

## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc.**

P.O. Box 399  
Garden City, KS 67846-0399

ATTN: Al Downing

### **1-31s-8w Harper KS**

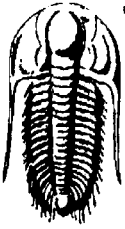
#### **Marvel #1**

Start Date: 2005.04.24 @ 15:32:27

End Date: 2005.04.24 @ 20:29:57

Job Ticket #: 20731                      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

American Warrior Inc.  
 P.O. Box 399  
 Garden City, KS 67846-0399  
 ATTN: Al Downing

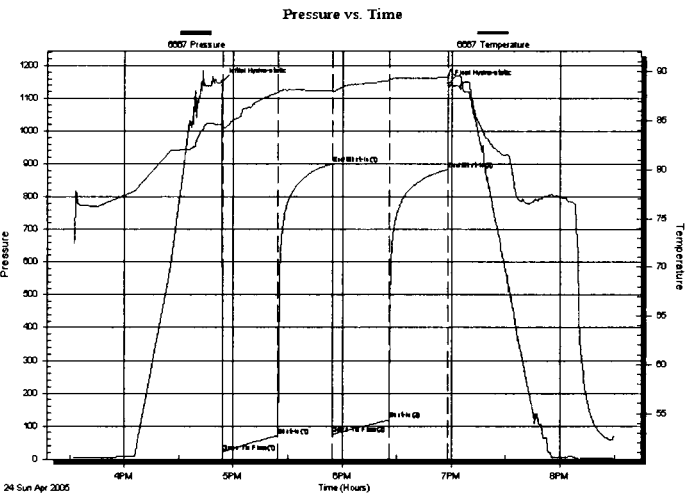
**Marvel #1**  
**1-31s-8w Harper KS**  
 Job Ticket: 20731      **DST#: 1**  
 Test Start: 2005.04.24 @ 15:32:27

## GENERAL INFORMATION:

Formation: **Indian Cave**  
 Deviated: **No Whipstock:**      ft (KB)  
 Test Type: **Conventional Bottom Hole**  
 Time Tool Opened: 16:53:57      Tester: **Jake Fahrenbruch**  
 Time Test Ended: 20:29:57      Unit No: **19**  
 Interval: **2333.00 ft (KB) To 2360.00 ft (KB) (TVD)**      Reference Elevations: **1632.00 ft (KB)**  
 Total Depth: **2360.00 ft (KB) (TVD)**      **1624.00 ft (CF)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**      KB to GRVCF: **8.00 ft**

**Serial #: 6667**      **Inside**  
 Press@RunDepth: **118.76 psig @ 2334.00 ft (KB)**      Capacity: **7000.00 psig**  
 Start Date: **2005.04.24**      End Date: **2005.04.24**      Last Calib.: **2005.04.24**  
 Start Time: **15:32:32**      End Time: **20:29:56**      Time On Btm: **2005.04.24 @ 16:53:42**  
 Time Off Btm: **2005.04.24 @ 18:58:12**

**TEST COMMENT:** IF: Weak blow, building to 9".  
 IS: Bled off, no blow back.  
 FF: Weak blow building to 8".  
 FSI: Bled off, no blow back.



## PRESSURE SUMMARY

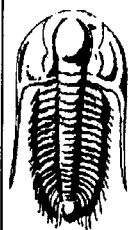
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1150.89	84.58	Initial Hydro-static
1	19.07	84.12	Open To Flow (1)
31	70.75	87.84	Shut-In(1)
61	901.27	88.07	End Shut-In(1)
61	74.95	87.91	Open To Flow (2)
92	118.76	89.11	Shut-In(2)
125	884.17	89.41	End Shut-In(2)
125	1144.19	89.54	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
200.00	Muddy Water 27% m 73% w	2.38
0.00	RW: 61 deg F @ .085 ohm = 135,000 ppr	0.00
0.00	0	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior Inc.

**Marvel #1**

P.O. Box 399  
Garden City, KS 67846-0399

**1-31s-8w Harper KS**

Job Ticket: 20731

**DST#: 1**

ATTN: Al Dow ning

Test Start: 2005.04.24 @ 15:32:27

### Tool Information

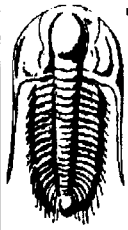
Drill Pipe:	Length: 2324.00 ft	Diameter: 3.50 inches	Volume: 27.66 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 46000.00 lb
			<u>Total Volume: 27.66 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 43000.00 lb
Depth to Top Packer:	2333.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	27.00 ft			
Tool Length:	55.00 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			2310.00	
Hydraulic tool	5.00			2315.00	
Jars	5.00			2320.00	
Safety Joint	3.00			2323.00	
Packer	5.00			2328.00	28.00 Bottom Of Top Packer
Packer	5.00			2333.00	
Stubb	1.00			2334.00	
Recorder	0.00	6667	Inside	2334.00	
Perforations	23.00			2357.00	
Recorder	0.00	6074	Outside	2357.00	
Bullnose	3.00			2360.00	27.00 Bottom Packers & Anchor

**Total Tool Length: 55.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior Inc.  
P.O. Box 399  
Garden City, KS 67846-0399  
ATTN: Al Downing

**Marvel #1**  
**1-31s-8w Harper KS**  
Job Ticket: 20731      **DST#: 1**  
Test Start: 2005.04.24 @ 15:32:27

## Mud and Cushion Information

Mud Type: Water	Cushion Type:	Oil API:	deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 28.00 sec/qt	Cushion Volume: bbl		
Water Loss: in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 78000.00 ppm			
Filter Cake: inches			

## Recovery Information

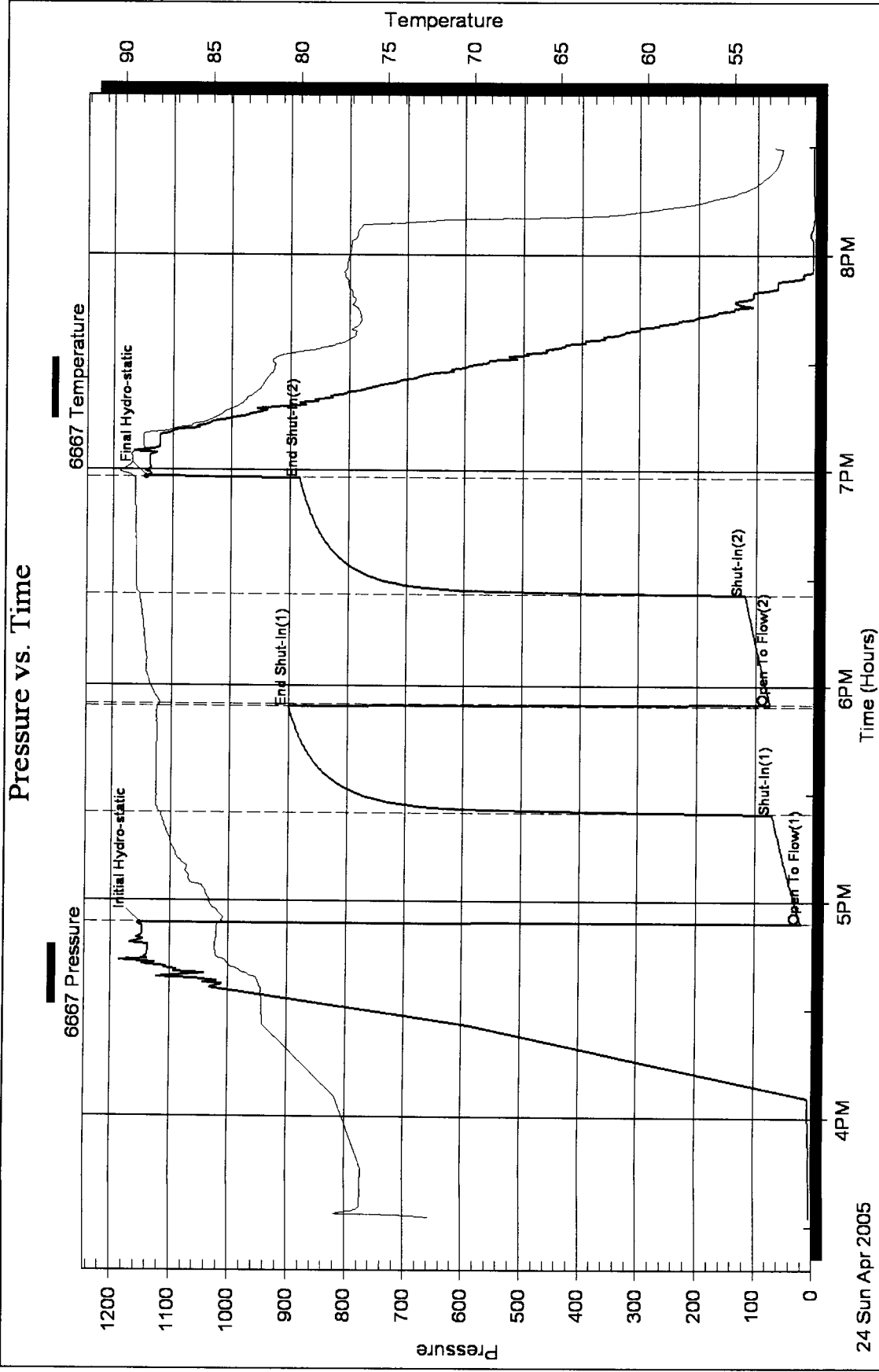
Recovery Table

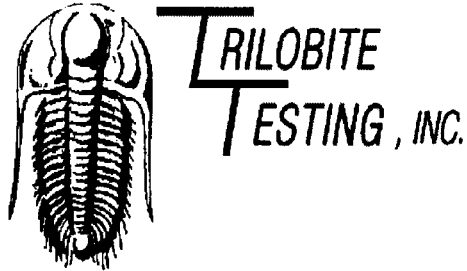
Length ft	Description	Volume bbl
200.00	Muddy Water 27% <sub>m</sub> 73% <sub>w</sub>	2.380
0.00	RW: 61 deg F @ .085 ohm = 135,000 ppm	0.000
0.00	0	0.000

Total Length: 200.00 ft      Total Volume: 2.380 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:

Recovery Comments: Drilling with water at present. Drilling with water is at 78000 chlorides ppm.  
They did run a premix of gel prior to pulling bit.





## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc.**

P.O. Box 399  
Garden City, KS 67846-0399

ATTN: Al Downing

**1-31s-8w Harper KS**

**Marvel #1**

Start Date: 2005.04.28 @ 13:03:17

End Date: 2005.04.28 @ 20:28:47

Job Ticket #: 20732                      DST #: 2

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc.  
P.O. Box 399  
Garden City, KS 67846-0399  
ATTN: Al Downing

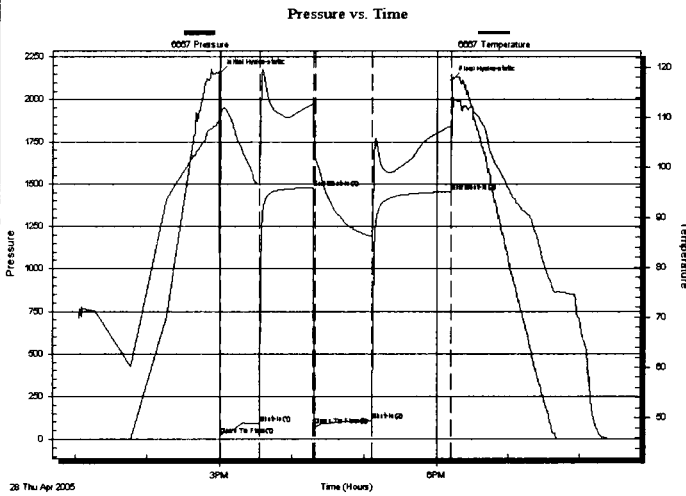
**Marvel #1**  
**1-31s-8w Harper KS**  
Job Ticket: 20732      **DST#: 2**  
Test Start: 2005.04.28 @ 13:03:17

## GENERAL INFORMATION:

Formation: **Mississippi**  
Deviated: **No Whipstock:**      **ft (KB)**  
Time Tool Opened: 15:01:02  
Time Test Ended: 20:28:47  
Test Type: **Conventional Bottom Hole**  
Tester: **Jake Fahrenbruch**  
Unit No: **19**  
Interval: **4369.00 ft (KB) To 4377.00 ft (KB) (TVD)**  
Reference Elevations:      **1632.00 ft (KB)**  
Total Depth: **2360.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Fair**  
KB to GR/CF:      **8.00 ft**

**Serial #: 6667**      **Inside**  
Press@RunDepth:      **109.95 psig @ 4370.00 ft (KB)**      Capacity:      **7000.00 psig**  
Start Date:      **2005.04.28**      End Date:      **2005.04.28**      Last Calib.:      **2005.04.28**  
Start Time:      **13:03:22**      End Time:      **20:28:46**      Time On Btm:      **2005.04.28 @ 15:00:02**  
Time Off Btm:      **2005.04.28 @ 18:12:32**

**TEST COMMENT:** IF: Strong blow, BOB 20sec. GTS 9min 30sec.  
IS: Bled off. Very weak surface blow, slowly died off.  
FF: Strong blow, BOB immediately.  
FSI: Bled off. Very weak surface blow, slowly died off.



## PRESSURE SUMMARY

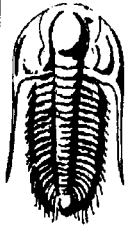
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2154.90	109.54	Initial Hydro-static
1	24.50	110.59	Open To Flow (1)
34	89.57	96.36	Shut-In(1)
78	1477.63	112.84	End Shut-In(1)
79	82.07	101.93	Open To Flow (2)
127	109.95	86.16	Shut-In(2)
193	1455.21	108.48	End Shut-In(2)
193	2114.10	109.77	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
70.00	SLGCWM 2%g33%w 65%m	0.83
0.00	RW: .25ohm @ 51.5deg F = 40,000 ppm	0.00
0.00	0	0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	15.00	46.64
Last Gas Rate		0.00	
Max. Gas Rate	0.25	51.00	103.75



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior Inc.

**Marvel #1**

P.O. Box 399  
Garden City, KS 67846-0399

**1-31s-8w Harper KS**

Job Ticket: 20732

**DST#: 2**

ATTN: Al Downing

Test Start: 2005.04.28 @ 13:03:17

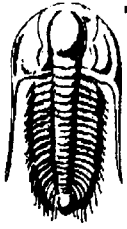
**Tool Information**

Drill Pipe:	Length: 4370.00 ft	Diameter: 3.50 inches	Volume: 52.00 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: 72000.00 lb
			<u>Total Volume: 52.00 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 69000.00 lb
Depth to Top Packer:	4369.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	8.00 ft			
Tool Length:	36.00 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			4346.00	
Hydraulic tool	5.00			4351.00	
Jars	5.00			4356.00	
Safety Joint	3.00			4359.00	
Packer	5.00			4364.00	28.00 Bottom Of Top Packer
Packer	5.00			4369.00	
Stubb	1.00			4370.00	
Recorder	0.00	6667	Inside	4370.00	
Perforations	4.00			4374.00	
Recorder	0.00	6074	Outside	4374.00	
Bullnose	3.00			4377.00	8.00 Bottom Packers & Anchor

**Total Tool Length: 36.00**



**TRILOBITE  
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**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

American Warrior Inc.

**Marvel #1**

P.O. Box 399  
Garden City, KS 67846-0399

**1-31s-8w Harper KS**

Job Ticket: 20732

**DST#: 2**

ATTN: Al Downing

Test Start: 2005.04.28 @ 13:03:17

**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: 44.00 sec/qt

Cushion Volume:

bbbl

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

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.04 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
70.00	SLGCMM 2%g33%w 65%m	0.833
0.00	RW: .25ohm @ 51.5deg F = 40,000 ppm	0.000
0.00	0	0.000

Total Length: 70.00 ft

Total Volume: 0.833 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:

Serial #: 6667

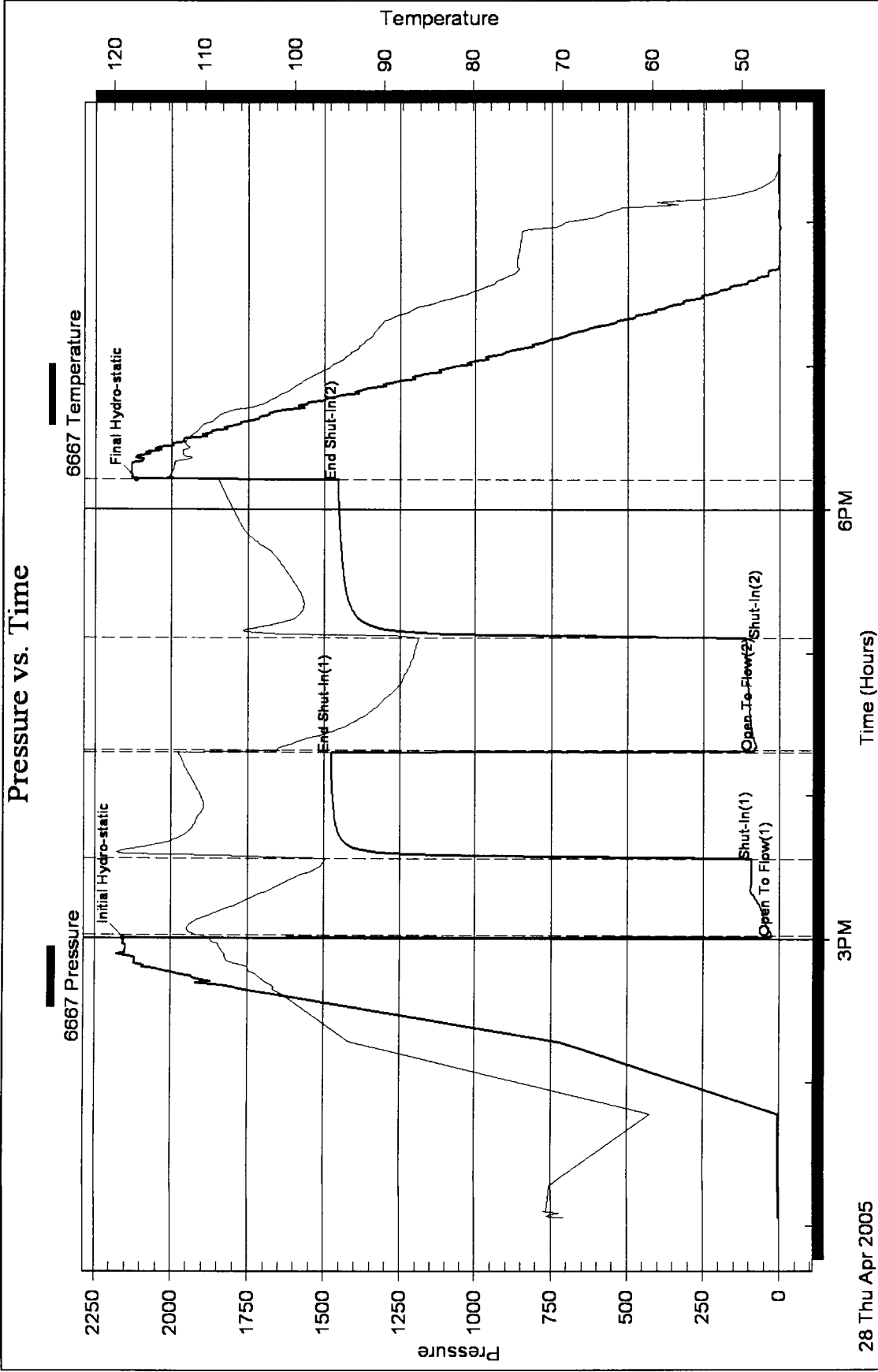
Inside

American Warrior Inc.

1-31s-8w Harper KS

DST Test Number: 2

### Pressure vs. Time

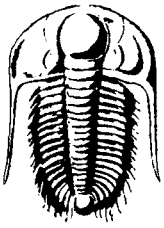


28 Thu Apr 2005

Trilobite Testing, Inc

Ref. No: 20732

Printed: 2005.05.04 @ 14:23:39 Page 5



# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 20731

05/03

## Test Ticket

TW  
7419

Well Name & No. Marvel #1 Test No. DST #1 Date 4-24-05  
 Company American Warrior Inc. Zone Tested Indian Cave  
 Address P.O. Box 399 Garden City, KS 67846-0399 Elevation 1632 KB 1624 GL  
 Co. Rep / Geo. Steve Murphy Cont. Duke Dalg Rig #2 Est. Ft. of Pay      Por.      %  
 Location: Sec. 1 Twp. 31s Rge. 8w Co. Harper State Kansas  
 No. of Copies      Distribution Sheet (Y, N)      Turnkey (Y, N)      Evaluation (Y, N)     

Interval Tested 2333 - 2360 Initial Str Wt./Lbs. 43000 Unseated Str Wt./Lbs. 44000  
 Anchor Length 27 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 46000  
 Top Packer Depth 2328 2355 Tool Weight 2100  
 Bottom Packer Depth 2333 2360 Hole Size 7 7/8" YES Rubber Size 6 3/4" YES  
 Total Depth 2360 Wt. Pipe Run 0 Drill Collar Run 0  
 Mud Wt. 9.8 LCM 0 Vis. 28 WL NC Drill Pipe Size 4 1/2" X H Ft. Run 2324  
 Blow Description IF: Weak blow, building to 9"  
ISI: Bled off, no blowback.  
FF: Weak blow, building to 8"  
FSI: Bled off, no blowback.

Recovery - Total Feet 200 GIP NO Ft. in DC 0 Ft. in DP 200  
 Rec. 200 Feet of Muddy Water %gas 0 %oil 73 %water 27 %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 89 °F Gravity      °API D @      °F Corrected Gravity      °API  
 RW .085 @ 61 °F Chlorides 135000 ppm Recovery      Chlorides 78000 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	1151	PSI	6667	*950
(B) First Initial Flow Pressure	19	PSI	2334	*
(C) First Final Flow Pressure	71	PSI	6074	*200
(D) Initial Shut-In Pressure	901	PSI	2357	*50
(E) Second Initial Flow Pressure	75	PSI		NC
(F) Second Final Flow Pressure	119	PSI		
(G) Final Shut-In Pressure	884	PSI	Initial Opening	
(Q) Final Hydrostatic Mud	1144	PSI	Initial Shut-In	

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Approved By     

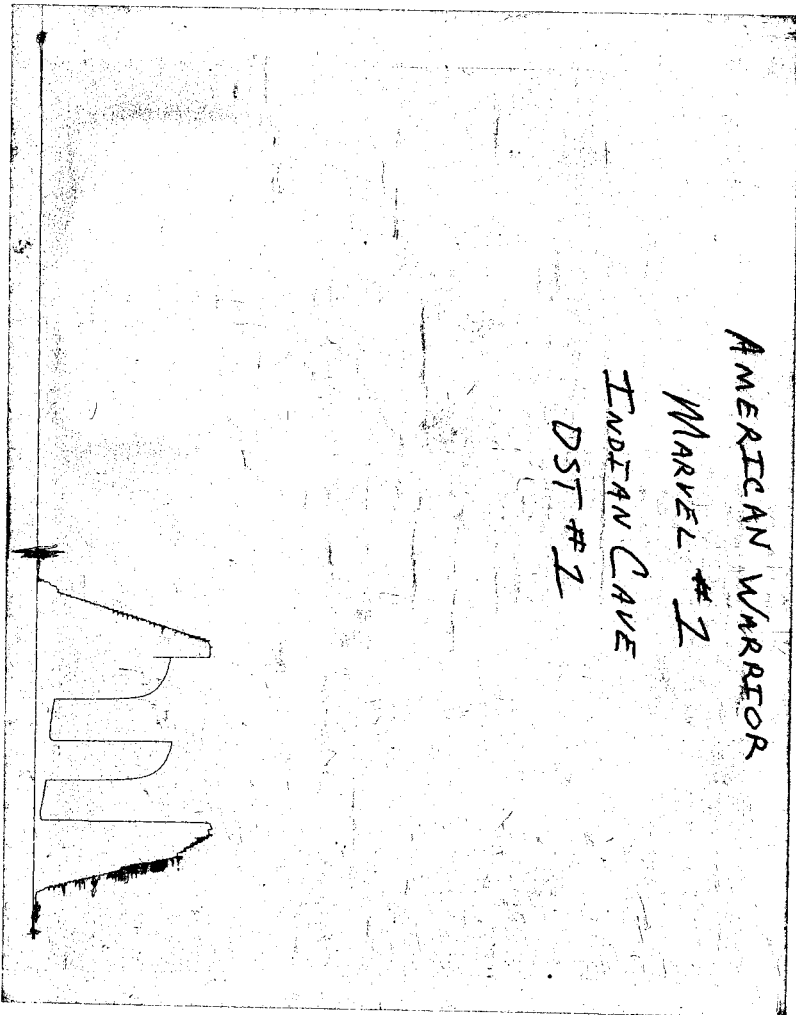
Our Representative     

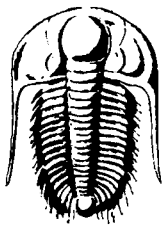
	Time
Final Flow	30
Final Shut-In	30
T-On Location	14:30
T-Started	15:32
T-Open	16:54
T-Pulled	18:58
T-Out	20:30

Shale Packer      Mileage 120 Sub Total: 1320  
 Std. By      Other      Total:

**CHART PAGE**

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





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 20732

05/03

## Test Ticket

Well Name & No. Marvel #1 Test No. DST #2 Date 4-28  
 Company American Warrior Inc. Zone Tested Mississippi  
 Address P.O. Box 399 Garden City, KS 67846-0399 Elevation 1632 KB 1629 GL  
 Co. Rep / Geo. Alan Dawning Cont. Duke Dalg Co Rig #2 Est. Ft. of Pay      Por.      %  
 Location: Sec. 1 Twp. 31s Rge. 8w Co. Harper State KS  
 No. of Copies      Distribution Sheet (Y, N)      Turnkey (Y, N)      Evaluation (Y, N)     

Interval Tested 4369 - 4377 Initial Str Wt./Lbs. 69000 Unseated Str Wt/Lbs. 70000  
 Anchor Length 8 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 72000  
 Top Packer Depth 4364 Tool Weight 2100  
 Bottom Packer Depth 4369 Hole Size 7 7/8" YES Rubber Size 6 3/4" YES  
 Total Depth 4377 Wt. Pipe Run 0 Drill Collar Run 0  
 Mud Wt. 9.2 LCM 2# Vis. 44 WL 8.8 Drill Pipe Size 4 1/2" XH Ft. Run 4338 4370

Blow Description IF: Strong blow, BOB 20sec, GTS 9m 30s.  
ISI: Bled off. Very weak surface blow, slowly died off.  
FF: Strong blow, BOB immediately.  
FSI: Bled off. Very weak surface blow, slowly died off.

Recovery - Total Feet 70 GIP All Fluid Free Pipe Ft. in DC 0 Ft. in DP       
 Rec. 70 Feet of SLGCLWM %gas 2 %oil 0 %water 33 %mud 65  
 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 108 °F Gravity NC °API D @ NC °F Corrected Gravity NC °API  
 RW 2.5 @ 51.5 °F Chlorides 40000 ppm Recovery      Chlorides 5000 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		2155 PSI	6667	★ 1050
(B) First Initial Flow Pressure		25 PSI	4370	★
(C) First Final Flow Pressure		90 PSI	6074	★ 200
(D) Initial Shut-In Pressure		1478 PSI	4374	★ 50
(E) Second Initial Flow Pressure		82 PSI		NC
(F) Second Final Flow Pressure		110 PSI		
(G) Final Shut-In Pressure		1455 PSI		
(Q) Final Hydrostatic Mud		2114 PSI		
			Initial Opening	
			Initial Shut-In	
			Final Flow	
			Final Shut-In	
			T-On Location	
			T-Started	
			T-Open	
			T-Pulled	
			T-Out	
				Mileage <u>120/120</u>
				Sub Total: <u>1420</u>
				Std. By <u>    </u>
				Other <u>    </u>
				Total: <u>    </u>

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Approved By [Signature]  
 Our Representative [Signature]



**CHART PAGE**

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

