

15-065-23728

30-8s-21w



**TRILOBITE
TESTING, INC.**

**KCC
APR 26 2011
CONFIDENTIAL**

DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operating, INC**

PO Box 86
Plainville, KS 67663+0086

ATTN: Charles R Ramsay

30-8s-21w Graham,KS

Gosselin #30-1

Start Date: 2011.04.09 @ 21:50:26

End Date: 2011.04.10 @ 04:23:26

Job Ticket #: 042608 DST #: 1

RECEIVED

APR 27 2011

KCC WICHITA

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

H&C Oil Operating, INC

PO Box 86
Plainville, KS 67663+0086

ATTN: Charles R Ramsay

Gosselin #30-1

30-8s-21w Graham,KS

Job Ticket: 042608

DST#: 1

Test Start: 2011.04.09 @ 21:50:26

GENERAL INFORMATION:

Formation: LKC-H-J

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:11

Time Test Ended: 04:23:26

Test Type: Conventional Bottom Hole

Tester: Jeff Brown

Unit No: 44

Interval: 3486.00 ft (KB) To 3556.00 ft (KB) (TVD)

Total Depth: 3556.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2158.00 ft (KB)

2150.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6672

Inside

Press@RunDepth: 35.49 psig @ 3524.00 ft (KB)

Start Date: 2011.04.09

End Date:

2011.04.10

Start Time: 21:50:27

End Time:

04:23:26

Capacity: 8000.00 psig

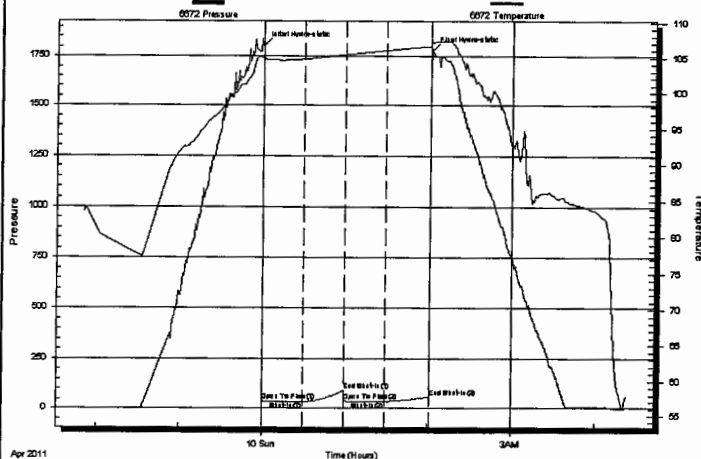
Last Calib.: 2011.04.10

Time On Btm: 2011.04.09 @ 23:59:56

Time Off Btm: 2011.04.10 @ 02:02:26

TEST COMMENT: IFP-Weak blow built to 1/2 in
ISI-Dead no blow back
FFP-Dead no blow
FSI-Dead no blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1805.03	105.24	Initial Hydro-static
1	36.46	104.45	Open To Flow (1)
30	34.80	104.82	Shut-In(1)
60	90.62	105.45	End Shut-In(1)
61	36.64	105.43	Open To Flow (2)
90	35.49	106.06	Shut-In(2)
122	59.80	106.67	End Shut-In(2)
123	1779.96	107.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud with oil spots	0.03

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating, INC

Gosselin #30-1

PO Box 86
Plainville, KS 67663+0086

30-8s-21w Graham, KS

Job Ticket: 042608

DST#: 1

ATTN: Charles R Ramsay

Test Start: 2011.04.09 @ 21:50:26

Tool Information

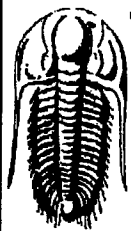
Drill Pipe:	Length: 3490.00 ft	Diameter: 3.70 inches	Volume: 46.41 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	40000.00 lb
			Total Volume: 46.41 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial	36000.00 lb
Depth to Top Packer:	3486.00 ft			Final	36000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	70.00 ft				
Tool Length:	90.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3467.00	
Shut In Tool	5.00			3472.00	
Hydraulic tool	5.00			3477.00	
Packer	4.00			3481.00	20.00 Bottom Of Top Packer
Packer	5.00			3486.00	
Stubb	1.00			3487.00	
Perforations	4.00			3491.00	
Change Over Sub	1.00			3492.00	
Drill Pipe	31.00			3523.00	
Change Over Sub	1.00			3524.00	
Recorder	0.00	6672	Inside	3524.00	
Recorder	0.00	8321	Outside	3524.00	
Perforations	29.00			3553.00	
Bullnose	3.00			3556.00	70.00 Bottom Packers & Anchor

Total Tool Length: 90.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating, INC

Gosselin #30-1

PO Box 86
Plainville, KS 67663+0086

30-8s-21w Graham, KS

Job Ticket: 042608

DST#: 1

ATTN: Charles R Ramsay

Test Start: 2011.04.09 @ 21:50:26

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Mud with oil spots	0.027

Total Length: 2.00 ft Total Volume: 0.027 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

DST Test Number: 1

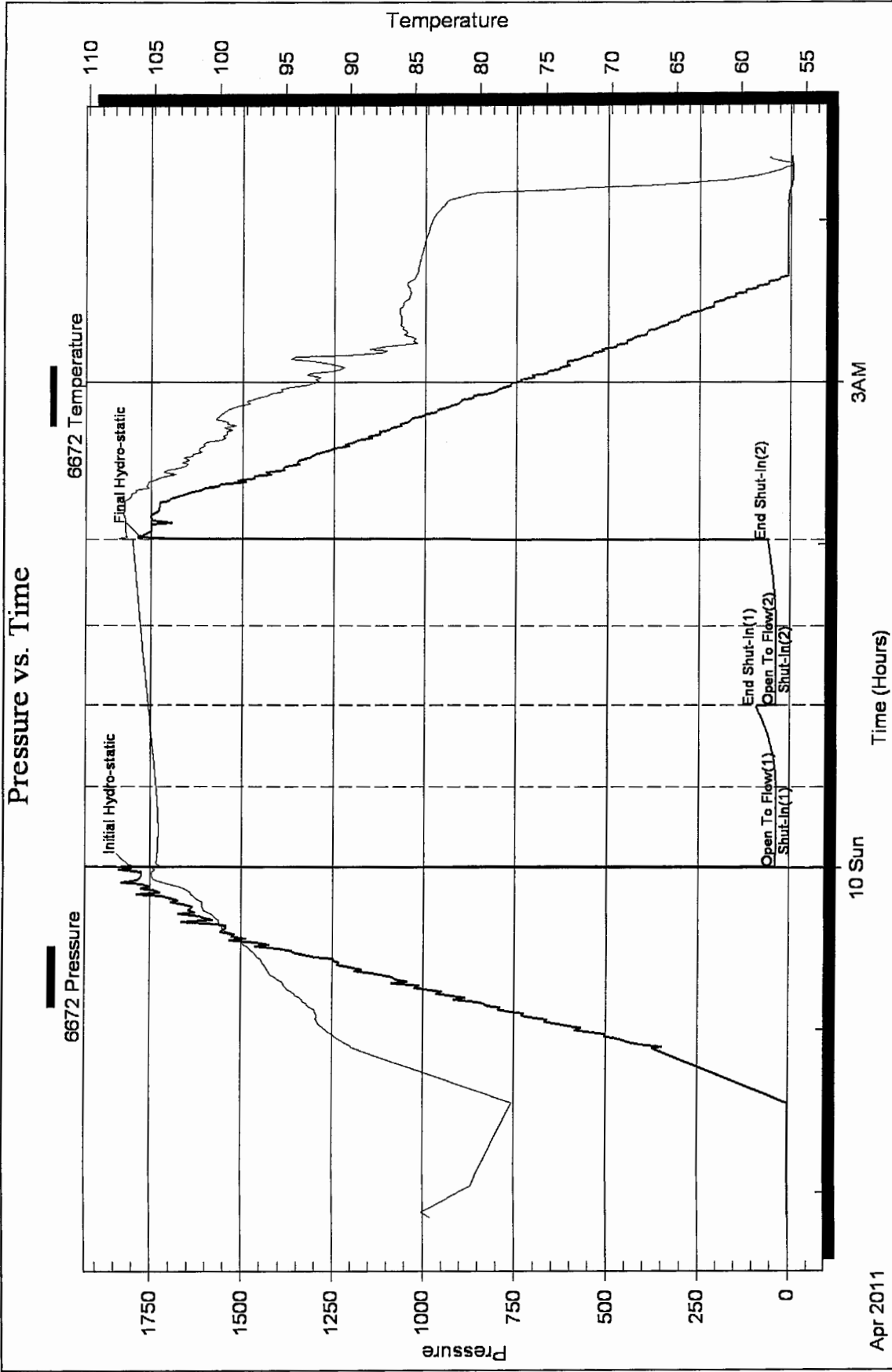
30-8s-21w Graham, KS

H&COil Operating, INC

Inside

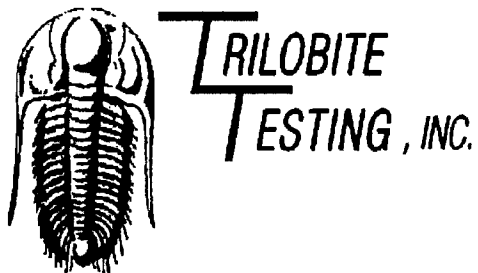
Serial #: 6672

Pressure vs. Time



Ref. No: 042608

Trilobite Testing, Inc



DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operating Inc.**

PO Box 86
Plainville, KS 67663

ATTN: Marc Downing

35-7s-23w Graham,KS

Davis Trust #35-1

Start Date: 2011.04.02 @ 09:36:00

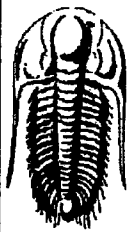
End Date: 2011.04.02 @ 16:08:30

Job Ticket #: 041981 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil Operating Inc.

PO Box 86
Plainville, KS 67663

ATTN: Marc Dow ning

Davis Trust #35-1

35-7s-23w Graham,KS

Job Ticket: 041981

DST#: 2

Test Start: 2011.04.02 @ 09:36:00

GENERAL INFORMATION:

Formation: LKC "J"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:01:30

Time Test Ended: 16:08:30

Test Type: Conventional Bottom Hole

Tester: James Winder

Unit No: 46

Interval: 3675.00 ft (KB) To 3715.00 ft (KB) (TVD)

Total Depth: 3715.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2270.00 ft (KB)

2263.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8366

Inside

Press@RunDepth: 27.30 psig @ 3676.00 ft (KB)

Start Date: 2011.04.02

End Date:

2011.04.02

Start Time: 09:36:05

End Time:

16:08:29

Capacity: 8000.00 psig

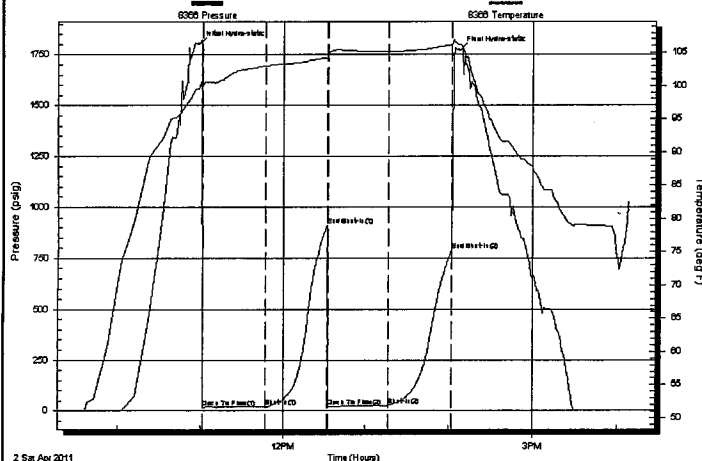
Last Calib.: 2011.04.02

Time On Btm: 2011.04.02 @ 10:58:30

Time Off Btm: 2011.04.02 @ 14:07:30

TEST COMMENT: IF: Blow built to 3"
IS: Bled off, No blow back
FF: 1" Blow at open, built to 4"
FS: Bled off, No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1801.39	99.56	Initial Hydro-static
3	16.43	100.02	Open To Flow (1)
49	21.82	102.99	Shut-In(1)
94	909.29	104.22	End Shut-In(1)
94	21.03	104.52	Open To Flow (2)
138	27.30	105.18	Shut-In(2)
184	787.12	106.12	End Shut-In(2)
189	1772.68	106.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
32.00	MO 58%o, 40% m, 2% g	0.45
0.00	GIP = 35'	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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H&C Oil Operating, INC

ATTN: Charles R Ramsay

30-8s-21w Graham,KS

DST#: 2

Test Start: 2011.04.11 @ 05:19:26

Formation: LKC-K

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:20:11

Time Test Ended: 12:26:41

Test Type: Conventional Straddle

Tester: Jeff Brown

Unit No: 44

Interval: 3553.00 ft (KB) To 3582.00 ft (KB) (TVD)

Total Depth: 3786.00 ft (KB) (TVD)

Hole Diameter: 7.88 inchesHole Condition: Fair

Reference Elevations: 2158.00 ft (KB)

2150.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8679 Below (Straddle)

Press@RunDepth: psig @ 3592.00 ft (KB)

Start Date: 2011.04.11

End Date:

2011.04.11

Capacity: 8000.00 psig

Last Calib.: 2011.04.11

Start Time: 05:19:38

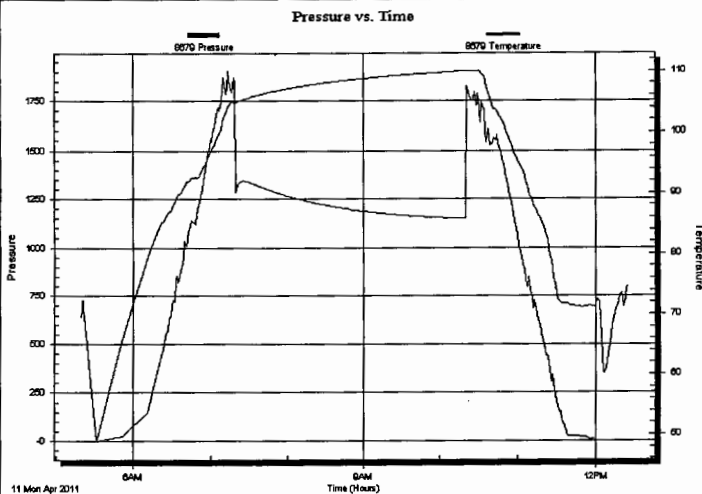
End Time:

12:25:37

Time On Btm:

Time Off Btm:

TEST COMMENT: IFF-Fair blow built to 4 1/4 in .
ISI-Dead no blow back
FFP-Weak blow built to 1 1/4 in
FSI-Dead no blow back

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

Annotation

Length (ft)	Description	Volume (bbl)
47.00	WM w with a scum of oil	0.63
3.00	MO 5% M95% O	0.04

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

Pressure (psig)	
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Gas Rate (Mcf/d)



**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating, INC

Gosselin #30-1

PO Box 86
Plainville, KS 67663+0086

30-8s-21w Graham, KS

Job Ticket: 042609

DST#: 2

ATTN: Charles R Ramsay

Test Start: 2011.04.11 @ 05:19:26

Tool Information

Drill Pipe:	Length: 3552.00 ft	Diameter: 3.70 inches	Volume: 47.24 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 44000.00 lb
			Total Volume: 47.24 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3553.00 ft			Final 39000.00 lb
Depth to Bottom Packer:	3582.00 ft			
Interval between Packers:	29.00 ft			
Tool Length:	253.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3534.00	
Shut In Tool	5.00			3539.00	
Hydraulic tool	5.00			3544.00	
Packer	4.00			3548.00	20.00 Bottom Of Top Packer
Packer	5.00			3553.00	
Stubb	1.00			3554.00	
Perforations	4.00			3558.00	
Recorder	0.00	6672	Inside	3558.00	
Recorder	0.00	8321	Outside	3558.00	
Perforations	20.00			3578.00	
Blank Off Sub	1.00			3579.00	
Stubb	3.00			3582.00	29.00 Tool Interval
Packer	1.00			3583.00	
Stubb	1.00			3584.00	
Perforations	8.00			3592.00	
Recorder	0.00	8679	Below	3592.00	
Change Over Sub	1.00			3593.00	
Drill Pipe	189.00			3782.00	
Change Over Sub	1.00			3783.00	
Bullnose	3.00			3786.00	204.00 Bottom Packers & Anchor
Total Tool Length:		253.00			



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating, INC

Gosselin #30-1

PO Box 86
Plainville, KS 67663-0086

30-8s-21w Graham, KS

Job Ticket: 042609

DST#: 2

ATTN: Charles R Ramsay

Test Start: 2011.04.11 @ 05:19:26

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 10.00 lb/gal

Viscosity: 59.00 sec/qt

Water Loss: 9.58 in³

Resistivity: ohm.m

Salinity: 7300.00 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: 13000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
47.00	WM with a scum of oil	0.625
3.00	MO 5% M95% O	0.040

Total Length: 50.00 ft Total Volume: 0.665 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6672

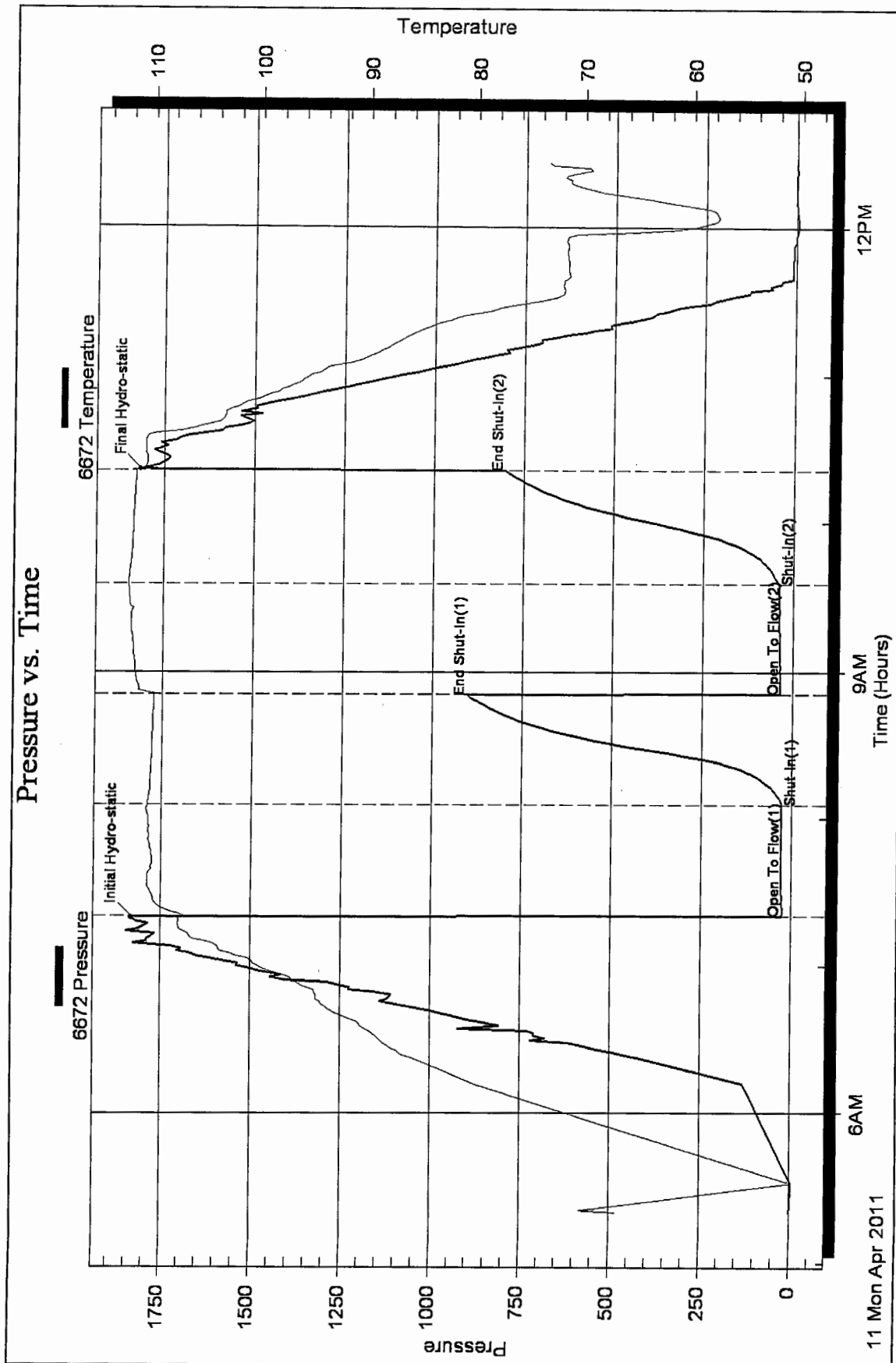
Inside

H&COil Operating, INC

30-8s-21w Graham,KS

DST Test Number: 2

Pressure vs. Time



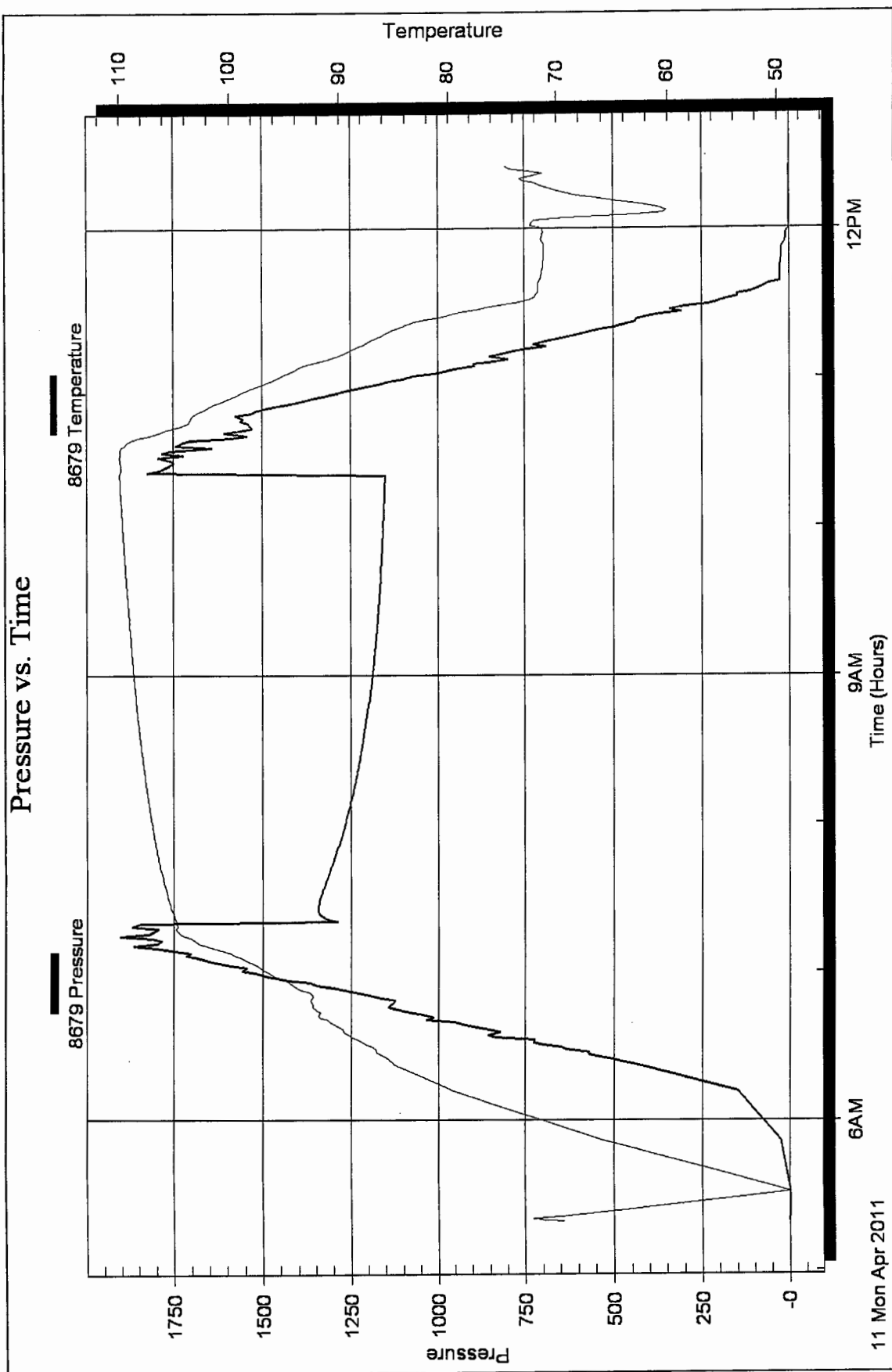
DST Test Number: 2

30-8s-21w Graham,KS

Below (Stratified) Oil Operating, INC

Serial #: 8679

Pressure vs. Time



Ref. No: 042609

Trilobite Testing, Inc

Printed: 2011.04.19 @ 11:00:49 Page 7