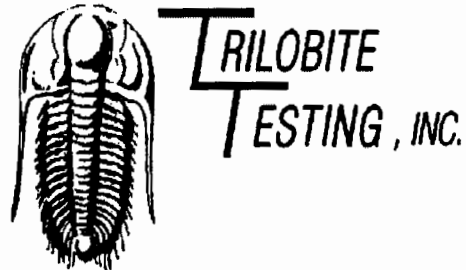


15-033-21405

21-32s-19w



DRILL STEM TEST REPORT

Prepared For: **Thoroughbred Associates**

8100 E. 22nd st.
No. Bldg. 600, Suite F

ATTN: Robert C. Patton

21-32S-19W Comanche

Rietzke #2

Start Date: 2004.09.03 @ 07:57:06

End Date: 2004.09.03 @ 17:33:06

Job Ticket #: 18336 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

Thoroughbred Associates

8100 E.22nd st.
No.Bldg. 600,Suite F

ATTN: Robert C.Patton

Rietzke #2

21-32S-19W Comanche

Job Ticket: 18336

DST#: 1

Test Start: 2004.09.03 @ 07:57:06

GENERAL INFORMATION:

Formation: **Mississippian**

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

Time Tool Opened: 10:29:36

Time Test Ended: 17:33:06

Interval: **5044.00 ft (KB) To 5155.00 ft (KB) (TVD)**

Total Depth: **5155.00 ft (KB) (TVD)**

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

Test Type: **Conventional Bottom Hole**

Tester: **Steve Clark**

Unit No: **19**

Reference Elevations: **1942.00 ft (KB)**

1937.00 ft (CF)

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

Serial #: 6667

Inside

Press@RunDepth: **234.04 psig @ 5055.00 ft (KB)**

Start Date: **2004.09.03**

End Date:

2004.09.03

Start Time: **07:57:07**

End Time:

17:33:06

Capacity: **7000.00 psig**

Last Calib.: **2004.09.03**

Time On Btm: **2004.09.03 @ 10:29:06**

Time Off Btm: **2004.09.03 @ 13:48:36**

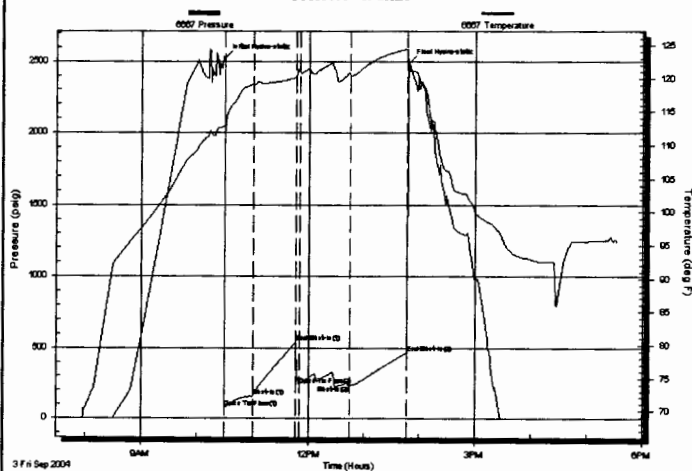
TEST COMMENT: IF-Fair blow blow ing btm.10 min.

IS-No blow back

FF-Strg. blw 1min.

FSI-No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2522.44	112.99	Initial Hydro-static
1	78.40	111.00	Open To Flow (1)
31	159.05	119.11	Shut-In(1)
77	537.22	120.12	End Shut-In(1)
81	238.72	120.97	Open To Flow (2)
136	234.04	120.34	Shut-In(2)
198	466.07	124.48	End Shut-In(2)
200	2490.36	121.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
540.00	Oil spec mud	5.39

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Thoroughbred Associates

Rietzke #2

8100 E.22nd st.
No.Bldg. 600,Suite F

21-32S-19W Comanche

Job Ticket: 18336

DST#: 1

ATTN: Robert C.Patton

Test Start: 2004.09.03 @ 07:57:06

Tool Information

Drill Pipe:	Length: 4812.00 ft	Diameter: 3.80 inches	Volume: 67.50 bbl	Tool Weight: 2500.00 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 90000.00 lb
		Total Volume:	68.68 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	5044.00 ft			Final 86000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	120.00 ft			
Tool Length:	134.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

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

Hydraulic tool	5.00			5035.00	
Safety Joint	4.00			5039.00	
Packer	5.00			5044.00	14.00 Bottom Of Top Packer
Shut In Tool	5.00			5049.00	120.00 Tool Interval
Packer	5.00			5054.00	
Change Over Sub	1.00			5055.00	
Recorder	0.00	6667	Inside	5055.00	
Drill Pipe	90.00			5145.00	
Perforations	16.00			5161.00	
Recorder	0.00		Outside	5161.00	
Bullnose	3.00			5164.00	1000133.00 Bottom Packers & Anchor

Total Tool Length: 134.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Thoroughbred Associates

Rietzke #2

8100 E.22nd st.
No.Bldg. 600,Suite F

21-32S-19W Comanche

Job Ticket: 18336

DST#: 1

ATTN: Robert C.Patton

Test Start: 2004.09.03 @ 07:57:06

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: 62.00 sec/qt

Cushion Volume:

bbl

Water Loss: 0.20 in³

Gas Cushion Type:

Resistivity: 1.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.32 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
540.00	Oil spec mud	5.388

Total Length: 540.00 ft

Total Volume: 5.388 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

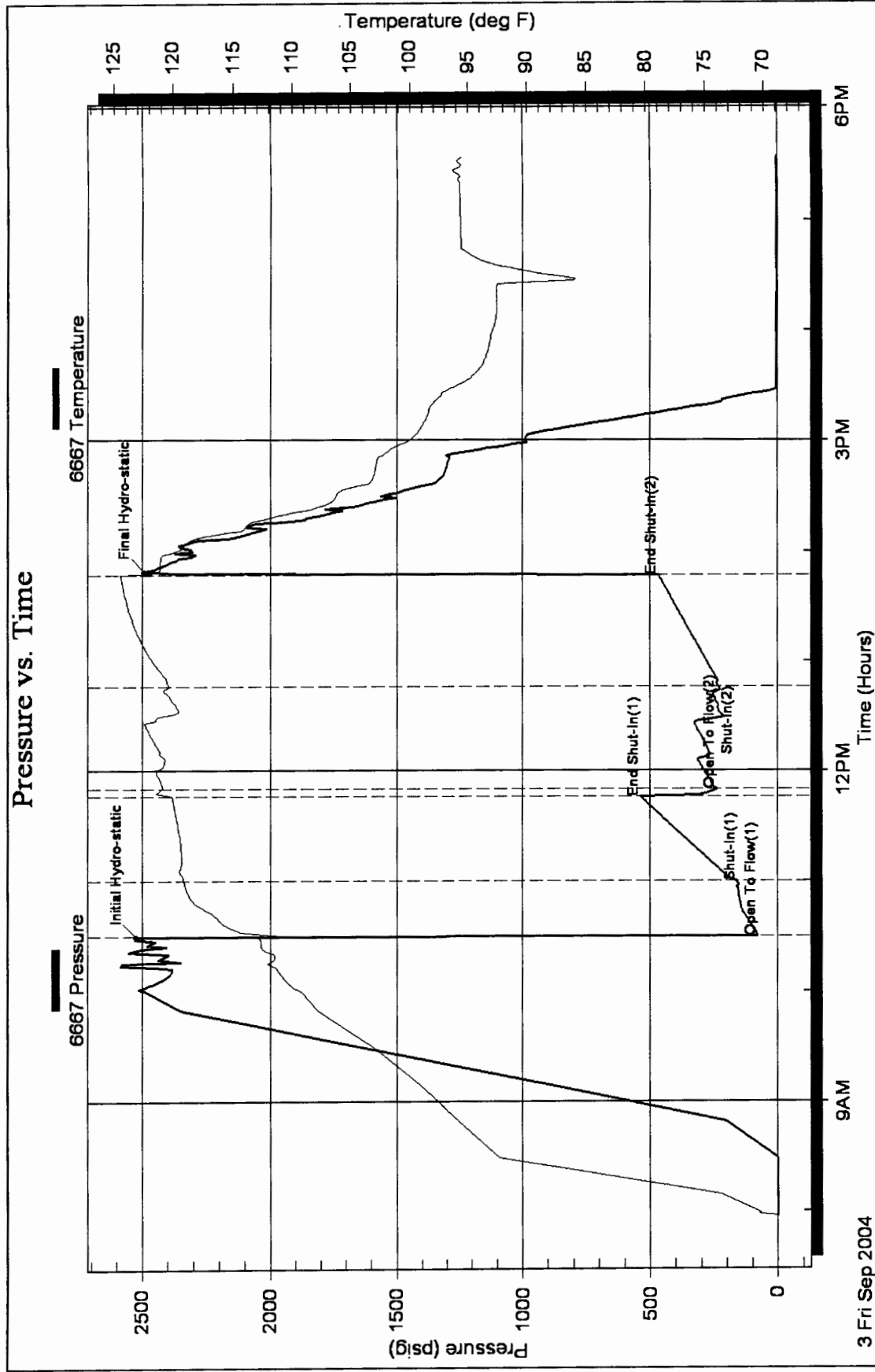
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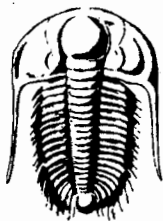
Inside

Thoroughbred Associates

21-32S-19W Comanche

DST Test Number: 1





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

N^o 18336

Test Ticket

Well Name & No. Airtake #2 Test No. #1 Date 9-2-04
 Company Thoroughbred Associates, LLC Zone Tested Mississippi
 Address 8190 E. 22nd St. No. Bldg. 600 Suite F Elevation 1942 KB 1937 GL
 Co. Rep / Geo. Paul Gonzelman Cont. Nickell Arg. #1 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 21 Twp. 32S Rge. 19W Co. Comanche State KS
 No. of Copies Reg Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 5044-5155 Initial Str Wt./Lbs. 80,000 Unseated Str Wt./Lbs. 96,000
 Anchor Length 111 Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 90,000
 Top Packer Depth 5044 Tool Weight 2,500
 Bottom Packer Depth 5039 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 5155 Wt. Pipe Run ✓ Drill Collar Run 247
 Mud Wt. 9.2 LCM - Vis. 62 WL 12 Drill Pipe Size 4 1/2 X# Ft. Run 4859
 Blow Description IF - Fair blow to htm. 10 min.
IST - No blow
FF - Strong blow 1 min. to htm.
ESI - No blow

Recovery - Total Feet _____ GIP _____ Ft. in DC 247 Ft. in DP 299
 Rec. 540 Feet of Oil Spec. Mud %gas 1 %oil _____ %water 99 %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 6000 ppm System

(A) Initial Hydrostatic Mud	<u>2550</u> <u>2522</u>	PSI	Recorder No.	<u>6667</u>	Test #1	<u>1100</u>
(B) First Initial Flow Pressure	<u>2347</u> <u>73</u>	PSI	(depth)	<u>5045</u>	Elec. Rec.	_____
(C) First Final Flow Pressure	<u>2418</u> <u>159</u>	PSI	Recorder No.	<u>11019</u>	Jars	_____
(D) Initial Shut-In Pressure	<u>2345</u> <u>537</u>	PSI	(depth)	<u>5151</u>	Safety Jt.	<u>50</u>
(E) Second Initial Flow Pressure	<u>2349</u> <u>238</u>	PSI	Recorder No.	_____	Circ Sub	_____
(F) Second Final Flow Pressure	<u>2345</u> <u>234</u>	PSI	(depth)	_____	Sampler	_____
(G) Final Shut-In Pressure	<u>2439</u> <u>406</u>	PSI	Initial Opening	<u>30</u>	Straddle	_____
(Q) Final Hydrostatic Mud	<u>2502</u> <u>2490</u>	PSI	Initial Shut-In	<u>45</u>	Ext. Packer	_____
			Final Flow	<u>60</u>	Shale Packer	_____
			Final Shut-In	<u>60</u>	Mileage	<u>115 RT 97.75</u>
			T-On Location	<u>06:00</u>	Sub Total:	<u>1247.75</u>
			T-Started	<u>08:30</u>	Std. By	<u>74 22.50</u>
			T-Open	<u>10:30</u>	Other	_____
			T-Pulled	<u>13:45</u>	Total:	<u>1270.25</u>
			T-Out	<u>16:45</u>		

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Approved By Steve Chou
 Our Representative Paul Gonzelman

CHART PAGE

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

