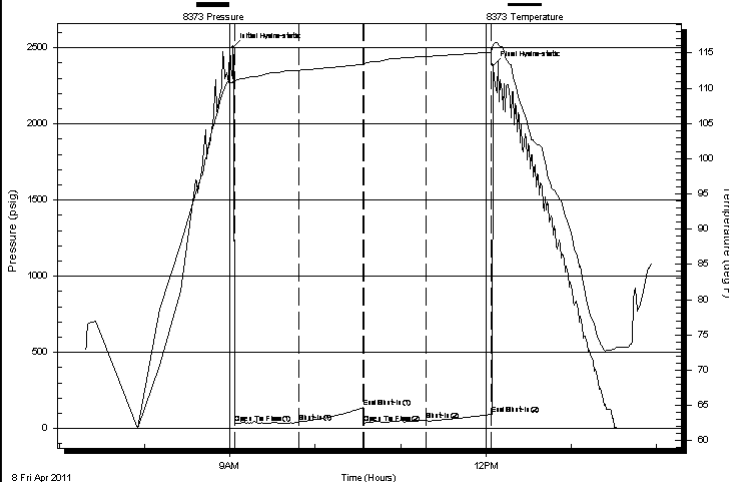
TEST COMMENT: IF: 1/4 blow built to 1 in 45 min.

IS: No return.

FF: No blow.

FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

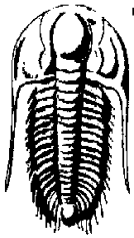
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2501.60	110.82	Initial Hydro-static
1	30.66	110.30	Open To Flow (1)
46	42.00	112.56	Shut-In(1)
92	137.49	113.40	End Shut-In(1)
93	36.26	113.45	Open To Flow (2)
136	56.07	114.51	Shut-In(2)
182	92.63	115.11	End Shut-In(2)
183	2383.07	116.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	mud 100% m	0.10

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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25-23-24 Hodgeman, KS

Job Ticket: 042079

DST#: 4

ATTN: Jamie Hess

Test Start: 2011.04.08 @ 07:18:30

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: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 14.92 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	mud 100%m	0.098

Total Length: 20.00 ft

Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

