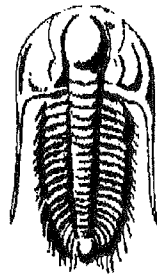


15-167-23418

18-14s-14w

K67



**TRILOBITE  
TESTING, INC.**

### DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc**

PO Box 352  
Russell KS 67665-2635

ATTN: John O Farmer IV

**18 14 14W Russell KS**

**Dietz #1**

Start Date: 2007.03.20 @ 22:15:37

End Date: 2007.03.21 @ 04:30:01

Job Ticket #: 28222                      DST #: 1

**KCC  
JUN 27 2007  
CONFIDENTIAL**

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

John O Farmer Inc

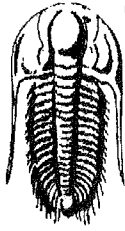
Dietz #1

18 14 14W Russell KS

DST # 1

LKC A-B

2007.03.20



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

John O Farmer Inc  
PO Box 352  
Russell KS 67665-2635  
  
ATTN: John O Farmer IV

**Dietz #1**  
**18 14 14W Russell KS**  
Job Ticket: 28222      **DST#: 1**  
Test Start: 2007.03.20 @ 22:15:37

## GENERAL INFORMATION:

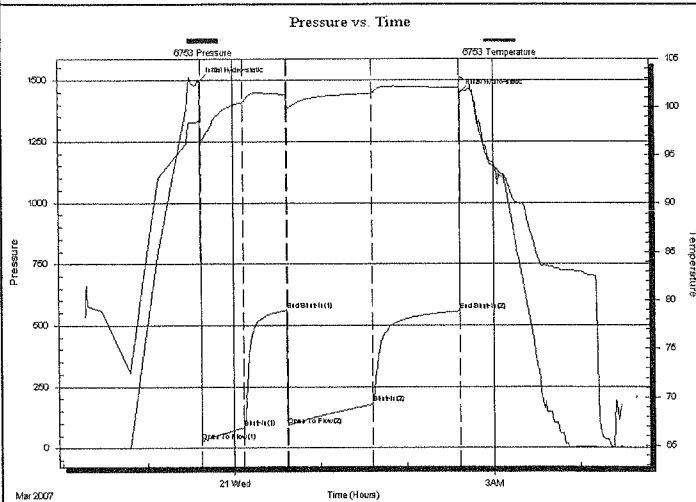
Formation: **LKC A-B**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 23:37:32  
Time Test Ended: 04:30:01  
  
Interval: **3060.00 ft (KB) To 3086.00 ft (KB) (TVD)**  
Total Depth: 3086.00 ft (KB) (TVD)  
Hole Diameter: 7.85 inches Hole Condition: Fair  
  
Test Type: Conventional Bottom Hole  
Tester: Ray Schwager  
Unit No: 28  
  
Reference Elevations: 1884.00 ft (KB)  
1876.00 ft (CF)  
KB to GR/CF: 8.00 ft

## Serial #: 6753

## Inside

Press@RunDepth: 183.60 psig @ 3061.01 ft (KB)      Capacity: 7000.00 psig  
Start Date: 2007.03.20      End Date: 2007.03.21      Last Calib.: 2007.03.21  
Start Time: 22:15:37      End Time: 04:30:01      Time On Btm: 2007.03.20 @ 23:36:32  
Time Off Btm: 2007.03.21 @ 02:37:01

TEST COMMENT: IFP Wk to strg in 5 min  
FFP Wk to strg in 9 min  
ISIP Surface bl bk  
FSIP Surface bl bk Time 30 30 30 60



## PRESSURE SUMMARY

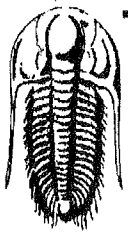
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1495.87	98.46	Initial Hydro-static
1	29.89	96.28	Open To Flow (1)
30	83.30	100.46	Shut-In (1)
61	561.43	101.30	End Shut-In (1)
61	93.19	99.98	Open To Flow (2)
120	183.60	101.41	Shut-In (2)
180	557.40	101.95	End Shut-In (2)
181	1446.12	103.09	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	HO&GCWM 15%G 30%O 20%W 35%M	0.42
60.00	O&GCMW 15%G 10%O 55%W 20%M	0.84
60.00	GCMW w/show of Oil	0.84
180.00	Water RW .2 @ 70F	2.52
0.00	390' 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 Inc

**Dietz #1**

PO Box 352  
Russell KS 67665-2635

**18 14 14W Russell KS**

Job Ticket: 28222

**DST#: 1**

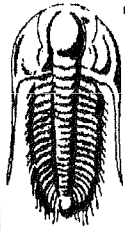
ATTN: John O Farmer IV

Test Start: 2007.03.20 @ 22:15:37

**Tool Information**

Drill Pipe:	Length: 3075.00 ft	Diameter: 3.80 inches	Volume: 43.13 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 43.13 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	36.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3060.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.02 ft			
Tool Length:	47.02 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			3040.00	
Shut In Tool	5.00			3045.00	
Hydraulic tool	5.00			3050.00	
Packer	5.00			3055.00	21.00 Bottom Of Top Packer
Packer	5.00			3060.00	
Stubb	1.00			3061.00	
Recorder	0.01	6753	Inside	3061.01	
Perforations	22.00			3083.01	
Recorder	0.01	13534	Outside	3083.02	
Bullnose	3.00			3086.02	26.02 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>47.02</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

John O Farmer Inc  
PO Box 352  
Russell KS 67665-2635  
ATTN: John O Farmer IV

**Dietz #1**  
**18 14 14W Russell KS**  
Job Ticket: 28222      **DST#: 1**  
Test Start: 2007.03.20 @ 22:15:37

## 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:	36000 ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.29 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 2.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	HO&GCWM 15%G 30%O 20%W 35%M	0.421
60.00	O&GCMV 15%G 10%O 55%W 20%M	0.842
60.00	GCMV w/show of Oil	0.842
180.00	Water RW .2 @ 70F	2.525
0.00	390' GIP	0.000

Total Length: 330.00 ft      Total Volume: 4.630 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

DST Test Number: 1

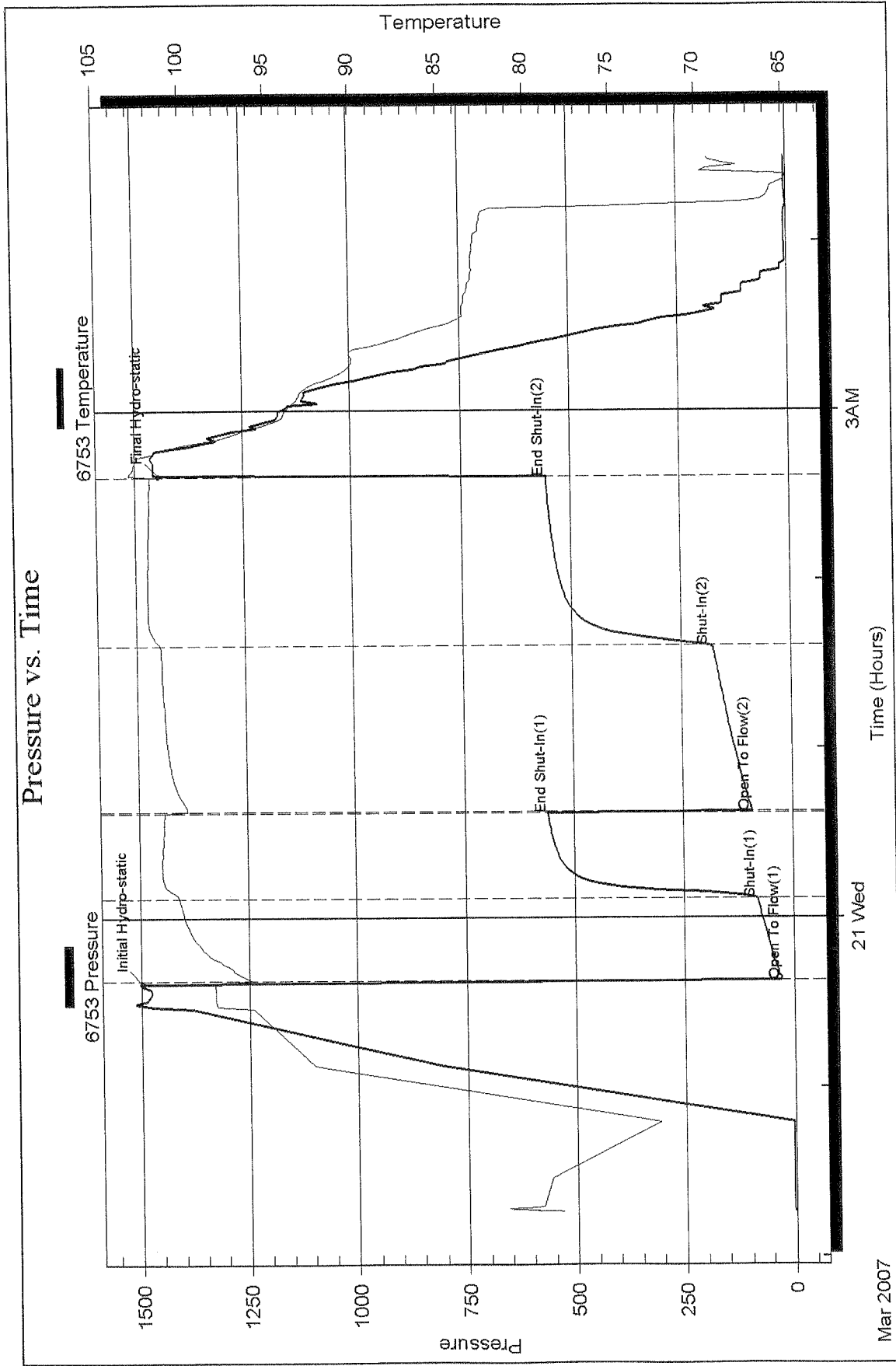
18 14 14W Russell KS

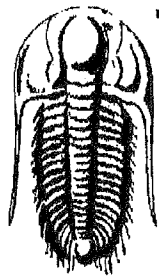
John O Farmer Inc

Inside

Serial #: 6753

### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc**

PO Box 352  
Russell KS 67665-2635

ATTN: John O Farmer IV

**18 14 14W Russell KS**

**Dietz #1**

Start Date: 2007.03.21 @ 09:13:59

End Date: 2007.03.21 @ 14:20:53

Job Ticket #: 28223                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

John O Farmer Inc  
PO Box 352  
Russell KS 67665-2635  
ATTN: John O Farmer IV

**Dietz #1**  
**18 14 14W Russell KS**  
Job Ticket: 28223      **DST#: 2**  
Test Start: 2007.03.21 @ 09:13:59

## GENERAL INFORMATION:

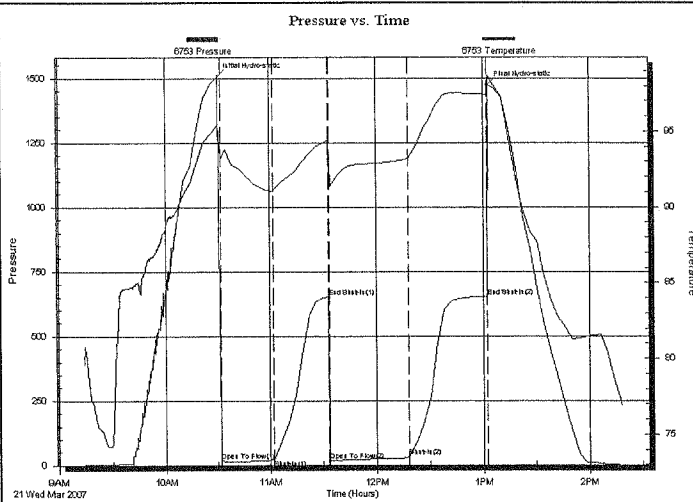
Formation: **LKC "C"**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 10:31:54  
Time Test Ended: 14:20:53  
Test Type: Conventional Bottom Hole  
Tester: Ray Schwager  
Unit No: 28  
Interval: **3086.00 ft (KB) To 3104.00 ft (KB) (TVD)**  
Reference Elevations: 1884.00 ft (KB)  
Total Depth: 3104.00 ft (KB) (TVD)      1876.00 ft (CF)  
Hole Diameter: 7.85 inches      Hole Condition: Fair      KB to GR/CF: 8.00 ft

## Serial #: 6753

Inside

Press@RunDepth: 32.14 psig @ 3087.01 ft (KB)      Capacity: 7000.00 psig  
Start Date: 2007.03.21      End Date: 2007.03.21      Last Calib.: 2007.03.21  
Start Time: 09:13:59      End Time: 14:20:53      Time On Btm: 2007.03.21 @ 10:30:24  
Time Off Btm: 2007.03.21 @ 13:02:54

TEST COMMENT: IFP Wk to strg in 6 min  
FFP Strg bl thru-out  
ISFP Surface bl bk  
FSIP Surface bl bk      Time 30 30 45 45



## PRESSURE SUMMARY

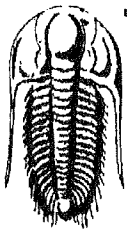
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1506.89	95.44	Initial Hydro-static
2	16.10	93.22	Open To Flow (1)
32	22.20	91.07	Shut-In(1)
63	650.84	94.40	End Shut-In(1)
64	18.03	93.00	Open To Flow (2)
108	32.14	93.19	Shut-In(2)
152	653.09	97.43	End Shut-In(2)
153	1472.25	98.68	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
45.00	GMO 35%G 55%O 10%M	0.63
0.00	1255' 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 Inc  
 PO Box 352  
 Russell KS 67665-2635  
 ATTN: John O Farmer IV

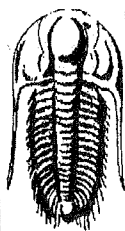
**Dietz #1**  
**18 14 14W Russell KS**  
 Job Ticket: 28223      **DST#: 2**  
 Test Start: 2007.03.21 @ 09:13:59

**Tool Information**

Drill Pipe:	Length: 3071.00 ft	Diameter: 3.80 inches	Volume: 43.08 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 43.08 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3086.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	18.02 ft			
Tool Length:	39.02 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			3066.00	
Shut In Tool	5.00			3071.00	
Hydraulic tool	5.00			3076.00	
Packer	5.00			3081.00	21.00      Bottom Of Top Packer
Packer	5.00			3086.00	
Stubb	1.00			3087.00	
Recorder	0.01	6753	Inside	3087.01	
Perforations	14.00			3101.01	
Recorder	0.01	13534	Outside	3101.02	
Bullnose	3.00			3104.02	18.02      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>39.02</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

John O Farmer Inc

**Dietz #1**

PO Box 352  
Russell KS 67665-2635

**18 14 14W Russell KS**

ATTN: John O Farmer IV

Job Ticket: 28223      **DST#: 2**

Test Start: 2007.03.21 @ 09:13:59

## 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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.28 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 2.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	GMO 35%G 55%O 10%M	0.631
0.00	1255' GIP	0.000

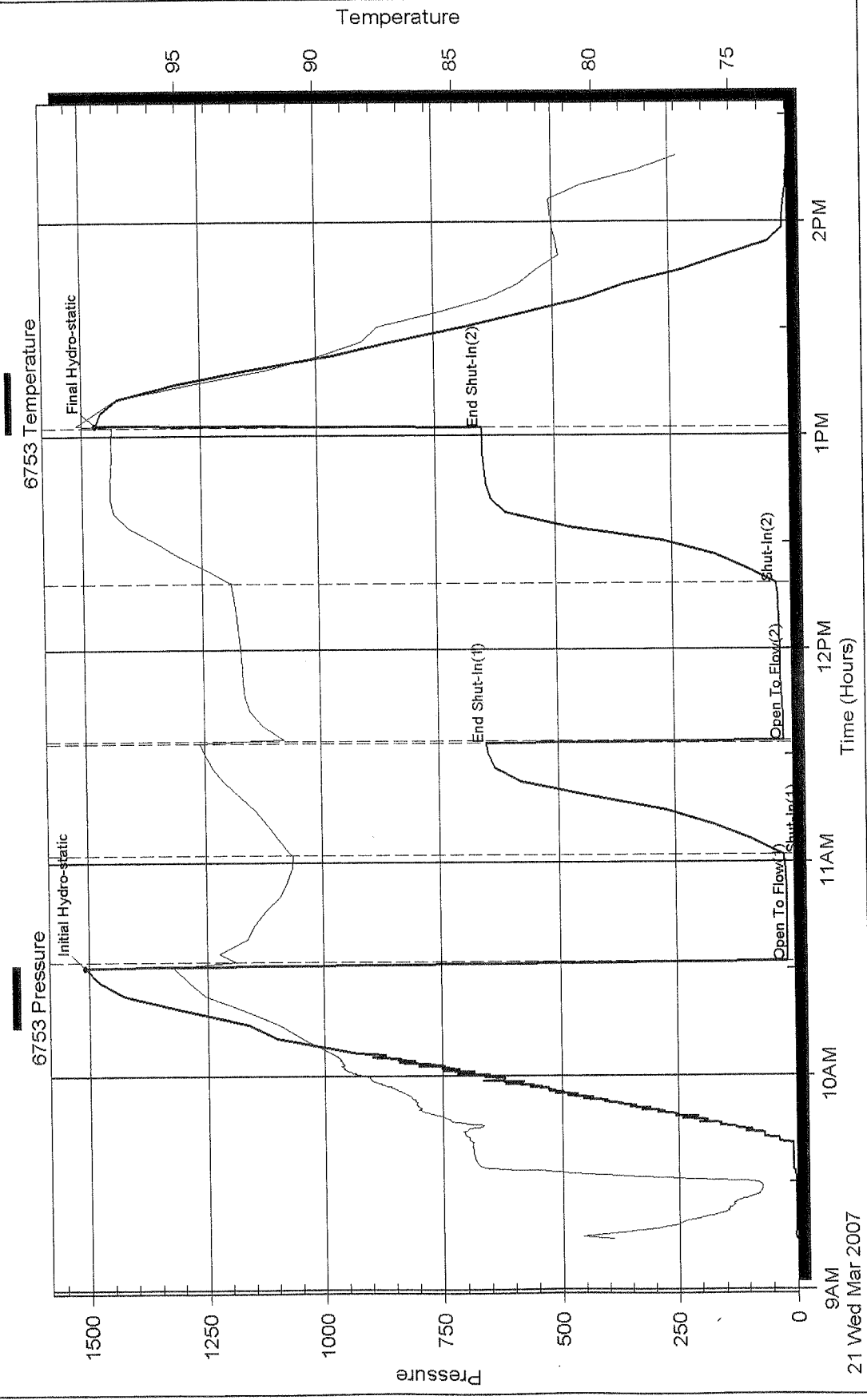
Total Length: 45.00 ft      Total Volume: 0.631 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

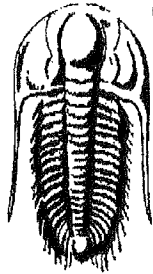
Laboratory Name:      Laboratory Location:

Recovery Comments:

### Pressure vs. Time



21 Wed Mar 2007 9AM



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc**

PO Box 352  
Russell KS 67665-2635

ATTN: John O Farmer IV

**18 14 14W Russell KS**

**Dietz #1**

Start Date: 2007.03.21 @ 20:12:00

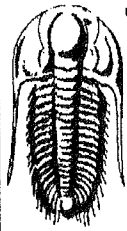
End Date: 2007.03.22 @ 01:27:54

Job Ticket #: 28224                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

John O Farmer Inc  
PO Box 352  
Russell KS 67665-2635  
ATTN: John O Farmer IV

**Dietz #1**  
**18 14 14W Russell KS**  
Job Ticket: 28224      **DST#: 3**  
Test Start: 2007.03.21 @ 20:12:00

## GENERAL INFORMATION:

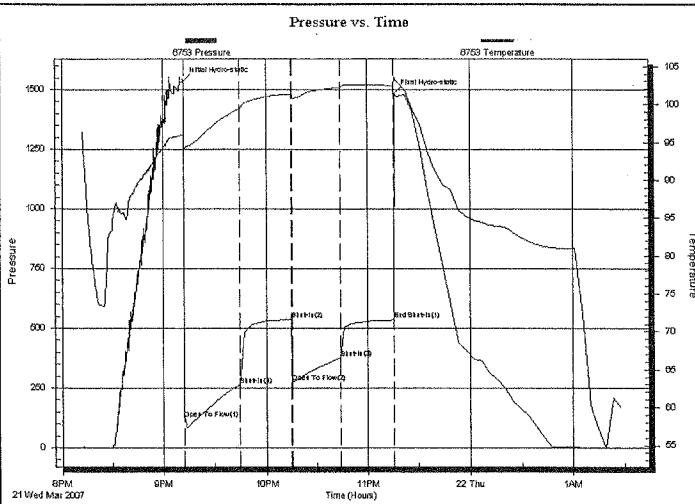
Formation: **LKC E-G**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 21:12:14  
Time Test Ended: 01:27:54  
Test Type: Conventional Bottom Hole  
Tester: Ray Schwager  
Unit No: 28  
Interval: **3116.00 ft (KB) To 3160.00 ft (KB) (TVD)**  
Reference Elevations: 1884.00 ft (KB)  
Total Depth: 3160.00 ft (KB) (TVD)      1876.00 ft (CF)  
Hole Diameter: 7.85 inches      Hole Condition: Fair      KB to GR/CF: 8.00 ft

## Serial #: 6753

**Inside**

Press@RunDepth: 263.19 psig @ 3127.01 ft (KB)      Capacity: 7000.00 psig  
Start Date: 2007.03.21      End Date: 2007.03.22      Last Calib.: 2007.03.22  
Start Time: 20:12:00      End Time: 01:27:54      Time On Btm: 2007.03.21 @ 21:12:12  
Time Off Btm: 2007.03.21 @ 23:15:55

TEST COMMENT: IFF Strg bl thru-out  
FFP Strg bl in 2 min. GTS in 20 min  
Times 30 30 30 30  
ISIP 2 " bl bk FSIP 3 " bl bk



## PRESSURE SUMMARY

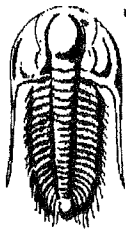
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1538.21	96.00	Initial Hydro-static
1	120.91	93.38	Open To Flow (1)
33	263.19	99.37	Shut-In(1)
63	538.31	101.36	Shut-In(2)
64	275.85	100.79	Open To Flow (2)
92	375.32	102.19	Shut-In(3)
124	535.08	102.44	End Shut-In(1)
124	1482.48	103.59	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	GMO 35%G 55%O 10%M	1.74
310.00	CO	4.35
124.00	GMWCO 35%G 45%O 15%W 5%M	1.74
62.00	SOCGW 10%G 2%O 88%W	0.87
250.00	Water RW .24 @ 61F	3.51
0.00	GTS	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

John O Farmer Inc

**Dietz #1**

PO Box 352  
Russell KS 67665-2635

**18 14 14W Russell KS**

Job Ticket: 28224

**DST#: 3**

ATTN: John O Farmer IV

Test Start: 2007.03.21 @ 20:12:00

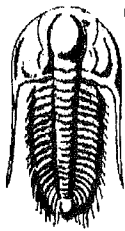
**Tool Information**

Drill Pipe:	Length: 3104.00 ft	Diameter: 3.80 inches	Volume: 43.54 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 43.54 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3116.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.02 ft			
Tool Length:	65.02 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			3096.00	
Shut In Tool	5.00			3101.00	
Hydraulic tool	5.00			3106.00	
Packer	5.00			3111.00	21.00 Bottom Of Top Packer
Packer	5.00			3116.00	
Stubb	1.00			3117.00	
Perforations	10.00			3127.00	
Recorder	0.01	6753	Inside	3127.01	
Perforations	30.00			3157.01	
Recorder	0.01	13534	Outside	3157.02	
Bullnose	3.00			3160.02	44.02 Bottom Packers & Anchor

**Total Tool Length: 65.02**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

John O Farmer Inc

**Dietz #1**

PO Box 352  
Russell KS 67665-2635

**18 14 14W Russell KS**

Job Ticket: 28224                      **DST#: 3**

ATTN: John O Farmer IV

Test Start: 2007.03.21 @ 20:12:00

**Mud and Cushion Information**

Mud Type: Gel Chem	Cushion Type:	Oil API: 40 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 33000 ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.93 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 5000.00 ppm		
Filter Cake: 2.00 inches		

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
124.00	GMO 35%G 55%O 10%M	1.739
310.00	CO	4.348
124.00	GMWCO 35%G 45%O 15%W 5%M	1.739
62.00	SOCGW 10%G 2%O 88%W	0.870
250.00	Water RW .24 @ 61F	3.507
0.00	GTS	0.000

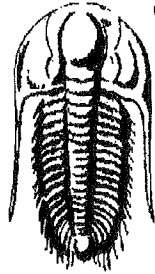
Total Length: 870.00 ft                      Total Volume: 12.203 bbl

Num Fluid Samples: 0                      Num Gas Bombs: 0                      Serial #:

Laboratory Name:                      Laboratory Location:

Recovery Comments:





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc**

PO Box 352  
Russell KS 67665-2635

ATTN: John O Farmer IV

**18 14 14W Russell KS**

**Dietz #1**

Start Date: 2007.03.22 @ 12:27:52

End Date: 2007.03.22 @ 17:22:46

Job Ticket #: 28225                      DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

John O Farmer Inc

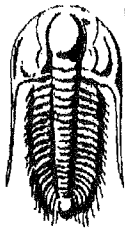
Dietz #1

18 14 14W Russell KS

DST # 4

LKC LK

2007.03.22



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

John O Farmer Inc  
PO Box 352  
Russell KS 67665-2635  
  
ATTN: John O Farmer IV

**Dietz #1**  
**18 14 14W Russell KS**  
Job Ticket: 28225      **DST#: 4**  
Test Start: 2007.03.22 @ 12:27:52

## GENERAL INFORMATION:

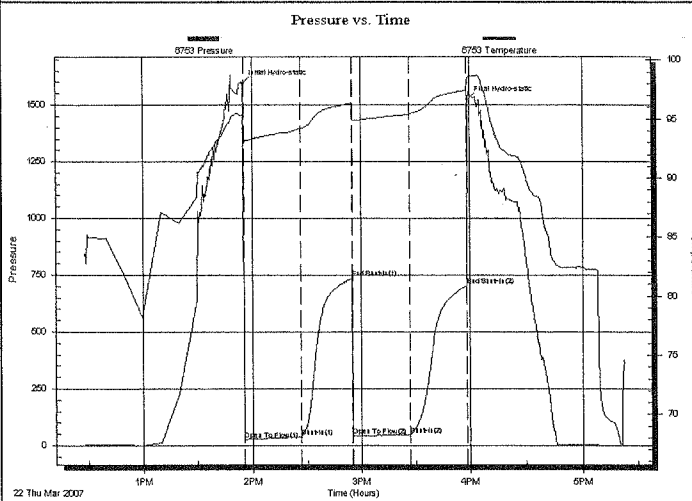
Formation: **LKC I-K**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 13:55:17  
Time Test Ended: 17:22:46  
  
Interval: **3204.00 ft (KB) To 3284.00 ft (KB) (TVD)**  
Total Depth: 3284.00 ft (KB) (TVD)  
Hole Diameter: 7.85 inches Hole Condition: Fair  
  
Test Type: Conventional Bottom Hole  
Tester: Ray Schwager  
Unit No: 28  
  
Reference Elevations: 1884.00 ft (KB)  
1876.00 ft (CF)  
KB to GR/CF: 8.00 ft

## Serial #: 6753

Inside

Press@RunDepth: 48.31 psig @ 3214.01 ft (KB)      Capacity: 7000.00 psig  
Start Date: 2007.03.22      End Date: 2007.03.22      Last Callb.: 2007.03.22  
Start Time: 12:27:52      End Time: 17:22:46      Time On Btm: 2007.03.22 @ 13:54:47  
Time Off Btm: 2007.03.22 @ 15:58:47

TEST COMMENT: IFP Wk bl thru-out 1/2 " to 1 " bl  
FFP Surface bl  
Times 30 30 30 30  
No bl on shut-in



## PRESSURE SUMMARY

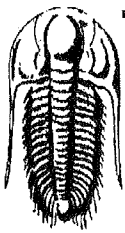
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1593.95	95.34	Initial Hydro-static
1	27.15	92.97	Open To Flow (1)
32	38.32	94.17	Shut-In(1)
60	736.03	96.35	End Shut-In(1)
61	43.58	94.90	Open To Flow (2)
92	48.31	95.42	Shut-In(2)
124	701.90	97.42	End Shut-In(2)
124	1523.23	98.43	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
45.00	SOCM 2%O 98%M	0.63

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

John O Farmer Inc

**Dietz #1**

PO Box 352  
Russell KS 67665-2635

**18 14 14W Russell KS**

ATTN: John O Farmer IV

Job Ticket: 28225

**DST#: 4**

Test Start: 2007.03.22 @ 12:27:52

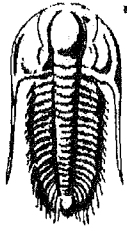
### Tool Information

Drill Pipe:	Length: 3199.00 ft	Diameter: 3.80 inches	Volume: 44.87 bbl	Tool Weight:	2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	55000.00 lb
			<u>Total Volume: 44.87 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3204.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	80.02 ft				
Tool Length:	101.02 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			3184.00	
Shut In Tool	5.00			3189.00	
Hydraulic tool	5.00			3194.00	
Packer	5.00			3199.00	21.00 Bottom Of Top Packer
Packer	5.00			3204.00	
Stubb	1.00			3205.00	
Perforations	9.00			3214.00	
Recorder	0.01	6753	Inside	3214.01	
Perforations	3.00			3217.01	
Recorder	0.01	13534	Outside	3217.02	
Blank Spacing	64.00			3281.02	
Bullnose	3.00			3284.02	80.02 Bottom Packers & Anchor

**Total Tool Length: 101.02**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

John O Farmer Inc  
PO Box 352  
Russell KS 67665-2635  
ATTN: John O Farmer IV

**Dietz #1**  
**18 14 14W Russell KS**  
Job Ticket: 28225      **DST#: 4**  
Test Start: 2007.03.22 @ 12:27:52

**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: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.17 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 9000.00 ppm			
Filter Cake: 2.00 inches			

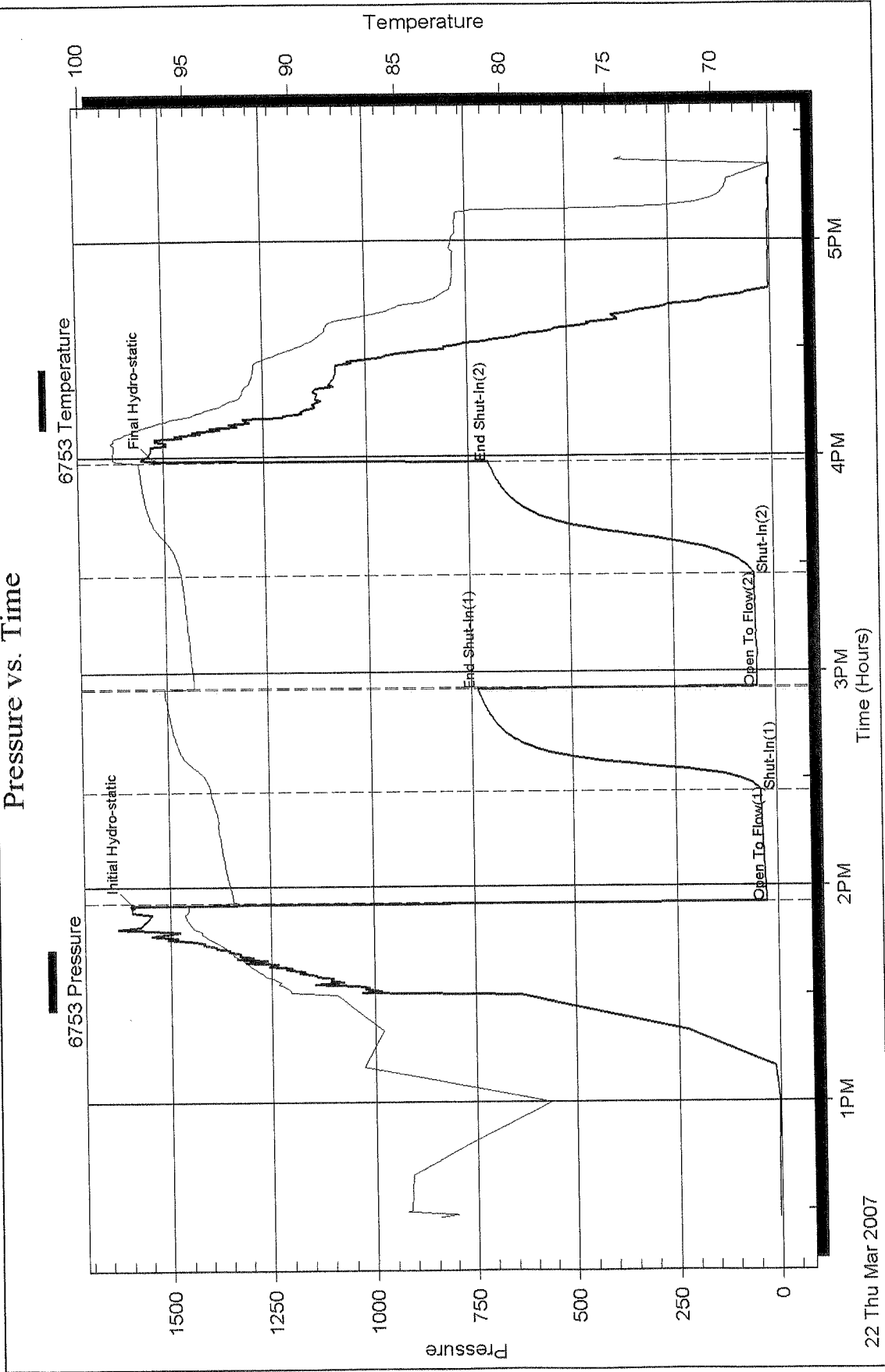
**Recovery Information**

Recovery Table

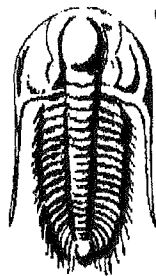
Length ft	Description	Volume bbl
45.00	SOCM 2%O 98%M	0.631

Total Length: 45.00 ft      Total Volume: 0.631 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

### Pressure vs. Time



22 Thu Mar 2007



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc**

PO Box 352  
Russell KS 67665-2635

ATTN: John O Farmer IV

**18 14 14W Russell KS**

**Dietz #1**

Start Date: 2007.03.23 @ 00:29:10

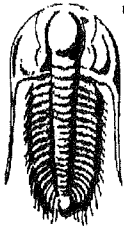
End Date: 2007.03.23 @ 05:16:34

Job Ticket #: 28151                      DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

John O Farmer Inc  
PO Box 352  
Russell KS 67665-2635  
ATTN: John O Farmer IV

**Dietz #1**  
**18 14 14W Russell KS**  
Job Ticket: 28151      **DST#: 5**  
Test Start: 2007.03.23 @ 00:29:10

## GENERAL INFORMATION:

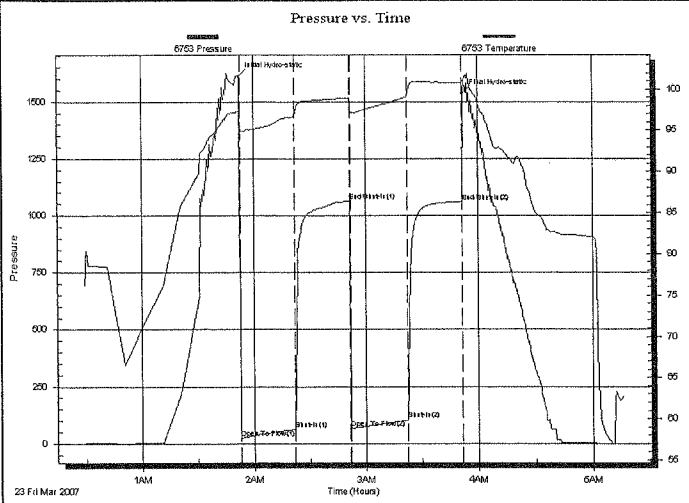
Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 01:52:35  
 Time Test Ended: 05:16:34  
 Interval: **3246.00 ft (KB) To 3320.00 ft (KB) (TVD)**  
 Total Depth: 3320.00 ft (KB) (TVD)  
 Hole Diameter: 7.85 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole  
 Tester: Ray Schwager  
 Unit No: 28  
 Reference Elevations: 1884.00 ft (KB)  
 1876.00 ft (CF)  
 KB to GR/CF: 8.00 ft

## Serial #: 6753

Inside

Press@RunDepth: 102.61 psig @ 3247.01 ft (KB)      Capacity: 7000.00 psig  
 Start Date: 2007.03.23      End Date: 2007.03.23      Last Calib.: 2007.03.23  
 Start Time: 00:29:10      End Time: 05:16:34      Time On Btm: 2007.03.23 @ 01:52:05  
 Time Off Btm: 2007.03.23 @ 03:52:05

TEST COMMENT: IFP Wk bl thru-out 1/2 " to 1 " bl  
 FFP Wk bl thru-out 1/4 " to 1 1/2 " bl  
 Times 30 30 30 30  
 No bl on shut-in



## PRESSURE SUMMARY

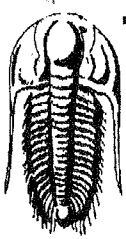
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1610.75	97.23	Initial Hydro-static
1	23.72	94.96	Open To Flow (1)
30	62.21	96.64	Shut-In(1)
59	1063.56	98.97	End Shut-In(1)
60	67.80	97.09	Open To Flow (2)
90	102.61	99.11	Shut-In(2)
120	1061.44	100.75	End Shut-In(2)
120	1535.19	101.06	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
165.00	MW 25%M 75%W RW.29 @ 70F	2.31

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

John O Farmer Inc  
 PO Box 352  
 Russell KS 67665-2635  
 ATTN: John O Farmer IV

**Dietz #1**  
**18 14 14W Russell KS**  
 Job Ticket: 28151      **DST#: 5**  
 Test Start: 2007.03.23 @ 00:29:10

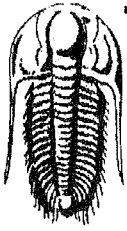
**Tool Information**

Drill Pipe:	Length: 3230.00 ft	Diameter: 3.80 inches	Volume: 45.31 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 45.31 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3246.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	74.02 ft			
Tool Length:	95.02 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			3226.00	
Shut In Tool	5.00			3231.00	
Hydraulic tool	5.00			3236.00	
Packer	5.00			3241.00	21.00      Bottom Of Top Packer
Packer	5.00			3246.00	
Stubb	1.00			3247.00	
Recorder	0.01	6753	Inside	3247.01	
Perforations	6.00			3253.01	
Recorder	0.01	13534	Outside	3253.02	
Blank Spacing	64.00			3317.02	
Bullnose	3.00			3320.02	74.02      Bottom Packers & Anchor

**Total Tool Length: 95.02**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

John O Farmer Inc  
PO Box 352  
Russell KS 67665-2635  
ATTN: John O Farmer IV

**Dietz #1**  
**18 14 14W Russell KS**  
Job Ticket: 28151      **DST#: 5**  
Test Start: 2007.03.23 @ 00:29:10

**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:	23000 ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.28 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 2.00 inches			

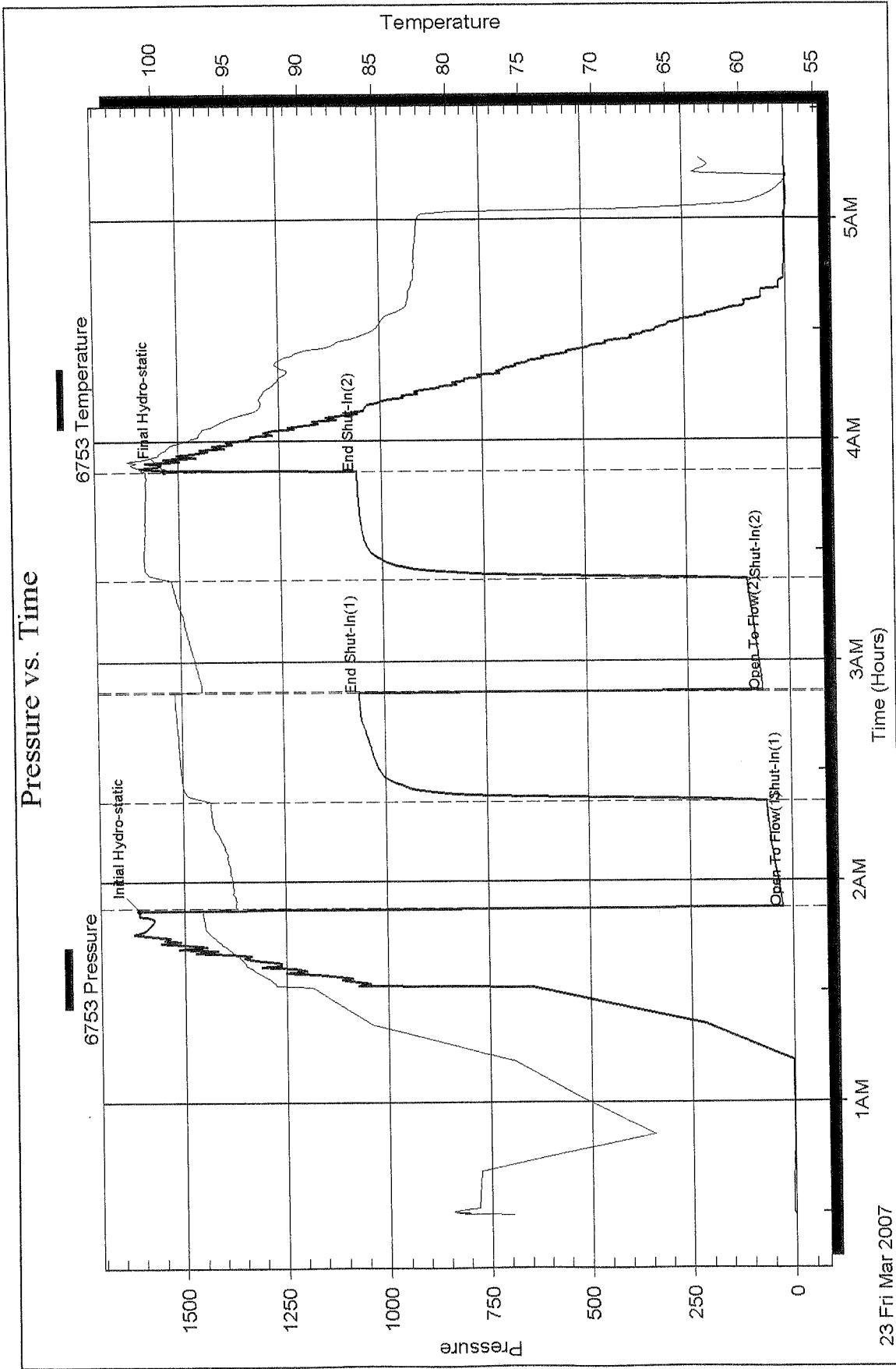
**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
165.00	MW 25%M 75%W RW.29 @ 70F	2.315

Total Length: 165.00 ft      Total Volume: 2.315 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

### Pressure vs. Time



23 Fri Mar 2007