

TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Black Diamond Oil Inc**

P O Box 641
Hays Ks 67601

ATTN: Ken Vihege

28-4s-22w Norton Ks

Sansom #4

Start Date: 2003.09.05 @ 19:22:18

End Date: 2003.09.05 @ 23:57:47

Job Ticket #: 18798 DST #: 1

NW SE NE NE
870 FNL 370 FEL

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

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KANSAS CORPORATION COMMISSION
Printed: 2003.09.11 @ 13:59:22 Page 1

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CONSERVATION DIVISION
WICHITA, KS

Black Diamond Oil Inc

Sansom #4

28-4s-22w Norton Ks

DST # 1

LKC

2003.09.05

15-137-20419



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Black Diamond Oil Inc

P O Box 641
Hays Ks 67601

ATTN: Ken Vihege

Sansom #4

28-4s-22w Norton Ks

Job Ticket: 18798

DST#: 1

Test Start: 2003.09.05 @ 19:22:18

GENERAL INFORMATION:

Formation: LKC

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:50:17

Time Test Ended: 23:57:47

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 28

Interval: 3472.00 ft (KB) To 3530.00 ft (KB) (TVD)

Total Depth: 3530.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Poor

Reference Elevations: 2262.00 ft (KB)

2254.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6668

Inside

Press@RunDepth: 40.34 psig @ 3476.01 ft (KB)

Start Date: 2003.09.05

End Date:

2003.09.05

Start Time: 19:22:18

End Time:

23:57:47

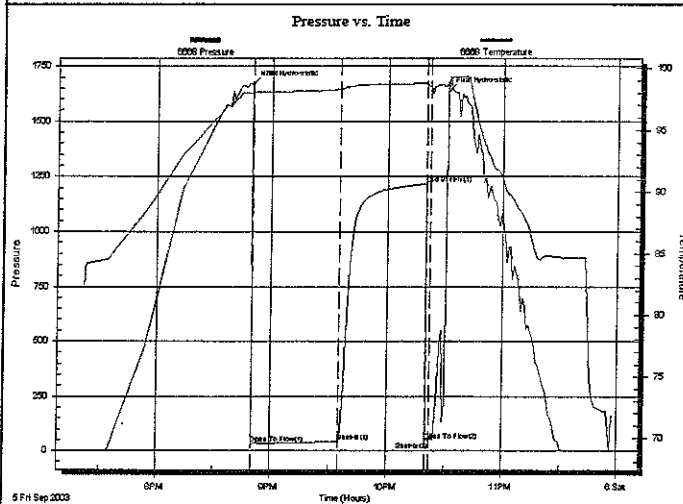
Capacity: 7000.00 psig

Last Calib.: 2003.09.06

Time On Btm: 2003.09.05 @ 20:49:47

Time Off Btm: 2003.09.05 @ 22:31:17

TEST COMMENT: IFF-w k bl died in 18 min
FFP-no bl flushed tool
Times 45-45-10
slid tool approx 10' to bottom



PRESSURE SUMMARY

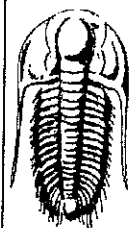
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1668.85	98.02	Initial Hydro-static
1	32.18	97.98	Open To Flow (1)
46	40.34	98.28	Shut-In(1)
90	1217.32	98.77	End Shut-In(1)
91	42.97	98.58	Open To Flow (2)
93	42.05	98.50	Shut-In(2)
102	1633.84	98.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	mud	0.63

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Black Diamond Oil Inc

Sansom #4

P O Box 641
Hays Ks 67601

28-4s-22w Norton Ks

Job Ticket: 18798

DST#: 1

ATTN: Ken Vihege

Test Start: 2003.09.05 @ 19:22:18

Tool Information

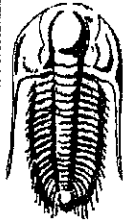
Drill Pipe:	Length: 3476.00 ft	Diameter: 3.80 inches	Volume: 48.76 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			Total Volume: 48.76 bbl	Tool Chased 10.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3472.00 ft			Final 36000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.02 ft			
Tool Length:	79.02 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			3452.00	
Shut In Tool	5.00			3457.00	
Hydraulic tool	5.00			3462.00	
Packer	5.00			3467.00	21.00 Bottom Of Top Packer
Packer	5.00			3472.00	
Stubb	1.00			3473.00	
Perforations	2.00			3475.00	
Change Over Sub	1.00			3476.00	
Recorder	0.01	6668	Inside	3476.01	
Blank Spacing	30.00			3506.01	
Change Over Sub	1.00			3507.01	
Recorder	0.01	11085	Outside	3507.02	
Perforations	20.00			3527.02	
Bullnose	3.00			3530.02	58.02 Bottom Packers & Anchor

Total Tool Length: 79.02

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DRILL STEM TEST REPORT

FLUID SUMMARY

Black Diamond Oil Inc

Sansom #4

P O Box 641
Hays Ks 67601

28-4s-22w Norton Ks

Job Ticket: 18798

DST#: 1

ATTN: Ken Vihege

Test Start: 2003.09.05 @ 19:22:18

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:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.36 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	mud	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:

Serial #: 6668

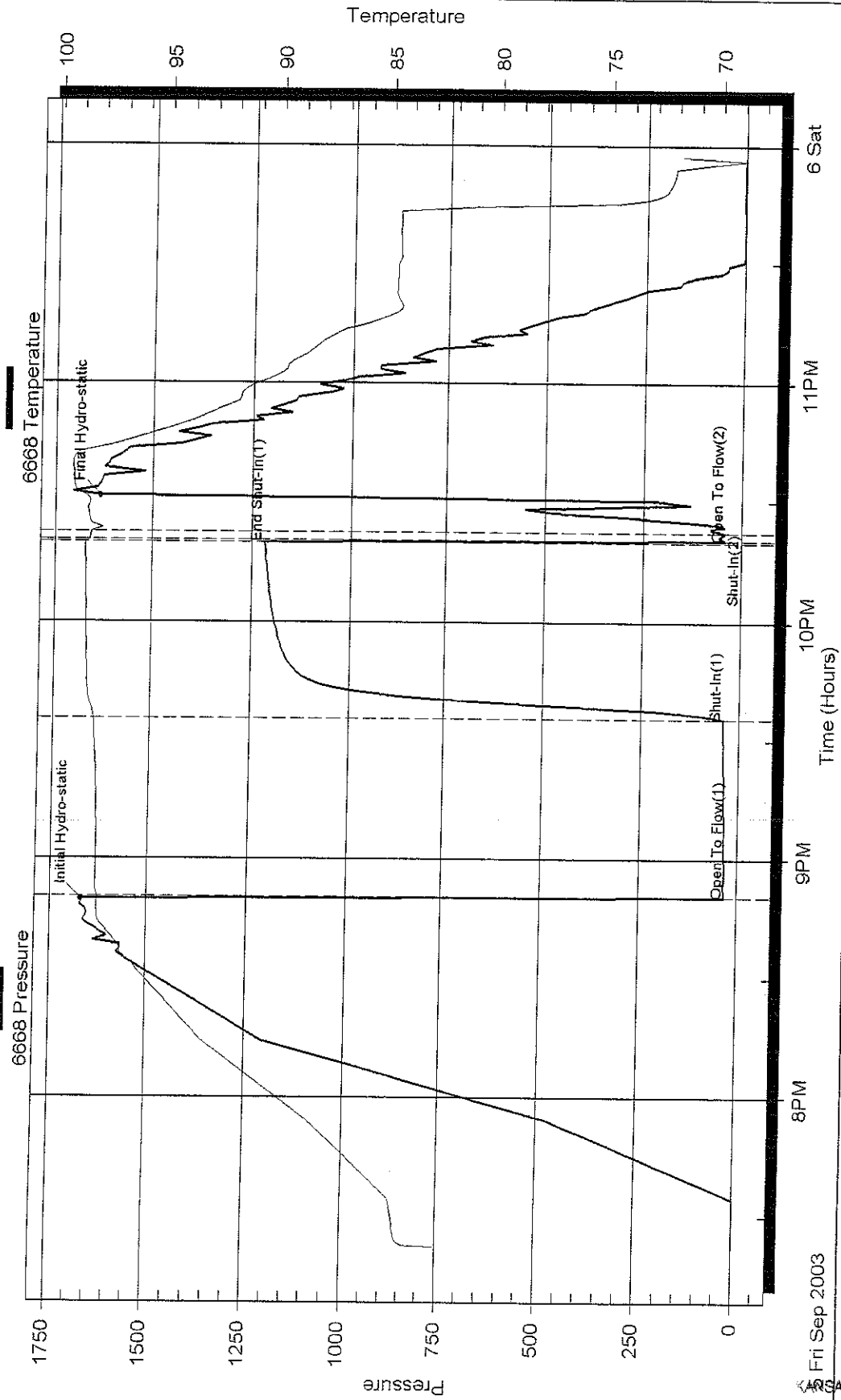
Inside

Black Diamond Oil Inc

28-4s-22w Norton Ks

DST Test Number: 1

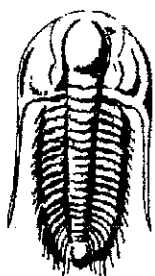
Pressure vs. Time



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Tribble Testing, Inc
Ref. No: 18798

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CONSERVATION DIVISION
WICHITA, KS



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Black Diamond Oil Inc**

P O Box 641
Hays Ks 67601

ATTN: Ken Vihege

28-4s-22w Norton Ks

Sansom #4

Start Date: 2003.09.06 @ 09:36:36

End Date: 2003.09.06 @ 16:35:35

Job Ticket #: 18799 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

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JUN 27 2007

CONSERVATION DIVISION
WICHITA KS

Black Diamond Oil Inc

Sansom #4

28-4s-22w Norton Ks

DST # 2

LKC

2003.09.06



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Black Diamond Oil Inc

P O Box 641
Hays Ks 67601

ATTN: Ken Vihege

Sansom #4

28-4s-22w Norton Ks

Job Ticket: 18799

DST#: 2

Test Start: 2003.09.06 @ 09:36:36

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:01:35

Time Test Ended: 16:35:35

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 28

Interval: **3550.00 ft (KB) To 3640.00 ft (KB) (TVD)**

Reference Elevations: 2262.00 ft (KB)

Total Depth: 3640.00 ft (KB) (TVD)

2254.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 6668

Inside

Press@RunDepth: 184.83 psig @ 3554.01 ft (KB)

Capacity: 7000.00 psig

Start Date: 2003.09.06

End Date:

2003.09.06

Last Calib.: 2003.09.06

Start Time: 09:36:36

End Time:

16:35:35

Time On Btm: 2003.09.06 @ 11:00:35

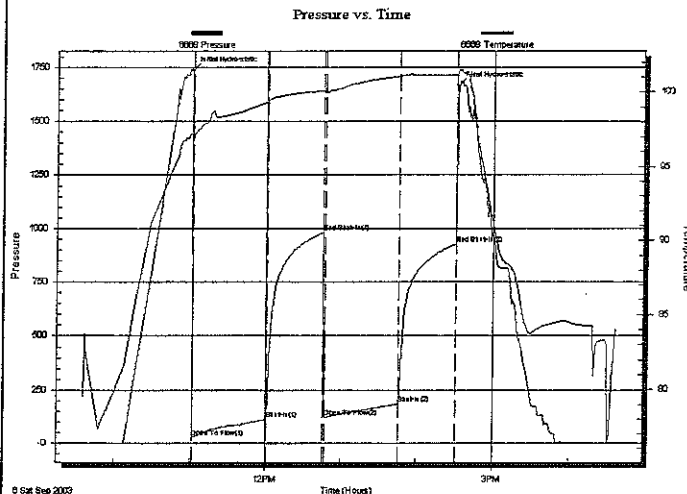
Time Off Btm: 2003.09.06 @ 14:31:35

TEST COMMENT: IFP-w k to strg in 35 min

FFP-w k bl thru-out 1/2" to 3" bl

Times 60-45-60-45

no bl on shut-in



PRESSURE SUMMARY

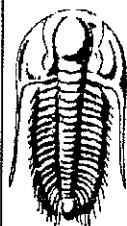
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1736.52	97.24	Initial Hydro-static
1	30.01	97.09	Open To Flow (1)
60	112.61	99.34	Shut-In (1)
106	981.18	100.06	End Shut-In (1)
107	125.16	99.98	Open To Flow (2)
166	184.83	101.07	Shut-In (2)
211	927.87	101.10	End Shut-In (2)
211	1664.48	101.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	o&gcm 6%gas 14%oil 80%mud	0.63
180.00	gmo 10%gas 74%oil 16%gas	2.52
150.00	MW 80%water 20%mud	2.10
0.00	315 GIP	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcfd)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Black Diamond Oil Inc

Sansom #4

P O Box 641
Hays Ks 67601

28-4s-22w Norton Ks

Job Ticket: 18799

DST#: 2

ATTN: Ken Vihege

Test Start: 2003.09.06 @ 09:36:36

Tool Information

Drill Pipe:	Length: 3538.00 ft	Diameter: 3.80 inches	Volume: 49.63 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
			Total Volume: 49.63 bbl	Tool Chased 6.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3550.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	90.02 ft			
Tool Length:	111.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

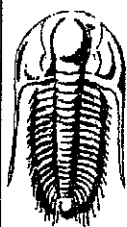
Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3530.00	
Shut In Tool	5.00			3535.00	
Hydraulic tool	5.00			3540.00	
Packer	5.00			3545.00	21.00 Bottom Of Top Packer
Packer	5.00			3550.00	
Stubb	1.00			3551.00	
Perforations	2.00			3553.00	
Change Over Sub	1.00			3554.00	
Recorder	0.01	6668	Inside	3554.01	
Blank Spacing	62.00			3616.01	
Change Over Sub	1.00			3617.01	
Recorder	0.01	11085	Outside	3617.02	
Perforations	20.00			3637.02	
Bullnose	3.00			3640.02	90.02 Bottom Packers & Anchor

Total Tool Length: 111.02

JUN 27 2007



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DRILL STEM TEST REPORT

FLUID SUMMARY

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Sansom #4

P O Box 641
Hays Ks 67601

28-4s-22w Norton Ks

Job Ticket: 18799

DST#: 2

ATTN: Ken Vihege

Test Start: 2003.09.06 @ 09:36:36

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:

14000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	o&gcm 6%gas 14%oil 80%mud	0.631
180.00	gmo 10%gas 74%oil 16%gas	2.525
150.00	MW 80%w ater 20%mud	2.104
0.00	315 GIP	0.000

Total Length: 375.00 ft

Total Volume: 5.260 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW.31 @ 94F

Serial #: 6668

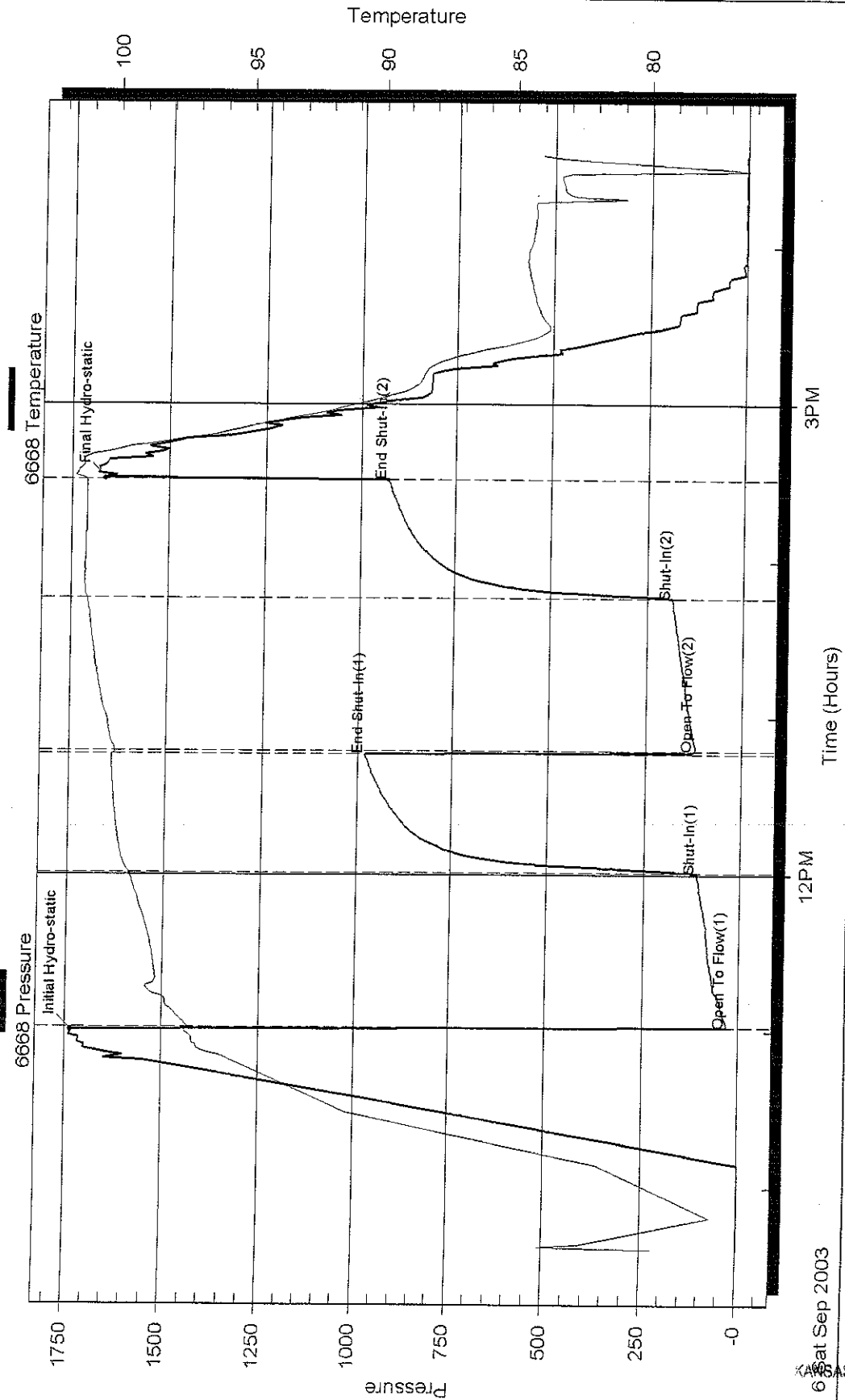
Inside

Black Diamond Oil Inc

28-4s-22w Norton Ks

DST Test Number: 2

Pressure vs. Time



RECEIVED
KANSAS CORPORATION COMMISSION

JUN 27 2007

CONSERVATION DIVISION
WICHITA, KS

Ref. No: 18799

Titelco Testing, Inc

