

15-065-23309

11-9s-22w

IND



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

PO Box 352
Russell KS 67665

ATTN: Tony Richardson

11 9S 22W Graham KS

Van Loenen #1

Start Date: 2007.06.11 @ 04:44:23

End Date: 2007.06.11 @ 09:59:38

Job Ticket #: 28645 DST #: 1

KCC
AUG 03 2007
CONFIDENTIAL

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

John O Farmer

Van Loenen #1

11 9S 22W Graham KS

DST # 1

LKC-"C"

2007.06.11



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O Farmer

Van Loenen #1

PO Box 352
Russell KS 67665

11 9S 22W Graham KS

Job Ticket: 28645

DST#: 1

ATTN: Tony Richardson

Test Start: 2007.06.11 @ 04:44:23

GENERAL INFORMATION:

Formation: **LKC-"C"**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 06:21:23

Time Test Ended: 09:59:38

Test Type: **Conventional Bottom Hole**

Tester: **Jason McLemore**

Unit No: **32**

Interval: **3524.00 ft (KB) To 3550.00 ft (KB) (TVD)**

Total Depth: **3550.00 ft (KB) (TVD)**

Hole Diameter: **7.80 inches** Hole Condition: **Good**

Reference Elevations: **2260.00 ft (KB)**

2255.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 6719

Inside

Press@RunDepth: **33.45 psig @ 3527.00 ft (KB)**

Start Date: **2007.06.11**

End Date: **2007.06.11**

Start Time: **04:44:25**

End Time: **09:59:38**

Capacity: **7000.00 psig**

Last Calib.: **2007.06.11**

Time On Btm: **2007.06.11 @ 06:21:08**

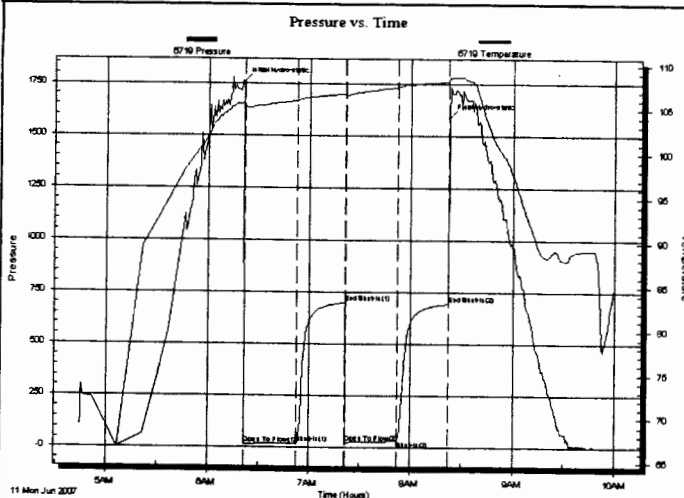
Time Off Btm: **2007.06.11 @ 08:22:53**

TEST COMMENT: **IFP Weak Blow Built to 1-1/4 "**

ISI Dead

FFP Dead

FSI Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1755.40	105.66	Initial Hydro-static
1	13.68	105.32	Open To Flow (1)
32	21.46	106.05	Shut-In(1)
60	699.10	106.78	End Shut-In(1)
61	26.76	106.63	Open To Flow (2)
92	33.45	107.57	Shut-In(2)
122	693.91	108.19	End Shut-In(2)
122	1585.24	108.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud W/Oil Spots In Tool	0.10

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer

Van Loenen #1

PO Box 352
Russell KS 67665

11 9S 22W Graham KS

Job Ticket: 28645

DST#: 1

ATTN: Tony Richardson

Test Start: 2007.06.11 @ 04:44:23

Tool Information

Drill Pipe:	Length: 3415.00 ft	Diameter: 3.80 inches	Volume: 47.90 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:	25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	55000.00 lb
			<u>Total Volume: 48.50 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	34.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3524.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	26.00 ft				
Tool Length:	47.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3504.00	
Shut In Tool	5.00			3509.00	
Hydraulic tool	5.00			3514.00	
Packer	5.00			3519.00	21.00 Bottom Of Top Packer
Packer	5.00			3524.00	
Stubb	1.00			3525.00	
Perforations	2.00			3527.00	
Recorder	0.00	6719	Inside	3527.00	
Perforations	20.00			3547.00	
Recorder	0.00	13221	Outside	3547.00	
Bullnose	3.00			3550.00	26.00 Bottom Packers & Anchor

Total Tool Length: 47.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

Van Loenen #1

PO Box 352
Russell KS 67665

11 9S 22W Graham KS

Job Ticket: 28645

DST#: 1

ATTN: Tony Richardson

Test Start: 2007.06.11 @ 04:44:23

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 59.00 sec/qt

Water Loss: 6.79 in³

Resistivity: ohm.m

Salinity: 2500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud W/Oil Spots In Tool	0.098

Total Length: 20.00 ft

Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

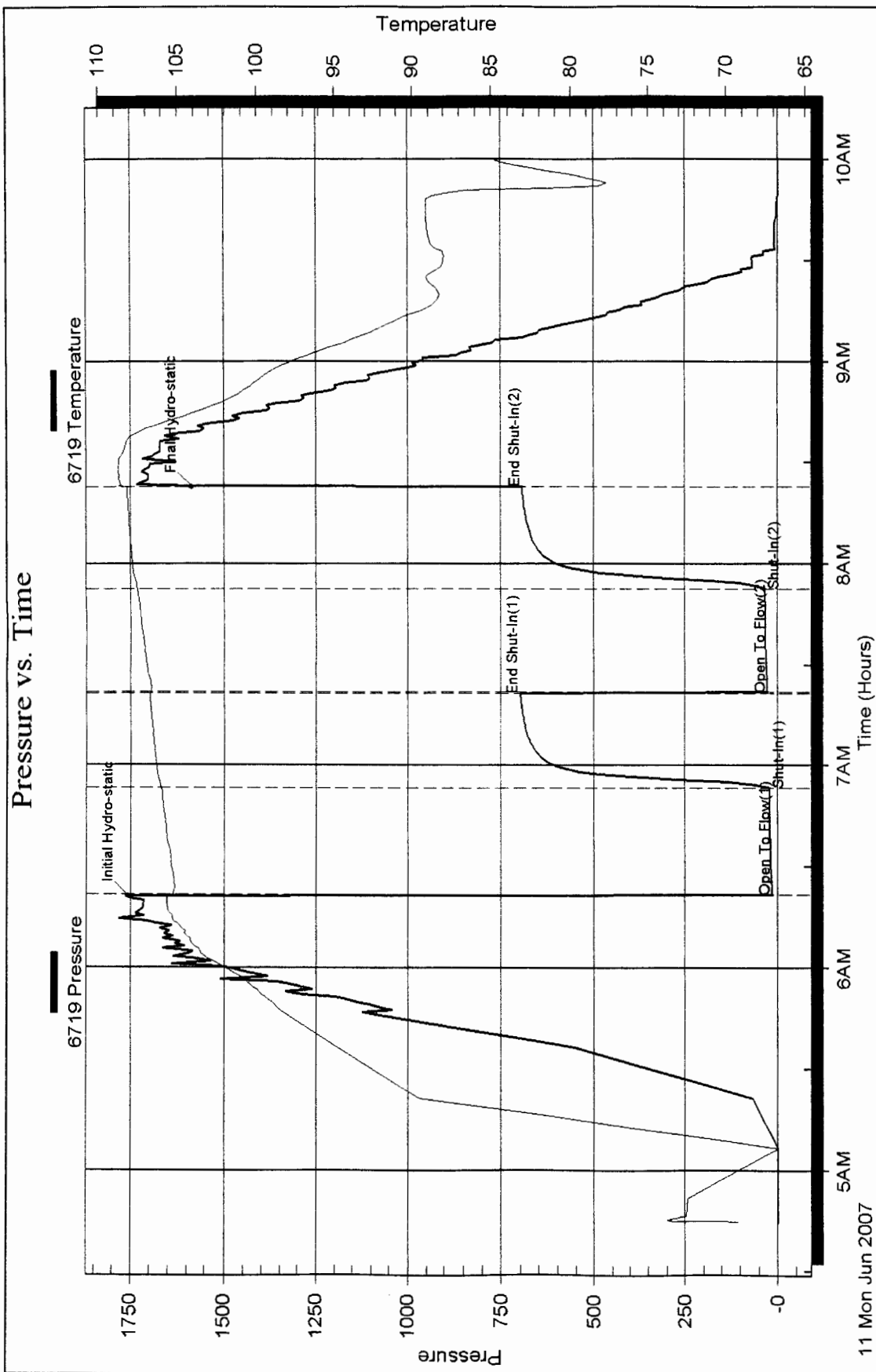
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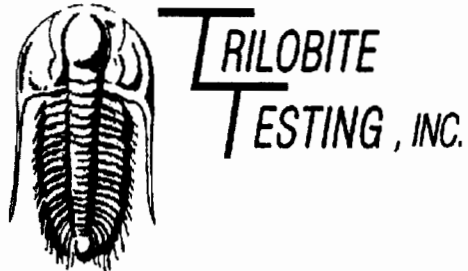
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

PO Box 352
Russell KS 67665

ATTN: Tony Richardson

11 9S 22W Graham KS

Van Loenen #1

Start Date: 2007.06.11 @ 19:20:01

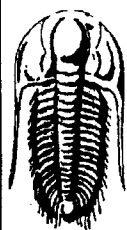
End Date: 2007.06.12 @ 00:32:01

Job Ticket #: 28646 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



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TESTING, INC.**

DRILL STEM TEST REPORT

John O Farmer

PO Box 352
Russell KS 67665

ATTN: Tony Richardson

Van Loenen #1

11 9S 22W Graham KS

Job Ticket: 28646

DST#: 2

Test Start: 2007.06.11 @ 19:20:01

GENERAL INFORMATION:

Formation: **LKC-"E-F-G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:57:16

Time Test Ended: 00:32:01

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **3567.00 ft (KB) To 3627.00 ft (KB) (TVD)**

Total Depth: 3627.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2260.00 ft (KB)

2255.00 ft (CF)

KB to GRV/CF: 5.00 ft

Serial #: 6719 Inside

Press@RunDepth: 80.17 psig @ 3570.00 ft (KB)

Start Date: 2007.06.11

End Date: 2007.06.12

Start Time: 19:20:03

End Time: 00:32:01

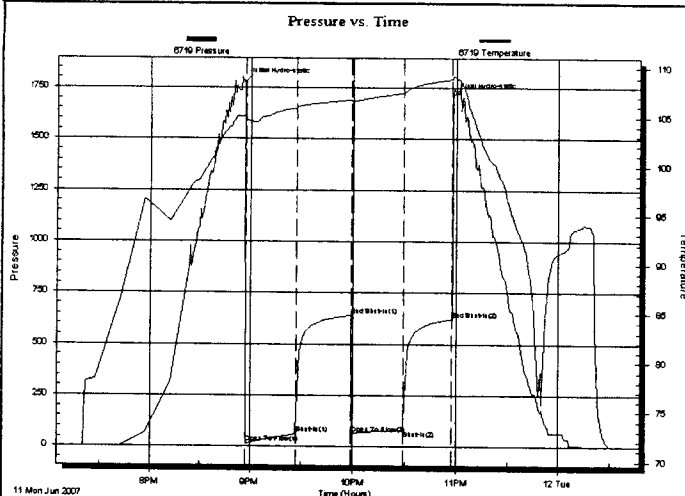
Capacity: 7000.00 psig

Last Calib.: 2007.06.12

Time On Btm: 2007.06.11 @ 20:57:01

Time Off Btm: 2007.06.11 @ 22:57:46

TEST COMMENT: IFP Weak Blow Built to 3 "
ISI Dead
FFP Weak Blow Built to 1-1/2 "
FSI Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1778.13	105.09	Initial Hydro-static
1	14.98	104.52	Open To Flow (1)
30	62.01	105.87	Shut-In(1)
62	639.77	106.75	End Shut-In(1)
62	64.02	106.52	Open To Flow (2)
92	80.17	107.44	Shut-In(2)
121	622.00	108.85	End Shut-In(2)
121	1708.82	109.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
130.00	Mud W/Oil Show	0.71

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer

Van Loenen #1

PO Box 352
Russell KS 67665

11 9S 22W Graham KS

Job Ticket: 28646

DST#: 2

ATTN: Tony Richardson

Test Start: 2007.06.11 @ 19:20:01

Tool Information

Drill Pipe:	Length: 3445.00 ft	Diameter: 3.80 inches	Volume: 48.32 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: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 55000.00 lb
		Total Volume: 48.92 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3567.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	79.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3547.00	
Shut In Tool	5.00			3552.00	
Hydraulic tool	5.00			3557.00	
Packer	5.00			3562.00	21.00 Bottom Of Top Packer
Packer	5.00			3567.00	
Stubb	1.00			3568.00	
Perforations	1.00			3569.00	
Change Over Sub	1.00			3570.00	
Recorder	0.00	6719	Inside	3570.00	
Blank Spacing	31.00			3601.00	
Change Over Sub	1.00			3602.00	
Perforations	20.00			3622.00	
Recorder	0.00	13221	Outside	3622.00	
Bullnose	3.00			3625.00	58.00 Bottom Packers & Anchor

Total Tool Length: 79.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

Van Loenen #1

PO Box 352
Russell KS 67665

11 9S 22W Graham KS

Job Ticket: 28646

DST#: 2

ATTN: Tony Richardson

Test Start: 2007.06.11 @ 19:20:01

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: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
130.00	Mud W/Oil Show	0.712

Total Length: 130.00 ft

Total Volume: 0.712 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6719

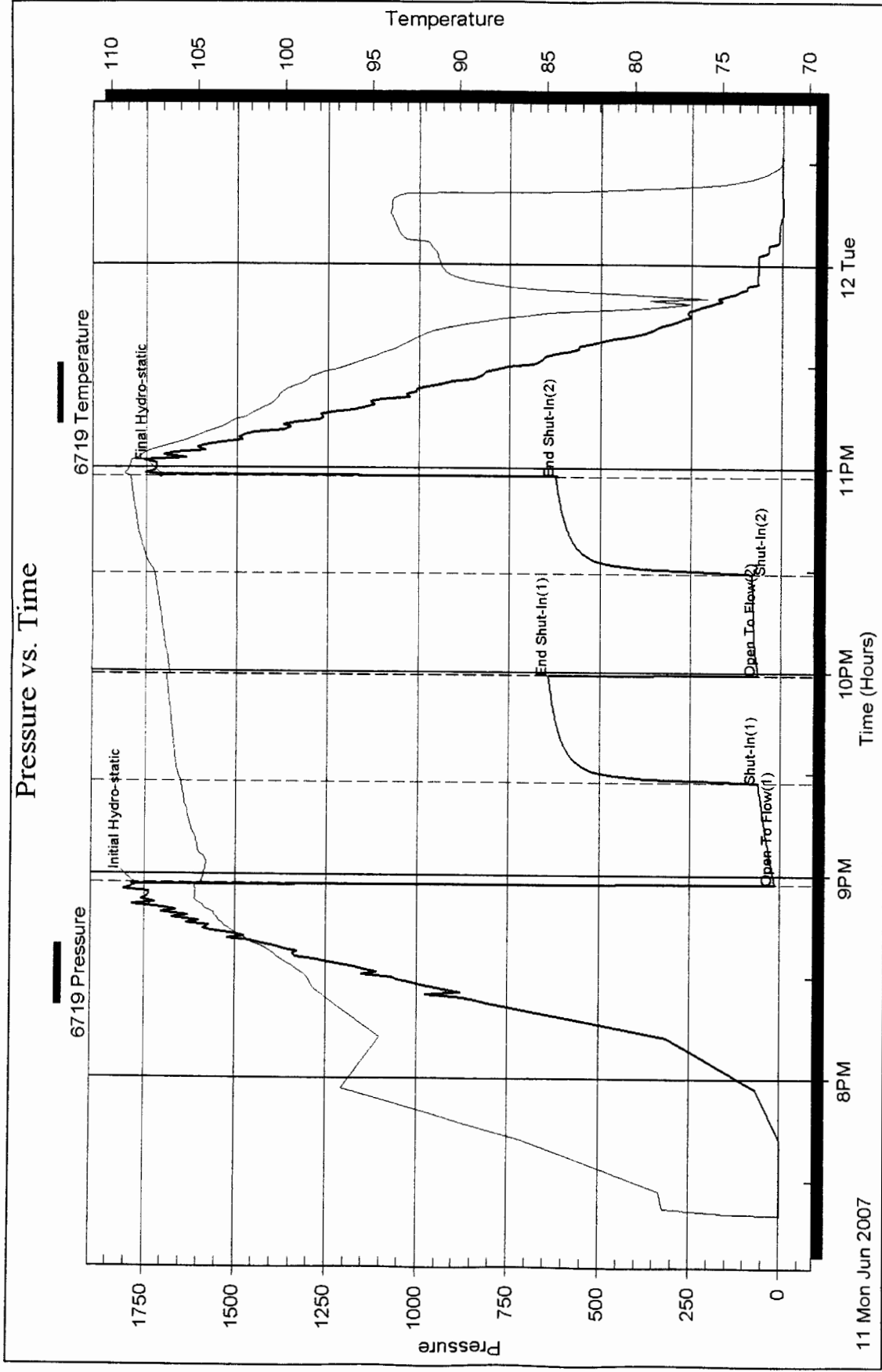
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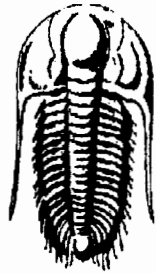
John O Farmer

11 9S 22W Graham KS

DST Test Number: 2

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

PO Box 352
Russell KS 67665

ATTN: Tony Richardson

11 9S 22W Graham KS

Van Loenen #1

Start Date: 2007.06.13 @ 05:12:09

End Date: 2007.06.13 @ 11:31:09

Job Ticket #: 28647 DST #: 3

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

John O Farmer

PO Box 352
Russell KS 67665

ATTN: Tony Richardson

Van Loenen #1

11 9S 22W Graham KS

Job Ticket: 28647

DST#: 3

Test Start: 2007.06.13 @ 05:12:09

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:00:09

Time Test Ended: 11:31:09

Test Type: Conventional Straddle

Tester: Jason McLemore

Unit No: 32

Interval: 3842.00 ft (KB) To 3873.00 ft (KB) (TVD)

Total Depth: 3918.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2260.00 ft (KB)

2255.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6719

Inside

Press@RunDepth: 429.46 psig @ 3844.00 ft (KB)

Start Date: 2007.06.13

End Date:

2007.06.13

Start Time: 05:12:11

End Time:

11:31:09

Capacity: 7000.00 psig

Last Calib.: 2007.06.13

Time On Btm: 2007.06.13 @ 06:59:24

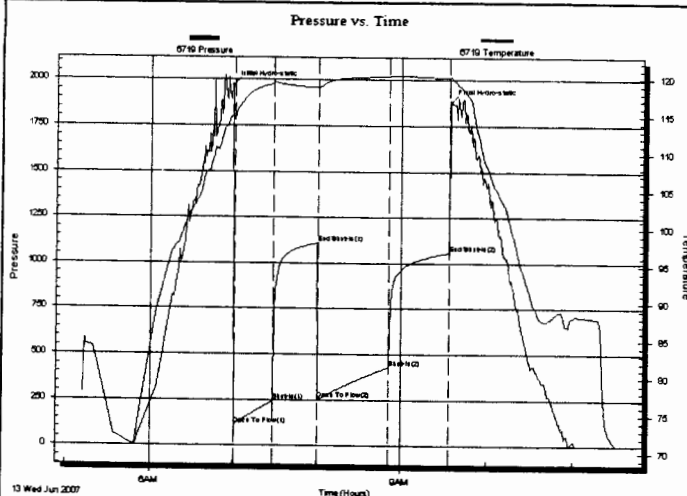
Time Off Btm: 2007.06.13 @ 09:34:24

TEST COMMENT: IFP Good Blow BOB in 7 Mn

ISI Dead

FFP Good Blow BOB in 10 Mn

FSI Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1971.24	115.04	Initial Hydro-static
1	113.88	114.58	Open To Flow (1)
30	244.73	119.29	Shut-In(1)
61	1109.60	118.82	End Shut-In(1)
62	251.96	118.67	Open To Flow (2)
113	429.46	120.26	Shut-In(2)
155	1056.53	120.05	End Shut-In(2)
155	1878.17	120.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
900.00	MV	11.51

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer

Van Loenen #1

PO Box 352
Russell KS 67665

11 9S 22W Graham KS

Job Ticket: 28647

DST#: 3

ATTN: Tony Richardson

Test Start: 2007.06.13 @ 05:12:09

Tool Information

Drill Pipe:	Length: 3728.00 ft	Diameter: 3.80 inches	Volume: 52.29 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:	25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	68000.00 lb
		Total Volume:	52.89 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	3842.00 ft			Final	59000.00 lb
Depth to Bottom Packer:	3873.00 ft				
Interval between Packers:	31.00 ft				
Tool Length:	97.00 ft				
Number of Packers:	3	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3822.00	
Shut In Tool	5.00			3827.00	
Hydraulic tool	5.00			3832.00	
Packer	5.00			3837.00	21.00 Bottom Of Top Packer
Packer	5.00			3842.00	
Stubb	1.00			3843.00	
Perforations	1.00			3844.00	
Recorder	0.00	6719	Inside	3844.00	
Perforations	25.00			3869.00	
Blank Off Sub	1.00			3870.00	
Blank Spacing	3.00			3873.00	31.00 Tool Interval
Packer	1.00			3874.00	
Stubb	1.00			3875.00	
Perforations	4.00			3879.00	
Change Over Sub	1.00			3880.00	
Recorder	0.00	13221	Below	3880.00	
Blank Spacing	31.00			3911.00	
Change Over Sub	1.00			3912.00	
Perforations	3.00			3915.00	
Bullnose	3.00			3918.00	45.00 Bottom Packers & Anchor

Total Tool Length: 97.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

Van Loenen #1

PO Box 352
Russell KS 67665

11 9S 22W Graham KS

Job Ticket: 28647

DST#: 3

ATTN: Tony Richardson

Test Start: 2007.06.13 @ 05:12:09

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:

21000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.38 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
900.00	MV	11.513

Total Length: 900.00 ft

Total Volume: 11.513 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6719

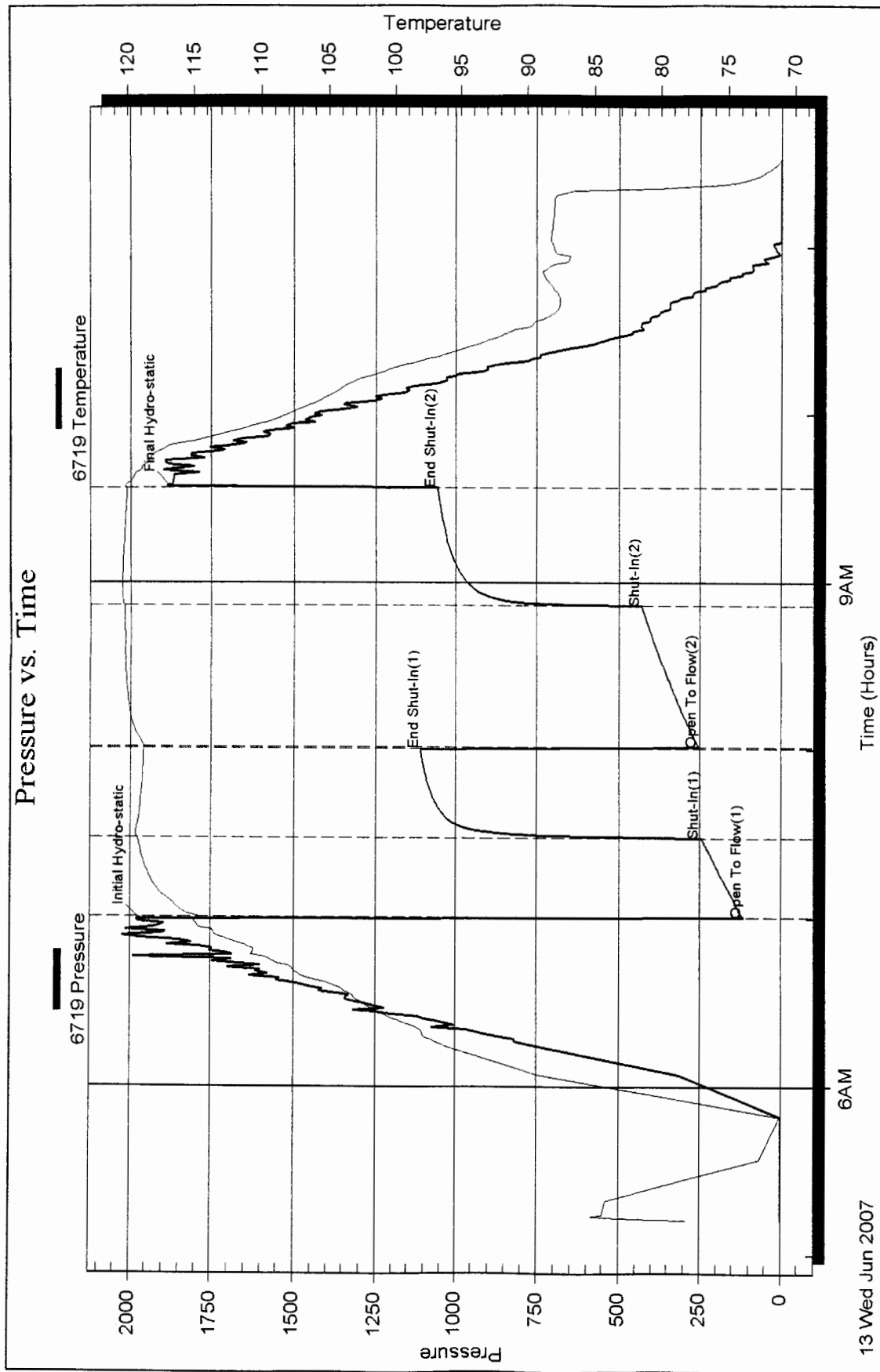
Inside

John O Farmer

11 9S 22W Graham KS

DST Test Number: 3

Pressure vs. Time



Ref. No: 28647

Trilobite Testing, Inc

Printed: 2007.06.14 @ 09:51:24 Page 5