



DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil Inc.**

PO Box 550
Hays, Ks. 67601

ATTN: Terry Piesker

3-14s-17w

Sander # 1

Start Date: 2003.10.04 @ 10:22:00

End Date: 2003.10.04 @ 16:20:30

Job Ticket #: 18170 DST #: 1

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Dreiling Oil Inc.

PO Box 550
Hays, Ks. 67601

ATTN: Terry Plesker

Sander # 1

3-14s-17w

Job Ticket: 18170

DST#: 1

Test Start: 2003.10.04 @ 10:22:00

GENERAL INFORMATION:

Formation: **L.Kc.-C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:59:00

Time Test Ended: 16:20:30

Test Type: Conventional Bottom Hole

Tester: John Schmidt

Unit No: 18

Interval: 3261.00 ft (KB) To 3314.00 ft (KB) (TVD)

Total Depth: 3314.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1995.00 ft (KB)

1990.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741

Inside

Press@RunDepth: 278.16 psig @ 3264.00 ft (KB)

Start Date: 2003.10.04

End Date: 2003.10.04

Start Time: 10:22:01

End Time: 16:20:30

Capacity: 7000.00 psig

Last Calib.: 2003.10.04

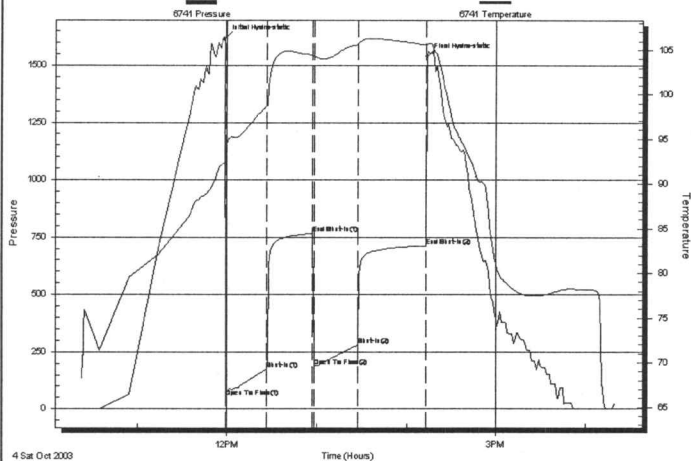
Time On Btm: 2003.10.04 @ 11:58:30

Time Off Btm: 2003.10.04 @ 14:13:00

TEST COMMENT: IF-Strong B.O.B.3 min.
FF-Strong B.O.B. 4 min

ISI-Strong blow back B.O.B.3 min.
FSI-G.T.S in 5 min will burn.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1617.42	92.37	Initial Hydro-static
1	51.13	92.49	Open To Flow (1)
28	175.21	98.70	Shut-In (1)
59	764.07	104.44	End Shut-In (1)
60	188.26	104.25	Open To Flow (2)
89	278.16	105.62	Shut-In (2)
134	710.38	105.58	End Shut-In (2)
135	1538.76	105.68	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GWMCO-20%G-10%W-35%M-35%O	0.30
190.00	GMCO-20%G-30%M-50%O	1.53
565.00	Gassy Oil-10%gas-90%oil	7.93

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dreiling Oil Inc.

Sander # 1

PO Box 550
Hays, Ks. 67601

3-14s-17w

Job Ticket: 18170

DST#: 1

ATTN: Terry Plesker

Test Start: 2003.10.04 @ 10:22:00

Tool Information

Drill Pipe:	Length: 3084.00 ft	Diameter: 3.80 inches	Volume: 43.26 bbl	Tool Weight:	3500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 185.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose:	50000.00 lb
			<u>Total Volume: 44.17 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial	38000.00 lb
Depth to Top Packer:	3261.00 ft			Final	40000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	48.00 ft				
Tool Length:	67.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3247.00	
Hydraulic tool	5.00			3252.00	
Packer	4.00			3256.00	19.00 Bottom Of Top Packer
Packer	5.00		Fluid	3261.00	
Stubb	1.00			3262.00	
Perforations	1.00			3263.00	
Change Over Sub	1.00			3264.00	
Recorder	0.00	6741	Inside	3264.00	
Blank Spacing	31.00			3295.00	
Change Over Sub	1.00			3296.00	
Recorder	0.00	11084	Outside	3296.00	
Perforations	10.00			3306.00	
Bullnose	3.00			3309.00	48.00 Bottom Packers & Anchor

Total Tool Length: 67.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dreiling Oil Inc.

Sander # 1

PO Box 550
Hays, Ks. 67601

3-14s-17w

Job Ticket: 18170

DST#: 1

ATTN: Terry Plesker

Test Start: 2003.10.04 @ 10:22:00

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GWMCO-20%G-10%W-35%M-35%O	0.295
190.00	GMCO-20%G-30%M-50%O	1.527
565.00	Gassy Oil-10%gas-90%oil	7.925

Total Length: 815.00 ft

Total Volume: 9.747 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

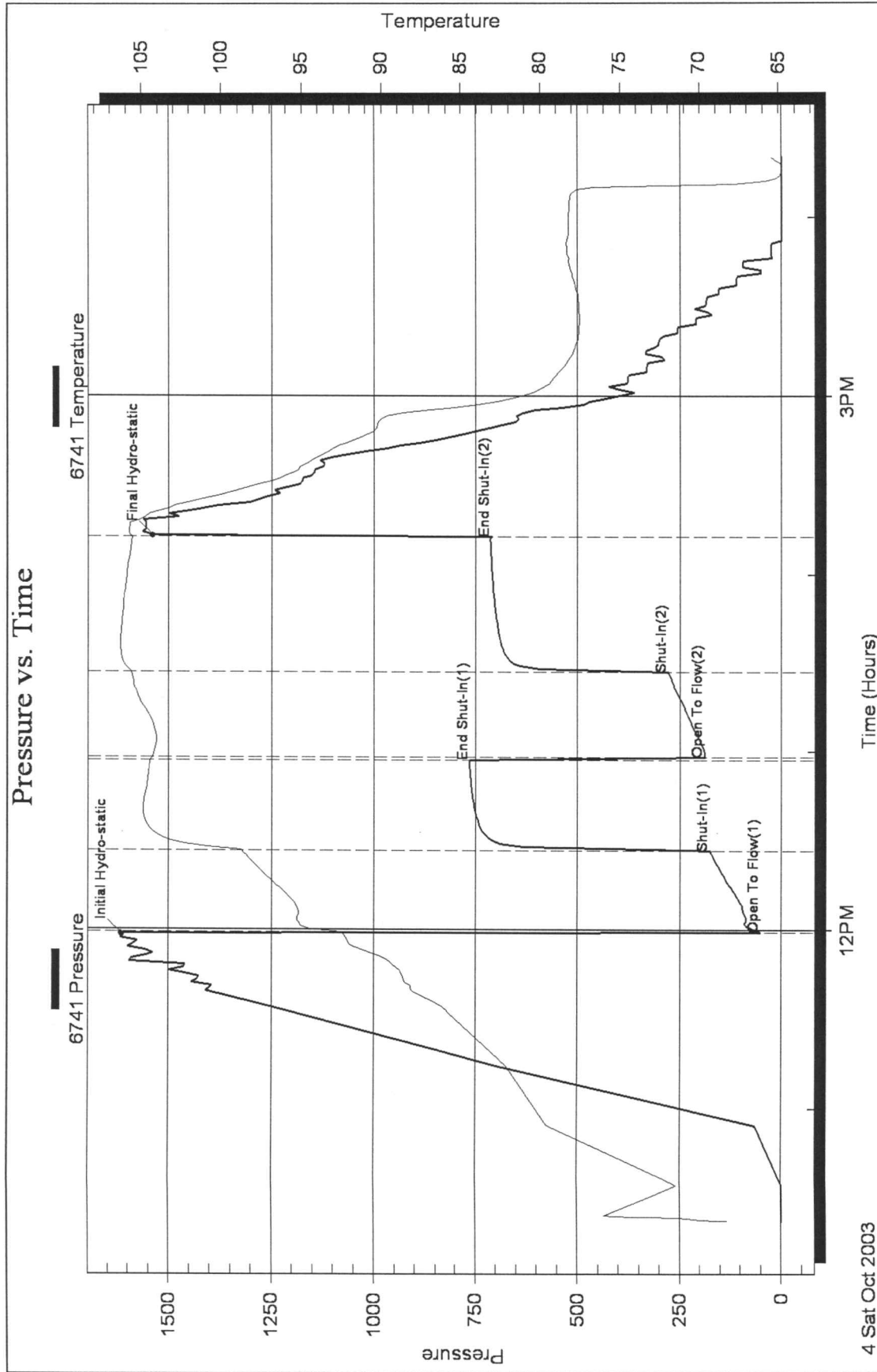
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil Inc.**

PO Box 550
Hays, Ks. 67601

ATTN: Terry Piesker

3-14s-17w

Sander # 1

Start Date: 2003.10.04 @ 23:20:18

End Date: 2003.10.05 @ 05:18:18

Job Ticket #: 18171 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

Dreiling Oil Inc.

PO Box 550
Hays, Ks. 67601

ATTN: Terry Plesker

Sander # 1

3-14s-17w

Job Ticket: 18171

DST#:2

Test Start: 2003.10.04 @ 23:20:18

GENERAL INFORMATION:

Formation: **L.Kc-D-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:55:18

Time Test Ended: 05:18:18

Test Type: Conventional Bottom Hole

Tester: John Schmidt

Unit No: 18

Interval: **3316.00 ft (KB) To 3377.00 ft (KB) (TVD)**

Total Depth: 3377.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1995.00 ft (KB)

1990.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741

Inside

Press@RunDepth: 224.65 psig @ 3322.00 ft (KB)

Start Date: 2003.10.04

End Date: 2003.10.05

Start Time: 23:20:19

End Time: 05:18:18

Capacity: 7000.00 psig

Last Calib.: 2003.10.05

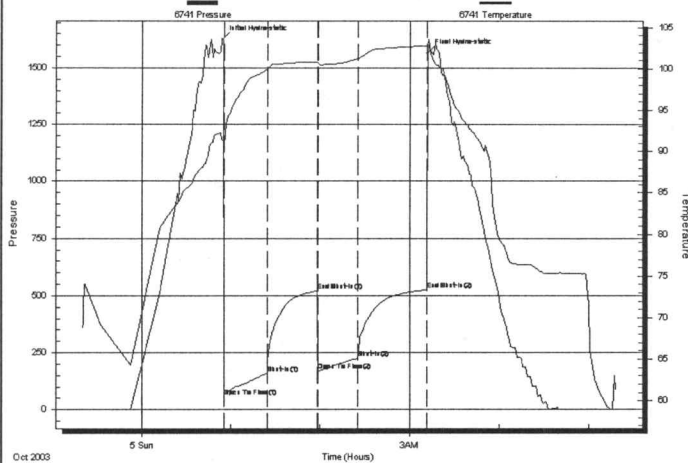
Time On Btm: 2003.10.05 @ 00:54:18

Time Off Btm: 2003.10.05 @ 03:11:48

TEST COMMENT: IF-Strong B.O.B.2 min
FF-Strong B.O.B.5 min

IS-Strong B.O.B.in 5 min
FSI-Strong B.O.B. in 13 min

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1625.32	91.29	Initial Hydro-static
1	54.71	90.85	Open To Flow (1)
30	158.66	99.89	Shut-In (1)
64	520.54	100.78	End Shut-In (1)
65	170.04	100.65	Open To Flow (2)
91	224.65	101.23	Shut-In (2)
137	524.91	102.77	End Shut-In (2)
138	1565.31	103.04	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	GMCO-40%G-30%M-30%O	0.97
410.00	Gassy Oil-15%G-85%oil	5.75
0.00	1985 gas in pipe	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dreiling Oil Inc.

PO Box 550
Hays, Ks. 67601

ATTN: Terry Flesker

Sander # 1

3-14s-17w

Job Ticket: 18171

DST#: 2

Test Start: 2003.10.04 @ 23:20:18

Tool Information

Drill Pipe:	Length: 3206.00 ft	Diameter: 3.80 inches	Volume: 44.97 bbl	Tool Weight: 3500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 45000.00 lb
			Total Volume: 45.58 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3316.00 ft			Final 37000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	61.00 ft			
Tool Length:	80.00 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			3302.00	
Hydraulic tool	5.00			3307.00	
Packer	4.00			3311.00	19.00 Bottom Of Top Packer
Packer	5.00		Fluid	3316.00	
Stubb	1.00			3317.00	
Perforations	4.00			3321.00	
Change Over Sub	1.00			3322.00	
Recorder	0.00	6741	Inside	3322.00	
Blank Spacing	31.00			3353.00	
Change Over Sub	1.00			3354.00	
Recorder	0.00	11084	Outside	3354.00	
Perforations	20.00			3374.00	
Bullnose	3.00			3377.00	61.00 Bottom Packers & Anchor

Total Tool Length: 80.00



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Dreiling Oil Inc.

Sander # 1

PO Box 550
Hays, Ks. 67601

3-14s-17w

Job Ticket: 18171

DST#: 2

ATTN: Terry Plesker

Test Start: 2003.10.04 @ 23:20:18

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	GMCO-40%G-30%M-30%O	0.975
410.00	Gassy Oil-15%G-85%oil	5.751
0.00	1985 gas in pipe	0.000

Total Length: 560.00 ft

Total Volume: 6.726 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6741

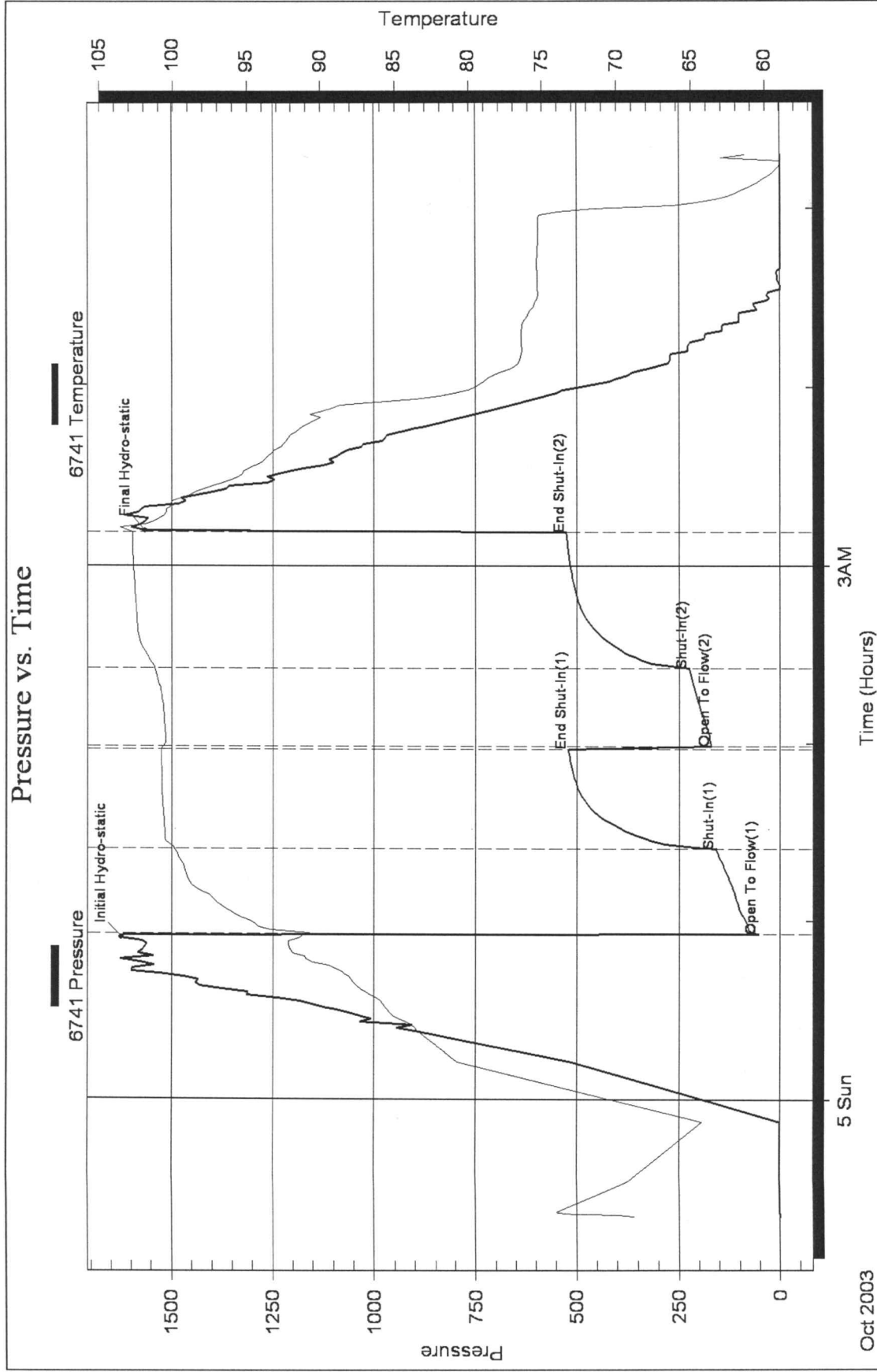
Inside

Drilling Oil Inc.

3-14s-17w

DST Test Number: 2

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil Inc.**

PO Box 550
Hays, Ks. 67601

ATTN: Terry Piesker

3-14s-17w

Sander # 1

Start Date: 2003.10.05 @ 15:50:08

End Date: 2003.10.05 @ 22:02:08

Job Ticket #: 18172 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Dreiling Oil Inc.

Sander # 1

3-14s-17w

DST # 3

L.Kc.-H-L

2003.10.05



TRILOBITE
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DRILL STEM TEST REPORT

Drilling Oil Inc.

PO Box 550
Hays, Ks. 67601

ATTN: Terry Plesker

Sander # 1

3-14s-17w

Job Ticket: 18172

DST#: 3

Test Start: 2003.10.05 @ 15:50:08

GENERAL INFORMATION:

Formation: **L.Kc.-H-L**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:28:08

Time Test Ended: 22:02:08

Test Type: Conventional Bottom Hole

Tester: John Schmidt

Unit No: 18

Interval: **3395.00 ft (KB) To 3505.00 ft (KB) (TVD)**

Total Depth: 3505.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1995.00 ft (KB)

1990.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741

Inside

Press@RunDepth: 62.21 psig @ 3398.00 ft (KB)

Start Date: 2003.10.05 End Date: 2003.10.05

Start Time: 15:50:09 End Time: 22:02:08

Capacity: 7000.00 psig

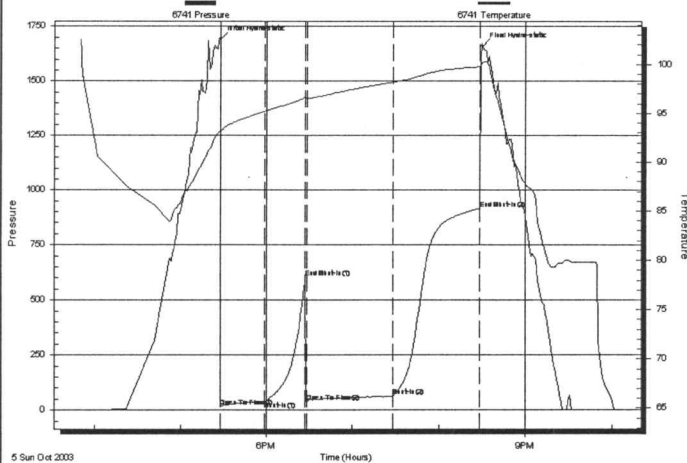
Last Calib.: 2003.10.05

Time On Btm: 2003.10.05 @ 17:27:38

Time Off Btm: 2003.10.05 @ 20:30:08

TEST COMMENT: IF-Weak built to 3" in
ISI-Weak to Fair built to 8" in
ISI-Very weak 5 min.
FSI-Weak Surf.blow back

Pressure vs. Time



PRESSURE SUMMARY

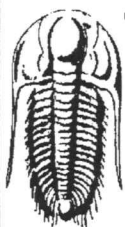
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1690.94	93.17	Initial Hydro-static
1	16.46	93.08	Open To Flow (1)
31	38.53	95.20	Shut-In(1)
60	601.87	96.63	End Shut-In(1)
61	36.63	96.52	Open To Flow (2)
121	62.21	98.18	Shut-In(2)
181	914.98	99.75	End Shut-In(2)
183	1661.85	100.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
105.00	OCM-45%oil-55%mud	0.52
20.00	free oil	0.11
0.00	180 gas in pipe	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dreiling Oil Inc.

Sander # 1

PO Box 550
Hays, Ks. 67601

3-14s-17w

Job Ticket: 18172

DST#: 3

ATTN: Terry Flesker

Test Start: 2003.10.05 @ 15:50:08

Tool Information

Drill Pipe:	Length: 3272.00 ft	Diameter: 3.80 inches	Volume: 45.90 bbl	Tool Weight:	3900.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose:	40000.00 lb
			Total Volume: 46.51 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	37000.00 lb
Depth to Top Packer:	3395.00 ft			Final	37000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	110.00 ft				
Tool Length:	129.00 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			3381.00	
Hydraulic tool	5.00			3386.00	
Packer	4.00			3390.00	19.00 Bottom Of Top Packer
Packer	5.00		Fluid	3395.00	
Stubb	1.00			3396.00	
Perforations	1.00			3397.00	
Change Over Sub	1.00			3398.00	
Recorder	0.00	6741	Inside	3398.00	
Blank Spacing	32.00			3430.00	
Recorder	0.00	11084	Outside	3430.00	
Blank Spacing	62.00			3492.00	
Change Over Sub	1.00			3493.00	
Perforations	9.00			3502.00	
Bullnose	3.00			3505.00	110.00 Bottom Packers & Anchor

Total Tool Length: 129.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dreiling Oil Inc.

Sander # 1

PO Box 550
Hays, Ks. 67601

3-14s-17w

Job Ticket: 18172

DST#: 3

ATTN: Terry Flesker

Test Start: 2003.10.05 @ 15:50:08

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
105.00	OCM-45%oil-55%mud	0.516
20.00	free oil	0.107
0.00	180 gas in pipe	0.000

Total Length: 125.00 ft

Total Volume: 0.623 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6741

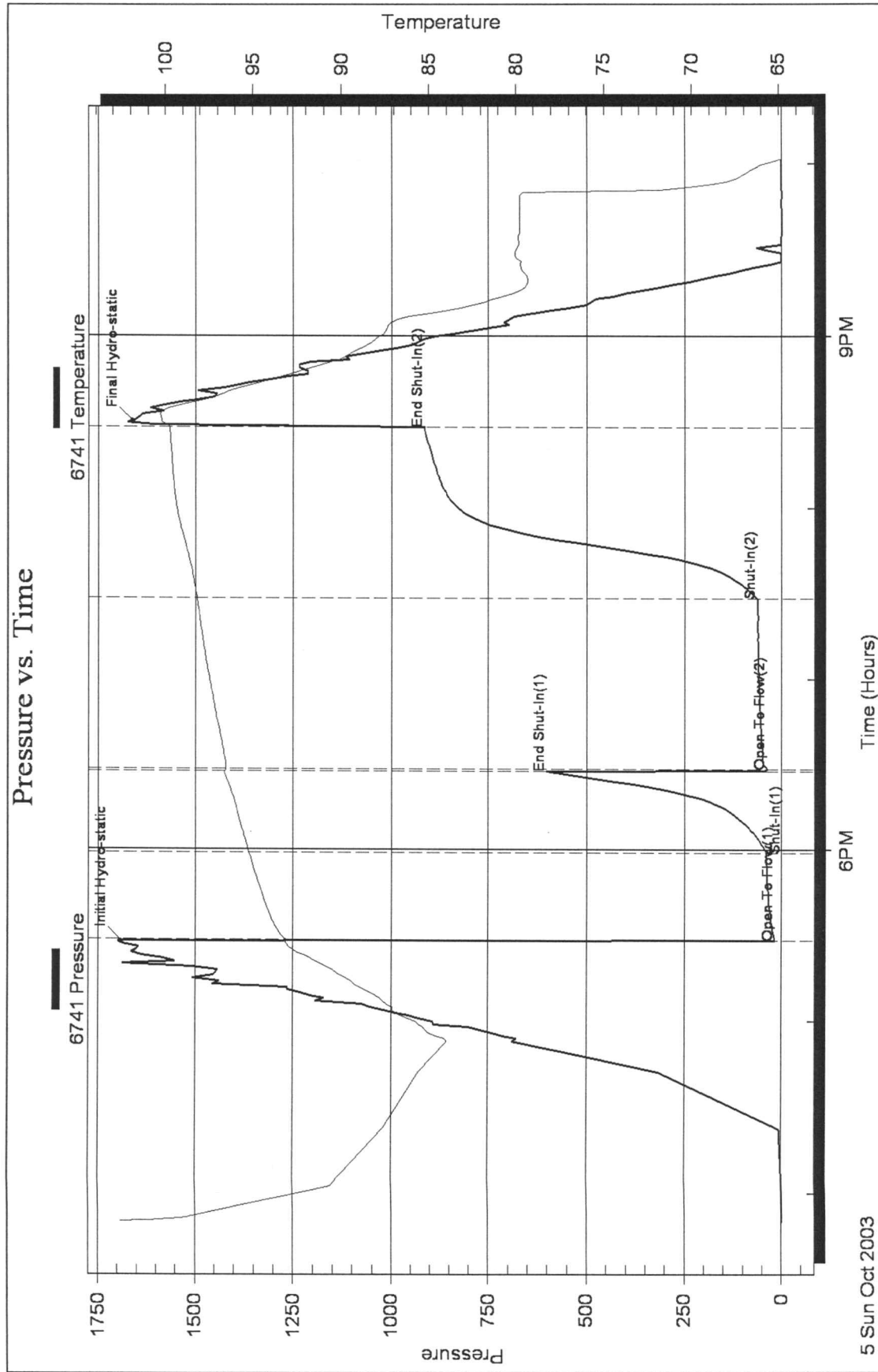
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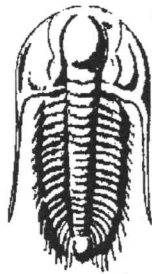
Drilling Oil Inc.

3-14s-17w

DST Test Number: 3

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil Inc.**

PO Box 550
Hays, Ks. 67601

ATTN: Terry Piesker

3-14s-17w

Sander # 1

Start Date: 2003.10.06 @ 06:04:19

End Date: 2003.10.06 @ 12:32:19

Job Ticket #: 18173 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Dreiling Oil Inc.

Sander # 1

3-14s-17w

DST # 4

Arbuckle

2003.10.06



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Drilling Oil Inc.

PO Box 550
Hays, Ks. 67601

ATTN: Terry Plesker

Sander # 1

3-14s-17w

Job Ticket: 18173

DST#: 4

Test Start: 2003.10.06 @ 06:04:19

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:40:49

Time Test Ended: 12:32:19

Test Type: Conventional Bottom Hole

Tester: John Schmidt

Unit No: 18

Interval: **3488.00 ft (KB) To 3545.00 ft (KB) (TVD)**

Total Depth: 3545.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1995.00 ft (KB)

1990.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6668

Inside

Press@RunDepth: 125.09 psig @ 3491.00 ft (KB)

Start Date: 2003.10.06

End Date:

2003.10.06

Start Time: 06:04:20

End Time:

12:32:19

Capacity: 7000.00 psig

Last Calib.: 2003.10.06

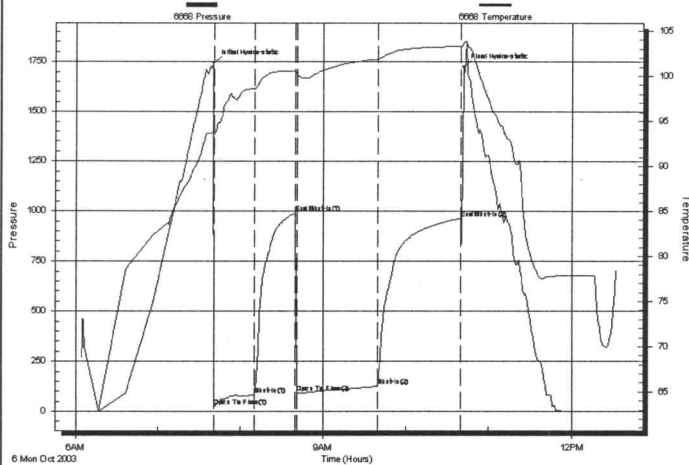
Time On Btm: 2003.10.06 @ 07:40:19

Time Off Btm: 2003.10.06 @ 10:41:49

TEST COMMENT: IF-Weak to Fair built to 8" in
FF-Good B.O.B. in 32 min.

ISI-Weak Surface blow back
FSI-Weak Surface blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1742.29	93.70	Initial Hydro-static
1	24.94	93.52	Open To Flow (1)
30	81.70	98.55	Shut-In (1)
60	989.19	100.55	End Shut-In (1)
61	90.09	100.20	Open To Flow (2)
120	125.09	101.86	Shut-In (2)
180	964.78	103.28	End Shut-In (2)
182	1722.43	103.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
175.00	OCM-40%oil-60%mud	0.86
120.00	gassy oil 10%G--90%oil	1.59
0.00	180 gas in pipe	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dreiling Oil Inc.

Sander # 1

PO Box 550
Hays, Ks. 67601

3-14s-17w

Job Ticket: 18173

DST#: 4

ATTN: Terry Flesker

Test Start: 2003.10.06 @ 06:04:19

Tool Information

Drill Pipe:	Length: 3307.00 ft	Diameter: 3.80 inches	Volume: 46.39 bbl	Tool Weight: 3400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 185.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 40000.00 lb
		Total Volume: 47.30 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3488.00 ft			Final 37000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	57.00 ft			
Tool Length:	76.00 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			3474.00	
Hydraulic tool	5.00			3479.00	
Packer	4.00			3483.00	19.00 Bottom Of Top Packer
Packer	5.00		Fluid	3488.00	
Stubb	1.00			3489.00	
Perforations	1.00			3490.00	
Change Over Sub	1.00			3491.00	
Recorder	0.00	6668	Inside	3491.00	
Blank Spacing	31.00			3522.00	
Change Over Sub	1.00			3523.00	
Recorder	0.00	11084	Outside	3523.00	
Perforations	19.00			3542.00	
Bullnose	3.00			3545.00	57.00 Bottom Packers & Anchor

Total Tool Length: 76.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dreiling Oil Inc.

Sander # 1

PO Box 550
Hays, Ks. 67601

3-14s-17w

Job Ticket: 18173

DST#: 4

ATTN: Terry Plesker

Test Start: 2003.10.06 @ 06:04:19

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
175.00	OCM-40%oil-60%mud	0.861
120.00	gassy oil 10%G--90%oil	1.592
0.00	180 gas in pipe	0.000

Total Length: 295.00 ft

Total Volume: 2.453 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

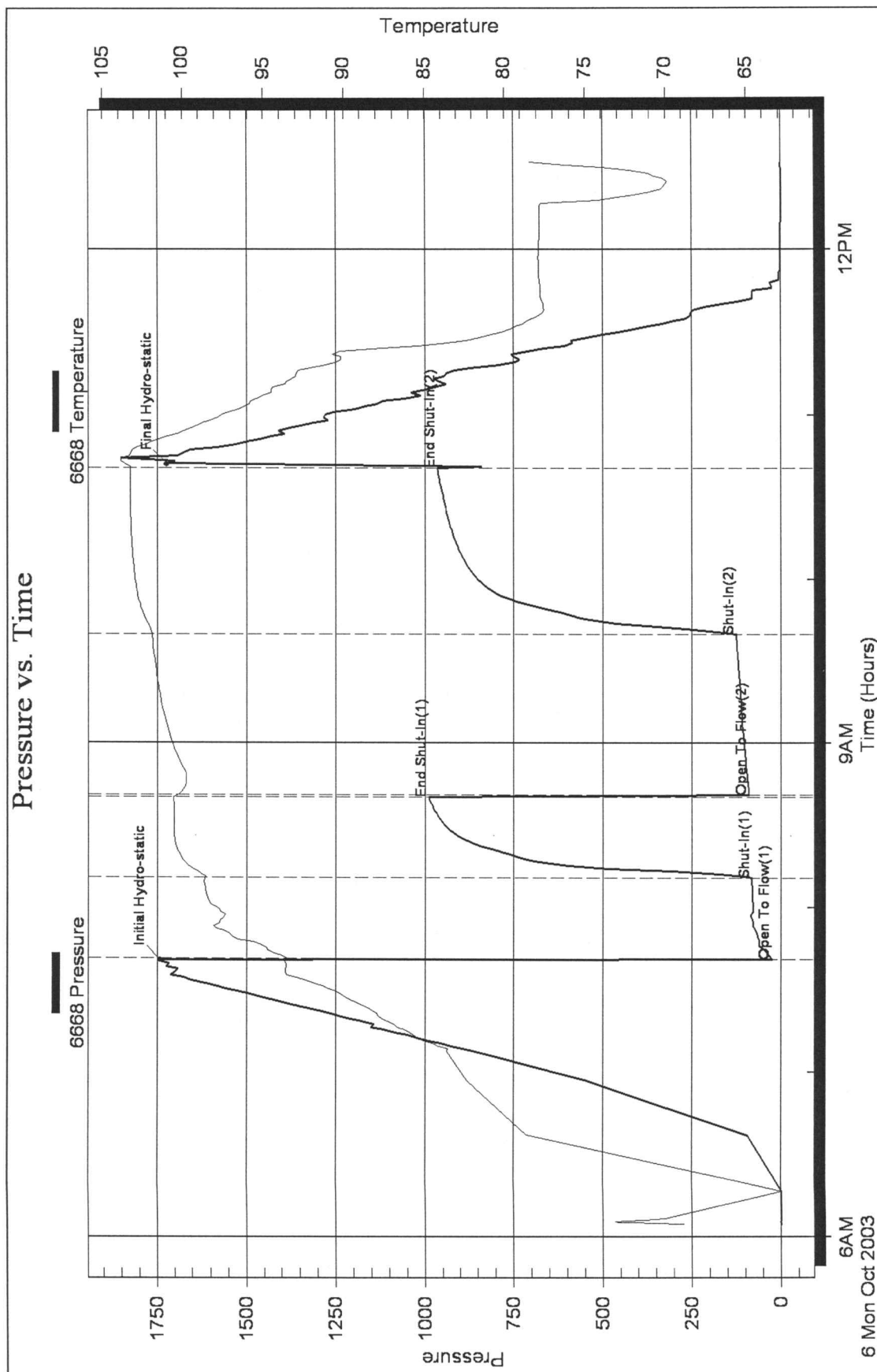
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil Inc.**

PO Box 550
Hays, Ks. 67601

ATTN: Terry Piesker

3-14s-17w

Sander # 1

Start Date: 2003.10.06 @ 17:24:21

End Date: 2003.10.06 @ 23:55:26

Job Ticket #: 18174 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Dreiling Oil Inc.

Sander # 1

3-14s-17w

DST # 5

Arbuckle

2003.10.06



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Drilling Oil Inc.

PO Box 550
Hays, Ks. 67601

ATTN: Terry Plesker

Sander # 1

3-14s-17w

Job Ticket: 18174

DST#: 5

Test Start: 2003.10.06 @ 17:24:21

GENERAL INFORMATION:

Formation: **Arbuckle**

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

Time Tool Opened: 19:00:26

Time Test Ended: 23:55:26

Test Type: **Conventional Bottom Hole**

Tester: **John Schmidt**

Unit No: **18**

Interval: **3545.00 ft (KB) To 3562.00 ft (KB) (TVD)**

Total Depth: **3562.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **1995.00 ft (KB)**

1990.00 ft (CF)

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

Serial #: 6741 **Inside**

Press@RunDepth: **153.98 psig @ 3547.00 ft (KB)**

Start Date: **2003.10.06**

End Date:

2003.10.06

Start Time: **17:24:22**

End Time:

23:55:26

Capacity: **7000.00 psig**

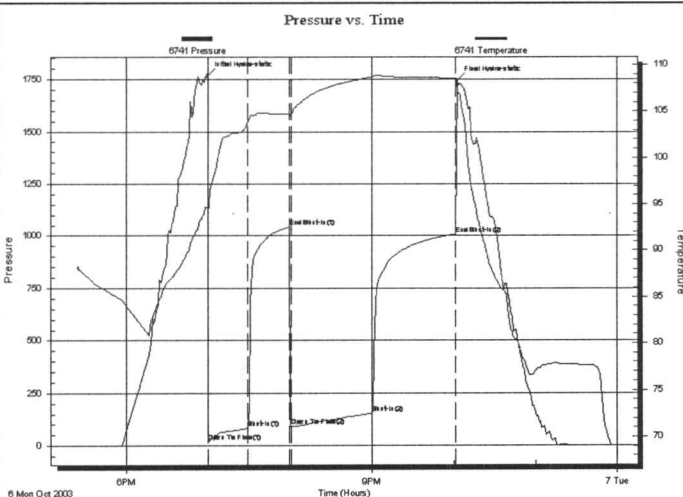
Last Calib.: **2003.10.07**

Time On Btm: **2003.10.06 @ 18:59:56**

Time Off Btm: **2003.10.06 @ 22:02:26**

TEST COMMENT: IF-Strong B.O.B.23 min
FF-Strong B.O.B.20 min

ISI-Good blow back 1.5" in
FSI-Good blow back 2" in.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1769.54	94.55	Initial Hydro-static
1	19.37	93.97	Open To Flow (1)
30	83.26	103.91	Shut-In (1)
60	1043.18	104.73	End Shut-In (1)
61	93.03	104.75	Open To Flow (2)
120	153.98	108.70	Shut-In (2)
182	1008.30	108.57	End Shut-In (2)
183	1746.05	107.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
155.00	HOGCM-15%G-35%O-50%M	0.76
205.00	Free oil 100%oil	2.60
0.00	320 gas in pipe	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dreiling Oil Inc.

Sander # 1

PO Box 550
Hays, Ks. 67601

3-14s-17w

Job Ticket: 18174

DST#: 5

ATTN: Terry Plesker

Test Start: 2003.10.06 @ 17:24:21

Tool Information

Drill Pipe:	Length: 3369.00 ft	Diameter: 3.80 inches	Volume: 47.26 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 185.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose:	45000.00 lb
			Total Volume: 48.17 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial	36000.00 lb
Depth to Top Packer:	3545.00 ft			Final	38000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	17.00 ft				
Tool Length:	36.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3531.00	
Hydraulic tool	5.00			3536.00	
Packer	4.00			3540.00	19.00 Bottom Of Top Packer
Packer	5.00		Fluid	3545.00	
Stubb	1.00			3546.00	
Perforations	1.00			3547.00	
Recorder	0.00	6741	Inside	3547.00	
Perforations	12.00			3559.00	
Recorder	0.00	13308	Outside	3559.00	
Bullnose	3.00			3562.00	17.00 Bottom Packers & Anchor
Total Tool Length:	36.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dreiling Oil Inc.

Sander # 1

PO Box 550
Hays, Ks. 67601

3-14s-17w

Job Ticket: 18174

DST#: 5

ATTN: Terry Plesker

Test Start: 2003.10.06 @ 17:24:21

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
155.00	HOGCM-15%G-35%O-50%M	0.762
205.00	Free oil 100%oil	2.602
0.00	320 gas in pipe	0.000

Total Length: 360.00 ft

Total Volume: 3.364 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6741

Inside

Drilling Oil Inc.

3-14s-17w

DST Test Number: 5

Pressure vs. Time

