15-065-23329

16-9s-22w

IND



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc**

P O Box 352
Russell KS 67665-2635

ATTN: Matt Drieling

16 9 22 Graham KS

McCall #1

Start Date: 2007.07.29 @ 04:50:18
End Date: 2007.07.29 @ 11:07:42
Job Ticket #: 28875 DST #: 1

KCC
OCT 0 1 2007
CONFIDENTIAL

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

John O Farmer Inc

P O Box 352
Russell KS 67665-2635

ATTN: Matt Drieling

McCall #1

16 9 22 Graham KS

Job Ticket: 28875 **DST#: 1**

Test Start: 2007.07.29 @ 04:50:18

GENERAL INFORMATION:

Formation: **LKC C-D**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:17:43
Time Test Ended: 11:07:42

Test Type: Conventional Bottom Hole
Tester: Ray Schwager
Unit No: 42

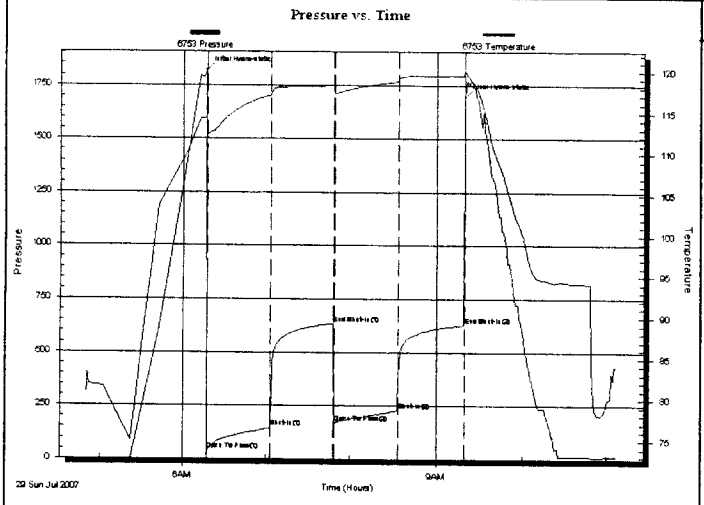
Interval: 3620.00 ft (KB) To 3662.00 ft (KB) (TVD)
Total Depth: 3662.00 ft (KB) (TVD)
Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2326.00 ft (KB)
2321.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6753 **Inside**
Press@RunDepth: 227.84 psig @ 3625.01 ft (KB)
Start Date: 2007.07.29 End Date: 2007.07.29
Start Time: 04:50:18 End Time: 11:07:42

Capacity: 7000.00 psig
Last Calib.: 2007.07.29
Time On Btm: 2007.07.29 @ 06:17:13
Time Off Btm: 2007.07.29 @ 09:19:42

TEST COMMENT: IFP Wk to strg in 22 min
FFP Wk to a gd bl 1/4 " to 8 " bl
Times 45 45 45 45
No bl on shut-in



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1817.38	114.61	Initial Hydro-static
1	39.47	112.31	Open To Flow (1)
47	146.45	117.11	Shut-In(1)
91	634.24	118.30	End Shut-In(1)
92	169.85	117.43	Open To Flow (2)
136	227.84	118.79	Shut-In(2)
182	627.05	119.48	End Shut-In(2)
183	1696.33	120.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MW 25%M 75%W	0.59
320.00	Water RW.22 @ 86F	4.49
0.00	w/show of Oil in tool	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

P O Box 352
Russell KS 67665-2635

ATTN: Matt Drieling

McCall #1

16 9 22 Graham KS

Job Ticket: 28875 **DST#: 1**

Test Start: 2007.07.29 @ 04:50:18

Tool Information

Drill Pipe:	Length:	3487.00 ft	Diameter:	3.80 inches	Volume:	48.91 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:	120.00 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	Weight to Pull Loose:		60000.00 lb
					Total Volume:	49.50 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		8.00 ft					String Weight:	Initial	46000.00 lb
Depth to Top Packer:		3620.00 ft						Final	50000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		43.02 ft							
Tool Length:		64.02 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			3600.00		
Shut In Tool	5.00			3605.00		
Hydraulic tool	5.00			3610.00		
Packer	5.00			3615.00	21.00	Bottom Of Top Packer
Packer	5.00			3620.00		
Stubb	1.00			3621.00		
Perforations	4.00			3625.00		
Recorder	0.01	6753	Inside	3625.01		
Perforations	3.00			3628.01		
Recorder	0.01	13534	Outside	3628.02		
Blank Spacing	32.00			3660.02		
Bullnose	3.00			3663.02	43.02	Bottom Packers & Anchor
Total Tool Length:	**64.02**					

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer Inc

P O Box 352
Russell KS 67665-2635

ATTN: Matt Drieling

McCall #1

16 9 22 Graham KS

Job Ticket: 28875 **DST#: 1**

Test Start: 2007.07.29 @ 04:50:18

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:	26000 ppm
Viscosity:	51.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.76 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1400.00 ppm				
Filter Cake:	2.00 inches				

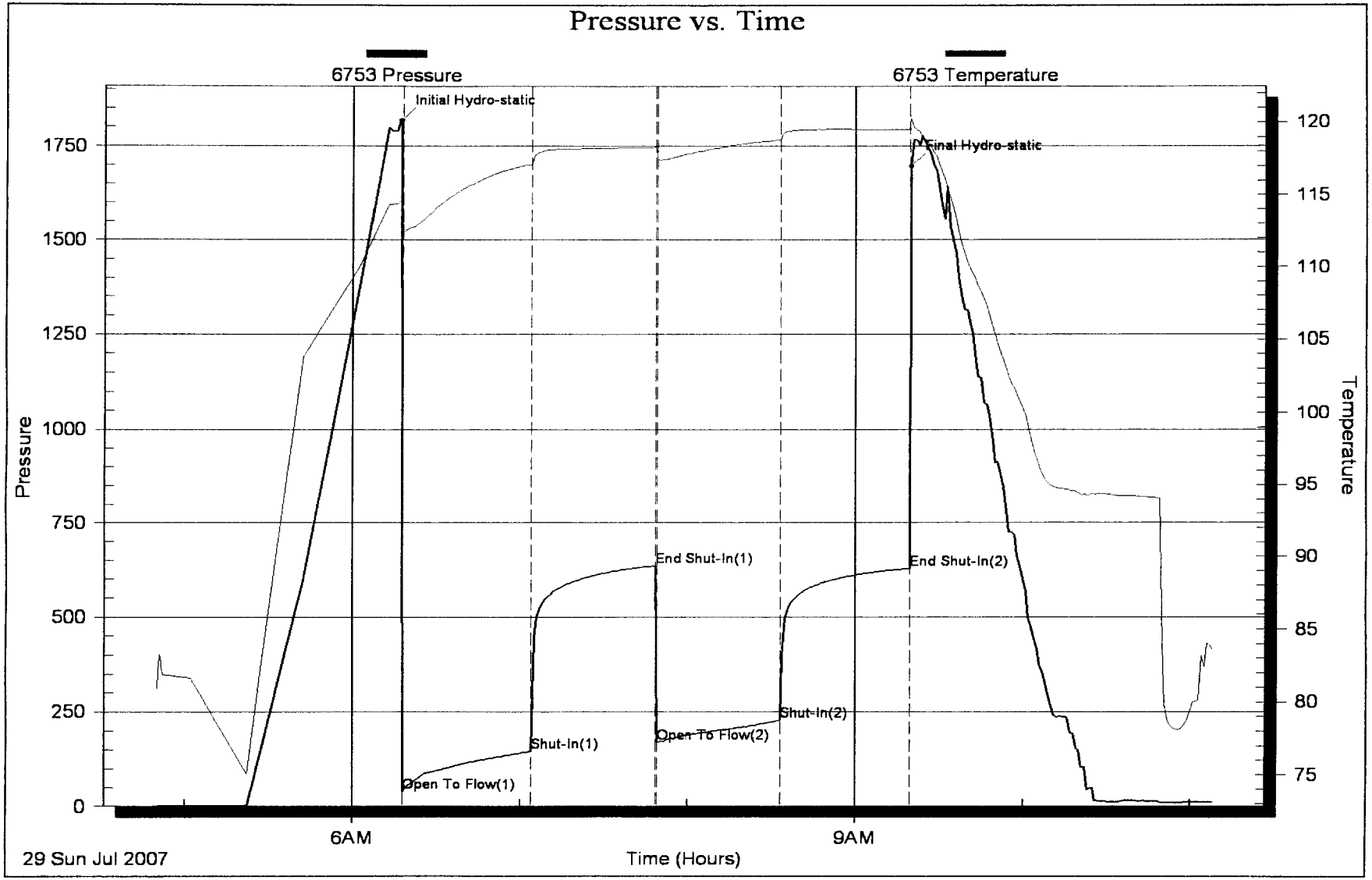
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	MW 25%M 75%W	0.590
320.00	Water RW.22 @ 86F	4.489
0.00	w/show of Oil in tool	0.000

Total Length: 440.00 ft Total Volume: 5.079 bbl

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


Pressure vs. Time
6753 Pressure
6753 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(1)
Shut-In(2)
Open To Flow(1)
Open To Flow(2)
Pressure
Temperature
1750
1500
1250
1000
750
500
250
0
120
115
110
105
100
95
90
85
80
75
6AM
9AM
29 Sun Jul 2007
Time (Hours)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc**

P O Box 352
Russell KS 67665-2635

ATTN: Matt Drieling

16 9 22 Graham KS

McCall #1

Start Date: 2007.07.29 @ 18:43:28
End Date: 2007.07.30 @ 00:07:52
Job Ticket #: 29176 DST #: 2

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

John O Farmer Inc

P O Box 352
Russell KS 67665-2635

ATTN: Matt Drieling

McCall #1

16 9 22 Graham KS

Job Ticket: 29176 **DST#: 2**

Test Start: 2007.07.29 @ 18:43:28

GENERAL INFORMATION:

Formation: **LKC E-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:25:53
Time Test Ended: 00:07:52

Test Type: Conventional Bottom Hole
Tester: Ray Schwager
Unit No: 42

Interval: 3658.00 ft (KB) To 3692.00 ft (KB) (TVD)
Total Depth: 3692.00 ft (KB) (TVD)
Hole Diameter: 7.85 inches Hole Condition: Fair

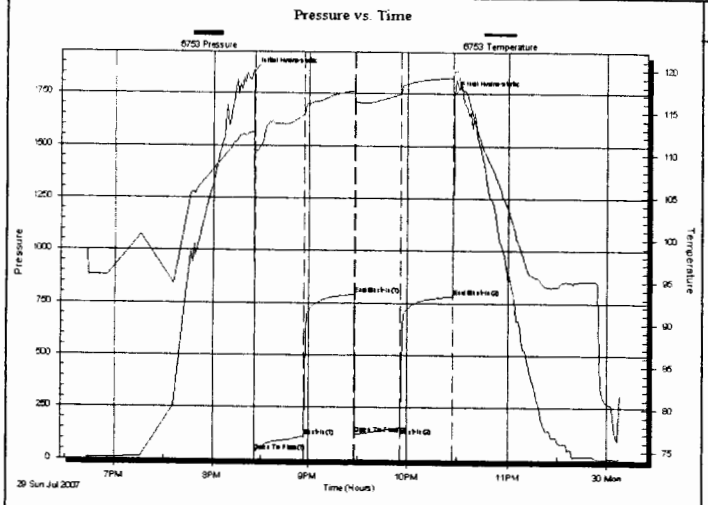
Reference Elevations: 2326.00 ft (KB)
2321.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6753 **Inside**

Press@RunDepth: 157.56 psig @ 3664.01 ft (KB)
Start Date: 2007.07.29 End Date: 2007.07.30
Start Time: 18:43:28 End Time: 00:07:52

Capacity: 7000.00 psig
Last Calib.: 2007.07.30
Time On Btm: 2007.07.29 @ 20:25:23
Time Off Btm: 2007.07.29 @ 22:27:53

TEST COMMENT: IFP Wk to a fr bl 1/4 " to 5 " bl
FFP Wk bl thru-out 1/4 " to 2 1/4 " bl
Times 30 30 30 30



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1855.07	112.69	Initial Hydro-static
1	34.18	110.46	Open To Flow (1)
32	111.07	114.63	Shut-In(1)
63	789.92	117.55	End Shut-In(1)
63	121.46	116.28	Open To Flow (2)
91	157.56	117.12	Shut-In(2)
122	782.62	119.15	End Shut-In(2)
123	1746.63	119.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	MW 40%M 60%W w/show of Oil	0.20
60.00	MW 15%M 85%W	0.30
180.00	Water RW .17 @ 86F	2.34

Gas Rates

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

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer Inc

P O Box 352
Russell KS 67665-2635

ATTN: Matt Drieling

McCall #1

16 9 22 Graham KS

Job Ticket: 29176 **DST#: 2**

Test Start: 2007.07.29 @ 18:43:28

Tool Information

Drill Pipe:	Length:	3547.00 ft	Diameter:	3.80 inches	Volume:	49.76 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:	120.00 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	Weight to Pull Loose:	55000.00 lb
					Total Volume:	50.35 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		30.00 ft					String Weight: Initial	47000.00 lb
Depth to Top Packer:		3658.00 ft					Final	49000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		34.02 ft						
Tool Length:		55.02 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			3638.00		
Shut In Tool	5.00			3643.00		
Hydraulic tool	5.00			3648.00		
Packer	5.00			3653.00	21.00	Bottom Of Top Packer
Packer	5.00			3658.00		
Stubb	1.00			3659.00		
Perforations	5.00			3664.00		
Recorder	0.01	6753	Inside	3664.01		
Perforations	25.00			3689.01		
Recorder	0.01	13534	Outside	3689.02		
Bullnose	3.00			3692.02	34.02	Bottom Packers & Anchor
Total Tool Length:	**55.02**					

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer Inc

P O Box 352
Russell KS 67665-2635

ATTN: Matt Drieling

McCall #1

16 9 22 Graham KS

Job Ticket: 29176 **DST#: 2**

Test Start: 2007.07.29 @ 18:43:28

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:	33000 ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.36 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1400.00 ppm				
Filter Cake:	2.00 inches				

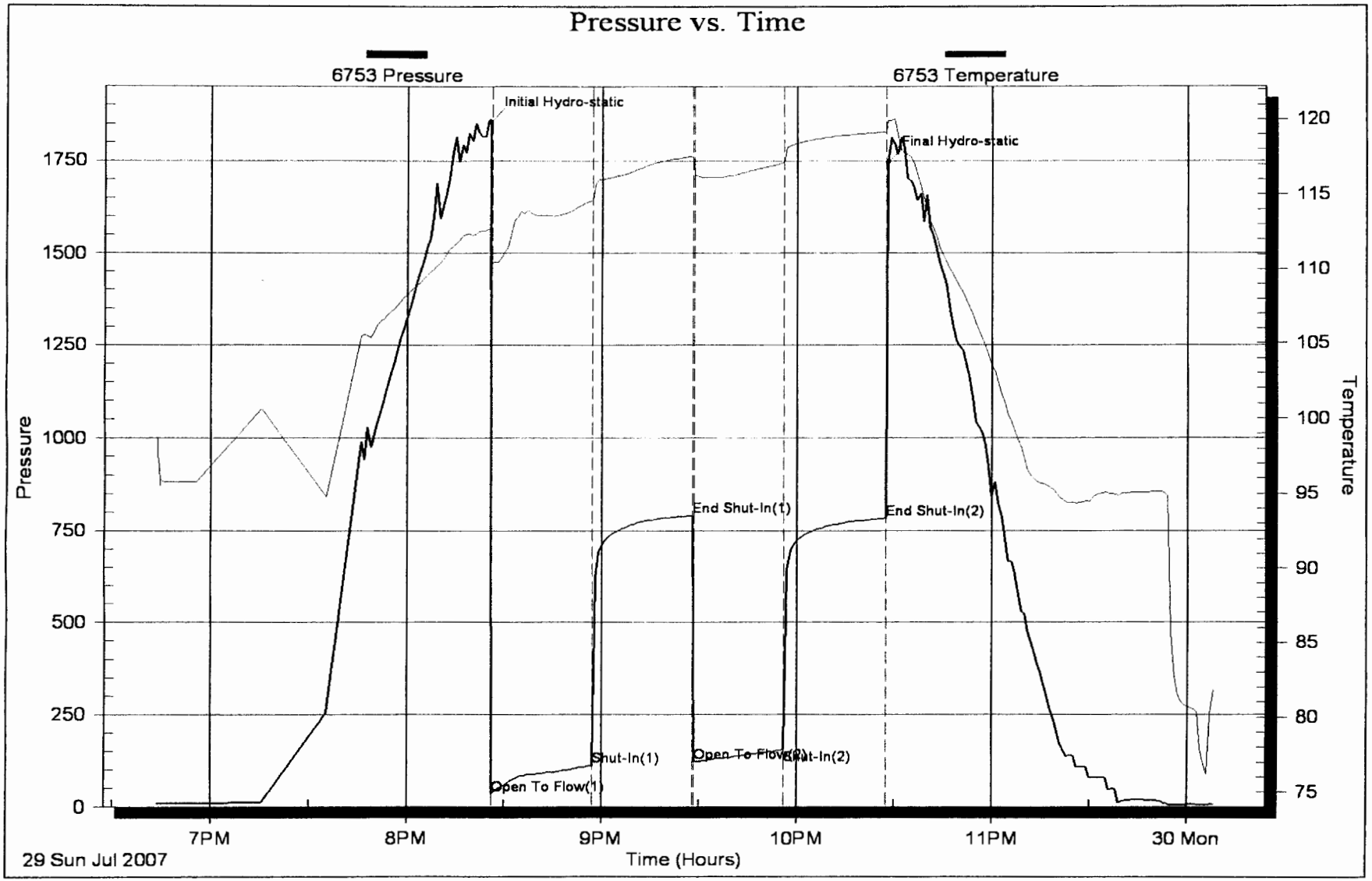
Recovery Information

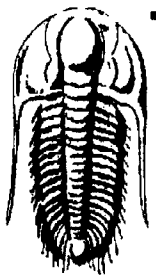
Recovery Table

Length ft	Description	Volume bbl
40.00	MW 40%M 60%W w/show of Oil	0.197
60.00	MW 15%M 85%W	0.295
180.00	Water RW .17 @ 86F	2.343

Total Length: 280.00 ft Total Volume: 2.835 bbl

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


Pressure vs. Time
6753 Pressure
6753 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(1)
Open To Flow(1)
Open To Flow(2)
Shut-In(2)
Pressure
Temperature
Time (Hours)
29 Sun Jul 2007
7PM
8PM
9PM
10PM
11PM
30 Mon
0
250
500
750
1000
1250
1500
1750
75
80
85
90
95
100
105
110
115
120



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc**

P O Box 352
Russell KS 67665-2635

ATTN: Matt Drieling

16 9 22 Graham KS

McCall #1

Start Date: 2007.07.30 @ 17:36:58
End Date: 2007.07.30 @ 23:47:22
Job Ticket #: 29177 DST #: 3

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

John O Farmer Inc

P O Box 352
Russell KS 67665-2635

ATTN: Matt Drieling

McCall #1

16 9 22 Graham KS

Job Ticket: 29177 **DST#: 3**

Test Start: 2007.07.30 @ 17:36:58

GENERAL INFORMATION:

Formation: **LKC H-K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:17:23
Time Test Ended: 23:47:22

Test Type: Conventional Bottom Hole
Tester: Ray Schwager
Unit No: 42

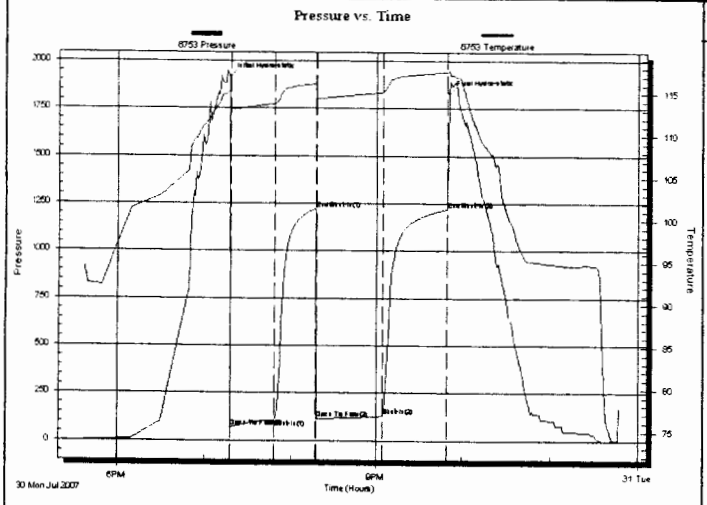
Interval: 3712.00 ft (KB) To 3805.00 ft (KB) (TVD)
Total Depth: 3805.00 ft (KB) (TVD)
Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2326.00 ft (KB)
2321.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6753 **Inside**
Press@RunDepth: 130.27 psig @ 3715.01 ft (KB)
Start Date: 2007.07.30 End Date: 2007.07.30
Start Time: 17:36:58 End Time: 23:47:22

Capacity: 7000.00 psig
Last Calib.: 2007.07.30
Time On Btm: 2007.07.30 @ 19:16:53
Time Off Btm: 2007.07.30 @ 21:50:53

TEST COMMENT: IFP Wk bl thru-out 1/4 " to 3 " bl
FFP
Times 30 30 30 30
No bl on shut-in



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1914.80	115.29	Initial Hydro-static
1	67.95	113.22	Open To Flow (1)
32	108.90	113.84	Shut-In(1)
60	1221.23	116.16	End Shut-In(1)
61	113.35	114.45	Open To Flow (2)
108	130.27	115.20	Shut-In(2)
153	1219.17	117.60	End Shut-In(2)
154	1829.44	117.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	HO&GCM 10%G 20%O 10%W 60%M	0.30
105.00	MGO 10%G 60%O 30%M	0.93
30.00	CO	0.42
0.00	165 ' 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

P O Box 352
Russell KS 67665-2635

ATTN: Matt Drieling

McCall #1

16 9 22 Graham KS

Job Ticket: 29177 **DST#: 3**

Test Start: 2007.07.30 @ 17:36:58

Tool Information

Drill Pipe:	Length:	3595.00 ft	Diameter:	3.80 inches	Volume:	50.43 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:	120.00 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	Weight to Pull Loose:		60000.00 lb
					Total Volume:	51.02 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		24.00 ft					String Weight:	Initial	49000.00 lb
Depth to Top Packer:		3712.00 ft						Final	50000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		93.02 ft							
Tool Length:		114.02 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			3692.00		
Shut In Tool	5.00			3697.00		
Hydraulic tool	5.00			3702.00		
Packer	5.00			3707.00	21.00	Bottom Of Top Packer
Packer	5.00			3712.00		
Stubb	1.00			3713.00		
Perforations	2.00			3715.00		
Recorder	0.01	6753	Inside	3715.01		
Blank Spacing	62.00			3777.01		
Recorder	0.01	13534	Outside	3777.02		
Perforations	25.00			3802.02		
Bullnose	3.00			3805.02	93.02	Bottom Packers & Anchor
Total Tool Length:	**114.02**					

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer Inc

P O Box 352
Russell KS 67665-2635

ATTN: Matt Drieling

McCall #1

16 9 22 Graham KS

Job Ticket: 29177 **DST#: 3**

Test Start: 2007.07.30 @ 17:36:58

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	37 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	51.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.75 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1400.00 ppm				
Filter Cake:	2.00 inches				

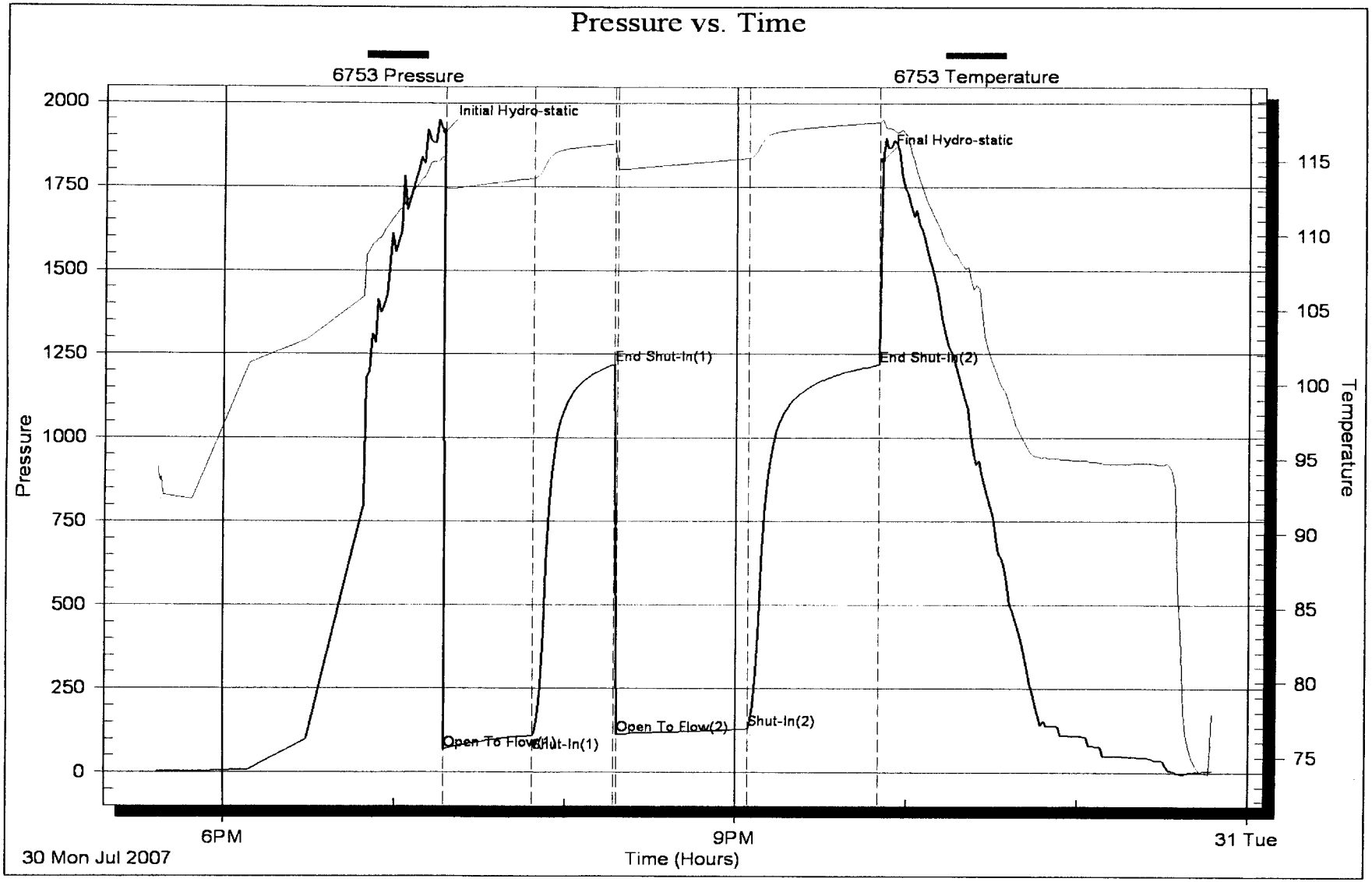
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	HO&GCM 10%G 20%O 10%W 60%M	0.295
105.00	MGO 10%G 60%O 30%M	0.926
30.00	CO	0.421
0.00	165 ' GIP	0.000

Total Length: 195.00 ft Total Volume: 1.642 bbl

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


Pressure vs. Time
6753 Pressure
6753 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
2000
1750
1500
1250
1000
750
500
250
0
Pressure
115
110
105
100
95
90
85
80
75
Temperature
6PM
9PM
31 Tue
30 Mon Jul 2007
Time (Hours)