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**TRILOBITE
TESTING, INC.**

15-109-20712

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company**

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

22-12S-33W Logan

Beagley #1-22

Start Date: 2003.09.08 @ 17:50:00

End Date: 2003.09.09 @ 02:03:00

Job Ticket #: 17689 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

**CONFIDENTIAL
ORIGINAL**

Murfin Drilling Company

Beagley #1-22

22-12S-33W Logan

DST # 1

L/KC "E"

2003.09.08

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ORIGINAL



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Company

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

Beagley #1-22

22-12S-33W Logan

Job Ticket: 17689

DST#: 1

Test Start: 2003.09.08 @ 17:50:00

GENERAL INFORMATION:

Formation: L/KC "E"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:49:45

Time Test Ended: 02:03:00

Interval: 4112.00 ft (KB) To 4128.00 ft (KB) (TVD)

Total Depth: 4128.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

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Test Type: Conventional Bottom Hole

Tester: Rod Steinbrink

Unit No: 22

Reference Elevations: 3083.00 ft (KB)

3078.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6751

Inside

Press@RunDepth: 158.64 psig @ 4113.00 ft (KB)

Start Date: 2003.09.08

End Date:

2003.09.09

Start Time: 17:50:02

End Time:

02:03:00

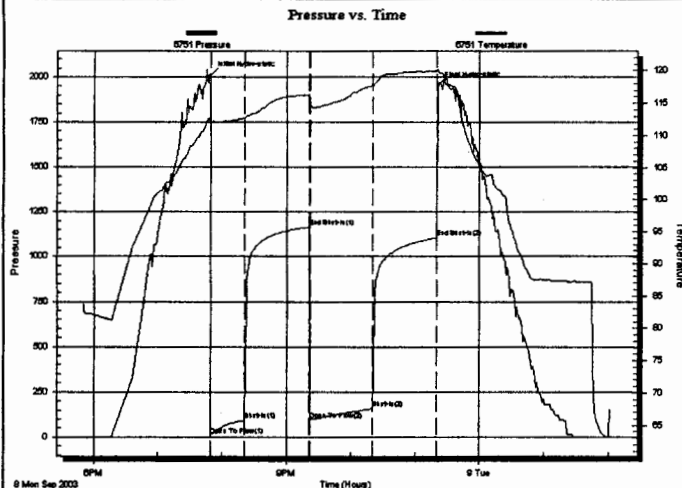
Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2003.09.08 @ 19:49:30

Time Off Btm: 2003.09.08 @ 23:21:15

TEST COMMENT: IF; Weak to fair off btm in 27 mins
IS; Surface return for 10 mins
FF; Weak to fair off btm in 40 mins
FSI; Surface return steady thru



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2007.81	112.70	Initial Hydro-static
1	10.70	111.86	Open To Flow (1)
32	92.85	112.69	Shut-In(1)
92	1165.11	116.28	End Shut-In(1)
93	96.41	115.26	Open To Flow (2)
151	158.64	117.67	Shut-In(2)
212	1105.89	119.91	End Shut-In(2)
212	1951.88	120.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	SMW 95%w tr 5% mud	0.59
255.00	Clean Oil	2.97

Gas Rates

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

 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT		TOOL DIAGRAM
	Murfin Drilling Company 250 N Water # 300 Wichita, KS. 67202 ATTN: Kris Kennedy	Beagley #1-22 22-12S-33W Logan Job Ticket: 17689 DST#: 1 Test Start: 2003.09.08 @ 17:50:00	

Tool Information

Drill Pipe:	Length: 3932.00 ft	Diameter: 3.80 inches	Volume: 55.16 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 80000.00 lb
			Total Volume: 56.08 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4112.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	16.00 ft			
Tool Length:	36.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4097.00	
Hydraulic tool	5.00			4102.00	
Packer	5.00			4107.00	20.00 Bottom Of Top Packer
Packer	5.00			4112.00	
Stubb	1.00			4113.00	
Recorder	0.00	6751	Inside	4113.00	
Perforations	10.00			4123.00	
Recorder	0.00	13309	Outside	4123.00	
Bullnose	5.00			4128.00	16.00 Bottom Packers & Anchor
Total Tool Length:	36.00				

 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT		FLUID SUMMARY
	Murfin Drilling Company 250 N Water # 300 Wichita, KS. 67202 ATTN: Kris Kennedy	Beagley #1-22 22-12S-33W Logan Job Ticket: 17689 DST#: 1 Test Start: 2003.09.08 @ 17:50:00	

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 31 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 35000 ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.76 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 4900.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	SMW 95%w tr 5%mud	0.590
255.00	Clean Oil	2.967

Total Length: 375.00 ft Total Volume: 3.557 bbl

 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: RW .21 @ 70 deg = 35,000 Chlorides

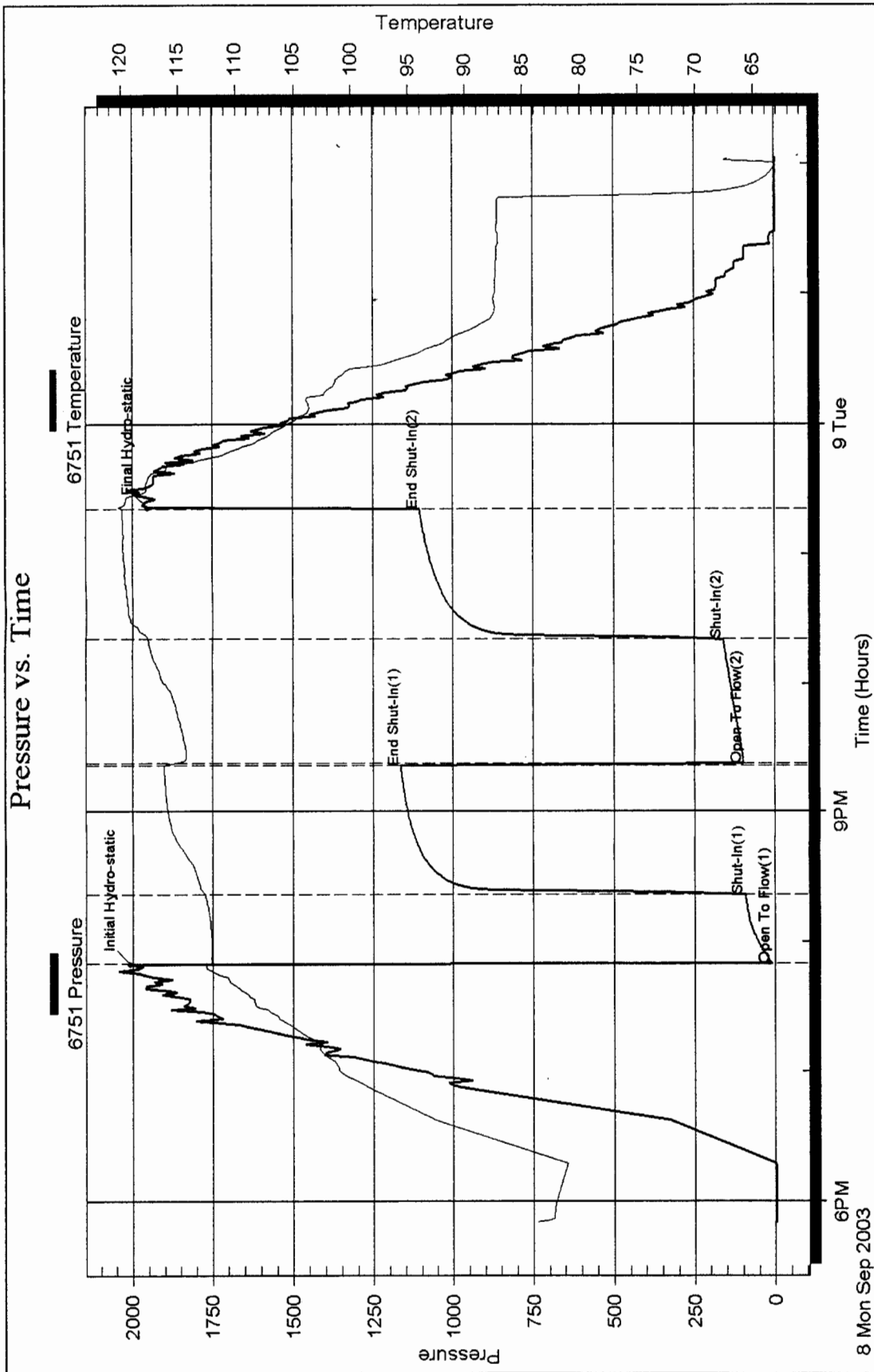
DST Test Number: 1

22-12S-33W Logan

Murfin Drilling Company

Inside

Serial #: 6751



Trilobite Testing, Inc

Ref. No: 17689

Printed: 2003.09.17 @ 10:01:35 Page 5

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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company**

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

22-12S-33W Logan

Beagley #1-22

Start Date: 2003.09.09 @ 17:35:26

End Date: 2003.09.10 @ 04:18:41

Job Ticket #: 17690 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

Murfin Drilling Company

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

Beagley #1-22

22-12S-33W Logan

Job Ticket: 17690

DST#: 2

Test Start: 2003.09.09 @ 17:35:26

GENERAL INFORMATION:

Formation: **L/ KC "H"**

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

Time Tool Opened: 19:35:26

Time Test Ended: 04:18:41

Test Type: **Conventional Bottom Hole**

Tester: **Rod Steinbrink**

Unit No: **22**

Interval: **4178.00 ft (KB) To 4214.00 ft (KB) (TVD)**

Total Depth: **4214.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **3083.00 ft (KB)**

3078.00 ft (CF)

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

Serial #: 6751

Inside

Press@RunDepth: **1016.15 psig @ 4179.00 ft (KB)**

Start Date: **2003.09.09**

End Date:

2003.09.10

Start Time: **17:35:28**

End Time:

04:18:41

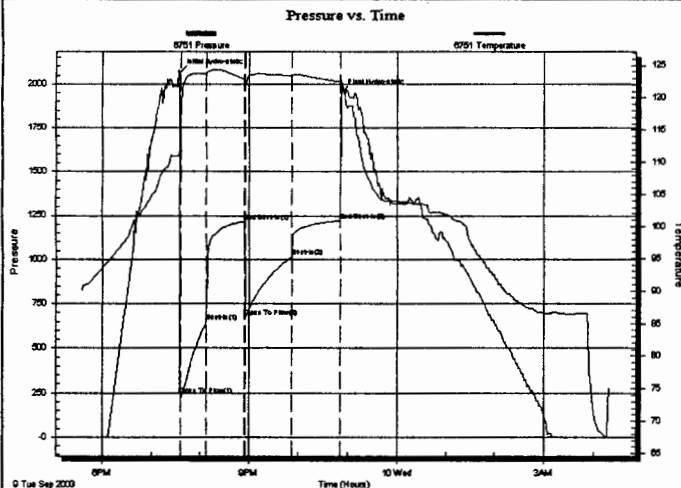
Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Time On Btm: **2003.09.09 @ 19:34:26**

Time Off Btm: **2003.09.09 @ 22:52:11**

TEST COMMENT: IF; Strong blow off btm in 2 mins
IS; Surface return built to btm in 8 mins
FF; Strong blow off btm in 3 mins
FS; Surface return built to btm in 10 mins



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2063.69	111.81	Initial Hydro-static
1	235.24	113.65	Open To Flow (1)
33	648.13	123.77	Shut-In(1)
80	1217.95	122.94	End Shut-In(1)
81	674.83	122.05	Open To Flow (2)
138	1016.15	123.46	Shut-In(2)
197	1221.50	122.50	End Shut-In(2)
198	1950.46	122.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
300.00	GMCO 5%gas 60%oil 35%mud	2.50
2510.00	CGO 15%gas 85%oil	35.21

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

Beagley #1-22

22-12S-33W Logan

Job Ticket: 17690

DST#: 2

Test Start: 2003.09.09 @ 17:35:26

Tool Information

Drill Pipe:	Length: 3992.00 ft	Diameter: 3.80 inches	Volume: 56.00 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 80000.00 lb
			Total Volume: 56.92 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4178.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	36.00 ft			
Tool Length:	58.00 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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Shut In Tool	5.00			4161.00	
Hydraulic tool	5.00			4166.00	
Safety Joint	2.00			4168.00	
Packer	5.00			4173.00	22.00 Bottom Of Top Packer
Packer	5.00			4178.00	
Stubb	1.00			4179.00	
Recorder	0.00	6751	Inside	4179.00	
Perforations	30.00			4209.00	
Recorder	0.00	13309	Outside	4209.00	
Bullnose	5.00			4214.00	36.00 Bottom Packers & Anchor
Total Tool Length:	58.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company

Beagley #1-22

250 N Water # 300

22-12S-33W Logan

Wichita, KS. 67202

Job Ticket: 17690

DST#:2

ATTN: Kris Kennedy

Test Start: 2003.09.09 @ 17:35:26

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4900.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
300.00	GMCO 5%gas 60%oil 35%mud	2.505
2510.00	CGO 15%gas 85%oil	35.209

Total Length: 2810.00 ft

Total Volume: 37.714 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

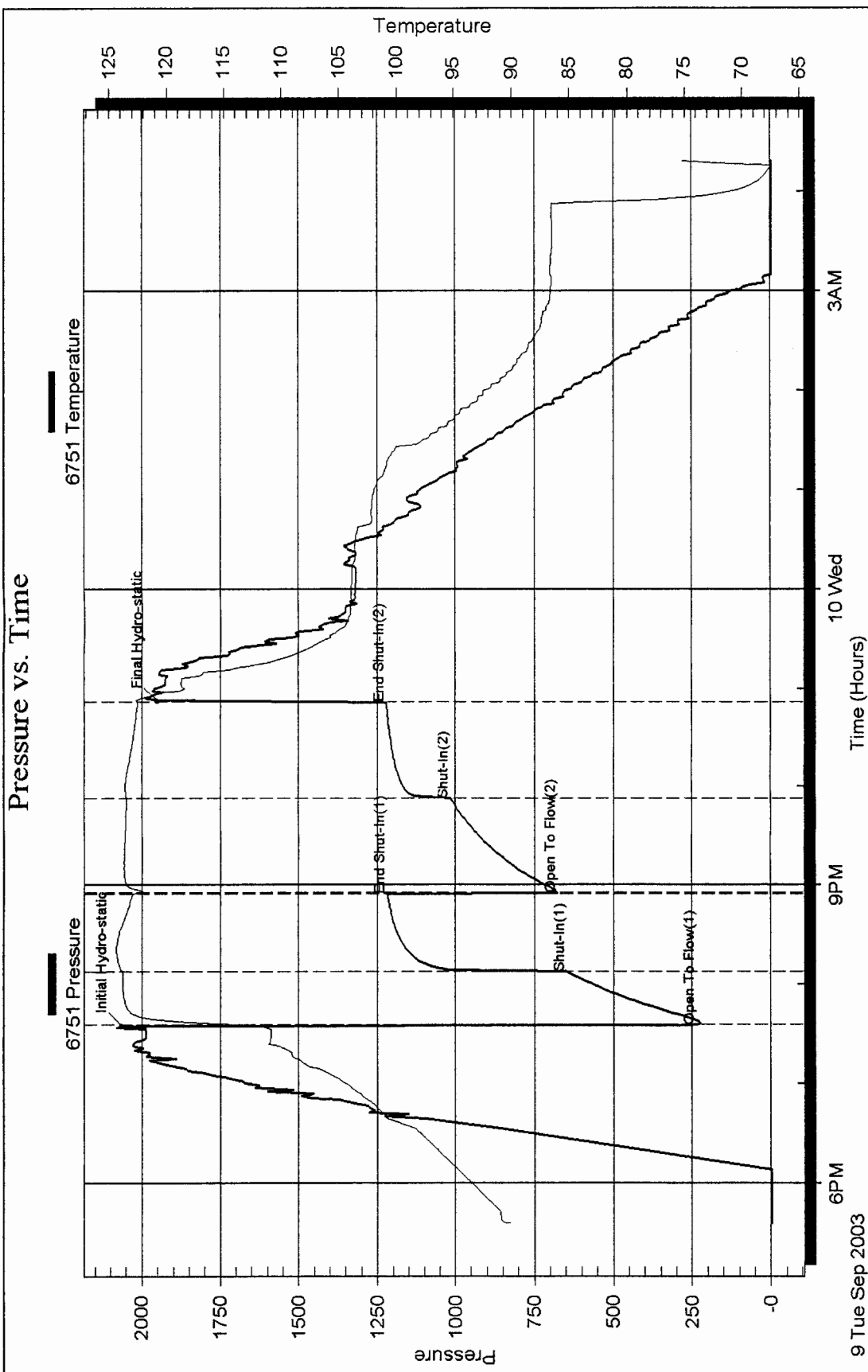
Serial #:

Laboratory Name:

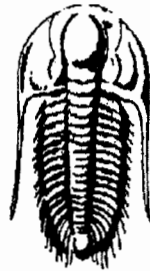
Laboratory Location:

Recovery Comments:

Pressure vs. Time



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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company**

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

22-12S-33W Logan

Beagley #1-22

Start Date: 2003.09.10 @ 13:55:29

End Date: 2003.09.10 @ 22:41:42

Job Ticket #: 17691 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Murfin Drilling Company

Beagley #1-22

22-12S-33W Logan

DST # 3

L/KC "I"

2003.09.10



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Company

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

Beagley #1-22

22-12S-33W Logan

Job Ticket: 17691

DST#: 3

Test Start: 2003.09.10 @ 13:55:29

GENERAL INFORMATION:

Formation: **L/KC "I"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:05:12

Time Test Ended: 22:41:42

Test Type: Conventional Bottom Hole

Tester: Rod Steinbrink

Unit No: 22

Interval: **4212.00 ft (KB) To 4244.00 ft (KB) (TVD)**

Total Depth: 4128.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3083.00 ft (KB)

3078.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6751 Inside

Press@RunDepth: 268.11 psig @ 4213.00 ft (KB)

Start Date: 2003.09.10

End Date:

2003.09.10

Start Time: 13:55:29

End Time:

22:41:42

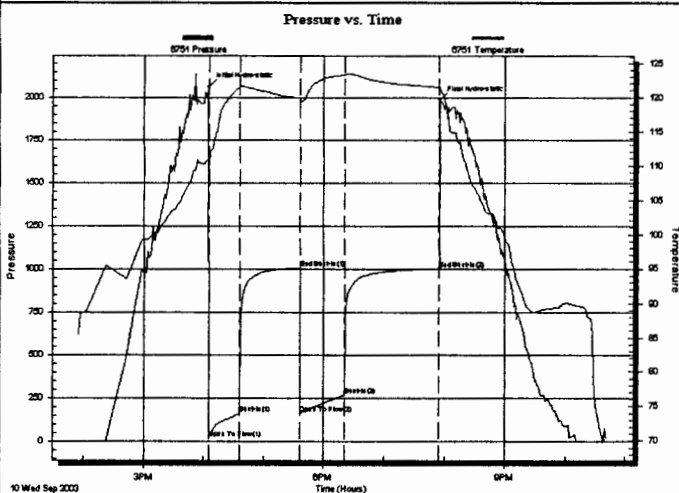
Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2003.09.10 @ 16:04:57

Time Off Btm: 2003.09.10 @ 19:55:42

TEST COMMENT: IF; Fair blow off btm in 20 mins
IS; Surface return steady died in 30 mins
FF; Fair blow off btm in 23 mins
FS; No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2063.13	110.81	Initial Hydro-static
1	15.67	110.11	Open To Flow (1)
31	158.33	121.40	Shut-In (1)
92	1006.82	119.91	End Shut-In (1)
92	162.70	119.59	Open To Flow (2)
137	268.11	123.27	Shut-In (2)
230	1001.67	121.42	End Shut-In (2)
231	1989.23	121.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
310.00	Wtr	2.65
185.00	MCW 80%w tr 20% mud	2.60
10.00	FO	0.14

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company

Beagley #1-22

250 N Water # 300
Wichita, KS. 67202

22-12S-33W Logan

Job Ticket: 17691

DST#: 3

ATTN: Kris Kennedy

Test Start: 2003.09.10 @ 13:55:29

Tool Information

Drill Pipe:	Length: 4026.00 ft	Diameter: 3.80 inches	Volume: 56.47 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume: 57.39 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4212.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	54.00 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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Shut In Tool	5.00			4195.00	
Hydraulic tool	5.00			4200.00	
Safety Joint	2.00			4202.00	
Packer	5.00			4207.00	22.00 Bottom Of Top Packer
Packer	5.00			4212.00	
Stubb	1.00			4213.00	
Recorder	0.00	6751	Inside	4213.00	
Perforations	26.00			4239.00	
Recorder	0.00	13309	Outside	4239.00	
Bullnose	5.00			4244.00	32.00 Bottom Packers & Anchor
Total Tool Length:	54.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

Beagley #1-22

22-12S-33W Logan

Job Ticket: 17691

DST#: 3

Test Start: 2003.09.10 @ 13:55:29

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 50.00 sec/qt

Water Loss: 5.98 in³

Resistivity: ohm.m

Salinity: 7200.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

37 deg API

Water Salinity:

30000 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
310.00	Wtr	2.645
185.00	MCW 80%w tr 20%mud	2.595
10.00	FO	0.140

Total Length: 505.00 ft

Total Volume: 5.380 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .24 @ 70 deg = 30,000 Chlorides

Serial #: 6751

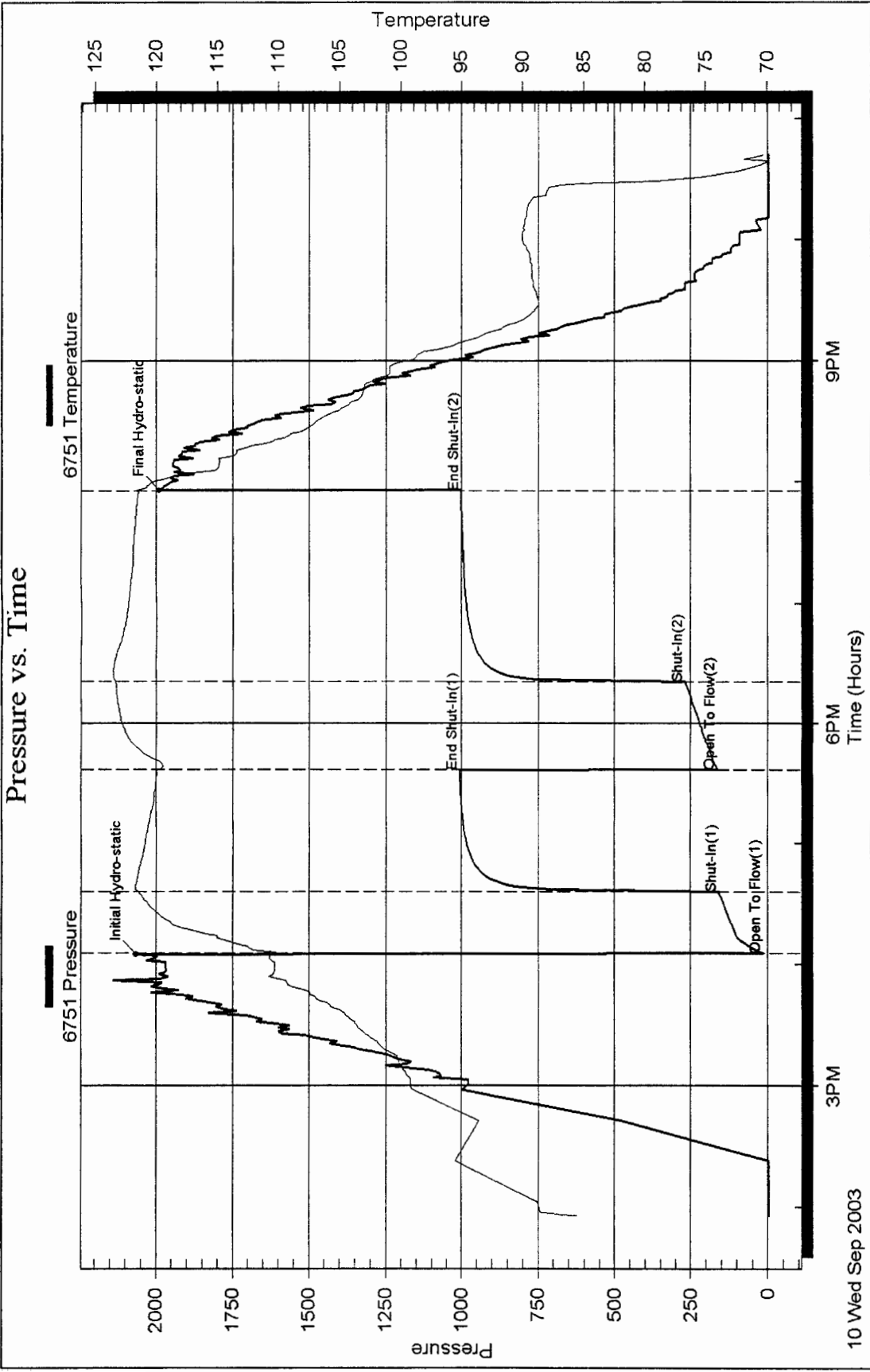
Inside

Murfin Drilling Company

22-12S-33W Logan

DST Test Number: 3

Pressure vs. Time



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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company**

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

22-12S-33W Logan

Beagley #1-22

Start Date: 2003.09.11 @ 07:15:02

End Date: 2003.09.11 @ 23:39:52

Job Ticket #: 17692 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Murfin Drilling Company

Beagley #1-22

22-12S-33W Logan

DST # 4

L/KC "J"

2003.09.11



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Company

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

Beagley #1-22

22-12S-33W Logan

Job Ticket: 17692

DST#: 4

Test Start: 2003.09.11 @ 07:15:02

GENERAL INFORMATION:

Formation: **L/KC "J"**

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

Time Tool Opened: 09:35:00

Time Test Ended: 23:39:52

Test Type: **Conventional Bottom Hole**

Tester: **Rod Steinbrink**

Unit No: **22**

Interval: **4233.00 ft (KB) To 4266.00 ft (KB) (TVD)**

Total Depth: **4266.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **3083.00 ft (KB)**

3078.00 ft (CF)

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

Serial #: 6751 **Inside**

Press@RunDepth: **psig @ 4234.00 ft (KB)**

Start Date: **2003.09.11**

End Date:

2003.09.11

Start Time: **07:15:02**

End Time:

14:49:15

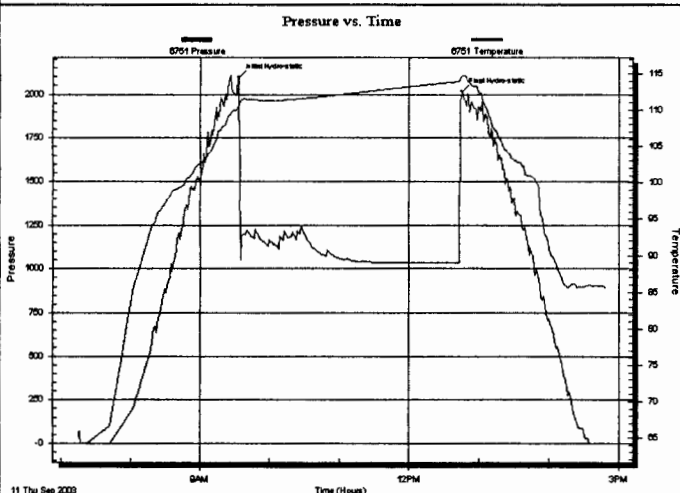
Capacity: **6000.00 psig**

Last Calib.: **1899.12.30**

Time On Btm: **2003.09.11 @ 09:33:30**

Time Off Btm: **2003.09.11 @ 12:45:15**

TEST COMMENT: IF; Weak 1/2" blow decreased to surface
FF: No return
plugged tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2098.30	110.50	Initial Hydro-static
192	2014.56	114.68	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Drig. Mud	0.05

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company

Beagley #1-22

250 N Water # 300
Wichita, KS. 67202

22-12S-33W Logan

Job Ticket: 17692

DST#: 4

ATTN: Kris Kennedy

Test Start: 2003.09.11 @ 07:15:02

Tool Information

Drill Pipe:	Length: 4051.00 ft	Diameter: 3.80 inches	Volume: 56.82 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 75000.00 lb
		Total Volume: 57.74 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4233.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	33.00 ft			
Tool Length:	55.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			4216.00	
Hydraulic tool	5.00			4221.00	
Safety Joint	2.00			4223.00	
Packer	5.00			4228.00	22.00 Bottom Of Top Packer
Packer	5.00			4233.00	
Stubb	1.00			4234.00	
Recorder	0.00	6751	Inside	4234.00	
Perforations	27.00			4261.00	
Recorder	0.00	13309	Outside	4261.00	
Bullnose	5.00			4266.00	33.00 Bottom Packers & Anchor
Total Tool Length:	55.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company

Beagley #1-22

250 N Water # 300
Wichita, KS. 67202

22-12S-33W Logan

Job Ticket: 17692

DST#: 4

ATTN: Kris Kennedy

Test Start: 2003.09.11 @ 07:15:02

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: 6.75 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4900.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Drig. Mud	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

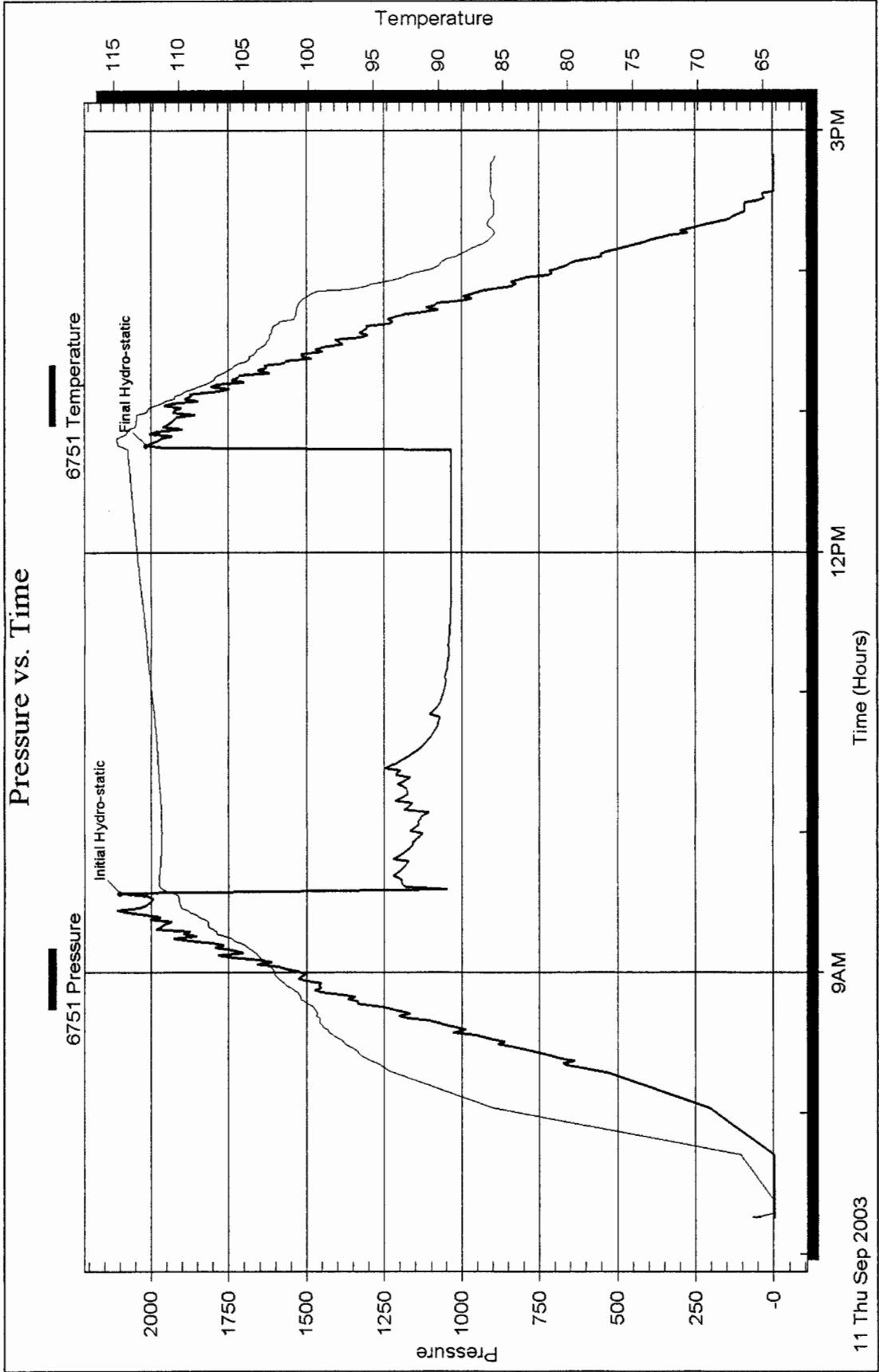
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

RECEIVED
NOV 06 2003
KCC WICHITA

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company**

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

22-12S-33W Logan

Beagley #1-22

Start Date: 2003.09.11 @ 07:15:00

End Date: 2003.09.11 @ 23:39:53

Job Ticket #: 17693 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

Murfin Drilling Company

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

Beagley #1-22

22-12S-33W Logan

Job Ticket: 17693

DST#: 5

Test Start: 2003.09.11 @ 07:15:00

GENERAL INFORMATION:

Formation: **L/KC "J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:15:23

Time Test Ended: 23:39:53

Test Type: Conventional Bottom Hole

Tester: Rod Steinbrink

Unit No: 22

Interval: **4246.00 ft (KB) To 4266.00 ft (KB) (TVD)**

Total Depth: 4266.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3083.00 ft (KB)

3078.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6751

Inside

Press@RunDepth: 287.88 psig @ 4247.00 ft (KB)

Start Date: 2003.09.11

End Date: 2003.09.11

Start Time: 14:40:15

End Time: 23:39:53

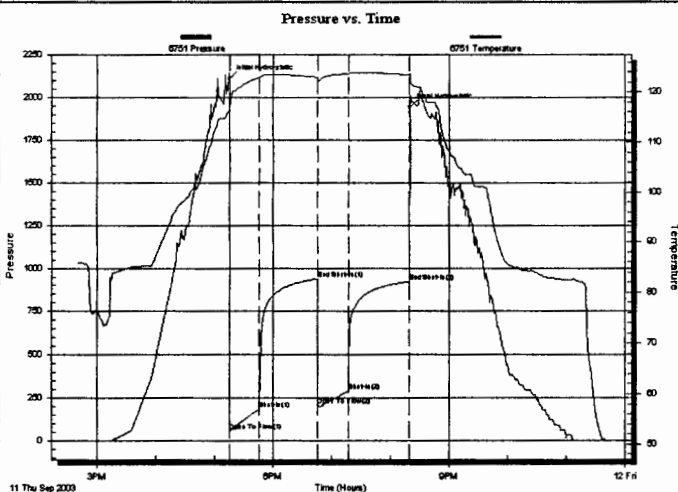
Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2003.09.11 @ 17:15:08

Time Off Btm: 2003.09.11 @ 20:19:38

TEST COMMENT: IF; Fair to strong off btm in 4 mins
IS; Fair return off btm in 10 mins
FF; Fair to strong off btm in 10 mins
FS; Fair return off btm in 15 mins decreased to surface



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2110.91	116.55	Initial Hydro-static
1	52.26	116.47	Open To Flow (1)
31	181.86	122.90	Shut-In(1)
91	936.70	122.98	End Shut-In(1)
92	203.06	122.34	Open To Flow (2)
122	287.88	123.67	Shut-In(2)
184	921.03	123.46	End Shut-In(2)
185	1944.68	123.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1790.00	GIP	23.41
185.00	MCW 95%w tr	2.60
60.00	OWCM 10%oil 10%w tr 80%mc0.84	
500.00	CGO 30%gas 70%oil	7.01

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company

Beagley #1-22

250 N Water # 300
Wichita, KS. 67202

22-12S-33W Logan

Job Ticket: 17693

DST#: 5

ATTN: Kris Kennedy

Test Start: 2003.09.11 @ 07:15:00

Tool Information

Drill Pipe:	Length: 4051.00 ft	Diameter: 3.80 inches	Volume: 56.82 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 75000.00 lb
			Total Volume: 57.74 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4246.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 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
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Shut In Tool	5.00			4229.00	
Hydraulic tool	5.00			4234.00	
Safety Joint	2.00			4236.00	
Packer	5.00			4241.00	22.00 Bottom Of Top Packer
Packer	5.00			4246.00	
Stubb	1.00			4247.00	
Recorder	0.00	6751	Inside	4247.00	
Perforations	14.00			4261.00	
Recorder	0.00	13309	Outside	4261.00	
Bullnose	5.00			4266.00	20.00 Bottom Packers & Anchor
Total Tool Length:	42.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company

Beagley #1-22

250 N Water # 300
Wichita, KS. 67202

22-12S-33W Logan

Job Ticket: 17693

DST#: 5

ATTN: Kris Kennedy

Test Start: 2003.09.11 @ 07:15:00

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:

40000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.76 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4900.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1790.00	GIP	23.406
185.00	MCW 95%w tr	2.595
60.00	OWCM 10%oil 10%w tr 80%mud	0.842
500.00	CGO 30%gas 70%oil	7.014

Total Length: 2535.00 ft

Total Volume: 33.857 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .19 @ 70 deg = 40,000 Chlorides

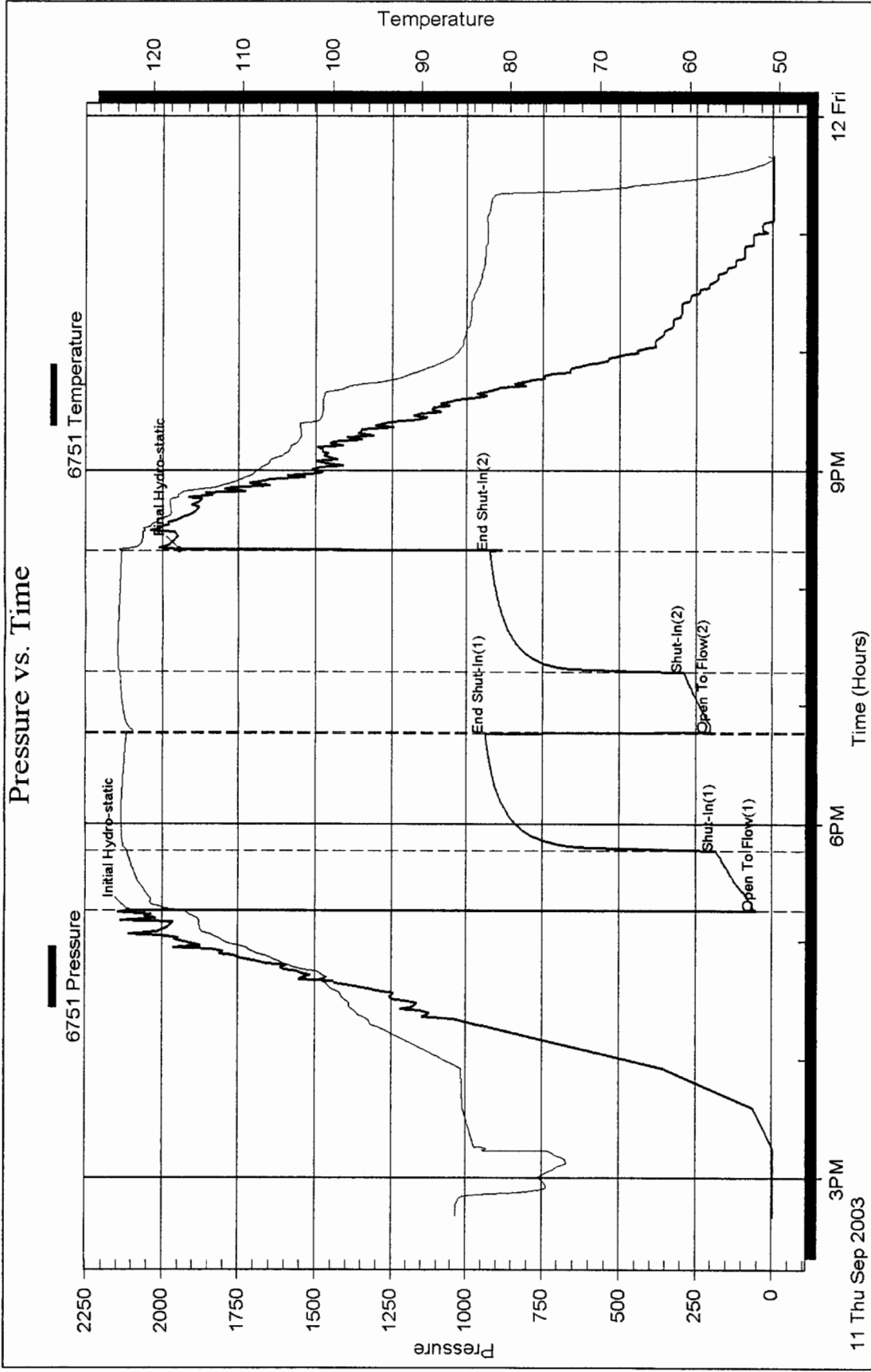
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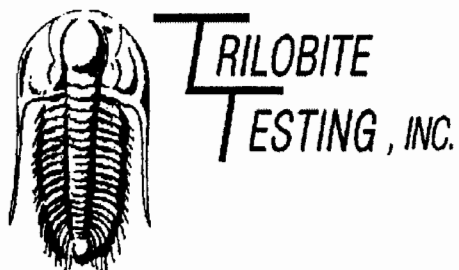
Inside

Murfin Drilling Company

22-12S-33W Logan

DST Test Number: 5





DRILL STEM TEST REPORT

RECEIVED
NOV 06 2003
KCC WICHITA

Prepared For: **Murfin Drilling Company**

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

22-12S-33W Logan

Beagley #1-22

Start Date: 2003.09.12 @ 11:45:00

End Date: 2003.09.12 @ 20:15:30

Job Ticket #: 17694 DST #: 6

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Company

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

Beagley #1-22

22-12S-33W Logan

Job Ticket: 17694

DST#: 6

Test Start: 2003.09.12 @ 11:45:00

GENERAL INFORMATION:

Formation: **L/KC "J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:07:00

Time Test Ended: 20:15:30

Test Type: Conventional Bottom Hole

Tester: Rod Steinbrink

Unit No: 22

Interval: **4268.00 ft (KB) To 4305.00 ft (KB) (TVD)**

Total Depth: 4268.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3083.00 ft (KB)

3078.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6751

Inside

Press@RunDepth: 426.53 psig @ 4269.00 ft (KB)

Start Date: 2003.09.12

End Date:

2003.09.12

Start Time: 11:45:02

End Time:

20:15:30

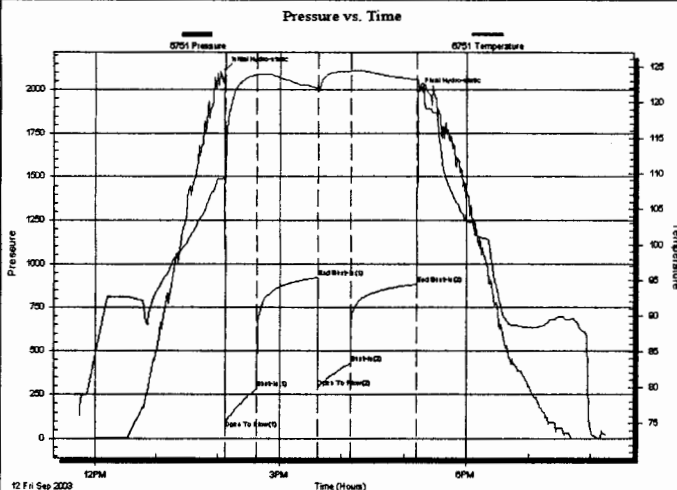
Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2003.09.12 @ 14:06:45

Time Off Btm: 2003.09.12 @ 17:13:00

TEST COMMENT: IF; Fair to strong off btm in 5 mins
IS; Weak return in 20 mins built to 2"
FF; Fair to strong off btm in 8 mins
FS; Weak return in 10 mins steady thru



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2111.74	109.94	Initial Hydro-static
1	53.43	109.75	Open To Flow (1)
32	283.62	123.88	Shut-in (1)
91	920.79	122.01	End Shut-in (1)
91	292.86	121.73	Open To Flow (2)
122	426.53	124.40	Shut-in (2)
186	883.81	123.21	End Shut-in (2)
187	1990.23	123.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
805.00	Wtr 100%w tr	9.59
185.00	MW 90%w tr 10%m	2.60
20.00	CGO 30%gas 70%oil	0.28
290.00	GIP	4.07

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company

Beagley #1-22

250 N Water # 300
Wichita, KS. 67202

22-12S-33W Logan

Job Ticket: 17694

DST#: 6

ATTN: Kris Kennedy

Test Start: 2003.09.12 @ 11:45:00

Tool Information

Drill Pipe:	Length: 4084.00 ft	Diameter: 3.80 inches	Volume: 57.29 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 58.21 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4268.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	37.00 ft			
Tool Length:	59.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4251.00	
Hydraulic tool	5.00			4256.00	
Safety Joint	2.00			4258.00	
Packer	5.00			4263.00	22.00 Bottom Of Top Packer
Packer	5.00			4268.00	
Stubb	1.00			4269.00	
Recorder	0.00	6751	Inside	4269.00	
Perforations	31.00			4300.00	
Recorder	0.00	13309	Outside	4300.00	
Bullnose	5.00			4305.00	37.00 Bottom Packers & Anchor
Total Tool Length:	59.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company

Beagley #1-22

250 N Water # 300
Wichita, KS. 67202

22-12S-33W Logan

Job Ticket: 17694

DST#: 6

ATTN: Kris Kennedy

Test Start: 2003.09.12 @ 11:45:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

39 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

20000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
805.00	Wtr 100%w tr	9.589
185.00	MW 90%w tr 10%m	2.595
20.00	CGO 30%gas 70%oil	0.281
290.00	GIP	4.068

Total Length: 1300.00 ft

Total Volume: 16.533 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

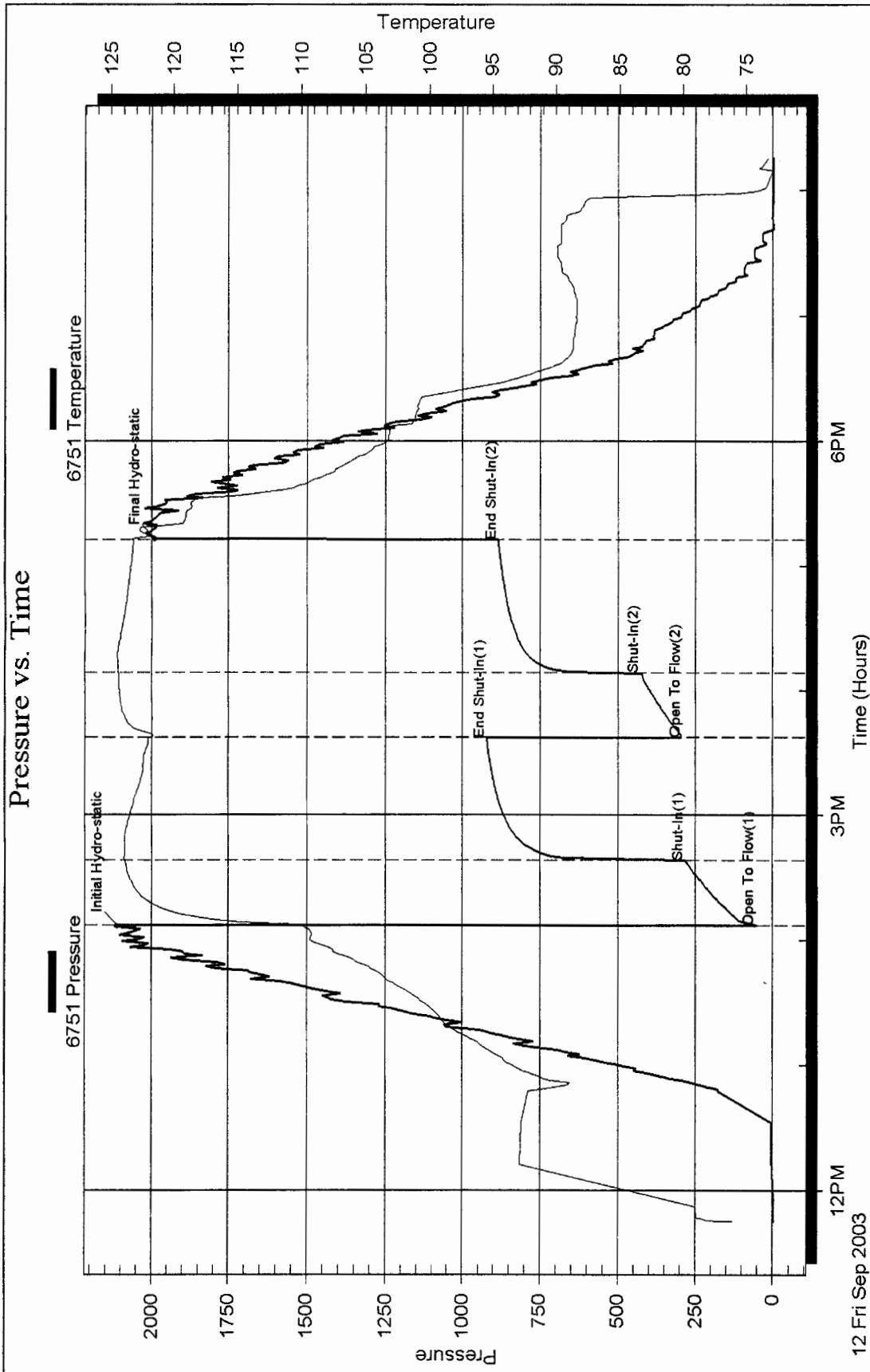
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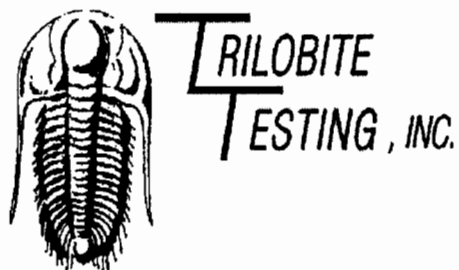
Laboratory Name:

Laboratory Location:

Recovery Comments: RW .35 @ 70 deg = 20,000 Chlorides

Pressure vs. Time





DRILL STEM TEST REPORT

RECEIVED
NOV 06 2003
KCC WICHITA

Prepared For: **Murfin Drilling Company**

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

22-12S-33W Logan

Beagley #1-22

Start Date: 2003.09.14 @ 04:07:29

End Date: 2003.09.14 @ 11:54:14

Job Ticket #: 17695 DST #: 7

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Company

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

Beagley #1-22

22-12S-33W Logan

Job Ticket: 17695

DST#: 7

Test Start: 2003.09.14 @ 04:07:29

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:16:59

Time Test Ended: 11:54:14

Test Type: Conventional Bottom Hole

Tester: Rod Steinbrink

Unit No: 22

Interval: **4592.00 ft (KB) To 4640.00 ft (KB) (TVD)**

Total Depth: 4640.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3083.00 ft (KB)

3078.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6751

Inside

Press@RunDepth: 83.79 psig @ 4593.00 ft (KB)

Start Date: 2003.09.14

End Date:

2003.09.14

Start Time: 04:07:31

End Time:

11:54:14

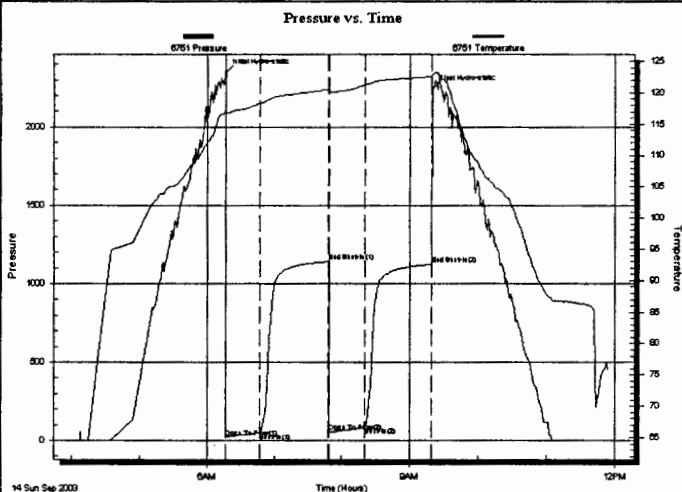
Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2003.09.14 @ 06:16:44

Time Off Btm: 2003.09.14 @ 09:19:29

TEST COMMENT: IF; Weak surface blow built to 1"
FF; Weak surface blow built to 1"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2346.85	117.25	Initial Hydro-static
1	19.42	116.75	Open To Flow (1)
31	49.03	118.35	Shut-In(1)
92	1138.24	120.49	End Shut-In(1)
93	53.17	120.15	Open To Flow (2)
124	83.79	121.23	Shut-In(2)
183	1121.92	122.56	End Shut-In(2)
183	2240.85	122.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
110.00	SGOCM 10%gas 30%oil 60%mud	0.54
30.00	CGO 15%gas 85%oil	0.15

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company

250 N Water # 300
Wichita, KS. 67202

ATTN: Kris Kennedy

Beagley #1-22

22-12S-33W Logan

Job Ticket: 17695

DST#: 7

Test Start: 2003.09.14 @ 04:07:29

Tool Information

Drill Pipe:	Length: 4390.00 ft	Diameter: 3.80 inches	Volume: 61.58 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: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 90000.00 lb
		Total Volume: 62.50 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4592.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	48.00 ft			
Tool Length:	70.00 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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Shut In Tool	5.00			4575.00	
Hydraulic tool	5.00			4580.00	
Safety Joint	2.00			4582.00	
Packer	5.00			4587.00	22.00 Bottom Of Top Packer
Packer	5.00			4592.00	
Stubb	1.00			4593.00	
Recorder	0.00	6751	Inside	4593.00	
Perforations	10.00			4603.00	
Change Over Sub	1.00			4604.00	
Anchor	30.00			4634.00	
Change Over Sub	1.00			4635.00	
Recorder	0.00	13309	Outside	4635.00	
Bullnose	5.00			4640.00	48.00 Bottom Packers & Anchor

Total Tool Length: 70.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company

Beagley #1-22

250 N Water # 300
Wichita, KS. 67202

22-12S-33W Logan

Job Ticket: 17695

DST#: 7

ATTN: Kris Kennedy

Test Start: 2003.09.14 @ 04:07:29

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
110.00	SGOCM 10%gas 30%oil 60%mud	0.541
30.00	CGO 15%gas 85%oil	0.148

Total Length: 140.00 ft

Total Volume: 0.689 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6751

Inside

Murfin Drilling Company

22-12S-33W Logan

DST Test Number: 7

Pressure vs. Time

