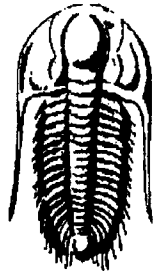


15-077-21445

10-31s-8w



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **R&B Oil & Gas**

PO Box 195
Attica Ks 67009-0195

ATTN: Tim Pierce

10 31s 8w Harper KS

Muir A-2

Start Date: 2002.12.14 @ 02:57:12

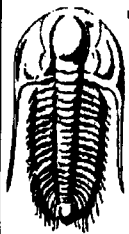
End Date: 2002.12.14 @ 10:13:12

Job Ticket #: 16600 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

R&B Oil & Gas
PO Box 195
Attica Ks 67009-0195
ATTN: Tim Pierce

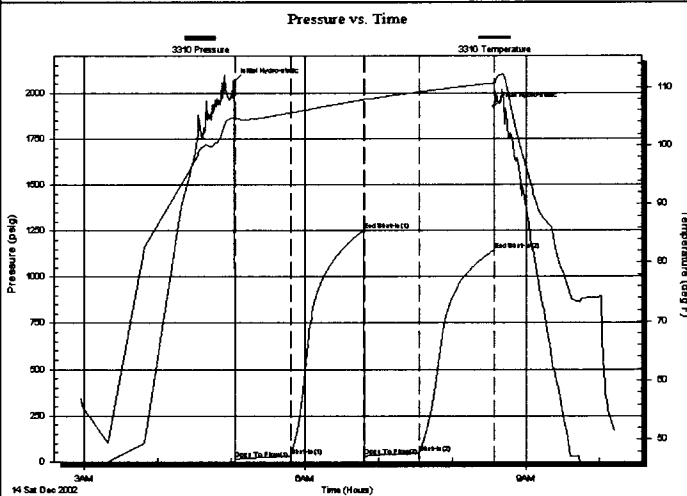
Muir A-2
10 31s 8w Harper KS
Job Ticket: 16600 **DST#: 1**
Test Start: 2002.12.14 @ 02:57:12

GENERAL INFORMATION:

Formation: **Lansing**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 05:03:27
Time Test Ended: 10:13:12
Test Type: Conventional Bottom Hole
Tester: Wenrich
Unit No: 14
Interval: **4040.00 ft (KB) To 4066.00 ft (KB) (TVD)**
Reference Elevations: 1656.00 ft (KB)
Total Depth: 4066.00 ft (KB) (TVD) 1648.00 ft (CF)
Hole Diameter: 6.75 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 3310 **Inside**
Press@RunDepth: 44.43 psig @ 4041.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2002.12.14 End Date: 2002.12.14 Last Calib.: 1899.12.30
Start Time: 02:57:17 End Time: 10:13:11 Time On Btm: 2002.12.14 @ 05:02:42
Time Off Btm: 2002.12.14 @ 08:33:57

TEST COMMENT: IF: Strong blow .BOB in 4 mins.
IS: No blow .
FF: Strong blow .BOB in 7.5 mins.
FS: No blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2062.98	104.70	Initial Hydro-static
1	16.55	104.76	Open To Flow (1)
46	30.77	105.60	Shut-in (1)
106	1251.01	107.88	End Shut-in (1)
106	29.35	108.04	Open To Flow (2)
151	44.43	109.20	Shut-in (2)
211	1144.61	110.73	End Shut-in (2)
212	1925.63	111.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	gomcw 5%g 15%o 55%w 25%m	0.55
3.00	gw mco 15%g 35%o 35%w 15%m	0.03

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

R&B Oil & Gas

Muir A-2

PO Box 195
Attica Ks 67009-0195

10 31s 8w Harper KS

Job Ticket: 16600 **DST#: 1**

ATTN: Tim Pierce

Test Start: 2002.12.14 @ 02:57:12

Tool Information

Drill Pipe:	Length: 4028.00 ft	Diameter: 3.08 inches	Volume: 37.12 bbl	Tool Weight: 2100.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
		Total Volume: 37.12 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	4040.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	46.00 ft			
Number of Packers:	2	Diameter: 5.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

C.O. Sub	1.00			4021.00	
S.I. Tool	5.00			4026.00	
HMV	5.00			4031.00	
Packer	4.00			4035.00	20.00 Bottom Of Top Packer
Packer	5.00			4040.00	
Stubb	1.00			4041.00	
Recorder	0.00	3310	Inside	4041.00	
Perforations	23.00			4064.00	
Recorder	0.00	10242	Outside	4064.00	
Bullnose	2.00			4066.00	26.00 Bottom Packers & Anchor
Total Tool Length:		46.00			



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

R&B Oil & Gas
PO Box 195
Attica Ks 67009-0195
ATTN: Tim Pierce

Muir A-2
10 31s 8w Harper KS
Job Ticket: 16600 DST#: 1
Test Start: 2002.12.14 @ 02:57:12

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: 43.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.99 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 0.20 inches			

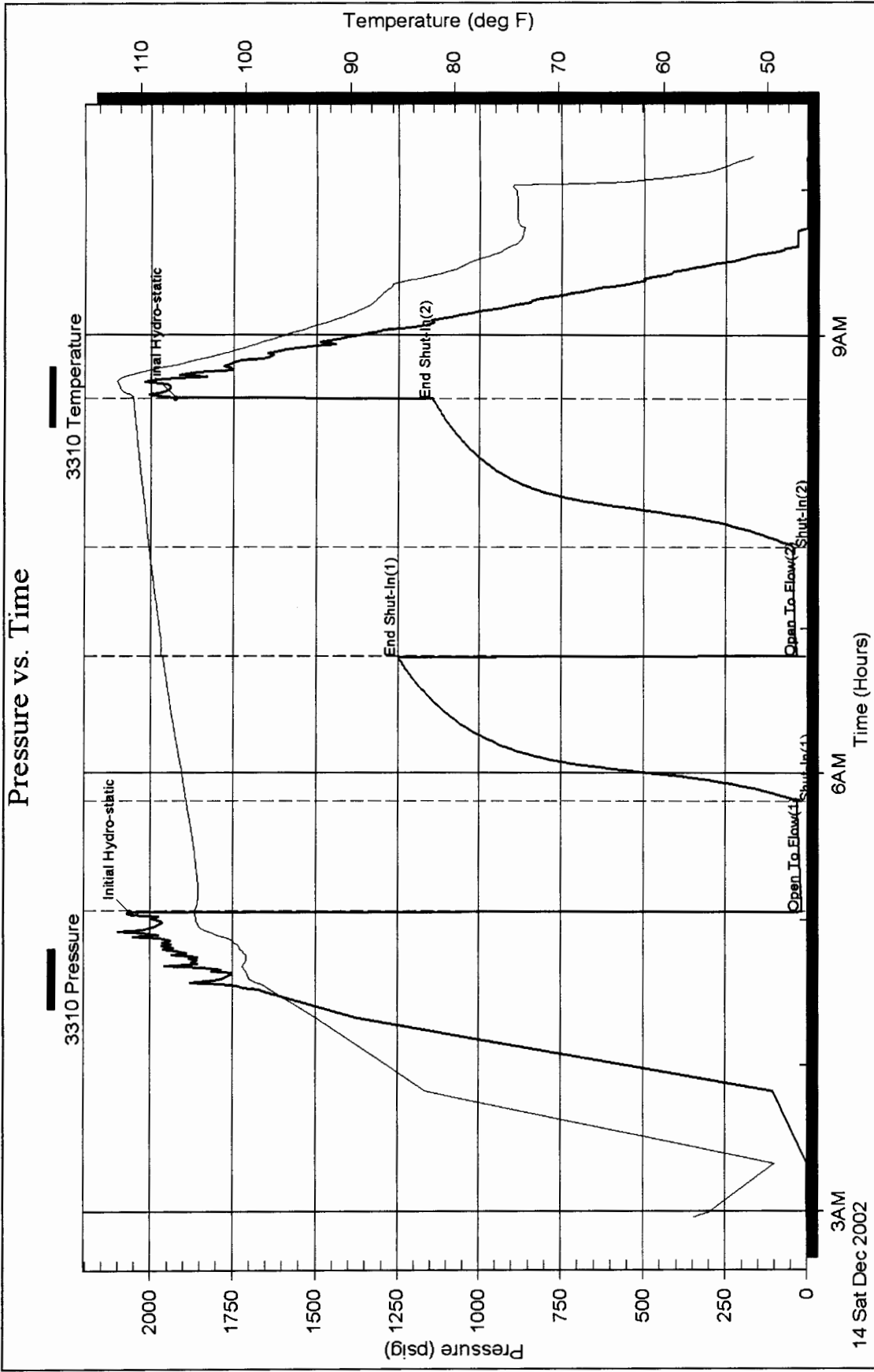
Recovery Information

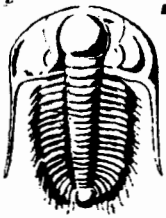
Recovery Table

Length ft	Description	Volume bbl
60.00	gomcw 5%g 15%o 55%w 25%m	0.553
3.00	gw mco 15%g 35%o 35%w 15%m	0.028

Total Length: 63.00 ft Total Volume: 0.581 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

No 16600

Test Ticket

Well Name & No. Muir A-2 Test No. 1 Date 12/14/02
 Company R+B Oil & Gas Zone Tested LANING
 Address P.O. Box 195 Altam, Ks 67009-0195 Elevation 1656 KB 1648 GL
 Co. Rep / Geo. Tim Pierce Cont. Duke Dik, Rig #2 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 10 Twp. 31s Rge. 8w Co. Harper State Ks
 No. of Copies 5 Distribution Sheet (Y, N) Turnkey (Y, N) Evaluation (Y, N) A

Interval Tested 4040 4066 Initial Str Wt./Lbs. 44,000 Unseated Str Wt./Lbs. 45,000
 Anchor Length _____ 26 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 50,000
 Top Packer Depth _____ 4035 Tool Weight 2100
 Bottom Packer Depth _____ 4040 Hole Size — 7 7/8" ✓ Rubber Size — 6 3/4" ✓
 Total Depth _____ 4066 Wt. Pipe Run 0 Drill Collar Run 0
 Mud Wt. 9.3 LCM 0 Vis. 43 WL 12 Drill Pipe Size 4 1/2 X 11 Ft. Run 4028
 Blow Description IF: Strong blow. B.O.B. in 4 min. FSI: No blow.
FF: Strong blow. B.O.B. in 7.5 min. FSI: No blow.

Recovery — Total Feet	GIP	Ft. in DC	Ft. in DP
<u>63</u>	<u>1400</u>	<u>0</u>	<u>63</u>
Rec. <u>3</u> Feet Of <u>GWMC0</u>	<u>10</u> %gas <u>35</u> %oil	<u>35</u> %water <u>15</u> %mud	
Rec. <u>60</u> Feet Of <u>CaOMCW</u>	<u>5</u> %gas <u>15</u> %oil	<u>55</u> %water <u>25</u> %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 _____ °API D@ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 4,000 ppm System

AK-1	Alpine	PSI	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>2063</u>		<u>3310</u>	<u>0200</u>
(B) First Initial Flow Pressure	<u>17</u>	PSI (depth)	<u>4041</u>	T-Started <u>0257</u>
(C) First Final Flow Pressure	<u>31</u>	PSI	Recorder No. <u>10242</u>	T-Open <u>0503</u>
(D) Initial Shut-In Pressure	<u>1251</u>	PSI (depth)	<u>4064</u>	T-Pulled <u>0854</u>
(E) Second Initial Flow Pressure	<u>29</u>	PSI	Recorder No. _____	T-Out <u>1013</u>
(F) Second Final Flow Pressure	<u>44</u>	PSI (depth)		T-Off Location _____
(G) Final Shut-in Pressure	<u>1145</u>	PSI	Initial Opening <u>45</u>	Test <input checked="" type="checkbox"/> <u>800</u>
(Q) Final Hydrostatic Mud	<u>1926</u>	PSI	Initial Shut-in <u>60</u>	Jars _____
			Final Flow <u>45</u>	Safety Joint _____
			Final Shut-in <u>60</u>	Straddle _____

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Approved By Tim Pierce
 Our Representative Jim Marshall

8.13
 Elec. Rec. 150
 Mileage 49
 Other _____
 TOTAL PRICE \$ 999

CHART PAGE

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

