

## DRILL STEM TEST REPORT

Prepared For: **Black Diamond**

PO Box 641  
Hays KS 67601

ATTN: Tony Richardson

**18 7 21 Graham KS**

**Fusillo #1**

Start Date: 2007.05.25 @ 17:24:20

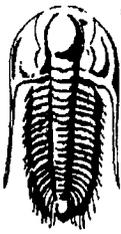
End Date: 2007.05.25 @ 23:10:20

Job Ticket #: 28633                      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

Black Diamond

Fusillo #1

PO Box 641  
Hays KS 67601

18 7 21 Graham KS

Job Ticket: 28633

DST#: 1

ATTN: Tony Richardson

Test Start: 2007.05.25 @ 17:24:20

## GENERAL INFORMATION:

Formation: **LKC-"C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:19:20

Time Test Ended: 23:10:20

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **3396.00 ft (KB) To 3424.00 ft (KB) (TVD)**

Reference Elevations: 2155.00 ft (KB)

Total Depth: 3424.00 ft (KB) (TVD)

2150.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: **6719** Inside

Press@RunDepth: 292.40 psig @ 3398.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2007.05.25

End Date:

2007.05.25

Last Calib.: 2007.05.25

Start Time: 17:24:22

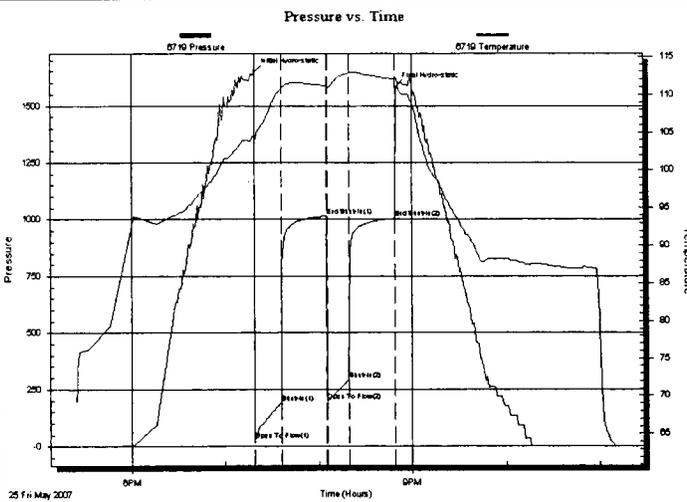
End Time:

23:10:20

Time On Btm: 2007.05.25 @ 19:19:05

Time Off Btm: 2007.05.25 @ 20:49:20

TEST COMMENT: IFF Strong BOB in 4-1/2 Mn  
ISI Dead  
FFP Strong BOB in 5-1/2 Mn  
FSI Dead



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1648.32	104.47	Initial Hydro-static
1	28.96	103.73	Open To Flow (1)
17	191.59	110.70	Shut-In(1)
46	1014.51	111.12	End Shut-In(1)
47	195.93	110.94	Open To Flow (2)
61	292.40	112.76	Shut-In(2)
90	1004.52	112.03	End Shut-In(2)
91	1582.64	112.15	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
585.00	Muddy Wtr Slight Oil Show 90%W 10%M7.09	

## Gas Rates

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



**TRILOBITE**  
TESTING, INC

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Black Diamond

**Fusillo #1**

PO Box 641  
Hays KS 67601

**18 7 21 Graham KS**

Job Ticket: 28633

**DST#: 1**

ATTN: Tony Richardson

Test Start: 2007.05.25 @ 17:24:20

### Tool Information

Drill Pipe:	Length: 3258.00 ft	Diameter: 3.80 inches	Volume: 45.70 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: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 60000.00 lb
		<b>Total Volume:</b>	<b>46.30 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3396.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	49.00 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			3376.00	
Shut In Tool	5.00			3381.00	
Hydraulic tool	5.00			3386.00	
Packer	5.00			3391.00	21.00 Bottom Of Top Packer
Packer	5.00			3396.00	
Stubb	1.00			3397.00	
Perforations	1.00			3398.00	
Recorder	0.00	6719	Inside	3398.00	
Perforations	23.00			3421.00	
Recorder	0.00	13221	Outside	3421.00	
Bullnose	3.00			3424.00	28.00 Bottom Packers & Anchor

**Total Tool Length: 49.00**



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Black Diamond

**Fusillo #1**

PO Box 641  
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**18 7 21 Graham KS**

Job Ticket: 28633

**DST#: 1**

ATTN: Tony Richardson

Test Start: 2007.05.25 @ 17:24:20

## 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:	70000 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.98 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 800.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
585.00	Muddy Wtr Slight Oil Show 90%W 10%M	7.095

Total Length: 585.00 ft      Total Volume: 7.095 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

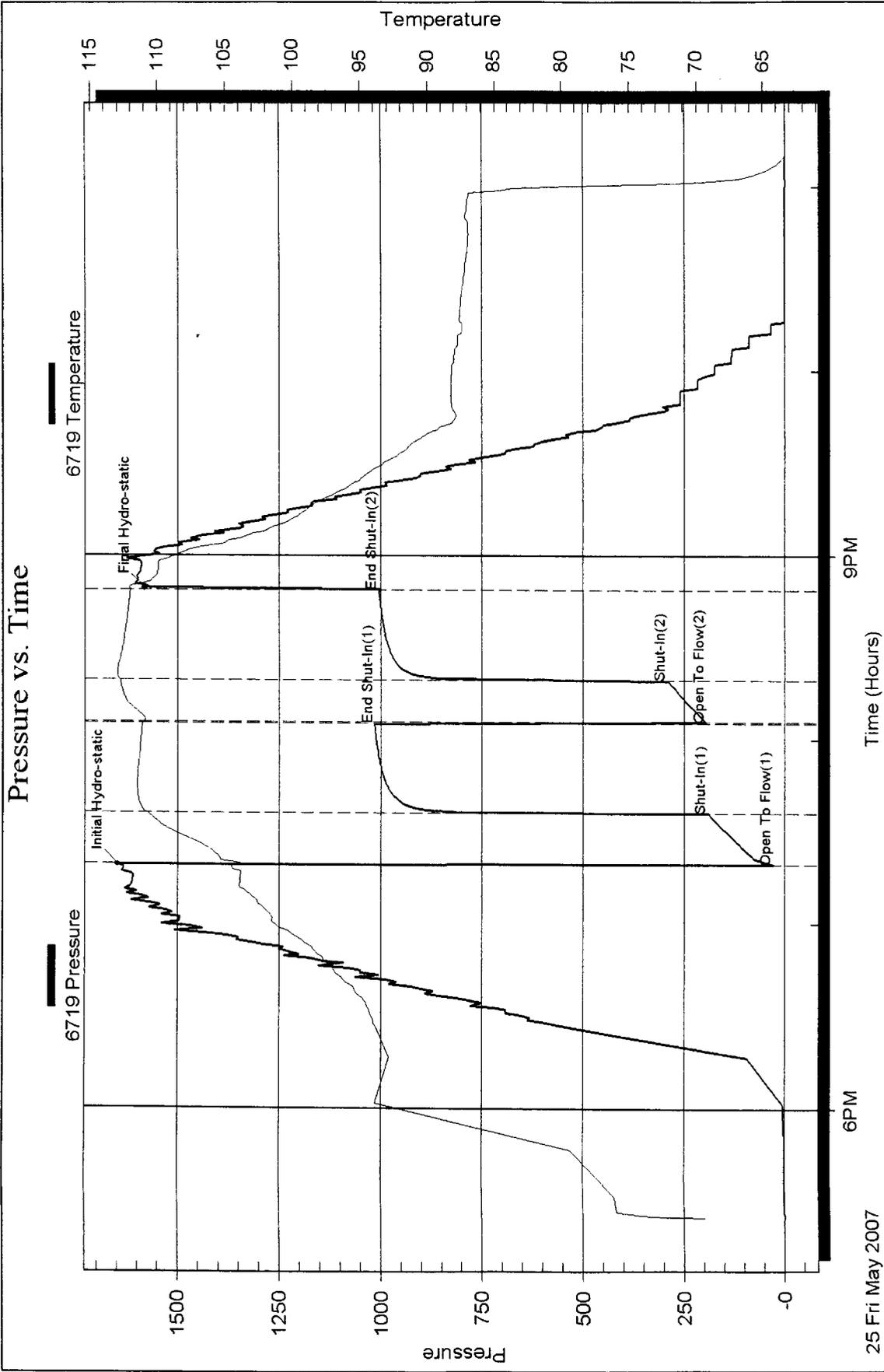
Serial #: 6719

Inside Black Diamond

18 7 21 Graham KS

DST Test Number: 1

### Pressure vs. Time

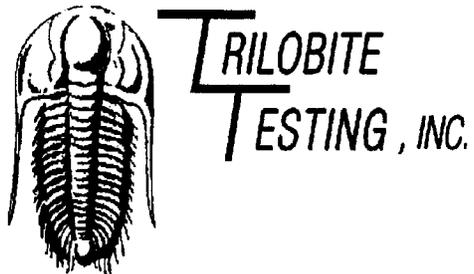


25 Fri May 2007

6PM

9PM

Time (Hours)



## DRILL STEM TEST REPORT

Prepared For: **Black Diamond**

PO Box 641  
Hays KS 67601

ATTN: Tony Richardson

**18 7 21 Graham KS**

**Fusillo #1**

Start Date: 2007.05.26 @ 17:54:29

End Date: 2007.05.26 @ 22:10:59

Job Ticket #: 28634                      DST #: 2

Trilobite Testing, Inc

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



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# DRILL STEM TEST REPORT

Black Diamond

Fusillo #1

PO Box 641  
Hays KS 67601

18 7 21 Graham KS

Job Ticket: 28634

DST#: 2

ATTN: Tony Richardson

Test Start: 2007.05.26 @ 17:54:29

## GENERAL INFORMATION:

Formation: **Marmaton-Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened:

Time Test Ended: 22:10:59

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **3567.00 ft (KB) To 3650.00 ft (KB) (TVD)**

Reference Elevations: 2155.00 ft (KB)

Total Depth: 3650.00 ft (KB) (TVD)

2150.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: **6719** Inside

Press@RunDepth: psig @ 3570.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2007.05.26

End Date: 2007.05.26

Last Calib.: 2007.05.26

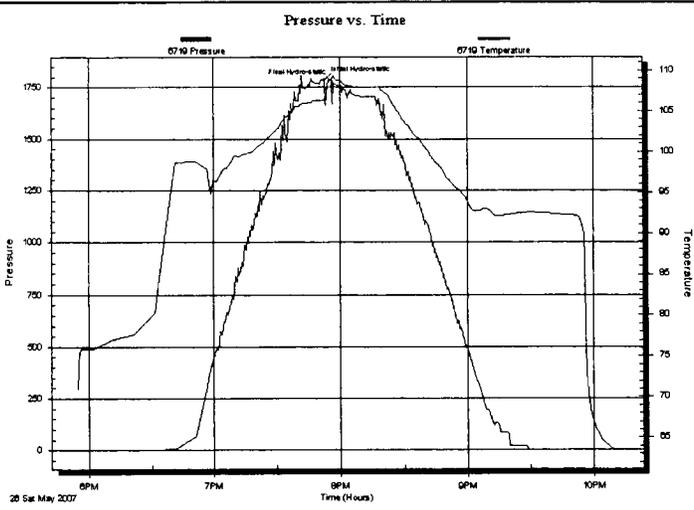
Start Time: 17:54:31

End Time: 22:10:59

Time On Btm: 2007.05.26 @ 19:52:44

Time Off Btm: 2007.05.26 @ 19:56:29

TEST COMMENT: IFP Packer Failure Pull Tool



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1786.73	106.29	Initial Hydro-static
4	1771.77	109.39	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
240.00	Drilling Mud	2.26

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Black Diamond

**Fusillo #1**

PO Box 641  
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**18 7 21 Graham KS**

Job Ticket: 28634

**DST#: 2**

ATTN: Tony Richardson

Test Start: 2007.05.26 @ 17:54:29

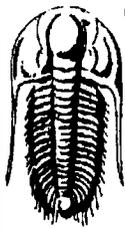
**Tool Information**

Drill Pipe:	Length: 3444.00 ft	Diameter: 3.80 inches	Volume: 48.31 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: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 52000.00 lb
		<b>Total Volume:</b>	<b>48.91 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3567.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	83.00 ft			
Tool Length:	104.00 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			3547.00	
Shut In Tool	5.00			3552.00	
Hydraulic tool	5.00			3557.00	
Packer	5.00			3562.00	21.00 Bottom Of Top Packer
Packer	5.00			3567.00	
Stubb	1.00			3568.00	
Perforations	1.00			3569.00	
Change Over Sub	1.00			3570.00	
Recorder	0.00	6719	Inside	3570.00	
Blank Spacing	63.00			3633.00	
Change Over Sub	1.00			3634.00	
Perforations	13.00			3647.00	
Recorder	0.00	13221	Outside	3647.00	
Bullnose	3.00			3650.00	83.00 Bottom Packers & Anchor

**Total Tool Length: 104.00**



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**FLUID SUMMARY**

Black Diamond

**Fusillo #1**

PO Box 641  
Hays KS 67601

**18 7 21 Graham KS**

Job Ticket: 28634

**DST#: 2**

ATTN: Tony Richardson

Test Start: 2007.05.26 @ 17:54:29

## 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: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
240.00	Drilling Mud	2.255

Total Length: 240.00 ft      Total Volume: 2.255 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

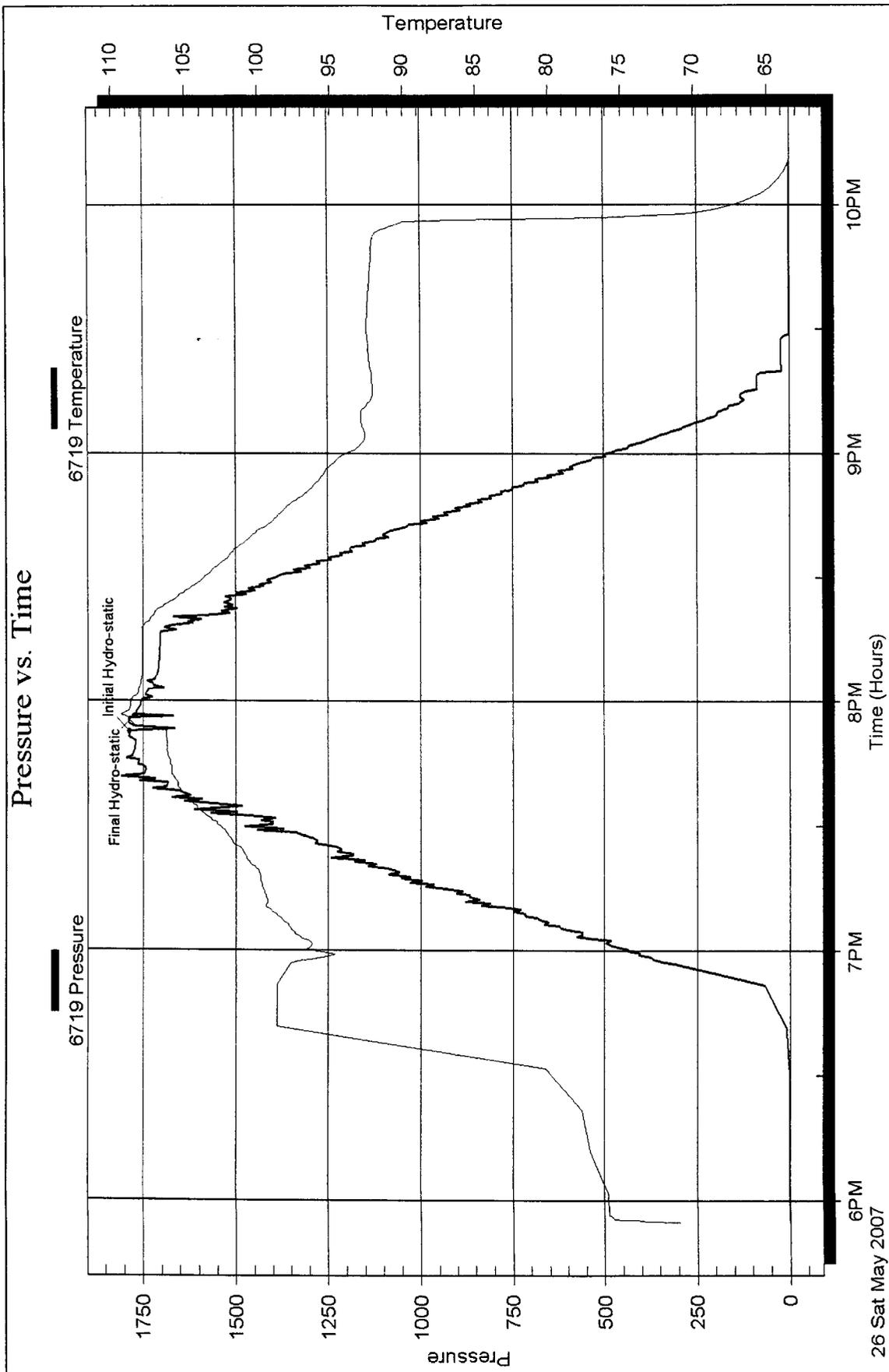
Serial #:

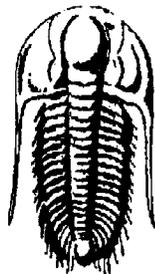
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Black Diamond**

PO Box 641  
Hays KS 67601

ATTN: Tony Richardson

**18 7 21 Graham KS**

**Fusillo #1**

Start Date: 2007.05.27 @ 08:10:07

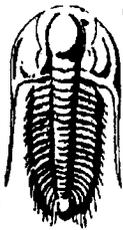
End Date: 2007.05.27 @ 15:51:52

Job Ticket #: 28635                      DST #: 3

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**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Black Diamond

**Fusillo #1**

PO Box 641  
Hays KS 67601

**18 7 21 Graham KS**

Job Ticket: 28635

**DST#: 3**

ATTN: Tony Richardson

Test Start: 2007.05.27 @ 08:10:07

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:44:07

Time Test Ended: 15:51:52

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **3545.00 ft (KB) To 3651.00 ft (KB) (TVD)**

Reference Elevations: 2155.00 ft (KB)

Total Depth: 3651.00 ft (KB) (TVD)

2150.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 6719 Inside**

Press@RunDepth: 74.55 psig @ 3548.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2007.05.27

End Date:

2007.05.27

Last Calib.: 2007.05.27

Start Time: 08:10:09

End Time:

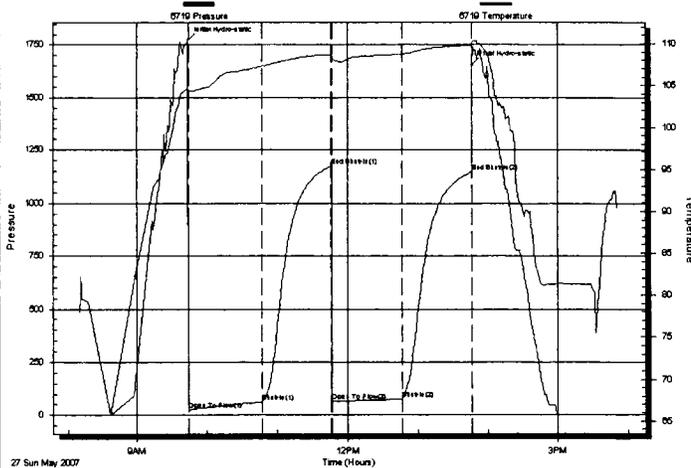
15:51:52

Time On Btm: 2007.05.27 @ 09:43:52

Time Off Btm: 2007.05.27 @ 13:46:37

TEST COMMENT: IFP Slow Building Blow Built to 5-3/4 "  
ISI Dead  
FFP Slow Building Blow Built to 6 "  
FSI Weak Surface Blow back

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1771.15	104.70	Initial Hydro-static
1	22.33	104.32	Open To Flow (1)
64	62.24	107.32	Shut-In(1)
123	1173.83	108.67	End Shut-In(1)
123	66.64	108.34	Open To Flow (2)
183	74.55	108.76	Shut-In(2)
243	1145.21	109.77	End Shut-In(2)
243	1654.80	110.02	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
150.00	MCO 55%O 45%M	0.99

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Black Diamond

**Fusillo #1**

PO Box 641  
Hays KS 67601

**18 7 21 Graham KS**

Job Ticket: 28635

**DST#: 3**

ATTN: Tony Richardson

Test Start: 2007.05.27 @ 08:10:07

### Tool Information

Drill Pipe:	Length: 3414.00 ft	Diameter: 3.80 inches	Volume: 47.89 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: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 48.49 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial	53000.00 lb
Depth to Top Packer:	3545.00 ft			Final	53000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	106.00 ft				
Tool Length:	127.00 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			3525.00	
Shut In Tool	5.00			3530.00	
Hydraulic tool	5.00			3535.00	
Packer	5.00			3540.00	21.00 Bottom Of Top Packer
Packer	5.00			3545.00	
Stubb	1.00			3546.00	
Perforations	1.00			3547.00	
Change Over Sub	1.00			3548.00	
Recorder	0.00	6719	Inside	3548.00	
Blank Spacing	94.00			3642.00	
Change Over Sub	1.00			3643.00	
Perforations	5.00			3648.00	
Recorder	0.00	13221	Outside	3648.00	
Bullnose	3.00			3651.00	106.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>127.00</b>				



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**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Black Diamond

**Fusillo #1**

PO Box 641  
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**18 7 21 Graham KS**

Job Ticket: 28635

**DST#: 3**

ATTN: Tony Richardson

Test Start: 2007.05.27 @ 08:10:07

**Mud and Cushion Information**

Mud Type: Gel Chem	Cushion Type:	Oil API: 22 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.79 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 1000.00 ppm		
Filter Cake: inches		

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
150.00	MCO 55%O 45%M	0.993

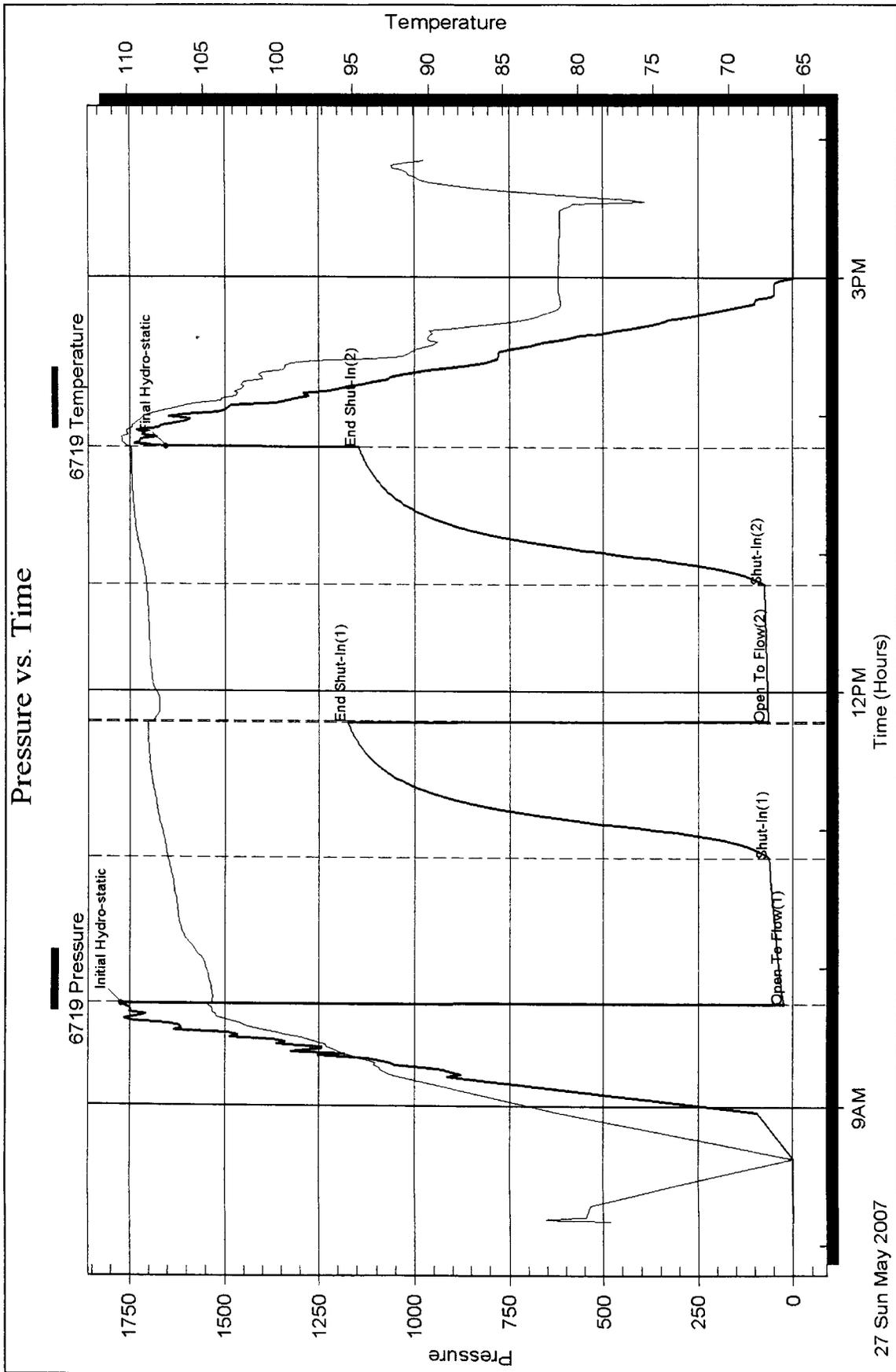
Total Length: 150.00 ft      Total Volume: 0.993 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:

# Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Black Diamond**

PO Box 641  
Hays KS 67601

ATTN: Tony Richardson

**18 7 21 Graham KS.**

**Fusillo #1**

Start Date: 2007.05.27 @ 20:15:00

End Date: 2007.05.28 @ 05:13:30

Job Ticket #: 28636                      DST #: 4

Trilobite Testing, Inc

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**TRILOBITE**  
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# DRILL STEM TEST REPORT

Black Diamond

**Fusillo #1**

PO Box 641  
Hays KS 67601

**18 7 21 Graham KS**

Job Ticket: 28636

**DST#: 4**

ATTN: Tony Richardson

Test Start: 2007.05.27 @ 20:15:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

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

Time Tool Opened: 22:47:30

Time Test Ended: 05:13:30

Test Type: **Conventional Bottom Hole**

Tester: **Jason McLemore**

Unit No: **32**

Interval: **3649.00 ft (KB) To 3655.00 ft (KB) (TVD)**

Reference Elevations: **2155.00 ft (KB)**

Total Depth: **3655.00 ft (KB) (TVD)**

**2150.00 ft (CF)**

Hole Diameter: **7.80 inches** Hole Condition: **Good**

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

**Serial #: 6719**

**Inside**

Press@RunDepth: **83.72 psig @ 3652.00 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2007.05.27**

End Date:

**2007.05.28**

Last Calib.: **2007.05.28**

Start Time: **20:15:02**

End Time:

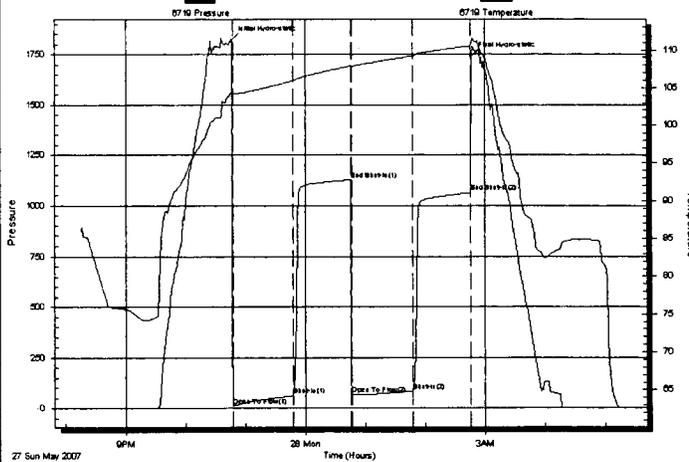
**05:13:30**

Time On Btm: **2007.05.27 @ 22:47:00**

Time Off Btm: **2007.05.28 @ 02:46:15**

TEST COMMENT: IFP Weak Slowly Building Blow to 6 "  
ISI Surface Blow back After 20 Min.  
FFP Fair Blow Built to 9 "  
FSI Blow back Built to 1/2 "

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1822.03	104.42	Initial Hydro-static
1	11.99	104.11	Open To Flow (1)
62	61.56	105.92	Shut-In(1)
119	1128.79	107.89	End Shut-In(1)
120	66.63	107.76	Open To Flow (2)
181	83.72	109.21	Shut-In(2)
239	1064.01	110.52	End Shut-In(2)
240	1739.09	110.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	MCO 5%G 60%O 35%M	0.15
210.00	Gassy Oil 30%G 70%O	2.11

Gas Rates

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



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Black Diamond

**Fusillo #1**

PO Box 641  
Hays KS 67601

**18 7 21 Graham KS**

Job Ticket: 28636

**DST#: 4**

ATTN: Tony Richardson

Test Start: 2007.05.27 @ 20:15:00

**Tool Information**

Drill Pipe:	Length: 3536.00 ft	Diameter: 3.80 inches	Volume: 49.60 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: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 60000.00 lb
		<b>Total Volume:</b>	<b>50.20 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3649.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	6.00 ft			
Tool Length:	27.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

**Tool Description**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3629.00	
Shut In Tool	5.00			3634.00	
Hydraulic tool	5.00			3639.00	
Packer	5.00			3644.00	21.00 Bottom Of Top Packer
Packer	5.00			3649.00	
Stubb	1.00			3650.00	
Perforations	2.00			3652.00	
Recorder	0.00	6719	Inside	3652.00	
Recorder	0.00	13221	Outside	3652.00	
Bullnose	3.00			3655.00	6.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>27.00</b>				



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Black Diamond

**Fusillo #1**

PO Box 641  
Hays KS 67601

**18 7 21 Graham KS**

Job Ticket: 28636

**DST#: 4**

ATTN: Tony Richardson

Test Start: 2007.05.27 @ 20:15:00

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	28 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1000.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	MCO 5%G 60%O 35%M	0.148
210.00	Gassy Oil 30%G 70%O	2.108

Total Length: 240.00 ft      Total Volume: 2.256 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

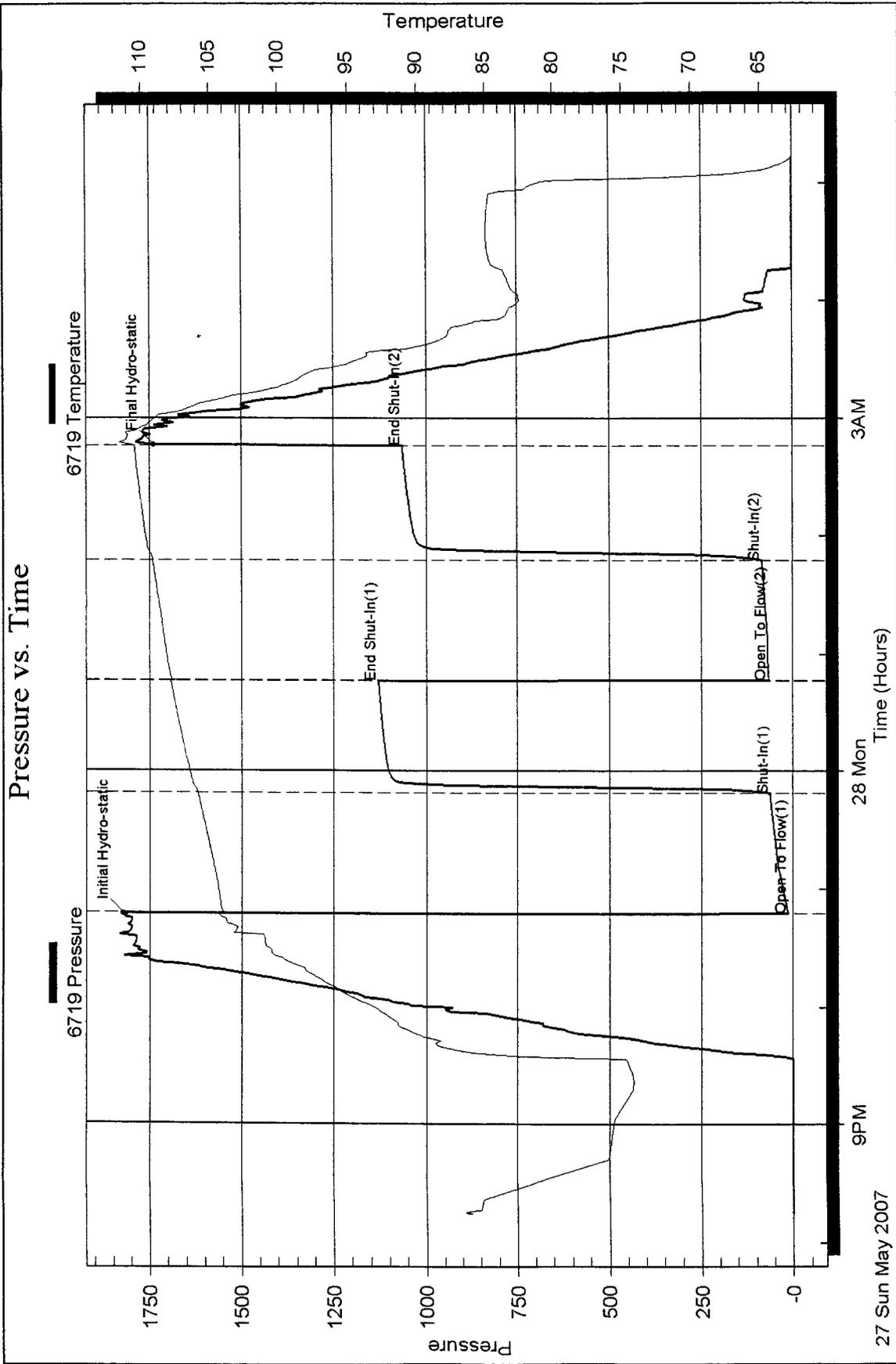
Serial #:

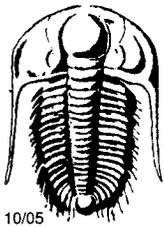
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

28633 ✓

10215

## Test Ticket

Well Name & No. Fusillo #1 Test No. 1 Date 5-25-07  
 Company Black Diamond Zone Tested LKc - "C"  
 Address PO Box 641, Hays, Ks. 67601 Elevation 2155 KB 2150 GL  
 Co. Rep / Geo. Tony Richardson Rig Ww #8  
 Location: Sec. 18 Twp. 7s Rge. 21w Co. Graham State Ks  
 Comment: \_\_\_\_\_ Release date / time: \_\_\_\_\_

Interval Tested 3396 - 3424 Initial Str Wt./Lbs. 50,000 Unseated Str Wt./Lbs. 55,000  
 Anchor Length 28' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 60,000  
 Top Packer Depth 3391 Tool Weight 2,000  
 Bottom Packer Depth 3396 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 3424 Wt. Pipe Run 0 Drill Collar Run 122  
 Mud Wt. 9.0 LCM 3/4" Vis. 50 WL 8.0 Drill Pipe Size 4 1/2 XH Ft. Run 3258  
 Blow Description IFP - Strong, BOB in 4 1/2 min.  
ISI - Dead  
FFP - Strong, BOB in 5 1/2 min  
FSI - Dead

Recovery - Total Feet 585 GIP \_\_\_\_\_ Ft. in DC 122 Ft. in DP 463  
 Rec. 585 Feet of Muddy water %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water 90 %mud 10  
 Rec. \_\_\_\_\_ Feet of Slight oil show %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 BHT 112° °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW .131 @ 62 °F Chlorides 70,000 ppm Recovery \_\_\_\_\_ Chlorides 800 ppm System

	AK-1	Alpine	Recorder No.	(test)
(A) Initial Hydrostatic Mud		<u>1648</u> PSI	<u>6719</u>	<u>1100</u>
(B) First Initial Flow Pressure		<u>29</u> PSI	(depth) <u>3398</u>	Jars _____
(C) First Final Flow Pressure		<u>192</u> PSI	Recorder No. <u>13221</u>	Safety Jt. _____
(D) Initial Shut-In Pressure		<u>1015</u> PSI	(depth) <u>3421</u>	Circ Sub _____
(E) Second Initial Flow Pressure		<u>196</u> PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure		<u>292</u> PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure		<u>1005</u> PSI	Initial Opening <u>15</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>1583</u> PSI	Initial Shut-In <u>30</u>	Shale Packer _____

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Approved By [Signature]  
 Our Representative G. Mc Lemmon *thank you*

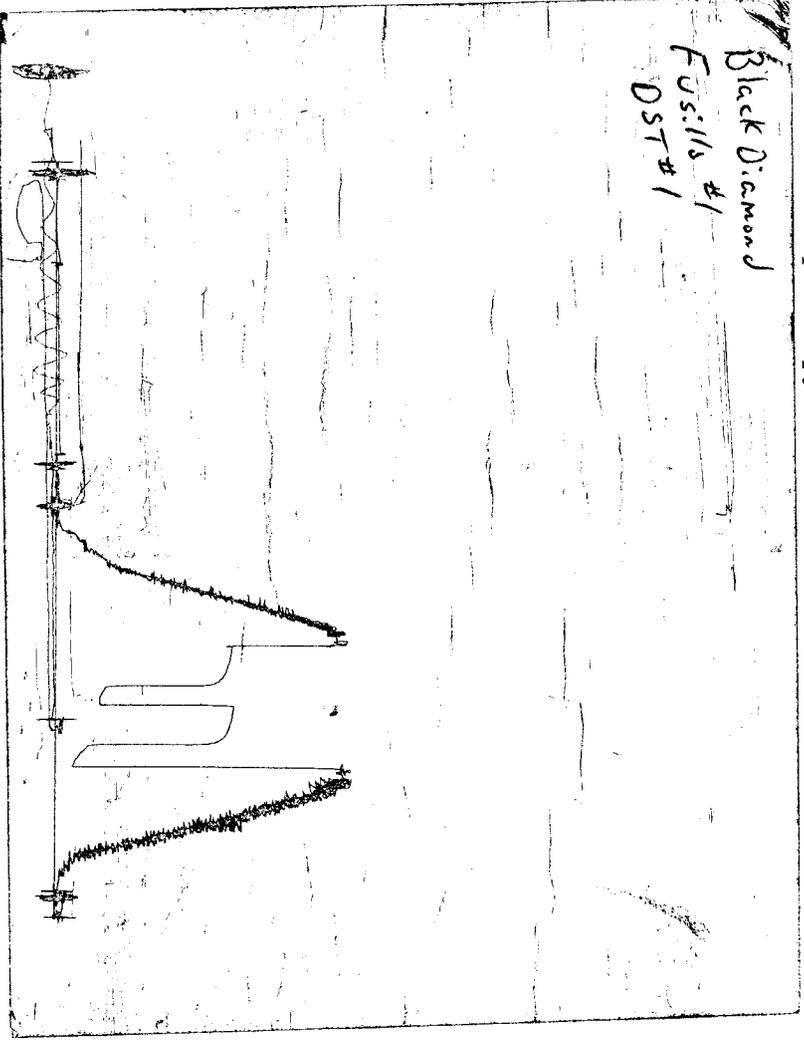
Final Flow 15  
 Final Shut-In 30  
 T-On Location 16:30  
 T-Started 17:24  
 T-Open 18:18  
 T-Pulled 20:48  
 T-Out 23:10

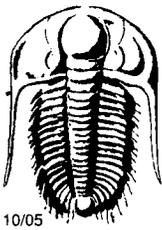
Ruined Packer \_\_\_\_\_  
 Mileage 142 at 177.50  
 Sub Total: \_\_\_\_\_  
 Std. By \_\_\_\_\_  
 Acc. Chg: 1277.50  
 Other: \_\_\_\_\_  
 Total: \_\_\_\_\_

**CHART PAGE**

This is a photocopy of the actual AK-1 recorder chart.

Black Diamond  
Fossils #1  
DST #1





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

28634

## Test Ticket

Well Name & No. Fusillo #1 Test No. 2 Date 5-27-07  
 Company Black Diamond Zone Tested Arbuckle  
 Address PO Box 641, Hays, Ks, 67601 Elevation 2155 KB 2150 GL  
 Co. Rep / Geo. Tony Richardson Rig Ww #8  
 Location: Sec. 18 Twp. 7s Rge. 21w Co. Graham State Ks  
 Comment: \_\_\_\_\_ Release date / time: \_\_\_\_\_

Interval Tested 3567 - 3650 Initial Str Wt./Lbs. 52,000 Unseated Str Wt/Lbs. 52,000  
 Anchor Length 83' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. \_\_\_\_\_  
 Top Packer Depth 3562 Tool Weight 2,000  
 Bottom Packer Depth 3567 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 3650 Wt. Pipe Run 0 Drill Collar Run 122  
 Mud Wt. 9.3 LCM 1/2" Vis. 50 WL 8.8 Drill Pipe Size 4 1/2 X 4 Ft. Run 3444  
 Blow Description IFP Packer Failure, Pull Tool

Recovery - Total Feet 240 GIP \_\_\_\_\_ Ft. in DC 122 Ft. in DP 118  
 Rec. 240 Feet of Mud %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 BHT \_\_\_\_\_ °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides \_\_\_\_\_ ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		1787	6719	1100
(B) First Initial Flow Pressure			(depth) 3570	Jars _____
(C) First Final Flow Pressure			Recorder No. 13221	Safety Jt. _____
(D) Initial Shut-In Pressure			(depth) 3647	Circ Sub _____
(E) Second Initial Flow Pressure			Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure			(depth) _____	Straddle _____
(G) Final Shut-In Pressure			Initial Opening _____	Ext. Packer _____
(Q) Final Hydrostatic Mud		1772	Initial Shut-In _____	Shale Packer _____

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Approved By \_\_\_\_\_

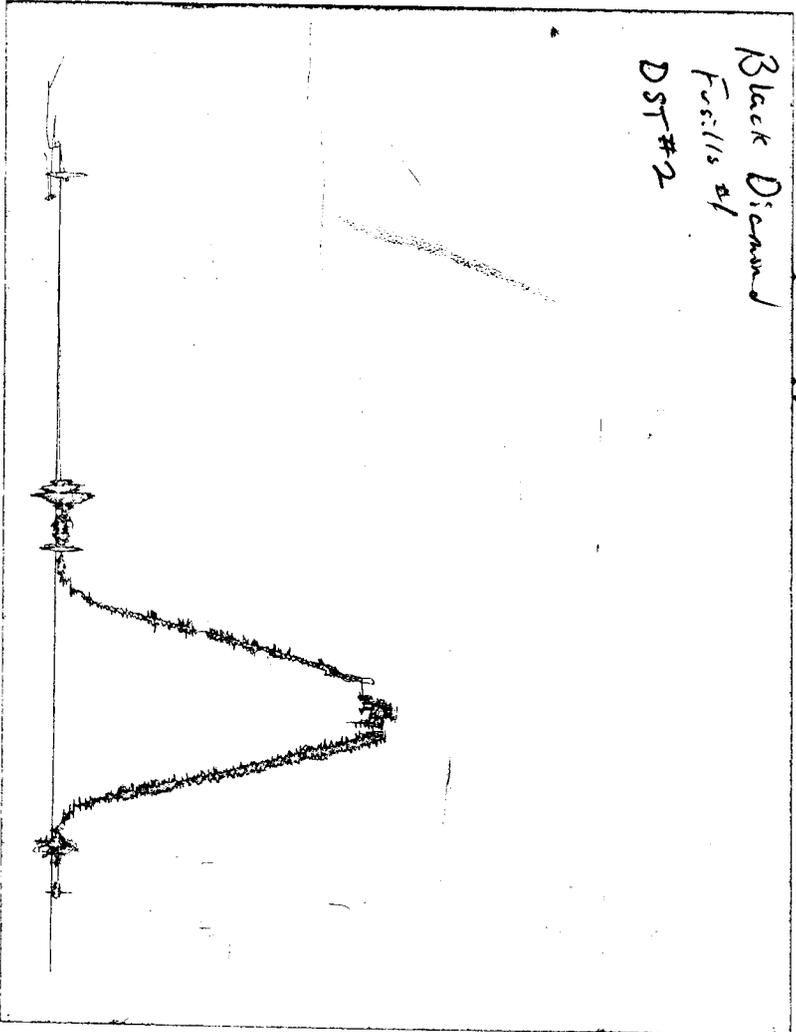
Our Representative J. Mc Lemor *Thank you!*

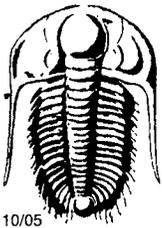
Final Flow \_\_\_\_\_  
 Final Shut-In \_\_\_\_\_  
 T-On Location 17:24  
 T-Started 17:54  
 T-Open 19:55  
 T-Pulled 20:05  
 T-Out 22:11  
 Ruined Packer \_\_\_\_\_  
 Mileage 142 m 177.50  
 Sub Total: \_\_\_\_\_  
 Std. By: \_\_\_\_\_  
 Acc. Chg: 1277.50  
 Other: \_\_\_\_\_  
 Total: \_\_\_\_\_

**CHART PAGE**

This is a photocopy of the actual AK-1 recorder chart.

Black Diamond  
Fossils #1  
DST #2





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

28635

## Test Ticket

27

Well Name & No. Fusillo #1 Test No. 3 Date 5-28-07  
 Company Black Diamond Zone Tested Arbuckle  
 Address PO Box 641, Hays, Ks. 67601 Elevation 2155 KB 2150 GL  
 Co. Rep / Geo. Tony Richardson Rig WW#8  
 Location: Sec. 18 Twp. 7s Rge. 21w Co. Graham State Ks  
 Comment: \_\_\_\_\_ Release date / time: \_\_\_\_\_

Interval Tested 3544 - 3650 3545-3651 Initial Str Wt./Lbs. 53,000 Unseated Str Wt/Lbs. 53,000  
 Anchor Length 106' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 60,000  
 Top Packer Depth 3539 Tool Weight 2,000  
 Bottom Packer Depth 3544 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 3650 Wt. Pipe Run 0 Drill Collar Run 122  
 Mud Wt. 9.4 LCM Y2# Vis. 50 WL 8.8 Drill Pipe Size 4 1/2 XH Ft. Run 3914  
 Blow Description IFP - Slow Building Blow, Built to 5 3/4"  
ISI - Dead  
FFP - Slow Building Blow, Built to 6"  
FSI - Weak surface Blowback

Recovery - Total Feet 150 GIP \_\_\_\_\_ Ft. in DC 122 Ft. in DP 28  
 Rec. 150 Feet of MCO %gas 55 %oil \_\_\_\_\_ %water 45 %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 BHT 110' °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity 22 °API \_\_\_\_\_  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 1,000 ppm System \_\_\_\_\_

	AK-1	Alpine	Recorder No.	(Test)
(A) Initial Hydrostatic Mud		<u>1769</u> PSI	<u>6719</u>	<u>1100</u>
(B) First Initial Flow Pressure		<u>22</u> PSI	(depth) <u>3548</u>	Jars _____
(C) First Final Flow Pressure		<u>62</u> PSI	Recorder No. <u>13221</u>	Safety Jt. _____
(D) Initial Shut-In Pressure		<u>1174</u> PSI	(depth) <u>3648</u>	Circ Sub _____
(E) Second Initial Flow Pressure		<u>67</u> PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure		<u>75</u> PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure		<u>1145</u> PSI	<b>Initial Opening</b> <u>60</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>1745</u> PSI	Initial Shut-In <u>60</u>	Shale Packer _____
			Final Flow <u>60</u>	Ruined Packer _____
			Final Shut-In <u>60</u>	Mileage <u>142 RT 177.50</u>
			<b>T-On Location</b> <u>6:51</u>	Sub Total: _____
			T-Started <u>8:10</u>	Std. By _____
			T-Open <u>9:45</u>	Acc. Chg: <u>1127.50</u>
			T-Pulled <u>13:45</u>	Other: _____
			T-Out <u>15:50</u>	Total: _____

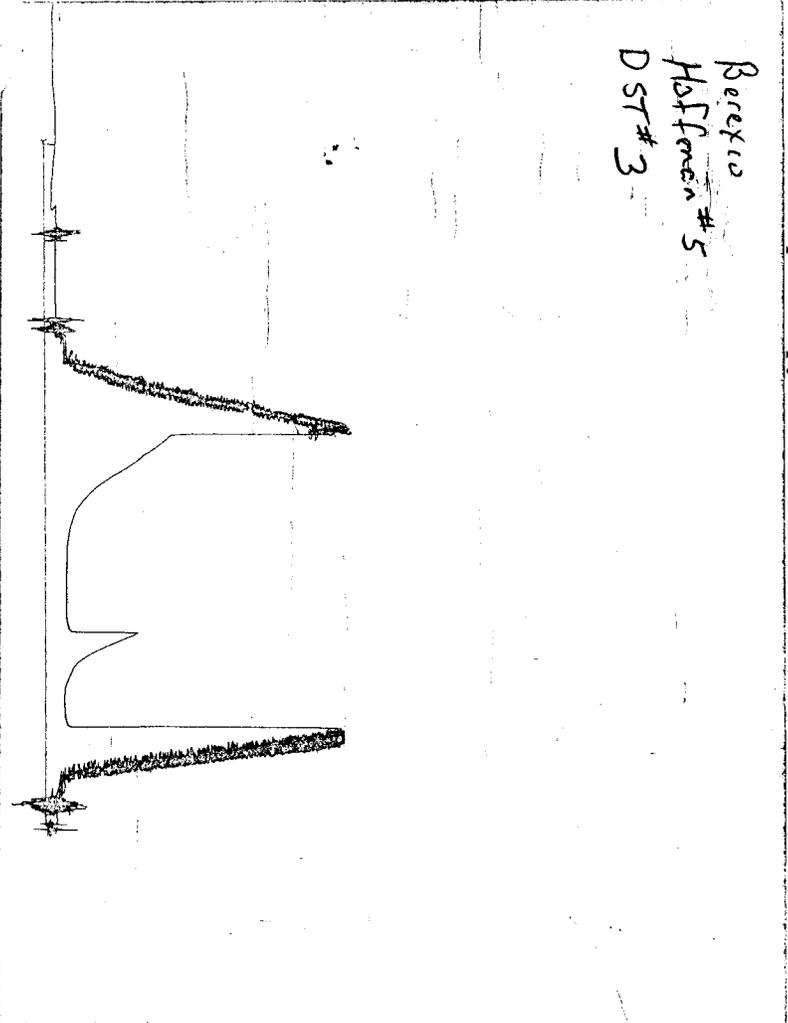
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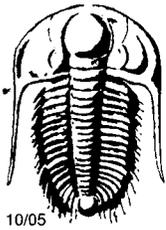
Approved By \_\_\_\_\_  
 Our Representative J. Mc Lemore Thank you

**CHART PAGE**

This is a photocopy of the actual AK-1 recorder chart.

Bereyis  
Hoffman #5  
DST # 3





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

28636

## Test Ticket

Well Name & No. Fussillo #1 Test No. 4 Date 5-27-07  
 Company Black Diamond Zone Tested Arbuckle  
 Address PO Box 641, Hays, Ks. 67601 Elevation 2155 KB 2150 GL  
 Co. Rep / Geo. Tony Richardson Rig WW #8  
 Location: Sec. 18 Twp. 7s Rge. 21w Co. Graham State Ks  
 Comment: \_\_\_\_\_ Release date / time: \_\_\_\_\_

Interval Tested 3649 - 3655 Initial Str Wt./Lbs. 52,000 Unseated Str Wt./Lbs. 52,000  
 Anchor Length 6' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 60,000  
 Top Packer Depth 3644 Tool Weight 2,000  
 Bottom Packer Depth 3649 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 3655 Wt. Pipe Run 0 Drill Collar Run 122  
 Mud Wt. 9.4 LCM 1/2 Vis. 50 WL 8.8 Drill Pipe Size 4 1/2 XH Ft. Run 3537  
 Blow Description IFP - Weck slow building, Built to 6"  
ISI - Dead For 20 min, Then surface blow back  
FFP - Fair Blow, Built to 9"  
FST - Blow back Built to 1/2"

Recovery - Total Feet 240 GIP \_\_\_\_\_ Ft. in DC 122 Ft. in DP \_\_\_\_\_  
 Rec. 210 Feet of Gassy Oil 30 %gas 70 %oil %water %mud  
 Rec. 30 Feet of MCO 5 %gas 60 %oil %water 35 %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas %oil %water %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas %oil %water %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas %oil %water %mud  
 BHT 111° °F Gravity 28 °API D @ 65 °F Corrected Gravity 28 °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 1,000 ppm System

	AK-1	Alpine	Recorder No.	(Test)
(A) Initial Hydrostatic Mud	1822	PSI	6719	1100
(B) First Initial Flow Pressure	12	PSI	(depth) 3651	Jars _____
(C) First Final Flow Pressure	62	PSI	Recorder No. 13221	Safety Jt. _____
(D) Initial Shut-In Pressure	1129	PSI	(depth) _____	Circ Sub _____
(E) Second Initial Flow Pressure	67	PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure	84	PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure	1064	PSI	Initial Opening <u>60</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	1757	PSI	Initial Shut-In <u>60</u>	Shale Packer _____
			Final Flow <u>60</u>	Ruined Packer _____
			Final Shut-In <u>60</u>	Mileage <u>142 # 177.50</u>

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Approved By \_\_\_\_\_  
 Our Representative J. McJannet *thank you*

T-On Location	T-Started	T-Open	T-Pulled	T-Out	Sub Total:	Std. By	Acc. Chg:	Other:	Total:
<u>20:06</u>	<u>20:15</u>	<u>22:47</u>	<u>2:47</u>	<u>5:13</u>	_____	_____	<u>\$ 1277.50</u>	_____	_____

**CHART PAGE**

This is a photocopy of the actual AK-1 recorder chart.

Black Diamond  
Fus. 110 #1  
DST #4

