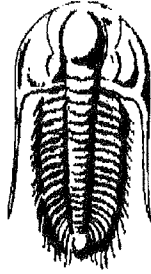


15-065-23477

27-95-22w

IND



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **John O'Farmer**

P.O Box 352  
Russell, KS 67665

ATTN: Steve Murphy

**27 9 22 Graham KS**

**Farrell 'C' #1**

Start Date: 2008.09.28 @ 11:27:16

End Date: 2008.09.28 @ 16:55:46

Job Ticket #: 33689                      DST #: 1

John O'Farmer

Farrell 'C' #1

27 9 22 Graham KS

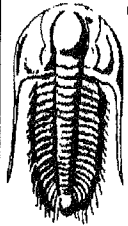
DST # 1

Topeka

2008.09.28

**KCC  
JAN 20 2009  
CONFIDENTIAL**

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

John O'Farmer

**Farrell 'C' #1**

P.O Box 352  
Russell, KS 67665

**27 9 22 Graham KS**

Job Ticket: 33689

**DST#: 1**

ATTN: Steve Murphy

Test Start: 2008.09.28 @ 11:27:16

## GENERAL INFORMATION:

Formation: **Topeka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:59:16

Time Test Ended: 16:55:46

Test Type: Conventional Bottom Hole

Tester: Brett Dickinson

Unit No: #38

Interval: **3525.00 ft (KB) To 3540.00 ft (KB) (TVD)**

Total Depth: 3540.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 2375.00 ft (KB)

2370.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8372** Inside

Press@RunDepth: 431.20 psig @ 3537.00 ft (KB)

Start Date: 2008.09.28

End Date: 2008.09.28

Start Time: 11:27:17

End Time: 16:55:46

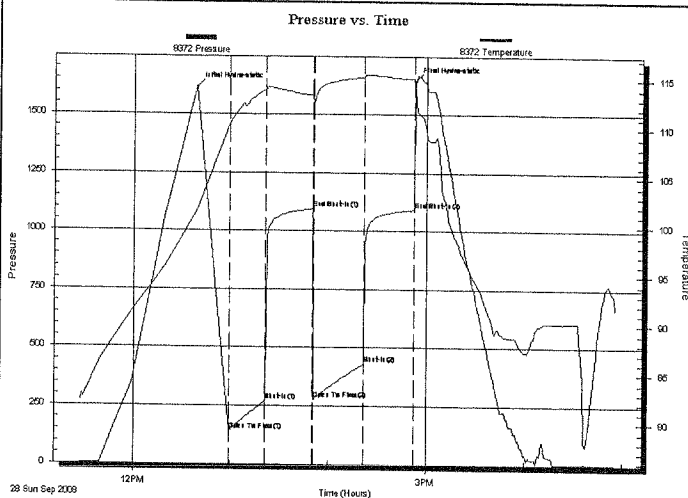
Capacity: 7000.00 psig

Last Calib.: 2008.09.28

Time On Btm: 2008.09.28 @ 12:39:16

Time Off Btm: 2008.09.28 @ 14:52:46

TEST COMMENT: IF-BOB in 6min  
ISI-Weak surface blow died in 10min  
FF-BOB in 8min  
FSI-Weak surface blow died in 8min



## PRESSURE SUMMARY

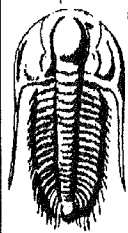
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1613.03	101.63	Initial Hydro-static
20	141.88	110.53	Open To Flow (1)
42	269.63	113.94	Shut-In(1)
71	1093.64	113.42	End Shut-In(1)
72	277.85	112.81	Open To Flow (2)
103	431.20	115.28	Shut-In(2)
133	1090.55	115.11	End Shut-In(2)
134	1642.98	114.21	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
780.00	MCW 20%M 80%W	9.85
60.00	MCW30%M 70%W	0.84
40.00	Oil Scum WCM 70%M 30%W	0.56

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

John O'Farmer

**Farrell 'C' #1**

P.O Box 352  
Russell, KS 67665

**27 9 22 Graham KS**

Job Ticket: 33689

**DST#: 1**

ATTN: Steve Murphy

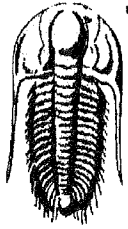
Test Start: 2008.09.28 @ 11:27:16

**Tool Information**

Drill Pipe:	Length: 3386.00 ft	Diameter: 3.80 inches	Volume: 47.50 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 61000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3525.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	42.00 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			3499.00	
Shut In Tool	5.00			3504.00	
Hydraulic tool	5.00			3509.00	
Jars	4.00			3513.00	
Safety Joint	3.00			3516.00	
Packer	4.00			3520.00	27.00 Bottom Of Top Packer
Packer	5.00			3525.00	
Stubb	1.00			3526.00	
Perforations	11.00			3537.00	
Recorder	0.00	8372	Inside	3537.00	
Recorder	0.00	8368	Outside	3537.00	
Bullnose	3.00			3540.00	15.00 Bottom Packers & Anchor

**Total Tool Length: 42.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

John O'Farmer

**Farrell 'C' #1**

P.O Box 352  
Russell, KS 67665

**27 9 22 Graham KS**

Job Ticket: 33689

**DST#: 1**

ATTN: Steve Murphy

Test Start: 2008.09.28 @ 11:27:16

## 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:

88000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
780.00	MCW 20%M 80%W	9.848
60.00	MCW30%M 70%W	0.842
40.00	Oil Scum WCM 70%M 30%W	0.561

Total Length: 880.00 ft

Total Volume: 11.251 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

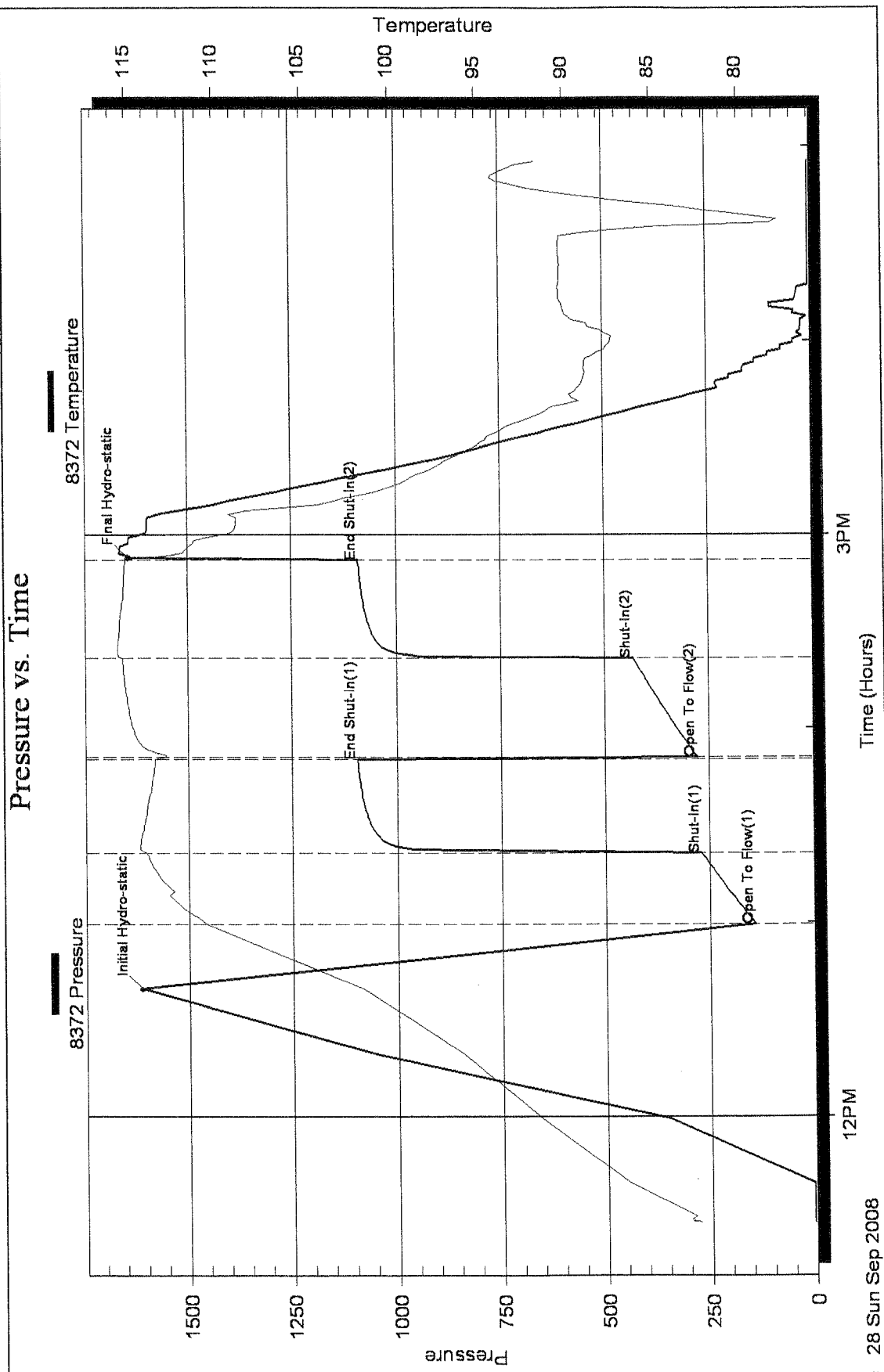
Serial #:

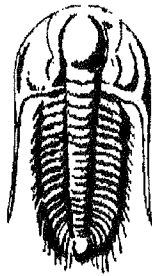
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **John O'Farmer**

P.O Box 352  
Russell, KS 67665

ATTN: Steve Murphy

**27 9 22 Graham KS**

**Farrell 'C' #1**

Start Date: 2008.09.29 @ 04:15:09

End Date: 2008.09.29 @ 11:22:09

Job Ticket #: 33690                      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

John O'Farmer

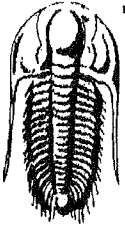
Farrell 'C' #1

27 9 22 Graham KS

DST # 2

LKC "C"

2008.09.29



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

John O'Farmer

**Farrell 'C' #1**

P.O Box 352  
Russell, KS 67665

**27 9 22 Graham KS**

Job Ticket: 33690

**DST#: 2**

ATTN: Steve Murphy

Test Start: 2008.09.29 @ 04:15:09

## GENERAL INFORMATION:

Formation: **LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:13:09

Time Test Ended: 11:22:09

Test Type: Conventional Bottom Hole

Tester: Brett Dickinson

Unit No: #38

Interval: **3620.00 ft (KB) To 3646.00 ft (KB) (TVD)**

Total Depth: 3646.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 2375.00 ft (KB)

2370.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8372**

**Inside**

Press@RunDepth: 447.02 psig @ 3643.00 ft (KB)

Start Date: 2008.09.29

End Date:

2008.09.29

Capacity: 7000.00 psig

Last Calib.: 2008.09.29

Start Time: 04:15:10

End Time:

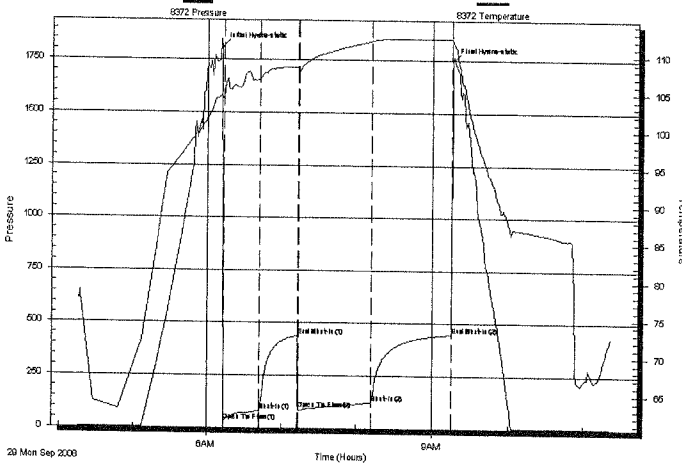
11:22:09

Time On Btm: 2008.09.29 @ 06:12:09

Time Off Btm: 2008.09.29 @ 09:15:09

**TEST COMMENT:** IF- BOB in 17min  
IS- Surface blow built to .25in died back to a weak surface blow  
FF- BOB in 23min  
FSI- Surface blow built to 1in died back to .75in

Pressure vs. Time



## PRESSURE SUMMARY

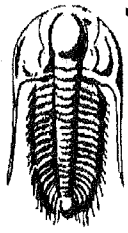
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1809.58	104.68	Initial Hydro-static
1	29.56	104.22	Open To Flow (1)
30	81.58	106.85	Shut-In (1)
61	439.62	108.51	End Shut-In (1)
62	89.15	107.91	Open To Flow (2)
120	123.46	111.95	Shut-In (2)
182	447.02	112.29	End Shut-In (2)
183	1747.51	112.03	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	OCMW 50%M 30%W 20%O	0.59
110.00	MCO60%O 35%M 5%G	1.54
20.00	Oil 95%O 5%G	0.28

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

John O'Farmer

**Farrell 'C' #1**

P.O Box 352  
Russell, KS 67665

**27 9 22 Graham KS**

Job Ticket: 33690

**DST#: 2**

ATTN: Steve Murphy

Test Start: 2008.09.29 @ 04:15:09

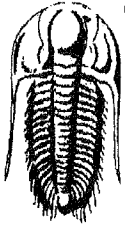
## Tool Information

Drill Pipe:	Length: 3479.00 ft	Diameter: 3.80 inches	Volume: 48.80 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3620.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	53.00 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			3594.00	
Shut In Tool	5.00			3599.00	
Hydraulic tool	5.00			3604.00	
Jars	4.00			3608.00	
Safety Joint	3.00			3611.00	
Packer	4.00			3615.00	27.00 Bottom Of Top Packer
Packer	5.00			3620.00	
Stubb	1.00			3621.00	
Perforations	22.00			3643.00	
Recorder	0.00	8372	Inside	3643.00	
Recorder	0.00	8368	Outside	3643.00	
Bullnose	3.00			3646.00	26.00 Bottom Packers & Anchor

**Total Tool Length: 53.00**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

John O'Farmer

**Farrell 'C' #1**

P.O Box 352  
Russell, KS 67665

**27 9 22 Graham KS**

Job Ticket: 33690

**DST#: 2**

ATTN: Steve Murphy

Test Start: 2008.09.29 @ 04:15:09

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

35000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.77 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
120.00	OCMW 50%M 30%W 20%O	0.590
110.00	MCO60%O 35%M 5%G	1.543
20.00	Oil 95%O 5%G	0.281

Total Length: 250.00 ft

Total Volume: 2.414 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8372

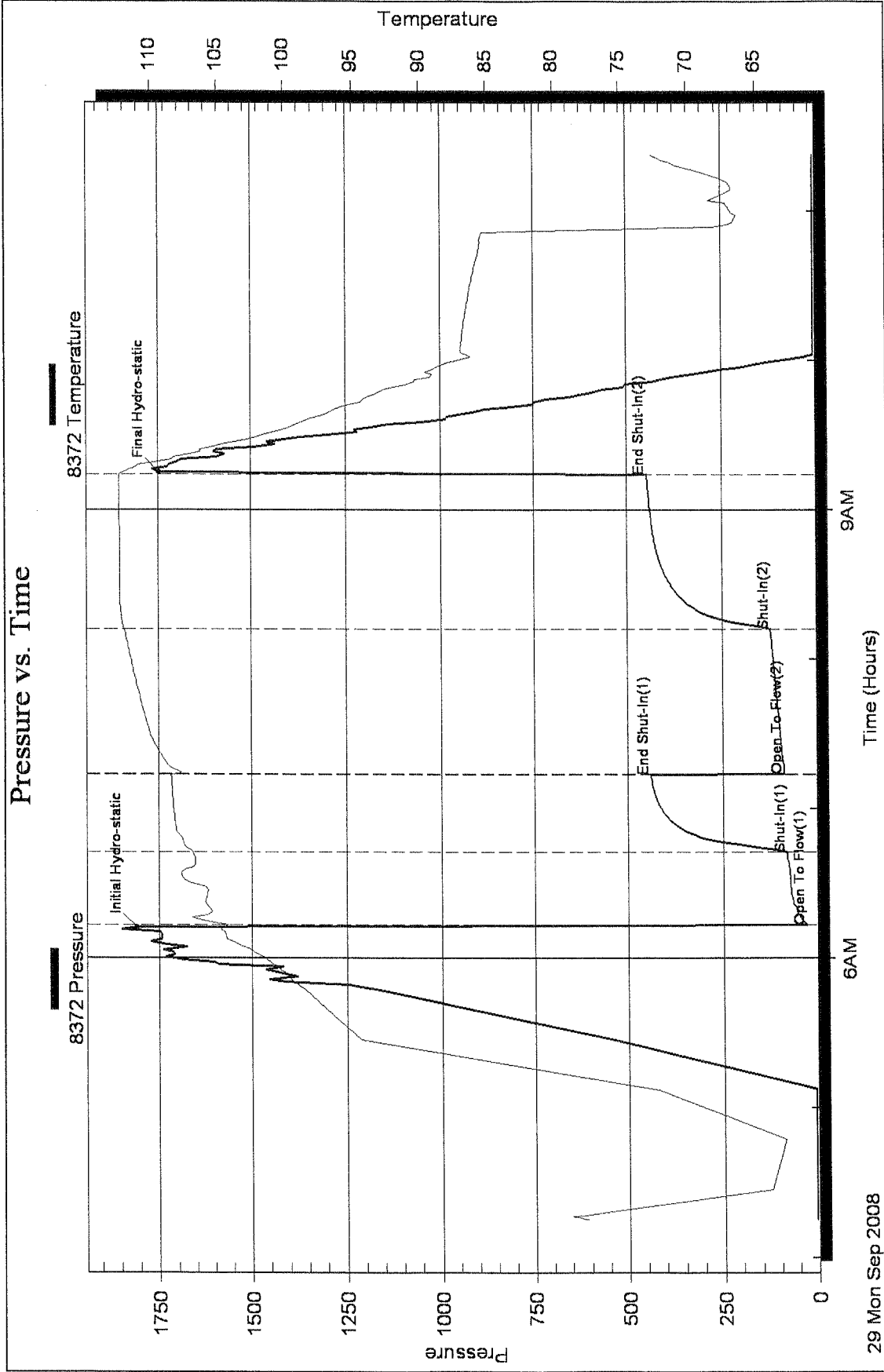
Inside

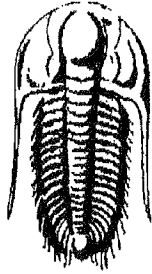
John O'Farmer

27 9 22 Graham KS

DST Test Number: 2

### Pressure vs. Time





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **John O'Farmer**

P.O Box 352  
Russell, KS 67665

ATTN: Steve Murphy

**27 9 22 Graham KS**

**Farrell 'C' #1**

Start Date: 2008.09.29 @ 18:43:27

End Date: 2008.09.30 @ 01:46:27

Job Ticket #: 33691                      DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

John O'Farmer

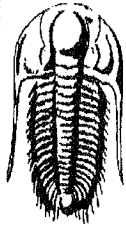
Farrell 'C' #1

27 9 22 Graham KS

DST # 3

LKC "D,E,F"

2008.09.29



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

John O'Farmer

**Farrell 'C' #1**

P.O Box 352  
Russell, KS 67665

**27 9 22 Graham KS**

Job Ticket: 33691

**DST#: 3**

ATTN: Steve Murphy

Test Start: 2008.09.29 @ 18:43:27

## GENERAL INFORMATION:

Formation: **LKC "D,E,F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:39:27

Time Test Ended: 01:46:27

Test Type: Conventional Bottom Hole

Tester: Brett Dickinson

Unit No: #38

Interval: **3654.00 ft (KB) To 3690.00 ft (KB) (TVD)**

Reference Elevations: 2375.00 ft (KB)

Total Depth: 3690.00 ft (KB) (TVD)

2370.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 5.00 ft

**Serial #: 8372**

**Inside**

Press@RunDepth: 217.11 psig @ 3687.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2008.09.29

End Date:

2008.09.30

Last Calib.: 2008.09.30

Start Time: 18:43:28

End Time:

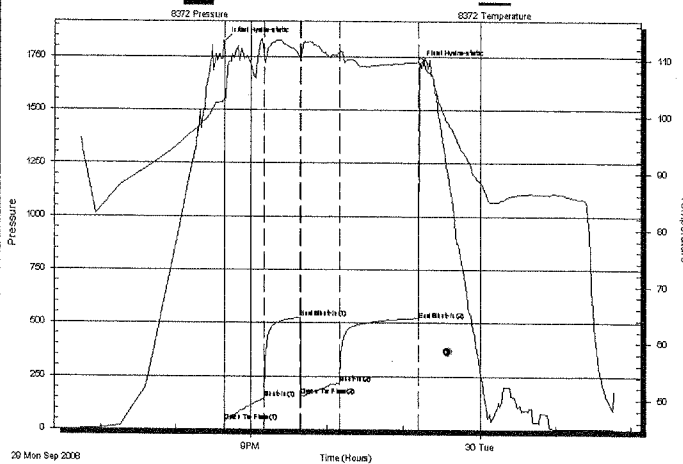
01:46:27

Time On Btm: 2008.09.29 @ 20:38:57

Time Off Btm: 2008.09.29 @ 23:12:27

TEST COMMENT: IF- BOB in 3min  
IS- BOB in 9min  
FF- BOB in 7min  
FSI- 9in blow

Pressure vs. Time



PRESSURE SUMMARY

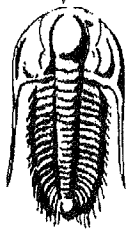
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1820.70	103.07	Initial Hydro-static
1	36.82	102.23	Open To Flow (1)
32	143.74	110.92	Shut-In (1)
60	525.35	110.65	End Shut-In (1)
61	157.34	111.00	Open To Flow (2)
91	217.11	111.05	Shut-In (2)
153	516.72	109.64	End Shut-In (2)
154	1716.73	110.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
155.00	Gasy Oil 30%G 70%O	1.08
360.00	MCGO 30%G 50%O 20%M	5.05
0.00	1200ft GIP	0.00

Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

John O'Farmer

**Farrell 'C' #1**

P.O Box 352  
Russell, KS 67665

**27 9 22 Graham KS**

Job Ticket: 33691

**DST#: 3**

ATTN: Steve Murphy

Test Start: 2008.09.29 @ 18:43:27

### Tool Information

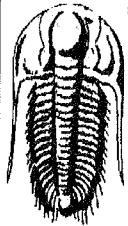
Drill Pipe:	Length: 3511.00 ft	Diameter: 3.80 inches	Volume: 49.25 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 60000.00 lb
			Total Volume: - bbl	Tool Chased ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3654.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	36.00 ft			
Tool Length:	63.00 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			3628.00	
Shut In Tool	5.00			3633.00	
Hydraulic tool	5.00			3638.00	
Jars	4.00			3642.00	
Safety Joint	3.00			3645.00	
Packer	4.00			3649.00	27.00 Bottom Of Top Packer
Packer	5.00			3654.00	
Stubb	1.00			3655.00	
Perforations	32.00			3687.00	
Recorder	0.00	8372	Inside	3687.00	
Recorder	0.00	8368	Outside	3687.00	
Bullnose	3.00			3690.00	36.00 Bottom Packers & Anchor

**Total Tool Length: 63.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

John O'Farmer

**Farrell 'C' #1**

P.O Box 352  
Russell, KS 67665

**27 9 22 Graham KS**

Job Ticket: 33691

**DST#: 3**

ATTN: Steve Murphy

Test Start: 2008.09.29 @ 18:43:27

### Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 50.00 sec/qt

Water Loss: 8.76 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 4200.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

36 deg API

Water Salinity:

ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
155.00	Gasy Oil 30%G 70%O	1.081
360.00	MCOG 30%G 50%O 20%M	5.050
0.00	1200ft GIP	0.000

Total Length: 515.00 ft

Total Volume: 6.131 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

# Pressure vs. Time

