

**TRILOBITE
TESTING, INC.**

KCC
JAN 17 2007
CONFIDENTIAL

DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Co LLC**

125 N Market Ste 1000
Wichita KS 67202

ATTN: Brad Rine

10 31 17 Commanche K

Shane Yost #1

Start Date: 2006.09.27 @ 10:00:11

End Date: 2006.09.27 @ 19:59:26

Job Ticket #: 26301 DST #: 1

RECEIVED
KANSAS CORPORATION COMMISSION

JAN 17 2007

CONSERVATION DIVISION
WICHITA, KS

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Woolsey Operating Co LLC

125 N Market Ste 1000
Wichita KS 67202

ATTN: Brad Rine

Shane Yost #1

10 31 17 Commanche K

Job Ticket: 26301

DST#: 1

Test Start: 2006.09.27 @ 10:00:11

GENERAL INFORMATION:

Formation: Miss

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:59:11

Time Test Ended: 19:59:26

Test Type: Conventional Bottom Hole

Tester: Harley Davidson

Unit No: 33

Interval: 4952.00 ft (KB) To 5017.00 ft (KB) (TVD)

Total Depth: 5017.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Fair

Reference Elevations: 2066.00 ft (KB)

2054.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: 6751

Inside

Press@RunDepth: 128.72 psig @ 4987.00 ft (KB)

Start Date: 2006.09.27

End Date:

2006.09.27

Start Time: 10:00:12

End Time:

19:59:26

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2006.09.27 @ 12:54:41

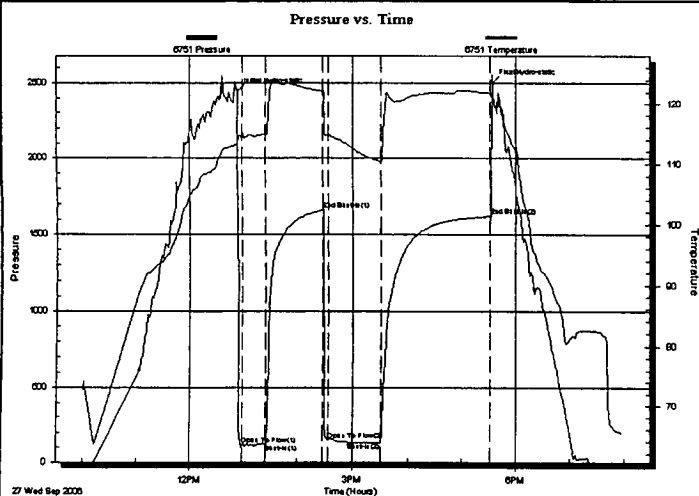
Time Off Btm: 2006.09.27 @ 17:32:56

TEST COMMENT: IF Strong blow BOB ASAO GTS 3 min.

ISI No blow back

FF Strong blow BOB GTS ASAO opened at 24 and died to 12.5.

FSI Very weak blow back



PRESSURE SUMMARY

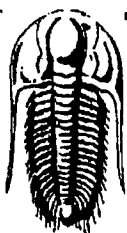
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2446.03	113.16	Initial Hydro-static
5	116.38	113.76	Open To Flow (1)
31	121.23	114.85	Shut-In(1)
93	1659.07	122.11	End Shut-In(1)
99	153.27	114.65	Open To Flow (2)
156	128.72	110.30	Shut-In(2)
277	1621.40	121.83	End Shut-In(2)
279	2502.44	120.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	5%G 95%Mw / a trace of Water	0.87
124.00	5%G 15%W 80%M slight trce of Oil	1.74
0.00		0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	16.00	205.07
Last Gas Rate	0.50	12.50	181.46
Max. Gas Rate	0.50	24.00	259.04



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Operating Co LLC

125 N Market Ste 1000
Wichita KS 67202

ATTN: Brad Rine

Shane Yost #1

10 31 17 Commanche K

Job Ticket: 26301

DST#: 1

Test Start: 2006.09.27 @ 10:00:11

Tool Information

Drill Pipe:	Length: 4946.00 ft	Diameter: 3.80 inches	Volume: 69.38 bbl	Tool Weight: 2000.00 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: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
		Total Volume: 69.38 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4952.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	65.00 ft			
Tool Length:	93.00 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			4925.00		
Shut In Tool	5.00			4930.00		
Hydraulic tool	5.00			4935.00		
Jars	5.00			4940.00		
Safety Joint	3.00			4943.00		
Packer	5.00			4948.00	28.00	Bottom Of Top Packer
Packer	4.00			4952.00		
Stubb	1.00			4953.00		
Perforations	1.00			4954.00		
Change Over Sub	1.00			4955.00		
Drill Pipe	31.00			4986.00		
Change Over Sub	1.00			4987.00		
Recorder	0.00	6751	Inside	4987.00		
Perforations	26.00			5013.00		
Recorder	0.00	11018	Inside	5013.00		
Bullnose	4.00			5017.00	65.00	Bottom Packers & Anchor
Total Tool Length:		93.00				



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DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Co LLC

Shane Yost #1

125 N Market Ste 1000
Wichita KS 67202

10 31 17 Commanche K

Job Ticket: 26301

DST#: 1

ATTN: Brad Rine

Test Start: 2006.09.27 @ 10:00:11

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: 45.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.35 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	5%G 95%M w/ a trace of Water	0.870
124.00	5%G 15%W 80%M slight trace of Oil	1.739
0.00		0.000

Total Length: 186.00 ft

Total Volume: 2.609 bbl

Num Fluid Samples: 0

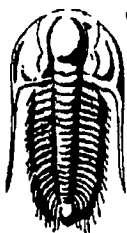
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



TRILOBITE
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DRILL STEM TEST REPORT

GAS RATES

Woolsey Operating Co LLC

Shane Yost #1

125 N Market Ste 1000
Wichita KS 67202

10 31 17 Commanche K

Job Ticket: 26301

DST#:1

ATTN: Brad Rine

Test Start: 2006.09.27 @ 10:00:11

Gas Rates Information

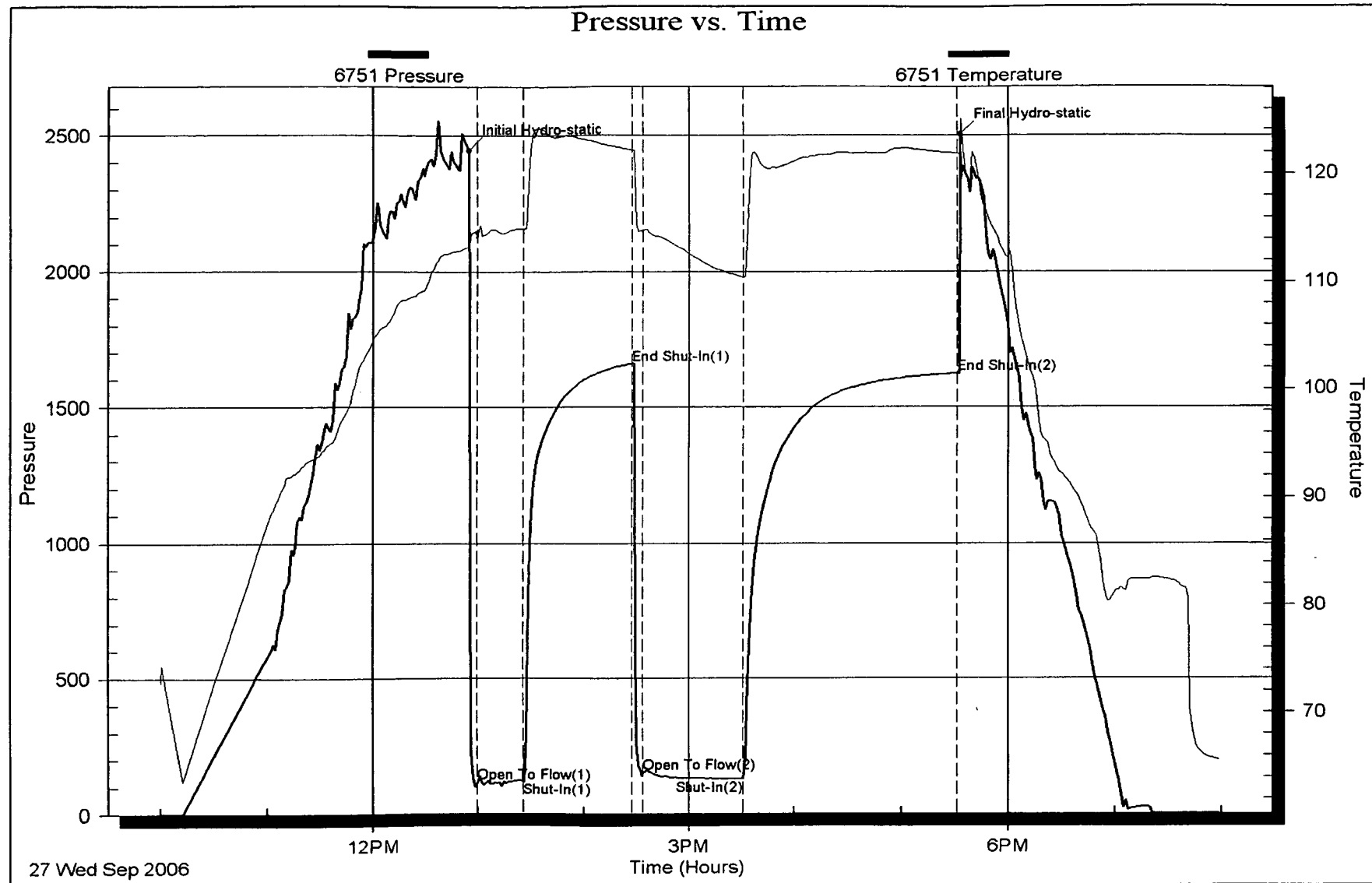
Temperature: 59 deg C

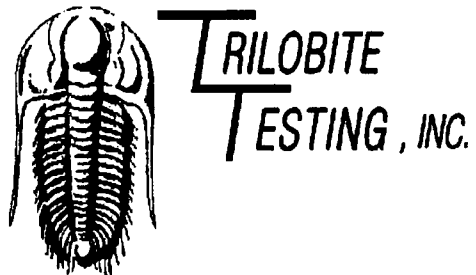
Relative Density: 0.65

Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
1	10	0.50	16.00	205.07
1	20	0.50	21.00	238.80
1	30	0.50	18.00	218.56
2	10	0.50	24.00	259.04
2	20	0.50	21.00	238.80
2	30	0.50	18.00	218.56
2	40	0.50	18.00	218.56
2	50	0.50	14.00	191.58
2	60	0.50	12.50	181.46





DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Co LLC**

125 N Market Ste 1000
Wichita KS 67202

ATTN: Brad Rine

10 31 17 Commanche K

Shane Yost #1

Start Date: 2006.09.28 @ 11:00:22

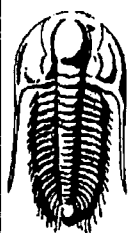
End Date: 2006.09.28 @ 20:42:37

Job Ticket #: 26302 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



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DRILL STEM TEST REPORT

Woolsey Operating Co LLC

125 N Market Ste 1000
Wichita KS 67202

ATTN: Brad Rine

Shane Yost #1

10 31 17 Commanche K

Job Ticket: 26302

DST#: 2

Test Start: 2006.09.28 @ 11:00:22

GENERAL INFORMATION:

Formation: **Midd. Miss**

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

Time Tool Opened: 13:45:52

Time Test Ended: 20:42:37

Test Type: **Conventional Bottom Hole**

Tester: **Harley Davidson**

Unit No: **33**

Interval: **5018.00 ft (KB) To 5065.00 ft (KB) (TVD)**

Total Depth: **5065.00 ft (KB) (TVD)**

Hole Diameter: **7.78 inches** Hole Condition: **Fair**

Reference Elevations: **2066.00 ft (KB)**

2054.00 ft (CF)

KB to GR/CF: **12.00 ft**

Serial #: 6751

Press@RunDepth: **25.75 psig @ ft (KB)**

Start Date: **2006.09.28**

End Date:

2006.09.28

Start Time: **11:00:23**

End Time:

20:42:37

Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Time On Btm: **2006.09.28 @ 13:44:37**

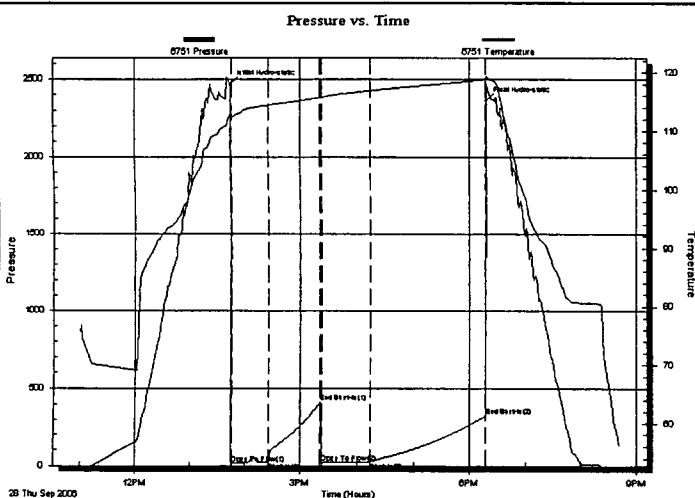
Time Off Btm: **2006.09.28 @ 18:17:37**

TEST COMMENT: IF Weak building built to 5 " in bucket

ISI No blow back

FF Weak blow built to 2 " in bucket

FSI No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2469.49	112.61	Initial Hydro-static
2	14.21	112.21	Open To Flow (1)
42	24.19	114.36	Shut-In(1)
97	409.76	115.70	End Shut-In(1)
98	19.48	115.59	Open To Flow (2)
149	25.75	116.92	Shut-In(2)
273	325.04	118.83	End Shut-In(2)
273	2363.22	119.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	120 of GIP	0.00
30.00	5%G 95%M w/scum of Oil	0.15

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Operating Co LLC

125 N Market Ste 1000
Wichita KS 67202

ATTN: Brad Rine

Shane Yost #1

10 31 17 Commanche K

Job Ticket: 26302

DST#: 2

Test Start: 2006.09.28 @ 11:00:22

Tool Information

Drill Pipe:	Length: 4444.00 ft	Diameter: 3.80 inches	Volume: 62.34 bbl	Tool Weight: 2000.00 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: 565.00 ft	Diameter: 2.25 inches	Volume: 2.78 bbl	Weight to Pull Loose: 80000.00 lb
		Total Volume:	65.12 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	5018.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	47.00 ft			
Tool Length:	75.00 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			4991.00	
Shut In Tool	5.00			4996.00	
Hydraulic tool	5.00			5001.00	
Jars	5.00			5006.00	
Safety Joint	3.00			5009.00	
Packer	5.00			5014.00	28.00 Bottom Of Top Packer
Packer	4.00			5018.00	
Stubb	1.00			5019.00	
Change Over Sub	1.00			5020.00	
Drill Pipe	31.00			5051.00	
Change Over Sub	1.00			5052.00	
Perforations	1.00			5053.00	
Recorder	0.00	6751	Inside	5053.00	
Perforations	8.00			5061.00	
Recorder	0.00	11018	Inside	5061.00	
Bullnose	4.00			5065.00	47.00 Bottom Packers & Anchor
Total Tool Length:		75.00			



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DRILL STEM TEST REPORT

FLUID SUMMARY

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125 N Market Ste 1000
Wichita KS 67202

10 31 17 Commanche K

Job Ticket: 26302

DST#: 2

ATTN: Brad Rine

Test Start: 2006.09.28 @ 11:00:22

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: 47.00 sec/qt

Cushion Volume:

bbl

Water Loss: 13.16 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	120 of GIP.	0.000
30.00	5%G 95%M w/scum of Oil	0.148

Total Length: 30.00 ft

Total Volume: 0.148 bbl

Num Fluid Samples: 0

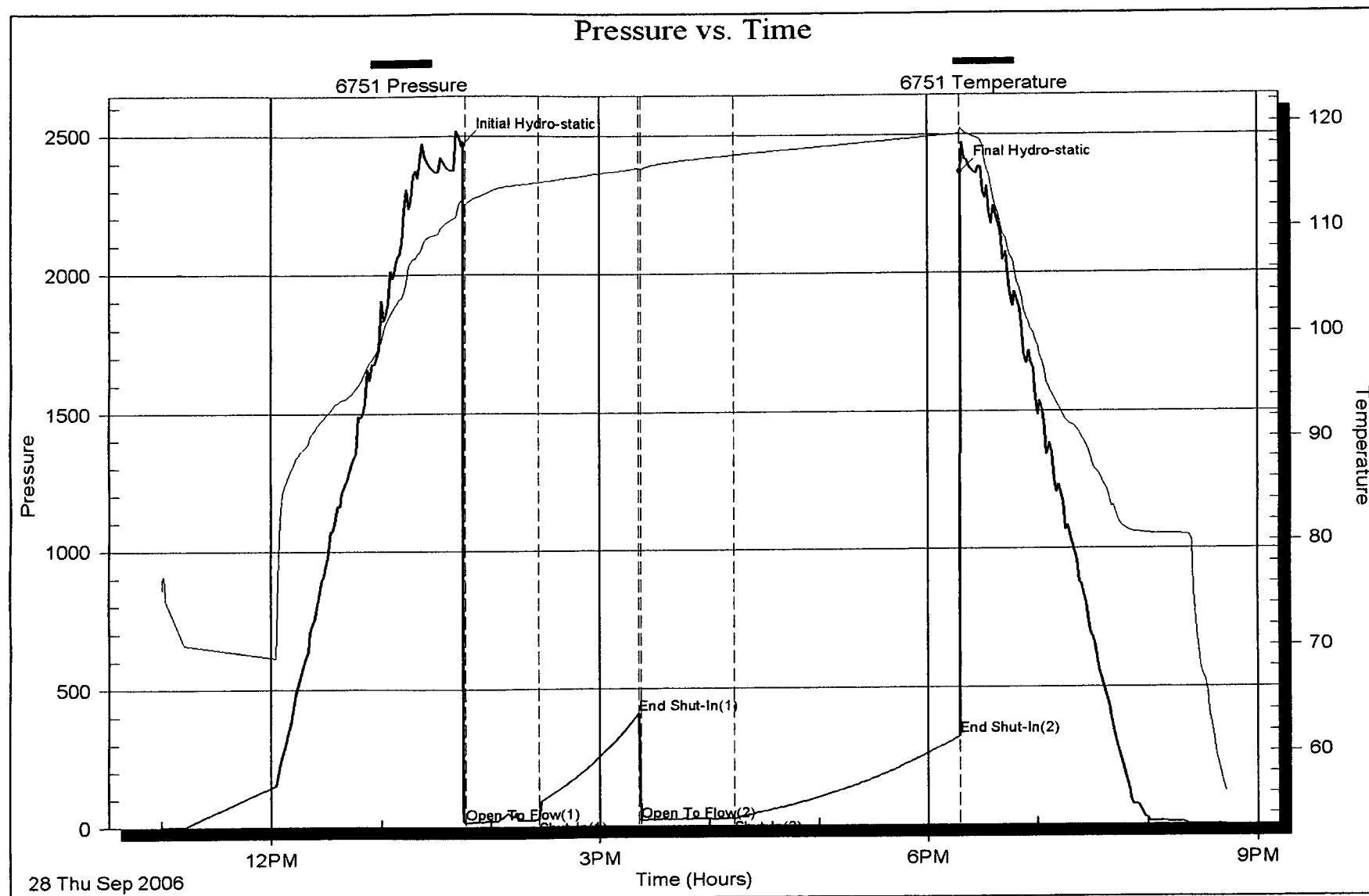
Num Gas Bombs: 0

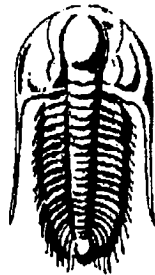
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE
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DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Co LLC**

125 N Market Ste 1000
Wichita KS 67202

ATTN: Brad Rine

10 31 17 Commanche K

Shane Yost #1

Start Date: 2006.09.29 @ 22:02:09

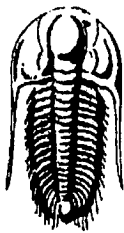
End Date: 2006.09.30 @ 09:45:09

Job Ticket #: 24971 DST #: 3

Trilobite Testing, Inc

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



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DRILL STEM TEST REPORT

Woolsey Operating Co LLC

125 N Market Ste 1000
Wichita KS 67202

ATTN: Brad Rine

Shane Yost #1

10 31 17 Commanche K

Job Ticket: 24971

DST#: 3

Test Start: 2006.09.29 @ 22:02:09

GENERAL INFORMATION:

Formation: Miss.

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:47:09

Time Test Ended: 09:45:09

Test Type: Conventional Straddle

Tester: Gary Pevoteaux

Unit No: 23

Interval: 5066.00 ft (KB) To 5121.00 ft (KB) (TVD)

Total Depth: 5140.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Poor

Reference Elevations: 2066.00 ft (KB)

2054.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: 6771

Inside

Press@RunDepth: 81.42 psig @ 5067.00 ft (KB)

Start Date: 2006.09.29

End Date:

2006.09.30

Start Time: 22:02:14

End Time:

09:45:09

Capacity: 7000.00 psig

Last Calib.: 2006.09.30

Time On Btm: 2006.09.30 @ 00:46:54

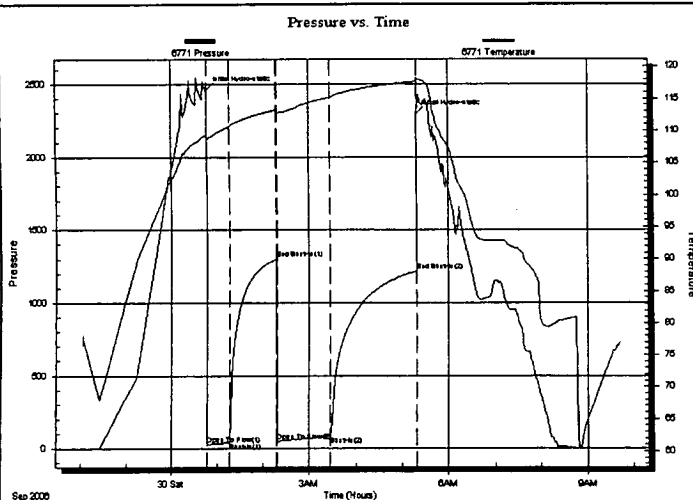
Time Off Btm: 2006.09.30 @ 05:18:53

TEST COMMENT: IF Weak blow 1/2 - 1 1/2 "

ISI No blow

FF Weak blow 1/2 - 4 "

FSI No blow



PRESSURE SUMMARY

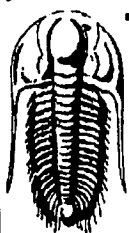
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2457.13	109.29	Initial Hydro-static
1	28.97	108.12	Open To Flow (1)
30	41.65	110.62	Shut-In(1)
91	1301.08	113.15	End Shut-In(1)
92	46.76	112.75	Open To Flow (2)
160	81.42	115.18	Shut-In(2)
272	1218.10	117.62	End Shut-In(2)
272	2295.74	118.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
75.00	WM 43%W 57%M	1.05
60.00	WM 29%W 71%M	0.84

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Operating Co LLC

125 N Market Ste 1000
Wichita KS 67202

ATTN: Brad Rine

Shane Yost #1

10 31 17 Commanche K

Job Ticket: 24971

DST#: 3

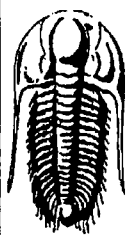
Test Start: 2006.09.29 @ 22:02:09

Tool Information

Drill Pipe:	Length: 5068.00 ft	Diameter: 3.80 inches	Volume: 71.09 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume: 71.09 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	5066.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	5121.00 ft			
Interval between Packers:	55.00 ft			
Tool Length:	101.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			5040.00		
Shut In Tool	5.00			5045.00		
Hydraulic tool	5.00			5050.00		
Jars	5.00			5055.00		
Safety Joint	2.00			5057.00		
Packer	4.00			5061.00	27.00	Bottom Of Top Packer
Packer	5.00			5066.00		
Stubb	1.00			5067.00		
Recorder	0.00	6771	Inside	5067.00		
Perforations	5.00			5072.00		
Change Over Sub	1.00			5073.00		
Blank Spacing	31.00			5104.00		
Change Over Sub	0.00			5104.00		
Perforations	13.00			5117.00		
Recorder	0.00	10290	Outside	5117.00		
Blank Off Sub	1.00			5118.00		
travel collar	3.00			5121.00	55.00	Tool Interval
Packer	0.00			5121.00		
Stubb	1.00			5122.00		
Perforations	13.00			5135.00		
Recorder	0.00	13789	Below	5135.00		
Bullnose	5.00			5140.00	19.00	Bottom Packers & Anchor
Total Tool Length:		101.00				



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DRILL STEM TEST REPORT

FLUID SUMMARY

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125 N Market Ste 1000
Wichita KS 67202

10 31 17 Commanche K

Job Ticket: 24971

DST#: 3

ATTN: Brad Rine

Test Start: 2006.09.29 @ 22:02:09

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:

17500 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6500.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
75.00	WM 43%W 57%M	1.052
60.00	WM 29%W 71%M	0.842

Total Length: 135.00 ft

Total Volume: 1.894 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6771

Inside Woolsey Operating Co LLC

10 31 17 Comanche K

DST Test Number: 3

