

TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Hess Oil Co.
PO Box 1009
McPherson, Ks 67460
ATTN: Jamie Hess

29-7-17 Rooks, Ks

Kriley A-3

Job Ticket: 47148

DST#: 1

Test Start: 2012.06.16 @ 17:32:00

GENERAL INFORMATION:

Formation: **BKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:41:30

Time Test Ended: 00:22:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Brian Fairbank

Unit No: 41

Interval: 3054.00 ft (KB) To 3144.00 ft (KB) (TVD)

Total Depth: 3144.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1782.00 ft (KB)

1777.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6752 Inside

Press@RunDepth: 159.47 psig @ 3057.00 ft (KB)

Start Date: 2012.06.16

End Date:

2012.06.17

Start Time: 17:32:01

End Time:

00:22:00

Capacity: 8000.00 psig

Last Calib.: 2012.06.17

Time On Btm: 2012.06.16 @ 19:40:30

Time Off Btm: 2012.06.16 @ 22:43:30

TEST COMMENT: IFP - weak blow throughout 1/4" - 3"

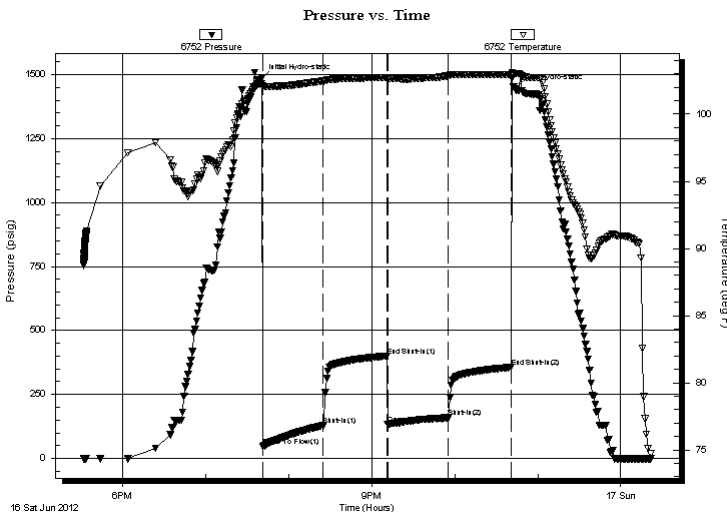
ISI - no blow back

FFP - no blow 3 min - 1 1/4"

FSI - no blow back

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1485.79	102.29	Initial Hydro-static
1	45.86	102.07	Open To Flow (1)
45	128.99	102.46	Shut-In(1)
91	400.60	102.73	End Shut-In(1)
91	132.50	102.63	Open To Flow (2)
135	159.47	102.86	Shut-In(2)
180	356.01	102.95	End Shut-In(2)
183	1443.47	103.02	Final Hydro-static

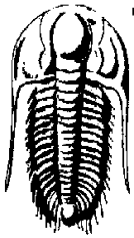


Recovery

Length (ft)	Description	Volume (bbl)
240.00	DRL MUD 100%	1.18
19.00	VSOCM 3%O, 97%M	0.25
1.00	FREE OIL TSTM	0.01

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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29-7-17 Rooks, Ks

Kriley A-3

Job Ticket: 47148

DST#: 1

Test Start: 2012.06.16 @ 17:32:00

GENERAL INFORMATION:

Formation: **BKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:41:30

Time Test Ended: 00:22:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Brian Fairbank

Unit No: 41

Interval: 3054.00 ft (KB) To 3144.00 ft (KB) (TVD)

Reference Elevations: 1782.00 ft (KB)

Total Depth: 3144.00 ft (KB) (TVD)

1777.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6741 Outside

Press@RunDepth: psig @ 3057.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.16

End Date:

2012.06.17

Last Calib.:

2012.06.17

Start Time: 17:32:34

End Time:

00:22:33

Time On Btm:

Time Off Btm:

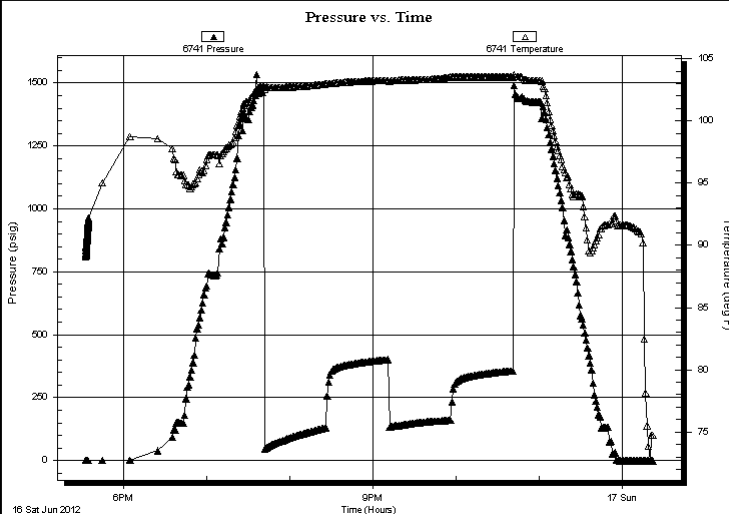
TEST COMMENT: IFP - weak blow throughout 1/4" - 3"

ISI - no blow back

FFP - no blow 3 min - 1 1/4"

FSI - no blow back

PRESSURE SUMMARY



Time
(Min.)

Pressure
(psig)

Temp
(deg F)

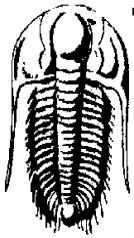
Annotation

Recovery

Length (ft)	Description	Volume (bbl)
240.00	DRL MUD 100%	1.18
19.00	VSOCM 3%O, 97%M	0.25
1.00	FREE OIL TSTM	0.01

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Co.
PO Box 1009
McPherson, Ks 67460
ATTN: Jamie Hess

29-7-17 Rooks, Ks
Kriley A-3
Job Ticket: 47148 **DST#: 1**
Test Start: 2012.06.16 @ 17:32:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 45.00 sec/qt
Water Loss: 7.20 in³
Resistivity: ohm.m
Salinity: 2300.00 ppm
Filter Cake: 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
240.00	DRL MUD 100%	1.180
19.00	VSOCM 3%O, 97%M	0.248
1.00	FREE OIL TSTM	0.014

Total Length: 260.00 ft Total Volume: 1.442 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6752

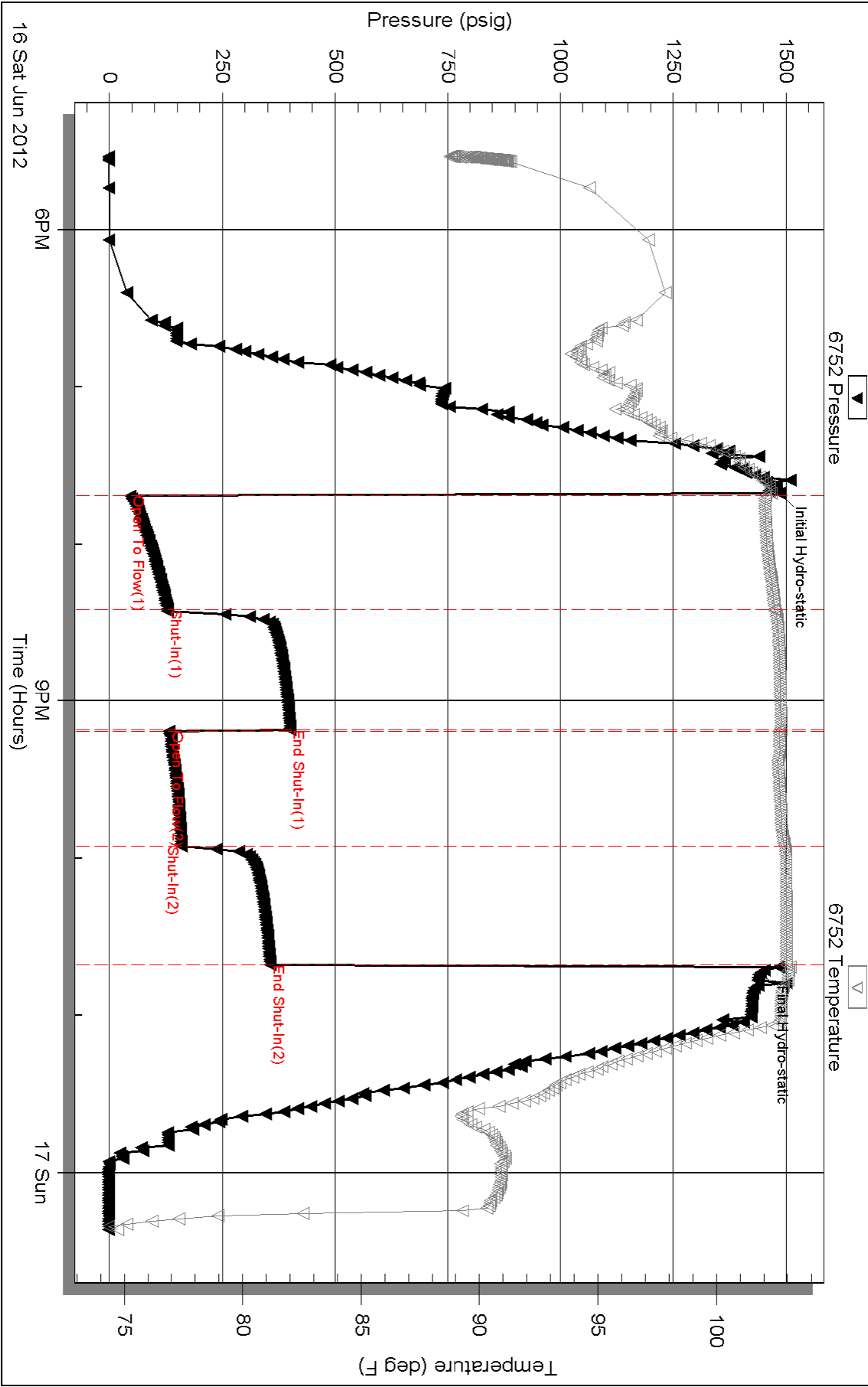
Inside

Hess Oil Co.

Kriley A-3

DST Test Number: 1

Pressure vs. Time

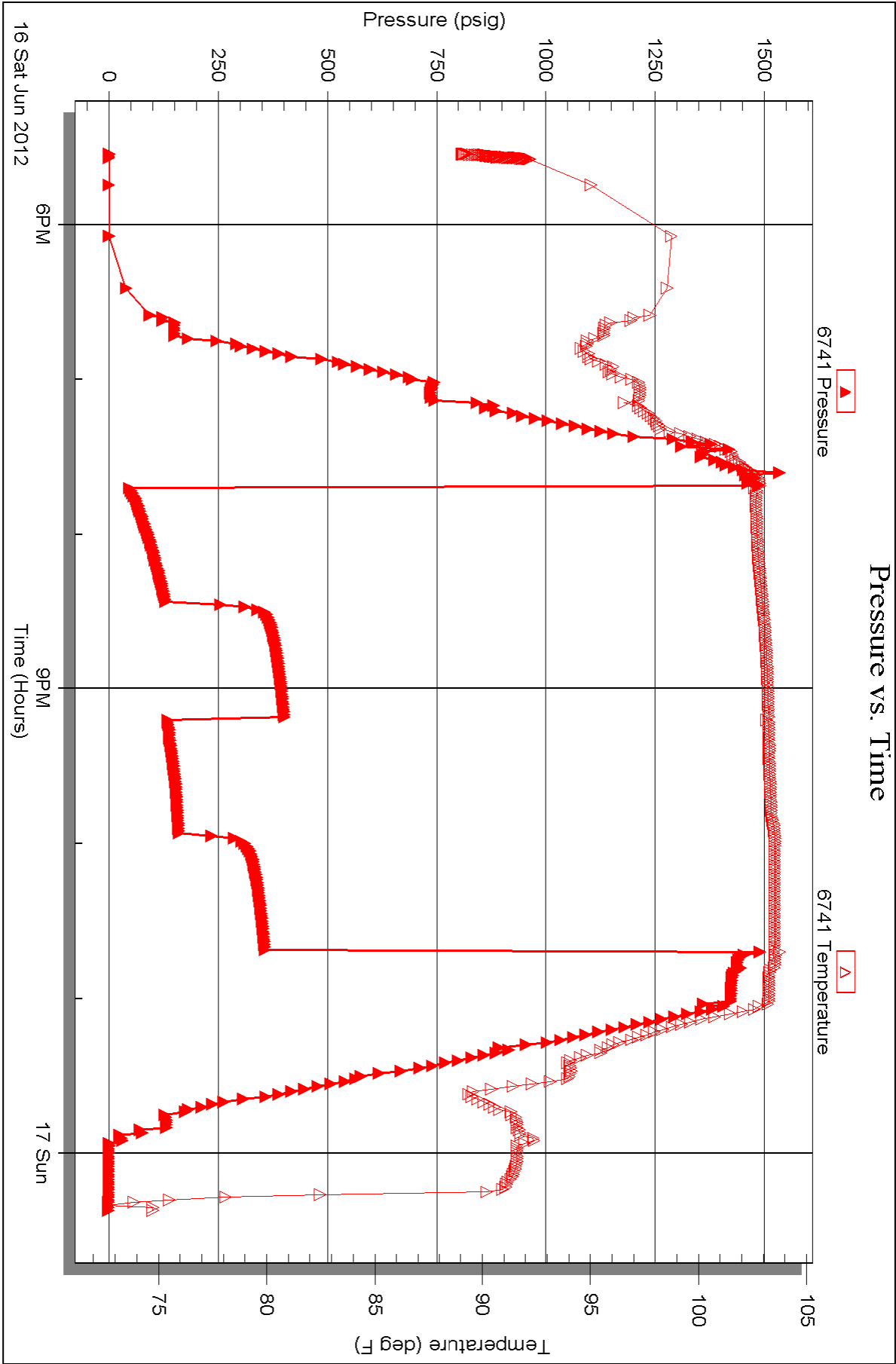


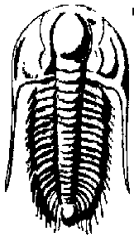
Serial #: 6741

Outside Hess Oil Co.

Kriley A-3

DST Test Number: 1





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DRILL STEM TEST REPORT

Hess Oil Co.
PO Box 1009
McPherson, Ks 67460
ATTN: Jamie Hess

29-7-17 Rooks, Ks

Kriley A-3

Job Ticket: 47149

DST#: 2

Test Start: 2012.06.17 @ 12:06:37

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:45:37

Time Test Ended: 16:38:07

Test Type: Conventional Bottom Hole (Reset)

Tester: Brian Fairbank

Unit No: 41

Interval: 3252.00 ft (KB) To 3275.00 ft (KB) (TVD)

Reference Elevations: 1782.00 ft (KB)

Total Depth: 3275.00 ft (KB) (TVD)

1777.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6752 Inside

Press@RunDepth: 16.67 psig @ 3257.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.17

End Date:

2012.06.17

Last Calib.: 2012.06.17

Start Time: 12:06:38

End Time:

16:38:07

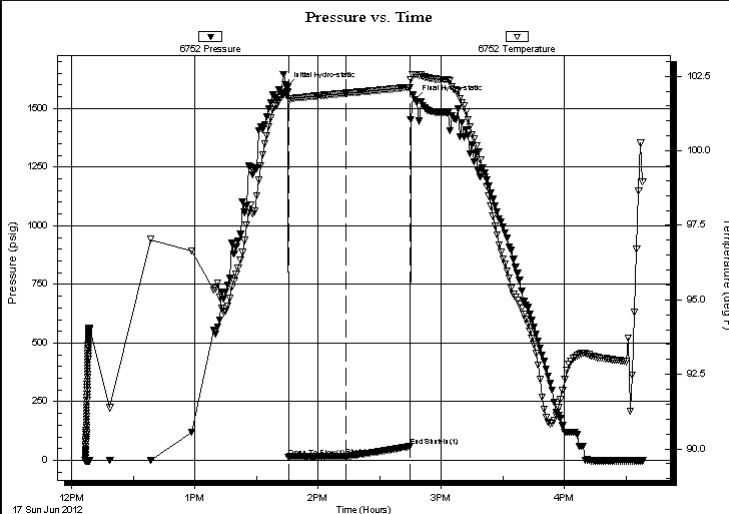
Time On Btm: 2012.06.17 @ 13:44:37

Time Off Btm: 2012.06.17 @ 14:47:07

TEST COMMENT: IFP - sur blow - died 4 min

ISI - no blow back

TIME - 30-30



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1594.16	101.94	Initial Hydro-static
1	14.20	101.75	Open To Flow (1)
29	16.67	101.93	Shut-In(1)
60	59.39	102.13	End Shut-In(1)
63	1537.15	102.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	OCM 10%O, 90%M	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



Hess Oil Co.

ATTN: Jamie Hess

Kriley A-3

DST#: 2

Test Start: 2012.06.17 @ 12:06:37

KB to GR/CF: 5.00 ft

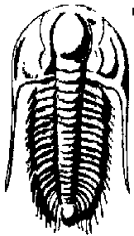
TIME - 30-30



Recovery

Gas Rates

Printed: 2012.06.18 @ 03:36:12



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DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Co.

29-7-17 Rooks, Ks

PO Box 1009
McPherson, Ks 67460

Kriley A-3

Job Ticket: 47149

DST#: 2

ATTN: Jamie Hess

Test Start: 2012.06.17 @ 12:06:37

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: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	OCM 10%O, 90%M	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

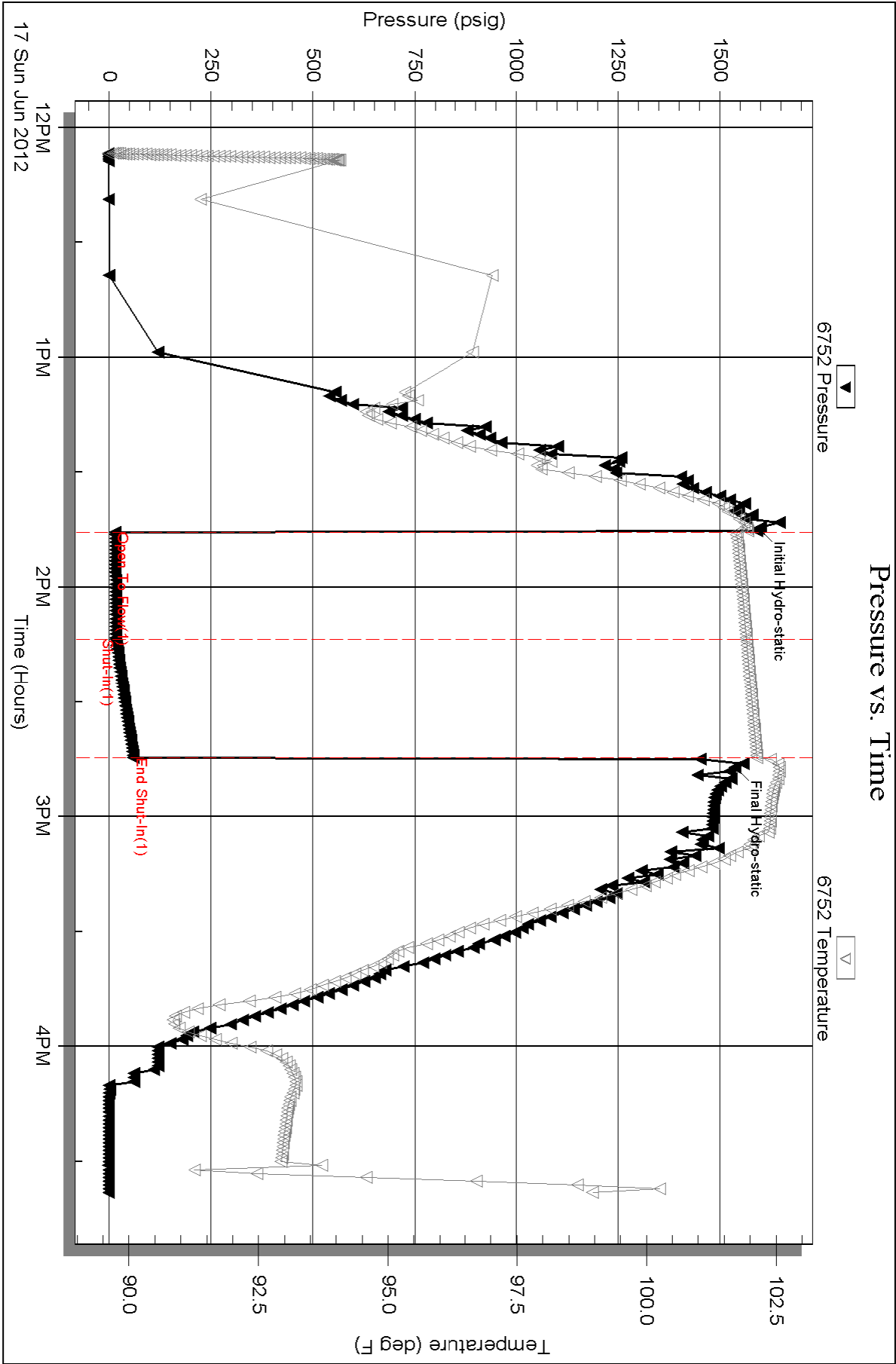
Serial #: 6752

Inside

Hess Oil Co.

Kriley A-3

DST Test Number: 2

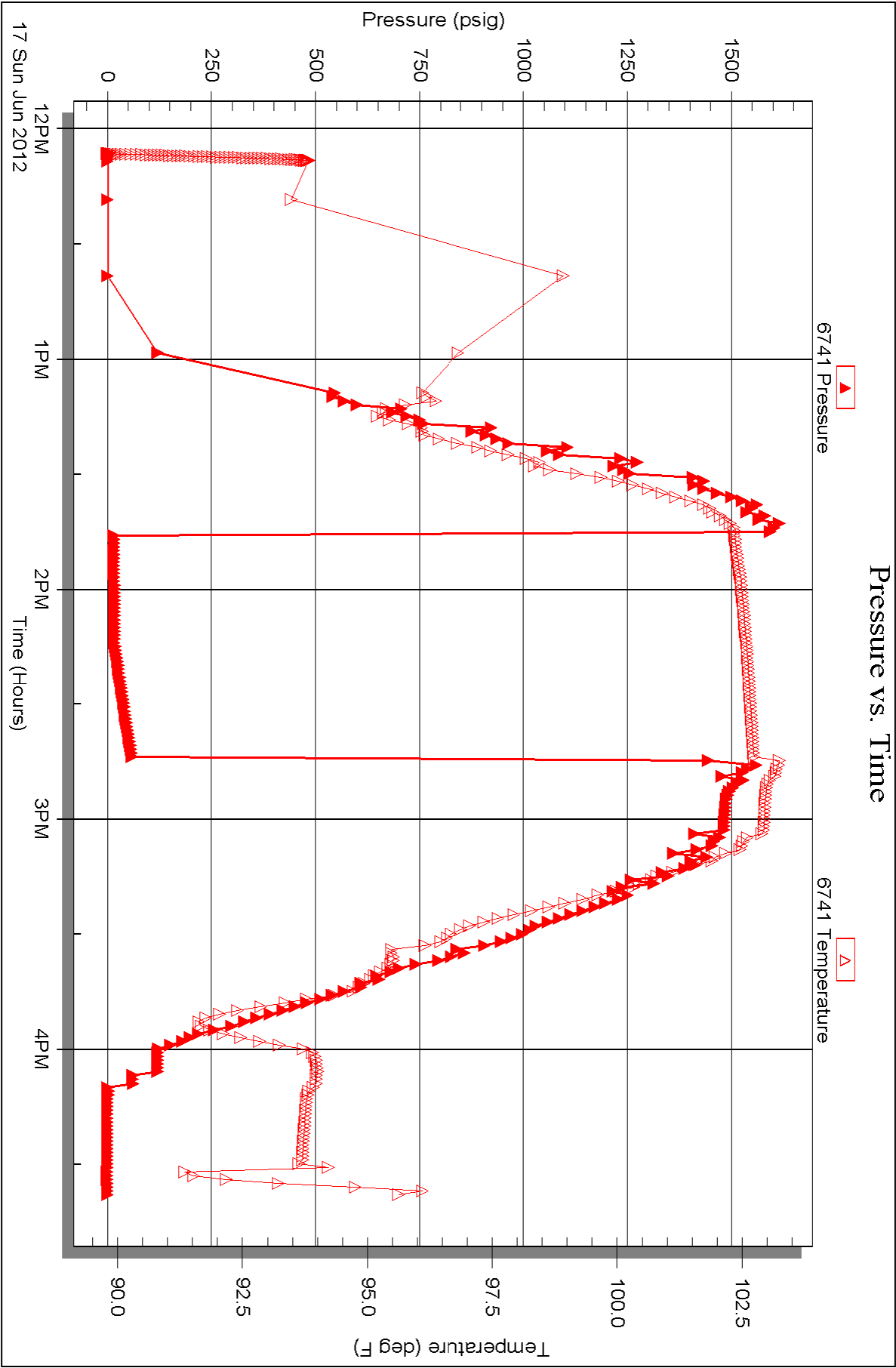


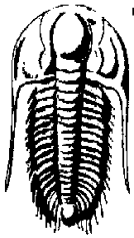
Serial #: 6741

Outside Hess Oil Co.

Kriley A-3

DST Test Number: 2





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DRILL STEM TEST REPORT

Hess Oil Co.
PO Box 1009
McPherson, Ks 67460
ATTN: Jamie Hess

29-7-17 Rooks, Ks

Kriley A-3

Job Ticket: 47150

DST#: 3

Test Start: 2012.06.16 @ 17:32:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened:

Time Test Ended:

Test Type: Conventional Bottom Hole (Reset)

Tester: Brian Fairbank

Unit No: 41

Interval: 3260.00 ft (KB) To 3290.00 ft (KB) (TVD)

Reference Elevations: 1782.00 ft (KB)

Total Depth: 3290.00 ft (KB) (TVD)

1777.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6752 Inside

Press@RunDepth: psig @ 3267.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.17

End Date:

2012.06.18

Last Calib.:

2012.06.18

Start Time: 22:44:36

End Time:

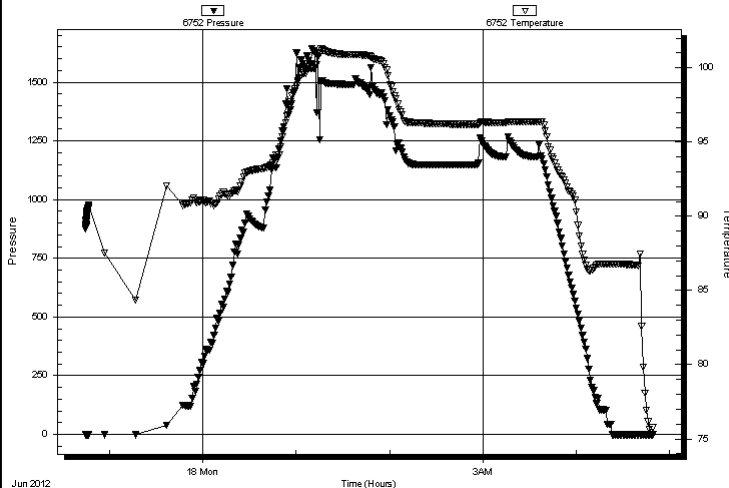
04:49:05

Time On Btm:

Time Off Btm:

TEST COMMENT: IFP -
ISI - PACKER FAILURE
FFP -
FSI -

Pressure vs. Time



PRESSURE SUMMARY

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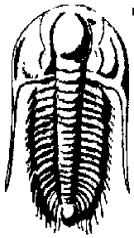
Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



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DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Co.
PO Box 1009
McPherson, Ks 67460
ATTN: Jamie Hess

29-7-17 Rooks, Ks
Kriley A-3
Job Ticket: 47150 **DST#: 3**
Test Start: 2012.06.16 @ 17:32:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 7.19 in³
Resistivity: ohm.m
Salinity: 2300.00 ppm
Filter Cake: 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

Total Length: ft Total Volume: bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

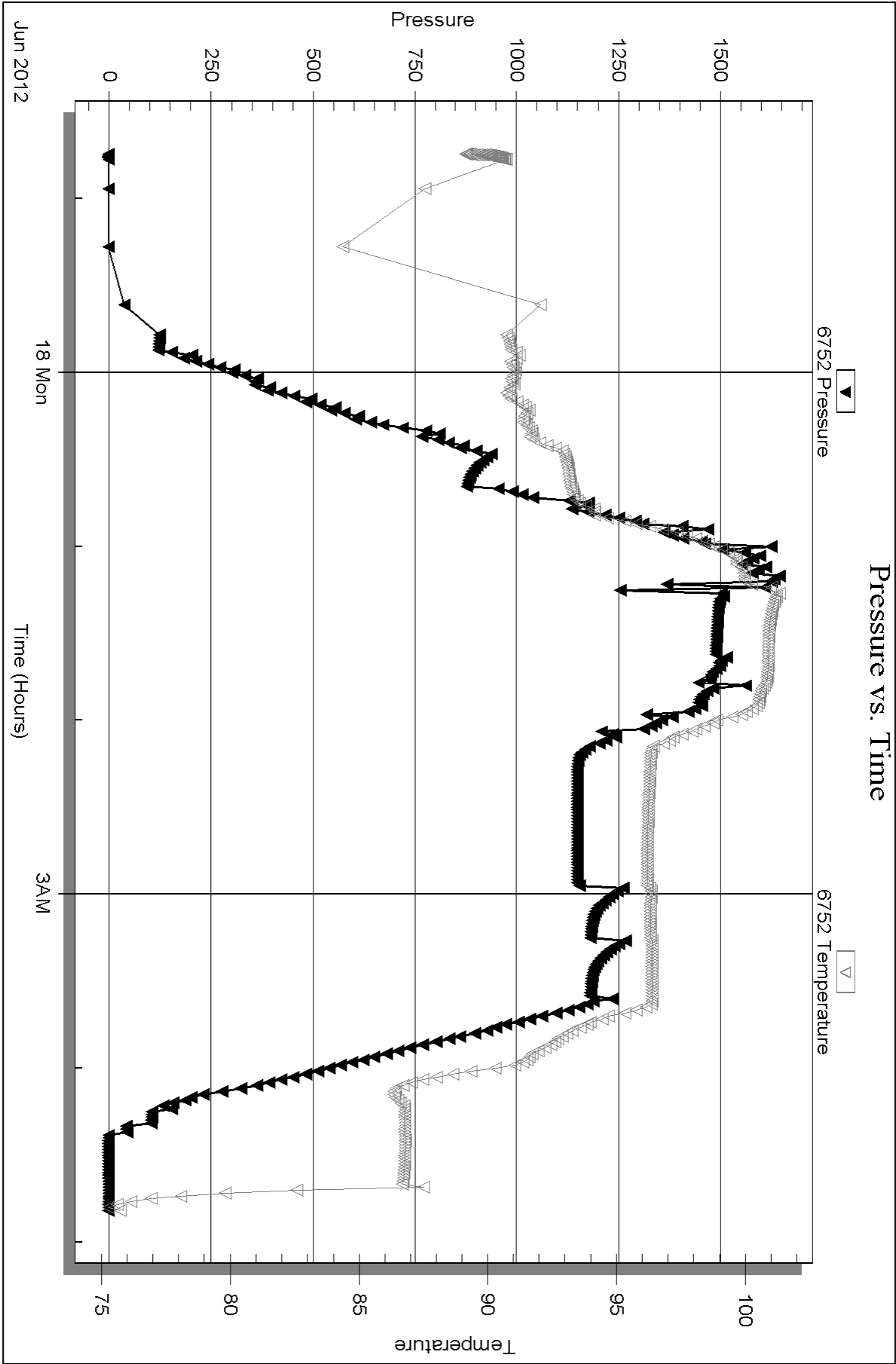
Serial #: 6752

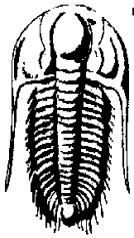
Inside

Hess Oil Co.

Kriley A-3

DST Test Number: 3





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Hess Oil Co.
PO Box 1009
McPherson, Ks 67460
ATTN: Jamie Hess

29-7-17 Rooks, Ks

Kriley A-3

Job Ticket: 47401

DST#: 4

Test Start: 2012.06.18 @ 04:58:43

GENERAL INFORMATION:

Formation: **Arbuckle (3)**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:25:43

Time Test Ended: 08:43:43

Test Type: Conventional Bottom Hole (Reset)

Tester: Brian Fairbank

Unit No: 41

Interval: 3252.00 ft (KB) To 3290.00 ft (KB) (TVD)

Reference Elevations: 1782.00 ft (KB)

Total Depth: 3290.00 ft (KB) (TVD)

1777.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6741 Outside

Press@RunDepth: 32.09 psig @ 3262.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.18

End Date:

2012.06.18

Last Calib.: 2012.06.18

Start Time: 04:58:44

End Time:

08:43:43

Time On Btm: 2012.06.18 @ 06:24:43

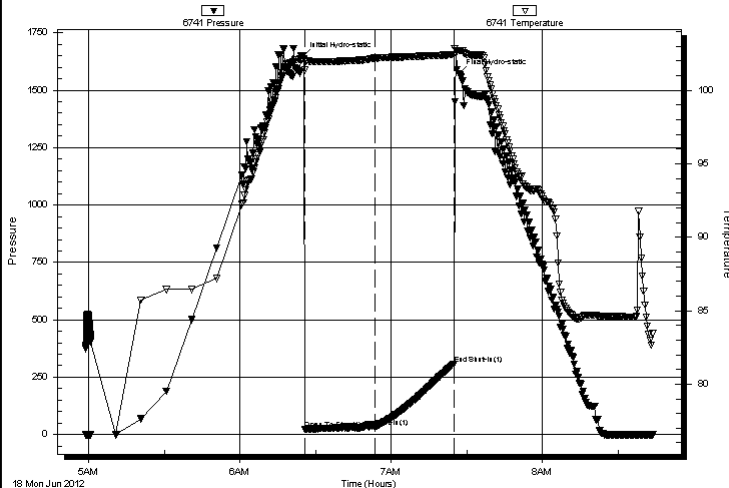
Time Off Btm: 2012.06.18 @ 07:26:43

TEST COMMENT: IFP - 1/2" blow - died 3 min

ISI - no blow back

TIME - 30-30

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1647.09	102.14	Initial Hydro-static
1	21.96	101.38	Open To Flow (1)
29	32.09	102.20	Shut-In(1)
60	306.62	102.42	End Shut-In(1)
62	1573.78	102.69	Final Hydro-static

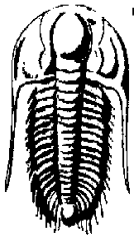
Recovery

Length (ft)	Description	Volume (bbl)
3.00	OCM 10%O, 90%M	0.01

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Co.
PO Box 1009
McPherson, Ks 67460
ATTN: Jamie Hess

29-7-17 Rooks, Ks
Kriley A-3
Job Ticket: 47401 **DST#: 4**
Test Start: 2012.06.18 @ 04:58:43

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 7.19 in³
Resistivity: ohm.m
Salinity: 2300.00 ppm
Filter Cake: 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
3.00	OCM 10%O, 90%M	0.015

Total Length: 3.00 ft Total Volume: 0.015 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

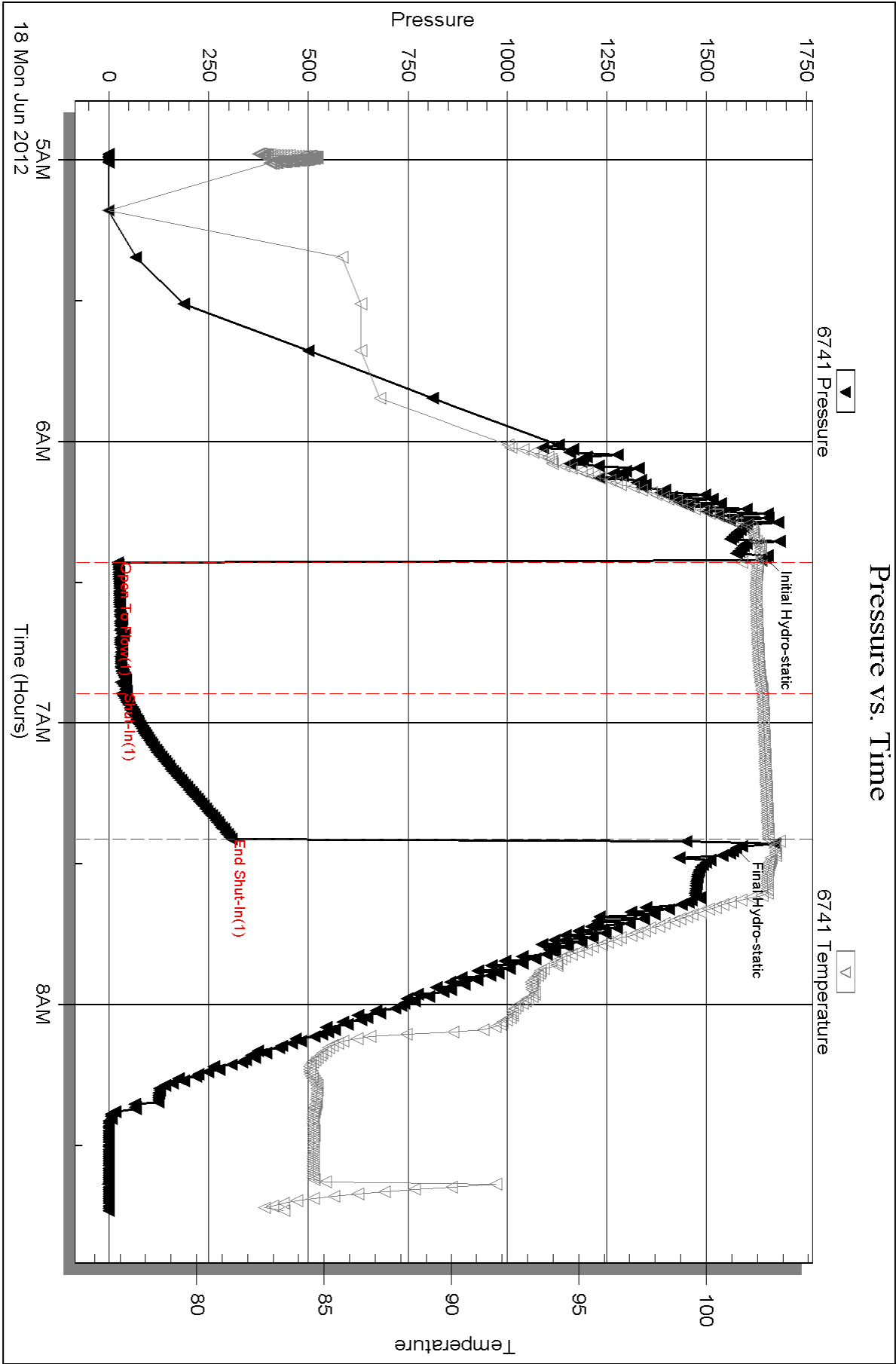
Recovery Comments:

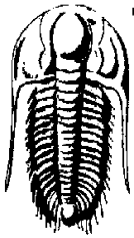
Serial #: 6741

Outside Hess Oil Co.

Kriley A-3

DST Test Number: 4





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Hess Oil Co.
PO Box 1009
McPherson, Ks 67460
ATTN: Jamie Hess

29-7-17 Rooks, Ks

Kriley A-3

Job Ticket: 47402

DST#: 5

Test Start: 2012.06.18 @ 12:45:27

GENERAL INFORMATION:

Formation: **Arbuckle (4)**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:14:27

Time Test Ended: 16:43:27

Test Type: Conventional Bottom Hole (Reset)

Tester: Brian Fairbank

Unit No: 41

Interval: 3290.00 ft (KB) To 3300.00 ft (KB) (TVD)

Reference Elevations: 1782.00 ft (KB)

Total Depth: 3300.00 ft (KB) (TVD)

1777.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6752 Inside

Press@RunDepth: 43.20 psig @ 3292.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.18

End Date:

2012.06.18

Last Calib.: 2012.06.18

Start Time: 12:45:28

End Time:

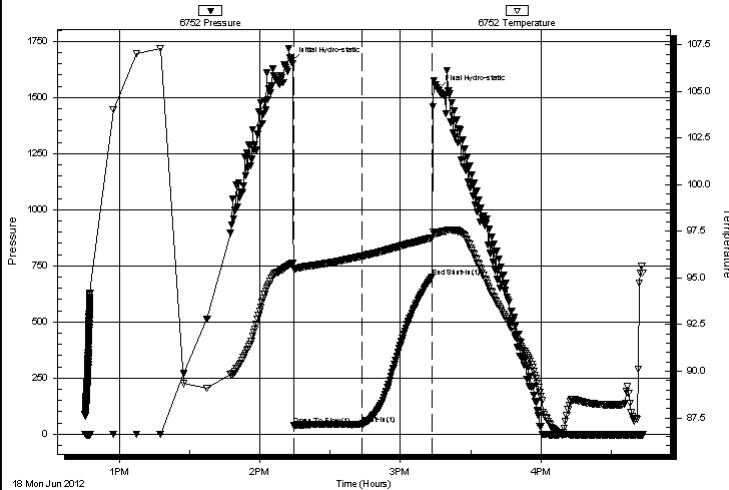
16:43:27

Time On Btm: 2012.06.18 @ 14:13:27

Time Off Btm: 2012.06.18 @ 15:15:57

TEST COMMENT: IFP - no blow
ISI - no blow back
TIME - 30-30

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1661.60	95.76	Initial Hydro-static
1	40.83	95.52	Open To Flow (1)
30	43.20	96.16	Shut-In(1)
60	701.29	97.15	End Shut-In(1)
63	1536.66	97.42	Final Hydro-static

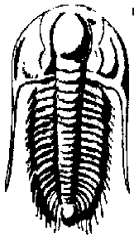
Recovery

Length (ft)	Description	Volume (bbl)
65.00	DRL MUD 100%	0.32

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



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TESTING, INC.

DRILL STEM TEST REPORT

Hess Oil Co.
PO Box 1009
McPherson, Ks 67460
ATTN: Jamie Hess

29-7-17 Rooks, Ks

Kriley A-3

Job Ticket: 47402

DST#: 5

Test Start: 2012.06.18 @ 12:45:27

GENERAL INFORMATION:

Formation: **Arbuckle (4)**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:14:27

Time Test Ended: 16:43:27

Test Type: Conventional Bottom Hole (Reset)

Tester: Brian Fairbank

Unit No: 41

Interval: 3290.00 ft (KB) To 3300.00 ft (KB) (TVD)

Reference Elevations: 1782.00 ft (KB)

Total Depth: 3300.00 ft (KB) (TVD)

1777.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6741 Outside

Press@RunDepth: psig @ 3292.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.18

End Date:

2012.06.18

Last Calib.:

2012.06.18

Start Time: 12:45:12

End Time:

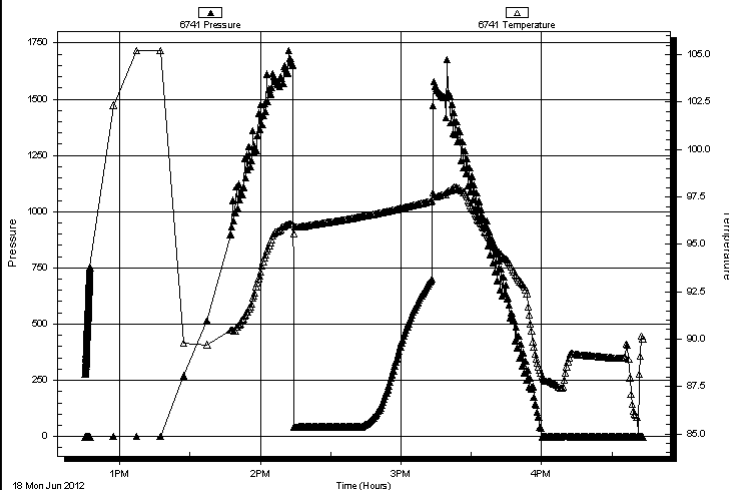
16:43:11

Time On Btm:

Time Off Btm:

TEST COMMENT: IFP - no blow
ISI - no blow back
TIME - 30-30

Pressure vs. Time



PRESSURE SUMMARY

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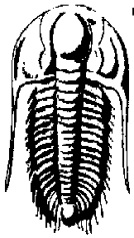
Recovery

Length (ft)	Description	Volume (bbl)
65.00	DRL MUD 100%	0.32

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Co.
PO Box 1009
McPherson, Ks 67460
ATTN: Jamie Hess

29-7-17 Rooks, Ks
Kriley A-3
Job Ticket: 47402 **DST#: 5**
Test Start: 2012.06.18 @ 12:45:27

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 49.00 sec/qt
Water Loss: 7.18 in³
Resistivity: ohm.m
Salinity: 2300.00 ppm
Filter Cake: 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
65.00	DRL MUD 100%	0.320

Total Length: 65.00 ft Total Volume: 0.320 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

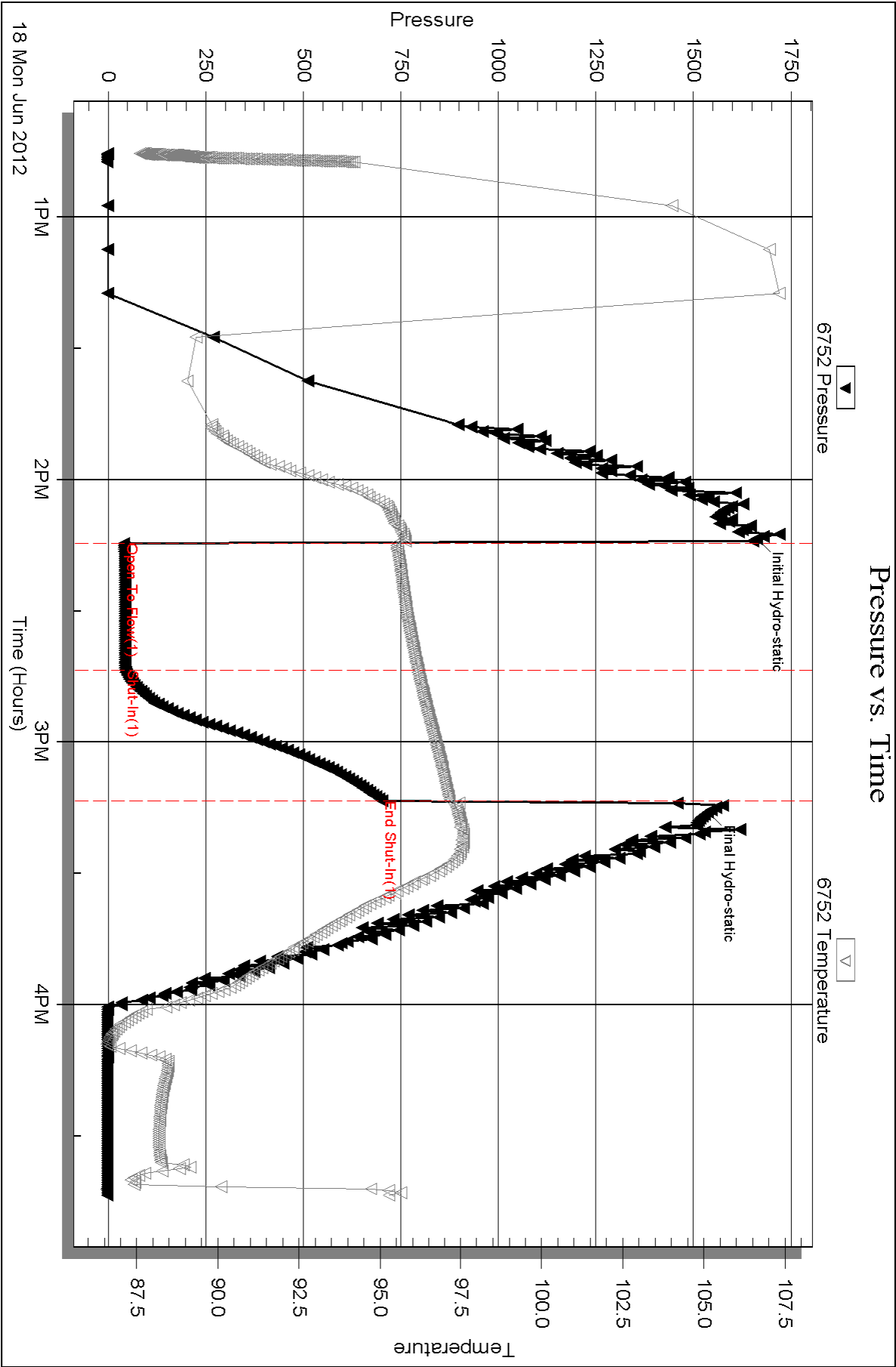
Serial #: 6752

Inside

Hess Oil Co.

Kriley A-3

DST Test Number: 5

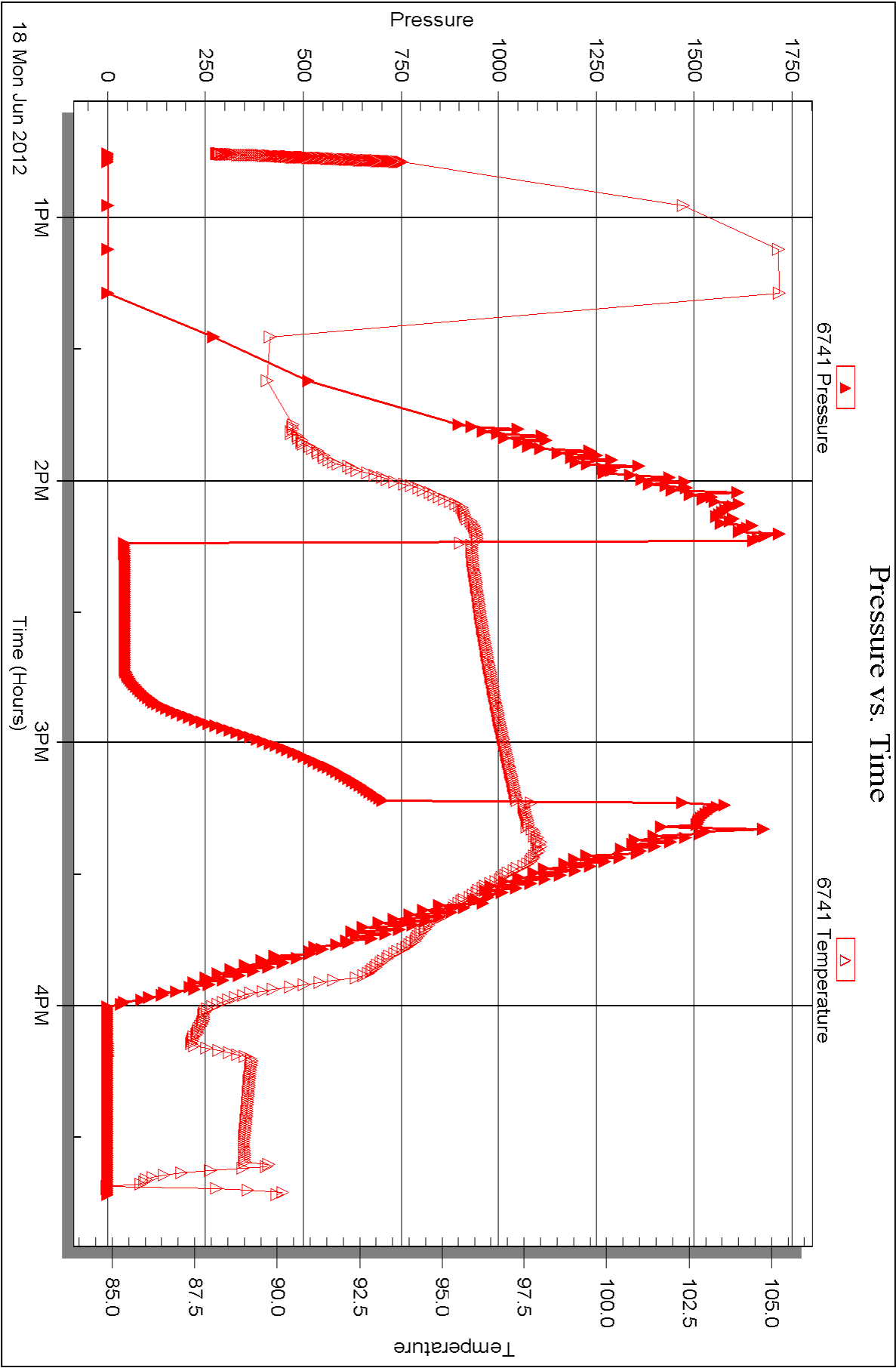


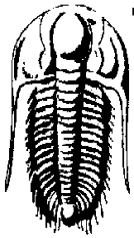
Serial #: 6741

Outside Hess Oil Co.

Kriley A-3

DST Test Number: 5





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Hess Oil Co.
PO Box 1009
McPherson, Ks 67460
ATTN: Jamie Hess

29-7-17 Rooks, Ks

Kriley A-3

Job Ticket: 47403

DST#: 6

Test Start: 2012.06.18 @ 22:47:44

GENERAL INFORMATION:

Formation: **Arbuckle (5)**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:27:44

Time Test Ended: 02:46:44

Test Type: Conventional Bottom Hole (Reset)

Tester: Brian Fairbank

Unit No: 41

Interval: 3290.00 ft (KB) To 3310.00 ft (KB) (TVD)

Total Depth: 3310.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1782.00 ft (KB)

1777.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6752 Inside

Press@RunDepth: 24.02 psig @ 3292.00 ft (KB)

Start Date: 2012.06.18

End Date:

2012.06.19

Start Time: 22:47:45

End Time:

02:46:44

Capacity: 8000.00 psig

Last Calib.: 2012.06.19

Time On Btm: 2012.06.19 @ 00:26:14

Time Off Btm: 2012.06.19 @ 01:30:14

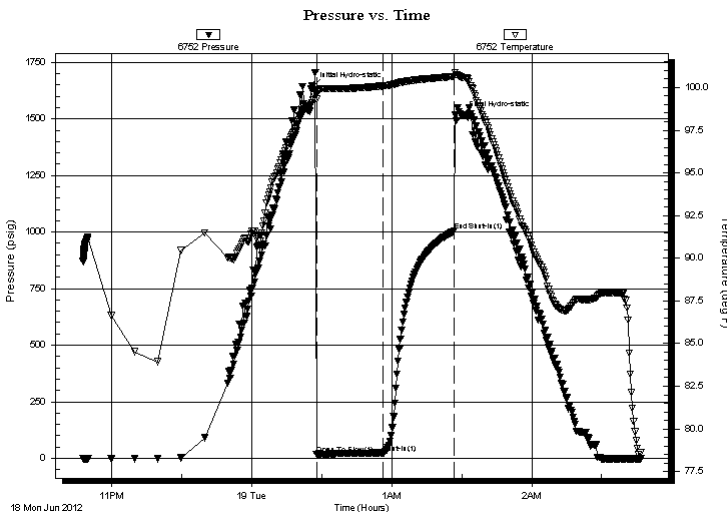
TEST COMMENT: IFP - 1/4" blow - died 2 min

ISI - no blow back

TIME - 30-30

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1642.51	99.31	Initial Hydro-static
2	18.31	99.31	Open To Flow (1)
30	24.02	100.09	Shut-In(1)
61	1003.77	100.65	End Shut-In(1)
64	1516.20	100.59	Final Hydro-static



Recovery

Length (ft)	Description	Volume (bbl)
5.00	SOCM 5%O, 95%M	0.02

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



Hess Oil Co.

ATTN: Jamie Hess

Kriley A-3

DST#: 6

Test Start: 2012.06.18 @ 22:47:44

KB to GR/CF: 5.00 ft

Time Off Btm:

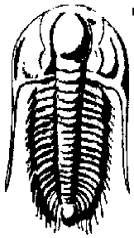
TIME - 30-30



Recovery

Gas Rates

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Co.

29-7-17 Rooks, Ks

PO Box 1009
McPherson, Ks 67460

Kriley A-3

Job Ticket: 47403

DST#: 6

ATTN: Jamie Hess

Test Start: 2012.06.18 @ 22:47:44

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: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	SOCM 5%O, 95%M	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6752

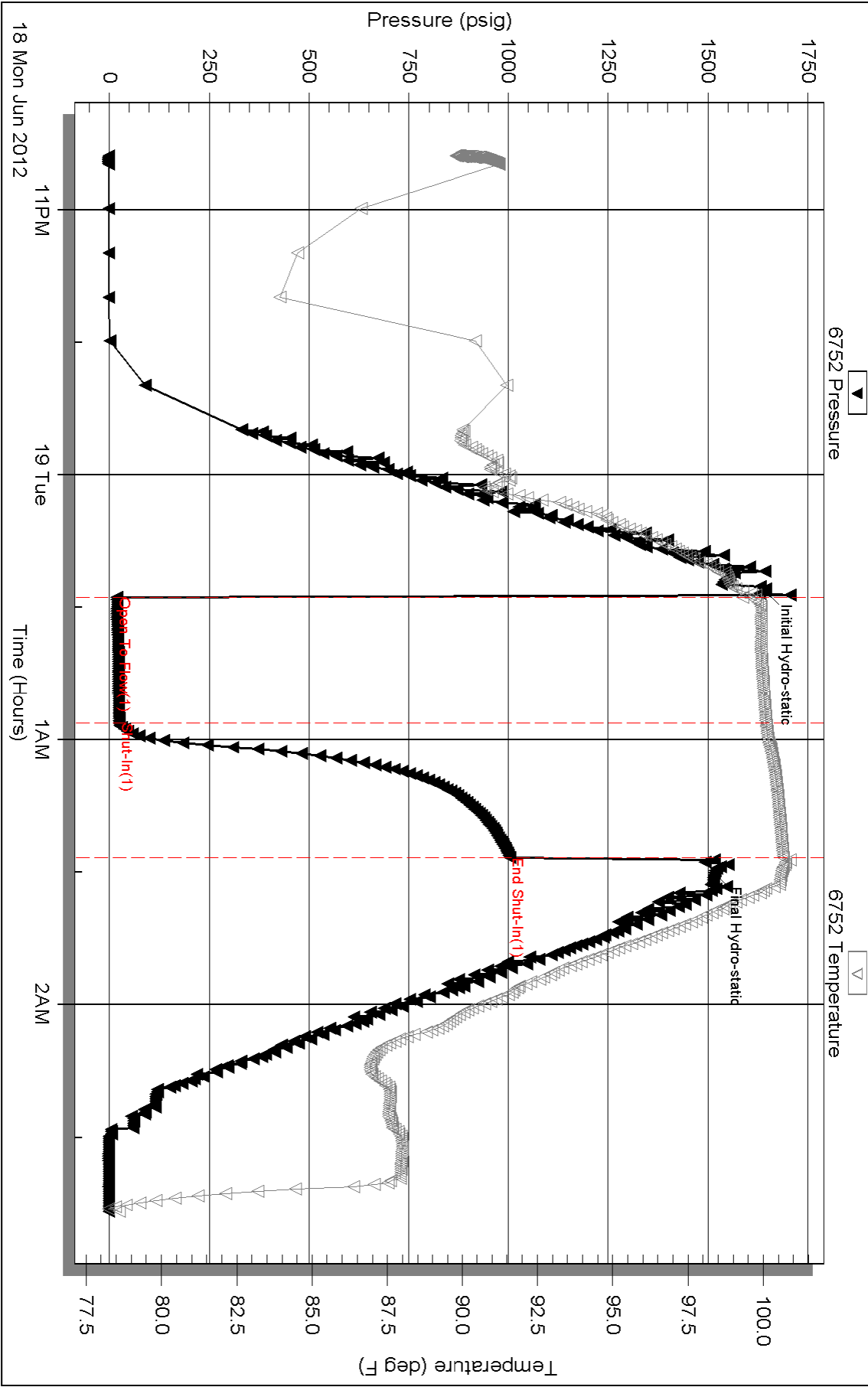
Inside

Hess Oil Co.

Kriley A-3

DST Test Number: 6

Pressure vs. Time

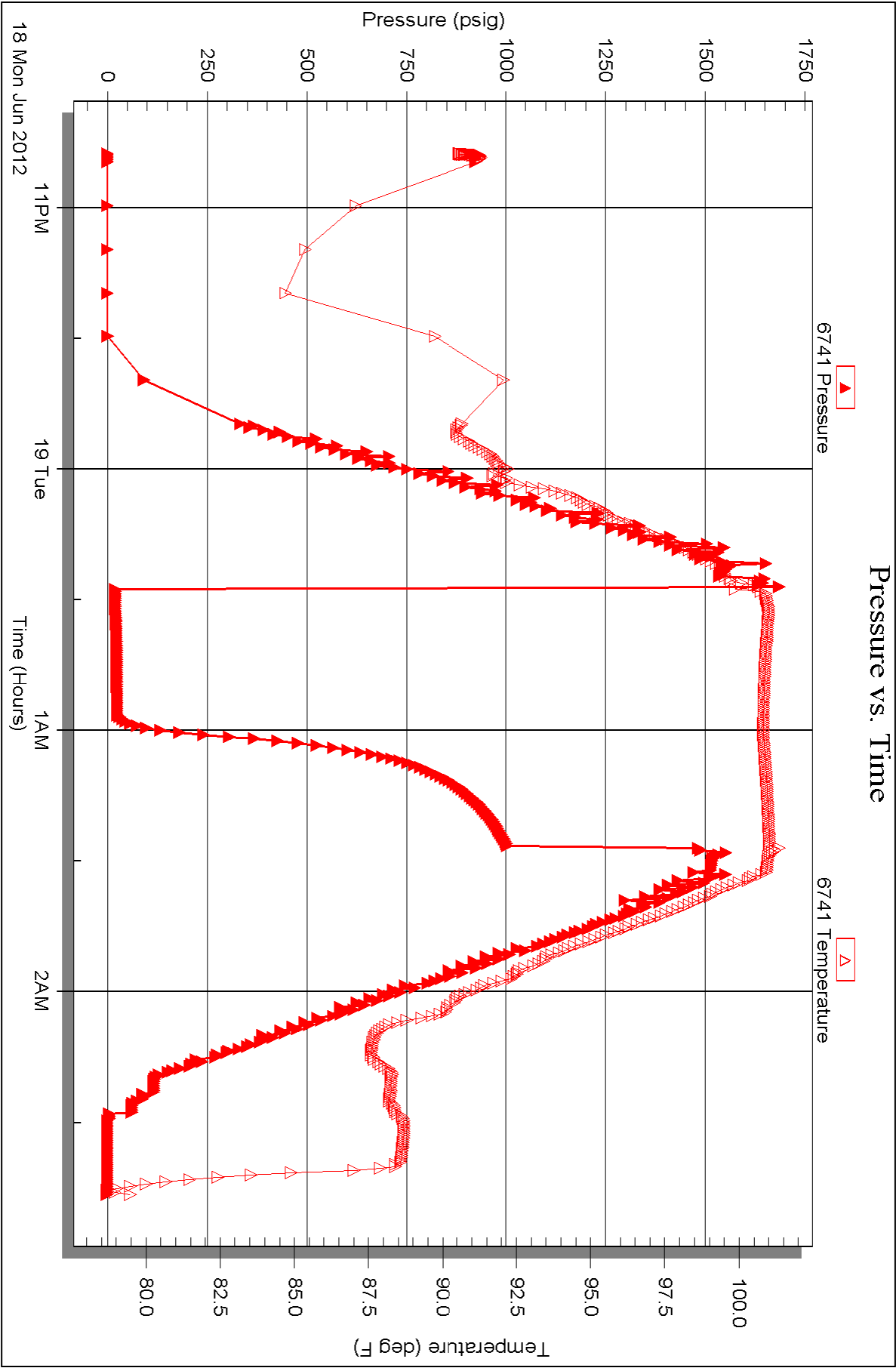


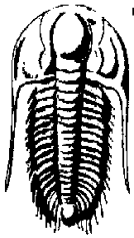
Serial #: 6741

Outside Hess Oil Co.

Kriley A-3

DST Test Number: 6





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Hess Oil Co.
PO Box 1009
McPherson, Ks 67460
ATTN: Jamie Hess

29-7-17 Rooks, Ks

Kriley A-3

Job Ticket: 47404

DST#: 7

Test Start: 2012.06.19 @ 06:52:20

GENERAL INFORMATION:

Formation: **Arbuckle (6)**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:37:50

Time Test Ended: 12:47:50

Test Type: Conventional Bottom Hole (Reset)

Tester: Brian Fairbank

Unit No: 41

Interval: 3290.00 ft (KB) To 3320.00 ft (KB) (TVD)

Reference Elevations: 1782.00 ft (KB)

Total Depth: 3320.00 ft (KB) (TVD)

1777.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6752 Inside

Press@RunDepth: 331.18 psig @ 3292.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.19

End Date:

2012.06.19

Last Calib.: 2012.06.19

Start Time: 06:52:21

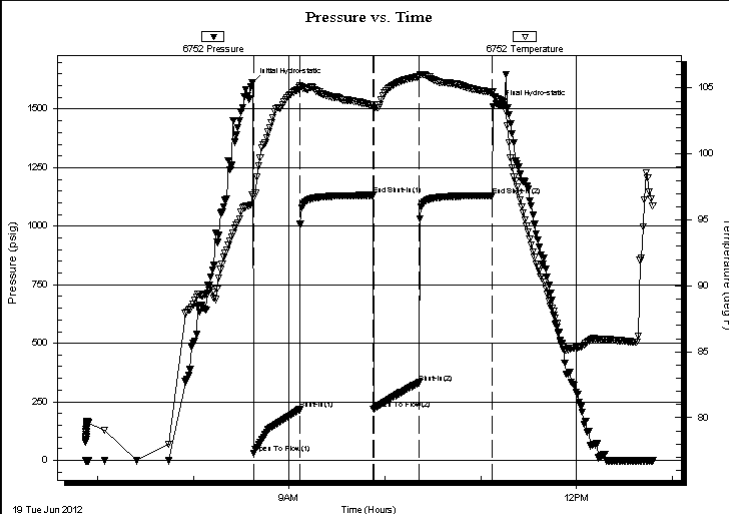
End Time:

12:47:50

Time On Btm: 2012.06.19 @ 08:36:50

Time Off Btm: 2012.06.19 @ 11:10:50

TEST COMMENT: IFP - BOB 7 min
ISI - no blow back
FFP - BOB 9 min
FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1614.06	96.86	Initial Hydro-static
1	30.55	96.72	Open To Flow (1)
30	216.83	105.00	Shut-In(1)
76	1132.52	103.73	End Shut-In(1)
76	218.40	103.44	Open To Flow (2)
105	331.18	105.86	Shut-In(2)
151	1131.45	104.66	End Shut-In(2)
154	1517.61	104.16	Final Hydro-static

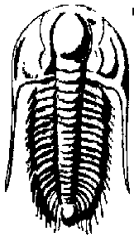
Recovery

Length (ft)	Description	Volume (bbl)
405.00	MW 90%W, 10%M	3.48
185.00	WM 40%W, 60%M	2.60
107.00	WCM 10%W, 90%M	1.50
3.00	SOCM 5%O, 95%M	0.04

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Co.

29-7-17 Rooks, Ks

PO Box 1009
McPherson, Ks 67460

Kriley A-3

Job Ticket: 47404

DST#: 7

ATTN: Jamie Hess

Test Start: 2012.06.19 @ 06:52:20

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 54.00 sec/qt

Water Loss: 7.80 in³

Resistivity: ohm.m

Salinity: 2300.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

deg API

32000 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
405.00	MW 90%W, 10%M	3.477
185.00	WM 40%W, 60%M	2.595
107.00	WCM 10%W, 90%M	1.501
3.00	SOCM 5%O, 95%M	0.042

Total Length: 700.00 ft

Total Volume: 7.615 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6752

Inside

Hess Oil Co.

Kriley A-3

DST Test Number: 7

