

**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **White Exploration**

2400 Woodlawn  
Wichita, KS 67220

ATTN: Tom Williams

**36 29 32 Haskell KS**

**Phoenix Farms #1**

Start Date: 2008.11.01 @ 00:00:00

End Date:

Job Ticket #: 34134                      DST #: 1

**KCC  
FEB 12 2009  
CONFIDENTIAL**

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

White Exploration

Phoenix Farms #1

36 29 32 Haskell KS

DST # 1

Morrow Sand

2008.11.01





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

White Exploration

**Phoenix Farms #1**

2400 Woodlaw n  
Wichita, KS 67220

**36 29 32 Haskell KS**

Job Ticket: 34134

**DST#: 1**

ATTN: Tom Williams

Test Start: 2008.11.01 @ 00:00:00

## Tool Information

Drill Pipe:	Length: 4939.00 ft	Diameter: 3.80 inches	Volume: 69.28 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: 245.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 70.48 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	5194.00 ft			Final 78000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	126.00 ft			
Tool Length:	149.00 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			5176.00	
Hydraulic tool	5.00			5181.00	
Jars	5.00			5186.00	
Safety Joint	3.00			5189.00	
Packer	5.00			5194.00	23.00 Bottom Of Top Packer
Packer - Shale	4.00			5198.00	
Stubb	1.00			5199.00	
Perforations	1.00			5200.00	
Change Over Sub	1.00			5201.00	
Recorder	0.00	6751	inside	5201.00	
Recorder	0.00	8355	inside	5201.00	
Drill Pipe	93.00			5294.00	
Change Over Sub	1.00			5295.00	
Perforations	21.00			5316.00	
Bullnose	4.00			5320.00	126.00 Anchor Tool
<b>Total Tool Length:</b>	<b>149.00</b>				



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

White Exploration

**Phoenix Farms #1**

2400 Woodlaw n  
Wichita, KS 67220

**36 29 32 Haskell KS**

Job Ticket: 34134

**DST#: 1**

ATTN: Tom Williams

Test Start: 2008.11.01 @ 00:00:00

## 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:

bbbl

Water Loss: 7.96 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2800.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
500.00	100% mud	4.782

Total Length: 500.00 ft

Total Volume: 4.782 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

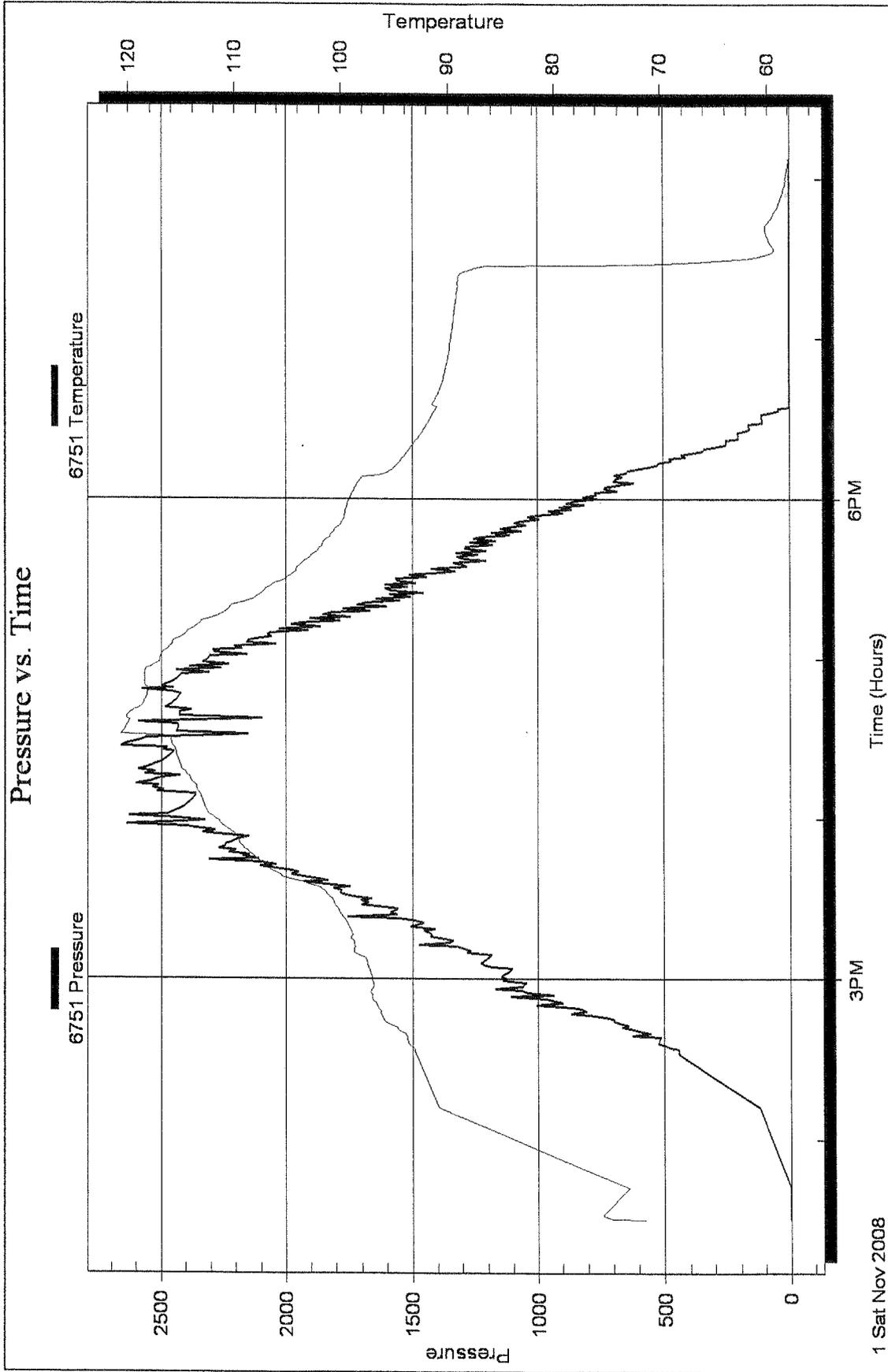
Recovery Comments:

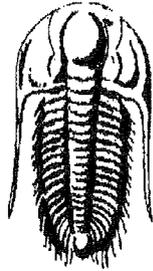
Serial #: 6751

White Exploration

36 29 32 Haskell KS

DST Test Number: 1





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **White Exploration**

2400 Woodlawn  
Wichita, KS 67220

ATTN: Tom Williams

**36 29 32 Haskell KS**

**Phoenix Farms #1**

Start Date: 2008.11.02 @ 00:00:00

End Date:

Job Ticket #: 34135

DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

White Exploration

Phoenix Farms #1

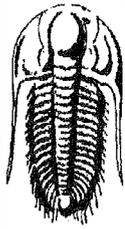
36 29 32 Haskell KS

DST # 2

Morrow Sand

2008.11.02





**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

White Exploration

**Phoenix Farms #1**

2400 Woodlawn  
Wichita, KS 67220

**36 29 32 Haskell KS**

Job Ticket: 34135

**DST#: 2**

ATTN: Tom Williams

Test Start: 2008.11.02 @ 00:00:00

## Tool Information

Drill Pipe:	Length: 4999.00 ft	Diameter: 3.80 inches	Volume: 70.12 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: 245.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 71.32 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	5242.00 ft			Final 75000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	78.00 ft			
Tool Length:	101.00 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			5224.00	
Hydraulic tool	5.00			5229.00	
Jars	5.00			5234.00	
Safety Joint	3.00			5237.00	
Packer	5.00			5242.00	23.00 Bottom Of Top Packer
Packer - Shale	4.00			5246.00	
Stubb	1.00			5247.00	
Perforations	1.00			5248.00	
Recorder	0.00	6751	Inside	5248.00	
Recorder	0.00	8355	Inside	5248.00	
Change Over Sub	1.00			5249.00	
Drill Pipe	62.00			5311.00	
Change Over Sub	1.00			5312.00	
Perforations	4.00			5316.00	
Bullnose	4.00			5320.00	78.00 Anchor Tool
<b>Total Tool Length:</b>	<b>101.00</b>				



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

White Exploration

**Phoenix Farms #1**

2400 Woodlaw n  
Wichita, KS 67220

**36 29 32 Haskell KS**

Job Ticket: 34135

**DST#: 2**

ATTN: Tom Williams

Test Start: 2008.11.02 @ 00:00:00

## 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:

bbbl

Water Loss: 7.96 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2800.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl

Total Length:

ft

Total Volume:

bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

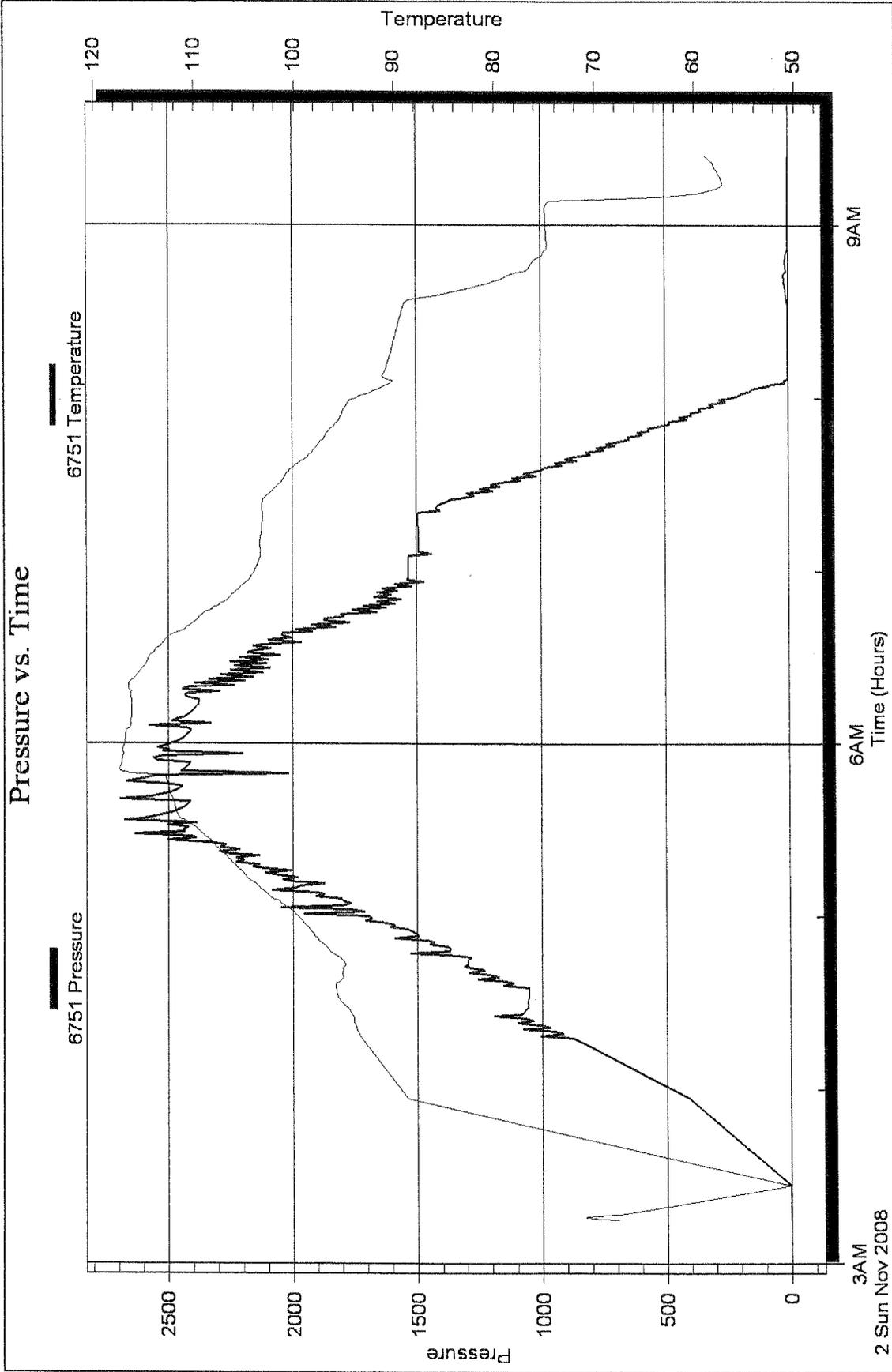
Recovery Comments:

Serial #: 6751

White Exploration

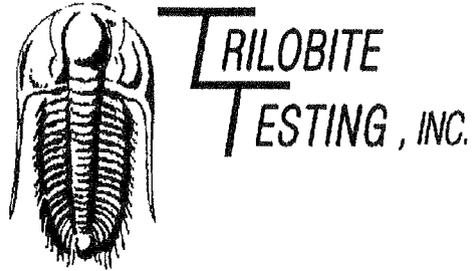
36 29 32 Haskell KS

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 34135



## DRILL STEM TEST REPORT

Prepared For: **White Exploration**

2400 Woodlawn  
Wichita, KS 67220

ATTN: Tom Williams

**36 29 32 Haskell KS**

**Phoenix Farms #1**

Start Date: 2008.11.02 @ 22:45:00

End Date: 2008.11.03 @ 08:29:45

Job Ticket #: 34136                      DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

White Exploration

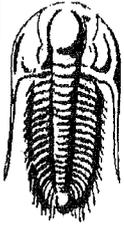
Phoenix Farms #1

36 29 32 Haskell KS

DST # 3

Chester Sand

2008.11.02



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

White Exploration

**Phoenix Farms #1**

2400 Woodlaw n  
Wichita, KS 67220

**36 29 32 Haskell KS**

Job Ticket: 34136

**DST#: 3**

ATTN: Tom Williams

Test Start: 2008.11.02 @ 22:45:00

## GENERAL INFORMATION:

Formation: **Chester Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:19:00

Time Test Ended: 08:29:45

Test Type: Conventional Bottom Hole

Tester: Harley Davidson

Unit No: 33

**Interval: 5366.00 ft (KB) To 5395.00 ft (KB) (TVD)**

Total Depth: 5395.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Fair

Reference Elevations: 2891.00 ft (KB)

2880.00 ft (CF)

KB to GR/CF: 11.00 ft

## Serial #: 6751

Press@RunDepth: 87.73 psig @ ft (KB)

Start Date: 2008.11.02

End Date:

2008.11.03

Capacity: 7000.00 psig

Last Calib.: 2008.11.03

Start Time: 22:45:01

End Time:

08:29:45

Time On Btm: 2008.11.03 @ 01:18:15

Time Off Btm: 2008.11.03 @ 05:19:45

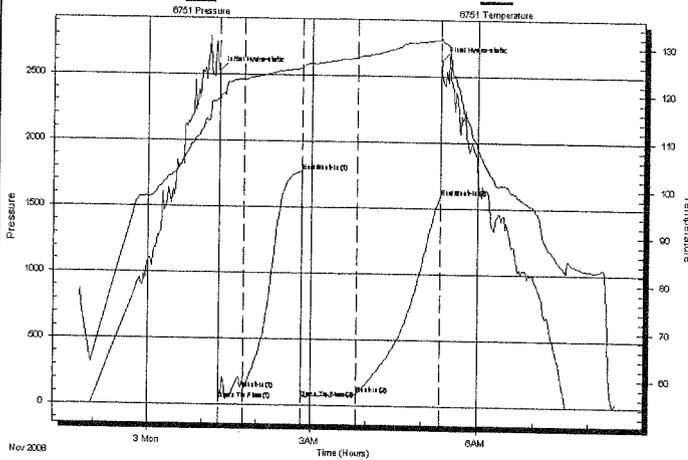
TEST COMMENT: IF- Weak building blow 22min BOB.

IS- No blow back.

FF- Strong blow BOB, ASAO,

FS- No blow back.

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2529.94	118.68	Initial Hydro-static
1	40.31	118.33	Open To Flow (1)
28	122.05	122.93	Shut-In (1)
91	1769.83	125.30	End Shut-In (1)
92	55.50	125.30	Open To Flow (2)
152	87.73	127.66	Shut-In (2)
241	1588.61	131.63	End Shut-In (2)
242	2620.60	132.01	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	10%oil 90%mud trace of gas	0.30
124.00	50%oil 50%gas trace of mud.	0.61

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

White Exploration

**Phoenix Farms #1**

2400 Woodlawn  
Wichita, KS 67220

**36 29 32 Haskell KS**

ATTN: Tom Williams

Job Ticket: 34136

**DST#: 3**

Test Start: 2008.11.02 @ 22:45:00

### Tool Information

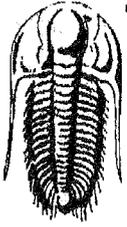
Drill Pipe:	Length: 5123.00 ft	Diameter: 3.80 inches	Volume: 71.86 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 245.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 72000.00 lb
		Total Volume: 73.06 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	5366.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	29.00 ft			
Tool Length:	52.00 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			5348.00	
Hydraulic tool	5.00			5353.00	
Jars	5.00			5358.00	
Safety Joint	3.00			5361.00	
Packer	5.00			5366.00	23.00 Bottom Of Top Packer
Packer - Shale	4.00			5370.00	
Stubb	1.00			5371.00	
Recorder	0.00	6751	Inside	5371.00	
Recorder	0.00	8355	Inside	5371.00	
Perforations	1.00			5372.00	
Perforations	19.00			5391.00	
Bullnose	4.00			5395.00	29.00 Anchor Tool

**Total Tool Length: 52.00**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

White Exploration

**Phoenix Farms #1**

2400 Woodlaw n  
Wichita, KS 67220

**36 29 32 Haskell KS**

Job Ticket: 34136

**DST#: 3**

ATTN: Tom Williams

Test Start: 2008.11.02 @ 22:45:00

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 49.00 sec/qt

Water Loss: 9.57 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 3300.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: ppm

deg API

ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	10%oil 90%mud trace of gas	0.305
124.00	50%oil 50%gas trace of mud.	0.610

Total Length: 186.00 ft

Total Volume: 0.915 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

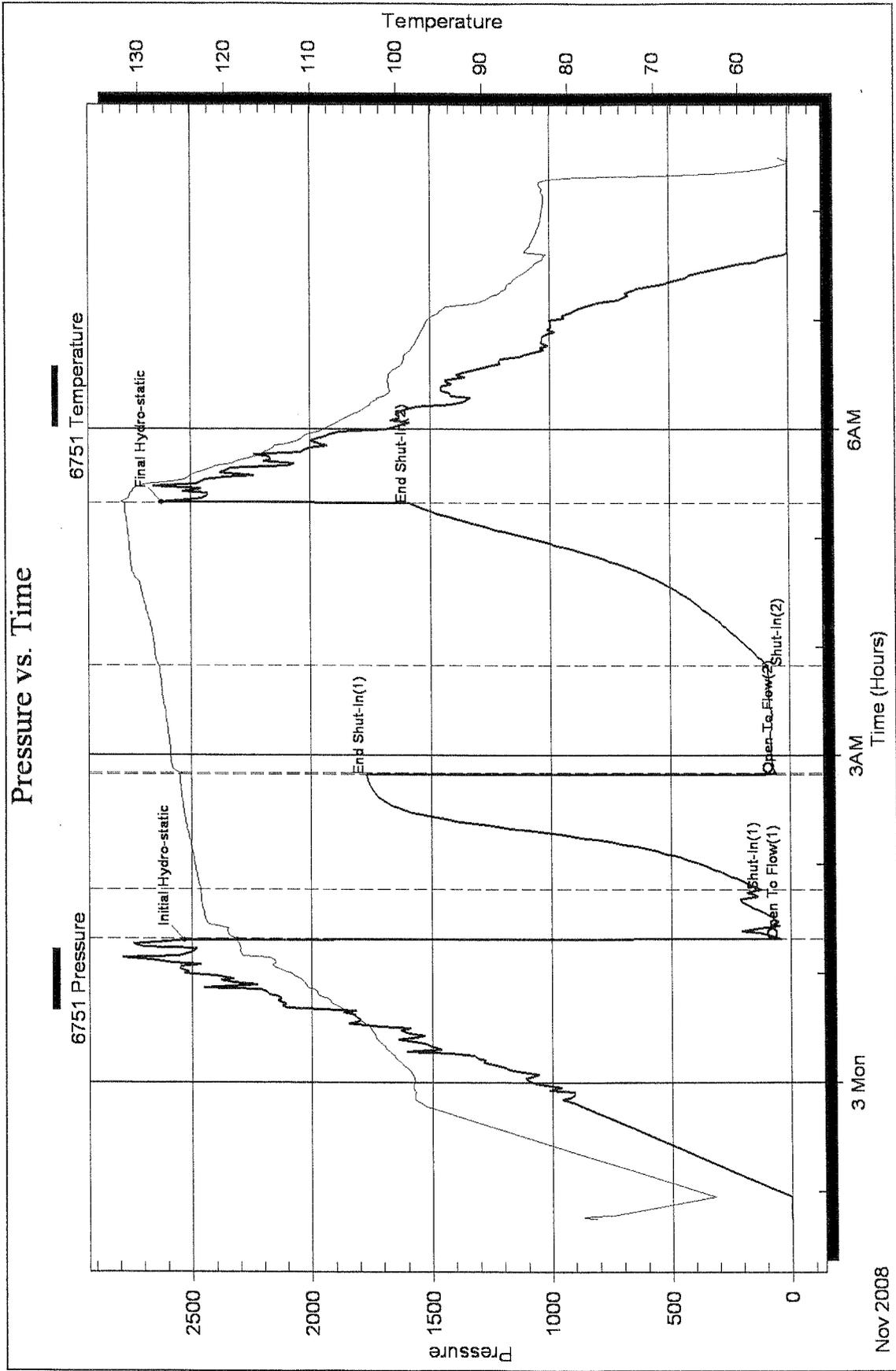
Recovery Comments:

Serial #: 6751

White Exploration

36 29 32 Haskell KS

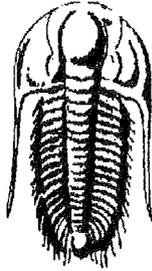
DST Test Number: 3



Tribolite Testing, Inc

Ref. No: 34136

Printed: 2008.11.18 @ 13:39:33 Page 5



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **White Exploration**

2400 Woodlawn  
Wichita, KS 67220

ATTN: Tom Williams

**36 29 32 Haskell KS**

**Phoenix Farms #1**

Start Date: 2008.11.04 @ 09:00:00

End Date: 2008.11.04 @ 18:11:45

Job Ticket #: 34138                      DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

White Exploration

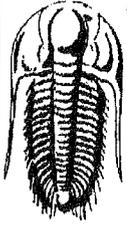
Phoenix Farms #1

36 29 32 Haskell KS

DST # 4

St. Louis

2008.11.04



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

White Exploration

**Phoenix Farms #1**

2400 Woodlaw n  
Wichita, KS 67220

**36 29 32 Haskell KS**

ATTN: Tom Williams

Job Ticket: 34138

**DST#: 4**

Test Start: 2008.11.04 @ 09:00:00

## GENERAL INFORMATION:

Formation: **St. Louis**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:40:45

Time Test Ended: 18:11:45

Test Type: Conventional Bottom Hole

Tester: Harley Davidson

Unit No: 33

**Interval: 5546.00 ft (KB) To 5570.00 ft (KB) (TVD)**

Total Depth: 5570.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition:

Reference Elevations: 2891.00 ft (KB)

2880.00 ft (CF)

KB to GR/CF: 11.00 ft

**Serial #: 8355**

**Inside**

Press@RunDepth: 76.61 psig @ 5551.00 ft (KB)

Start Date: 2008.11.04

End Date:

2008.11.04

Capacity: 7000.00 psig

Last Calib.: 2008.11.04

Start Time: 09:00:01

End Time:

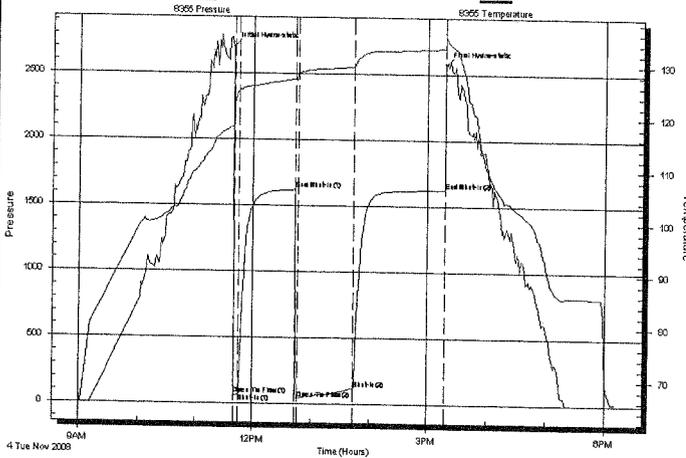
18:11:45

Time On Btm: 2008.11.04 @ 11:39:30

Time Off Btm: 2008.11.04 @ 15:17:45

**TEST COMMENT:** IF- Strong blow BOB ASAO. No GTS.  
IS- No blow back.  
FF- Strong blow BOB ASAO, GTS 30min.  
FSI-

Pressure vs. Time



## PRESSURE SUMMARY

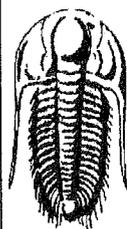
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2704.39	118.36	Initial Hydro-static
2	65.07	122.56	Open To Flow (1)
6	76.61	125.09	Shut-In(1)
65	1621.93	127.30	End Shut-In(1)
67	39.39	128.38	Open To Flow (2)
125	118.65	129.75	Shut-In(2)
218	1623.83	133.30	End Shut-In(2)
219	2577.19	135.72	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
310.00	10%gas 10%w ater 15%mud 65%oil	2.78

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	9.00	8.76
Last Gas Rate	0.13	18.00	12.13
Max. Gas Rate	0.13	18.00	12.13



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

White Exploration

**Phoenix Farms #1**

2400 Woodlaw n  
Wichita, KS 67220

**36 29 32 Haskell KS**

ATTN: Tom Williams

Job Ticket: 34138

**DST#: 4**

Test Start: 2008.11.04 @ 09:00:00

### Tool Information

Drill Pipe:	Length: 5283.00 ft	Diameter: 3.80 inches	Volume: 74.11 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: 245.00 ft	Diameter: 2.80 inches	Volume: 1.87 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 75.98 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	5546.00 ft			Final 75000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	47.00 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			5528.00	
Hydraulic tool	5.00			5533.00	
Jars	5.00			5538.00	
Safety Joint	3.00			5541.00	
Packer	5.00			5546.00	23.00 Bottom Of Top Packer
Packer - Shale	4.00			5550.00	
Stubb	1.00			5551.00	
Recorder	0.00	6751	Inside	5551.00	
Recorder	0.00	8355	Inside	5551.00	
Perforations	1.00			5552.00	
Perforations	14.00			5566.00	
Bullnose	4.00			5570.00	24.00 Anchor Tool

**Total Tool Length: 47.00**



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

### FLUID SUMMARY

White Exploration

**Phoenix Farms #1**

2400 Woodlaw n  
Wichita, KS 67220

**36 29 32 Haskell KS**

ATTN: Tom Williams

Job Ticket: 34138

**DST#: 4**

Test Start: 2008.11.04 @ 09:00:00

### Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 50.00 sec/qt

Water Loss: 8.79 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 6000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API: deg API

Water Salinity: ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
310.00	10%gas 10%water 15%mud 65%oil	2.778

Total Length: 310.00 ft      Total Volume: 2.778 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Water had almost no chl. could be filtrate??



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

# DRILL STEM TEST REPORT

**GAS RATES**

White Exploration

**Phoenix Farms #1**

2400 Woodlaw n  
Wichita, KS 67220

**36 29 32 Haskell KS**

Job Ticket: 34138

**DST#: 4**

ATTN: Tom Williams

Test Start: 2008.11.04 @ 09:00:00

## Gas Rates Information

Temperature: 59 deg C  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m <sup>3</sup> /d)
2	40	0.13	9.00	8.76
2	50	0.13	14.00	10.63
2	60	0.13	18.00	12.13

231939

DST Test Number: 4

36 29 32 Haskell KS

White Exploration

Inside

Serial #: 8355

### Pressure vs. Time

