

DRILL STEM TEST REPORT

Prepared For: **Athena Energy, Inc.**

4045 NW 84th Ste.180
Oklahoma City, OK. 73116

ATTN: Tim Harper

32-29-41 Stanton KS

Hazel Roe 1-32

Start Date: 2002.09.05 @ 14:44:43

End Date: 2002.09.06 @ 01:05:13

Job Ticket #: 14419 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

Athena Energy, Inc.
4045 NW 84th Ste.180
Oklahoma City, OK. 73116
ATTN: Tim Harper

Hazel Roe 1-32
32-29-41 Stanton KS
Job Ticket: 14419 **DST#: 1**
Test Start: 2002.09.05 @ 14:44:43

GENERAL INFORMATION:

Formation: **St. Louis**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:06:43
Time Test Ended: 01:05:13

Test Type: Conventional Bottom Hole
Tester: Shad Vieux
Unit No: 17

Interval: **5694.00 ft (KB) To 5830.00 ft (KB) (TVD)**
Total Depth: **5830.00 ft (KB) (TVD)**
Hole Diameter: **77.80 inches** Hole Condition: Fair

Reference Elevations: **3470.00 ft (KB)**
3460.00 ft (CF)
KB to GR/CF: **10.00 ft**

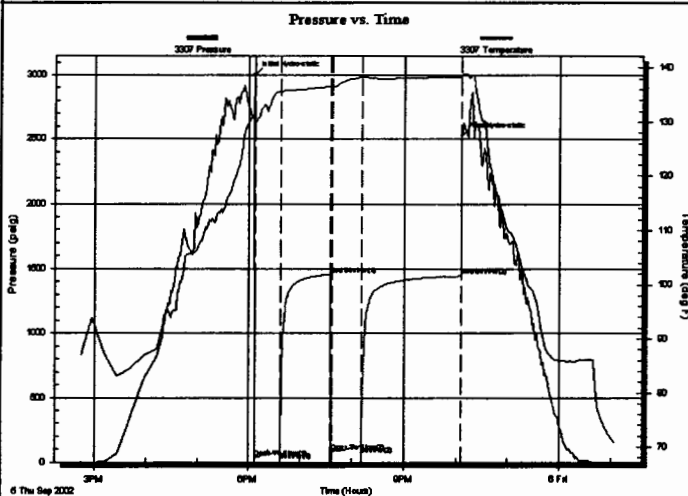
Serial #: 3307

Inside

Press@RunDepth: **123.63 psig @ 5695.00 ft (KB)**
Start Date: **2002.09.05** End Date: **2002.09.06**
Start Time: **14:44:44** End Time: **01:05:13**

Capacity: **7000.00 psig**
Last Calib.: **1899.12.30**
Time On Btmr: **2002.09.05 @ 18:05:43**
Time Off Btmr: **2002.09.05 @ 22:06:13**

TEST COMMENT: IF- Weak Blow Built to 2"
IS- No Blow
FF- Weak Blow Built to 2"
FS- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3001.83	131.34	Initial Hydro-static
1	38.42	129.87	Open To Flow (1)
31	78.37	135.67	Shut-In (1)
90	1457.81	136.55	End Shut-In (1)
91	82.42	136.70	Open To Flow (2)
126	123.63	138.36	Shut-In (2)
240	1444.61	138.38	End Shut-In (2)
241	2525.48	138.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	10% Water 90% Mud	0.15
180.00	20% Water 80% Mud	0.89

Gas Rates

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

Athena Energy, Inc.

Hazel Roe 1-32

4045 NW 84th Ste.180
Oklahoma City, OK. 73116

32-29-41 Stanton KS

Job Ticket: 14419

DST#: 1

ATTN: Tim Harper

Test Start: 2002.09.05 @ 14:44:43

Tool Information

Drill Pipe:	Length: 5423.00 ft	Diameter: 3.80 inches	Volume: 76.07 bbl	Tool Weight: 1800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 274.00 ft	Diameter: 2.25 inches	Volume: 1.35 bbl	Weight to Pull Loose: 110000.0 lb
		Total Volume:	77.42 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 89000.00 lb
Depth to Top Packer:	5694.00 ft			Final 94000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	136.00 ft			
Tool Length:	164.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

C.O. Sub	1.00			5667.00	
S.L. Tool	5.00			5672.00	
HMV	5.00			5677.00	
Jars	5.00			5682.00	
Safety Joint	2.00			5684.00	
C.O. Sub	1.00			5685.00	
Packer	5.00			5690.00	28.00 Bottom Of Top Packer
Packer	4.00			5694.00	
Stubb	1.00			5695.00	
Recorder	0.00	3307	Inside	5695.00	
Perforations	37.00			5732.00	
C.O. Sub	1.00			5733.00	
Blank Spacing	93.00			5826.00	
C.O. Sub	1.00			5827.00	
Recorder	0.00	5495	Inside	5827.00	
Bullnose	3.00			5830.00	136.00 Bottom Packers & Anchor
Total Tool Length:	164.00				



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FLUID SUMMARY

Athena Energy, Inc.

Hazel Roe 1-32

4045 NW 84th Ste.180
Oklahoma City, OK. 73116

32-29-41 Stanton KS

Job Ticket: 14419

DST#: 1

ATTN: Tim Harper

Test Start: 2002.09.05 @ 14:44:43

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:

10000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	10% Water 90% Mud	0.148
180.00	20% Water 80% Mud	0.885

Total Length: 210.00 ft

Total Volume: 1.033 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

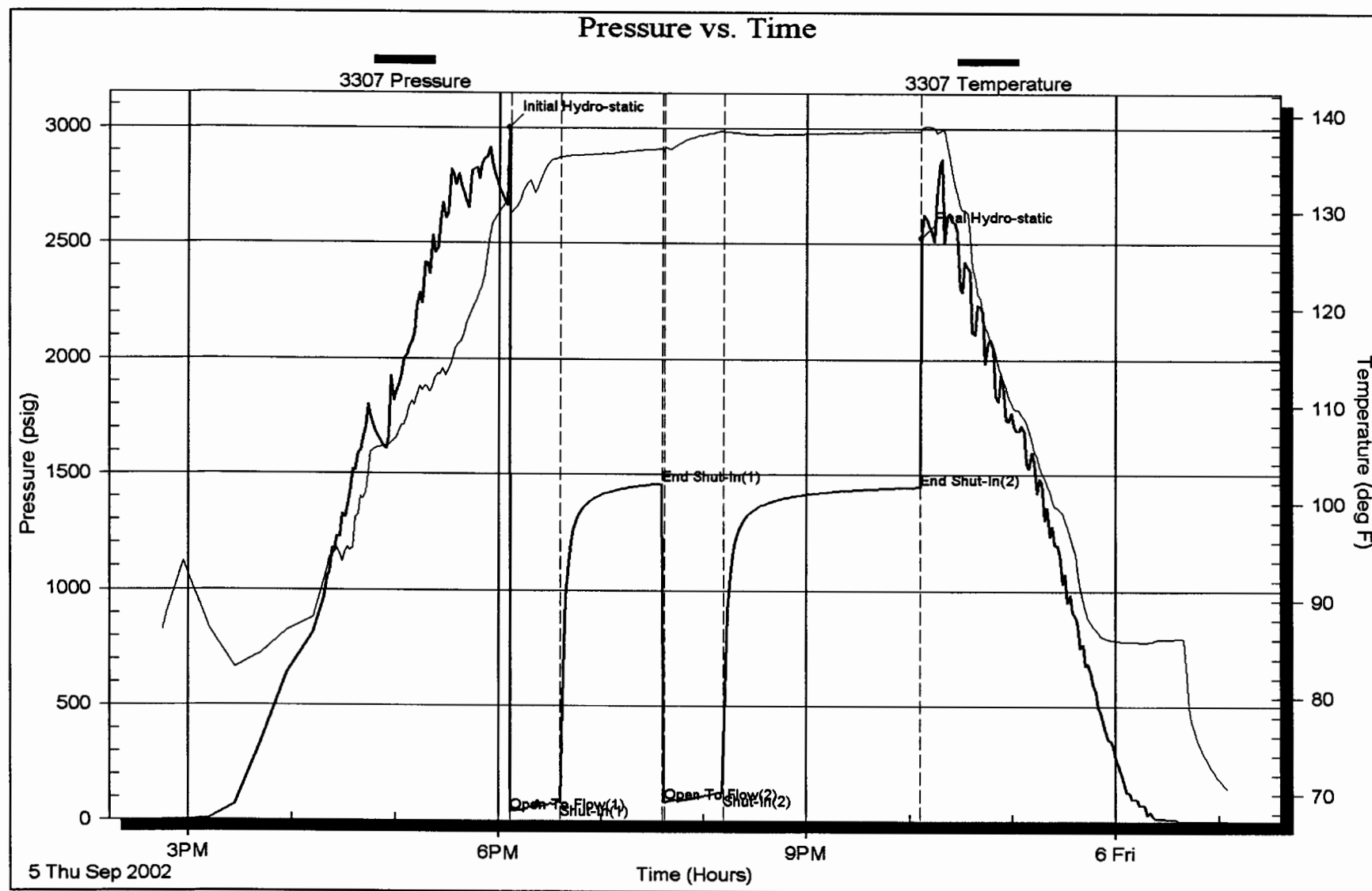
Recovery Comments:

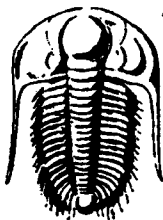
Serial #: 3307

Inside Athena Energy, Inc.

32-29-41 Stanton KS

DST Test Number: 1





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

INVOICE
5129
1385-00

No 14419

Test Ticket

Well Name & No. <u>Hazel Roe 1-32</u>	Test No. <u>1</u>	Date <u>9-5-02</u>
Company <u>Athena Energy, Inc.</u>	Zone Tested <u>St. Louis</u>	
Address <u>4045 NW 84th Ste. 180, Oklahoma City, OK. 73116</u>		Elevation <u>3470</u> KB <u>3460</u> GL
Co. Rep / Geo. <u>Tim Harper</u>	Cont. <u>Big A #1</u>	Est. Ft. of Pay <u> </u> Por. <u> </u> %
Location: Sec. <u>32</u>	Twp. <u>29</u>	Rge. <u>41</u> Co. <u>Stanton</u> State <u>KS</u>
No. of Copies <u> </u>	Distribution Sheet (Y, N) <u> </u>	Turnkey (Y, N) <u> </u> Evaluation (Y, N) <u> </u>

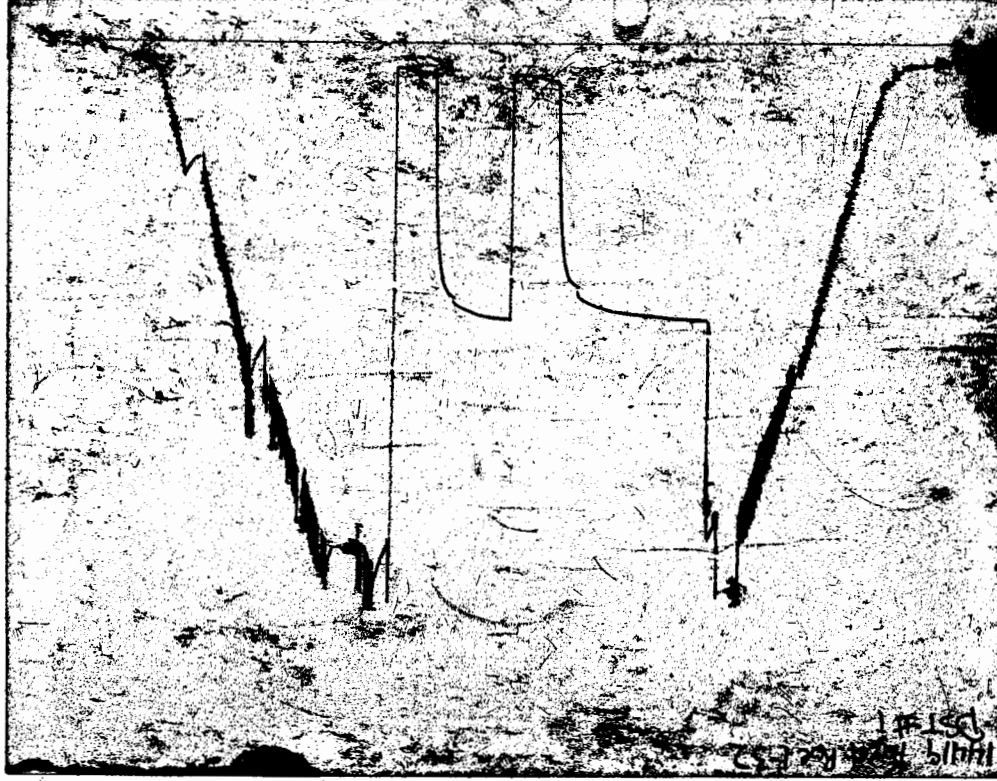
Interval Tested <u>5694 - 5830</u>	Initial Str Wt./Lbs. <u>89,000</u>	Unseated Str Wt./Lbs. <u>94,000</u>
Anchor Length <u>136</u>	Wt. Set Lbs. <u>20,000</u>	Wt. Pulled Loose/Lbs. <u>110,000</u>
Top Packer Depth <u>5689</u>	Tool Weight <u>1800</u>	
Bottom Packer Depth <u>5694</u>	Hole Size — 7 7/8" ☒	Rubber Size — 6 3/4" ☒
Total Depth <u>5830</u>	Wt. Pipe Run <u>N/A</u>	Drill Collar Run <u>274</u>
Mud Wt. <u>8.9</u> LCM <u>5#</u> Vis. <u>57</u> WL <u>8.0</u>	Drill Pipe Size <u>4 1/2 X0</u>	Ft. Run <u>5423</u>
Blow Description <u>IF- Weak Blow Built to 2 in.</u>		
<u>ISI- No Blow</u>		
<u>FF- Weak Blow Built to 2 in.</u>		
<u>FSI- No Blow</u>		

Recovery — Total Feet <u>210</u>	GIP <u> </u>	Ft. in DC <u>210</u>	Ft. in DP <u> </u>
Rec. <u>30</u> Feet Of <u>Watery mud</u>	%gas <u> </u> %oil <u>10</u> %water <u>90</u> %mud <u> </u>		
Rec. <u>60</u> Feet Of <u>Watery mud</u>	%gas <u> </u> %oil <u>20</u> %water <u>80</u> %mud <u> </u>		
Rec. <u>60</u> Feet Of <u>Watery mud</u>	%gas <u> </u> %oil <u>20</u> %water <u>80</u> %mud <u> </u>		
Rec. <u>60</u> Feet Of <u>Watery mud</u>	%gas <u> </u> %oil <u>20</u> %water <u>80</u> %mud <u> </u>		
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u> %oil <u> </u> %water <u> </u> %mud <u> </u>		
BHT <u>138</u> °F Gravity <u> </u>	°API D@ <u> </u>	°F Corrected Gravity <u> </u> °API <u> </u>	
RW <u>1.011</u> @ <u>68.6</u> °F Chlorides <u>11,000</u>	ppm Recovery <u> </u>	Chlorides <u>400</u>	ppm System <u> </u>

AK-1	Alpine	PSI Recorder No. <u>3307</u>	T-On Location <u>13:50</u>
(A) Initial Hydrostatic Mud	<u>3001</u>	PSI (depth) <u>5695</u>	T-Started <u>14:40</u>
(B) First Initial Flow Pressure	<u>38</u>	PSI Recorder No. <u>5495</u>	T-Open <u>18:00</u>
(C) First Final Flow Pressure	<u>78</u>	PSI (depth) <u>5827</u>	T-Pulled <u>22:00</u>
(D) Initial Shut-In Pressure	<u>1457</u>	PSI Recorder No. <u> </u>	T-Out <u>01:05</u>
(E) Second Initial Flow Pressure	<u>82</u>	PSI (depth) <u> </u>	T-Off Location <u>03:45</u>
(F) Second Final Flow Pressure	<u>123</u>	PSI Initial Opening <u>30</u>	Test ☒ Conventional <u>900</u>
(G) Final Shut-in Pressure	<u>1444</u>	PSI Initial Shut-in <u>60</u>	Jars ☒ <u>200</u>
(Q) Final Hydrostatic Mud	<u>2525</u>	Final Flow <u>30</u>	Safety Joint ☒ <u>50</u>
		Final Shut-in <u>120</u>	Straddle <u> </u>
			Circ. Sub <u> </u>
			Sampler <u> </u>
			Extra Packer <u> </u>
			Elec. Rec. ☒ <u>150</u>
			Mileage ☒ <u>\$85</u> <u>85</u>
			Other <u> </u>
			TOTAL PRICE \$ <u>1385</u> <u>\$1385</u>

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Approved By Tim Harper
Our Representative Shel V. O.



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

CHART PAGE