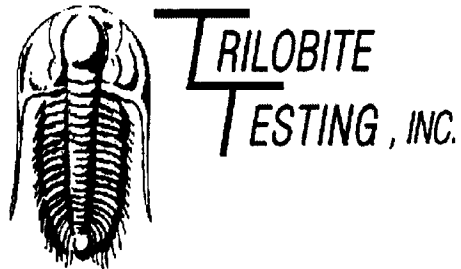


15-033-21226



DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

CONFIDENTIAL PO Box 399
Garden City Ks 67846-0399
KCC

ORIGINAL AUG 01 2001
ATTN: Ron Nelson
26-31-20 Comanche **CONFIDENTIAL**

Randall #2

Start Date: 2001.06.03 @ 12:29:20

End Date: 2001.06.03 @ 19:53:50

Job Ticket #: 14204 DST #: 1

Trilobite Testing, Inc.
KANSAS CITY, MO

AUG 02 2001

CONFIDENTIAL

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

PO Box 399
Garden City Ks 67846-0399

ATTN: Ron Nelson

Randall #2

26-31-20 Comanche

Job Ticket: 14204

DST#: 1

Test Start: 2001.06.03 @ 12:29:20

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:16:50

Time Test Ended: 19:53:50

Test Type: Conventional

Tester: Jakki Kreklau

Unit No: 17

Interval: **4926.00 ft (KB) To 5070.00 ft (KB) (TVD)**

Total Depth: 5070.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Fair

Reference Elevations: 1985.00 ft (KB)

1972.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 3026

Inside

Press@RunDepth: 779.33 psig @ 4929.00 ft (KB)

Start Date: 2001.06.03

End Date: 2001.06.03

Start Time: 12:29:22

End Time: 19:53:50

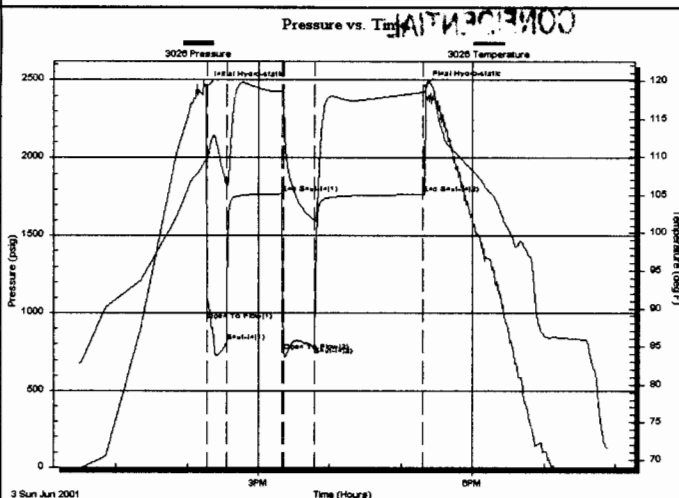
Capacity: 7000.00 psig

Last Calib.: 2001.01.05

Time On Btm: 2001.06.03 @ 14:16:35

Time Off Btm: 2001.06.03 @ 17:20:20

TEST COMMENT: IF-strong blow BOB 30 in sec. QTS in 3 min.
IS-
FF-strong blow gauging gas
FSI-1/2 blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2462.04	109.71	Initial Hydro-static
1	946.40	109.75	Open To Flow (1)
17	807.51	106.45	Shut-In (1)
63	1770.22	118.60	End Shut-In (1)
65	746.54	115.55	Open To Flow (2)
91	779.33	101.66	Shut-In (2)
182	1765.99	118.54	End Shut-In (2)
184	2464.08	118.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
300.00	gassy mud	1.50

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.75	165.00	2802.20
Last Gas Rate	0.75	300.00	4910.88
Max. Gas Rate	0.75	300.00	4910.88



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Warrior Inc
PO Box 399
Garden City Ks 67846-0399
ATTN: Ron Nelson

Randall #2
26-31-20 Comanche
Job Ticket: 14204 DST#: 1
Test Start: 2001.06.03 @ 12:29:20

Tool Information

Drill Pipe:	Length: 4610.00 ft	Diameter: 3.80 inches	Volume: 64.67 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:	23000.00 lb
Drill Collar:	Length: 297.00 ft	Diameter: 2.25 inches	Volume: 1.46 bbl	Weight to Pull Loose:	98000.00 lb
		Total Volume:	66.13 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial	76000.00 lb
Depth to Top Packer:	4926.00 ft			Final	lb
Depth to Bottom Packer:	ft				
Interval between Packers:	144.00 ft				
Tool Length:	171.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

**CONFIDENTIAL ORIGINAL
KCC**

AUG 01 2001

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Length	
S.I. Tool	5.00			4904.00		
HMV	5.00			4909.00		
Jars	5.00			4914.00		
Safety Joint	2.00			4916.00		
Packer	5.00			4921.00	27.00	Bottom Of Top Packer
Packer	5.00			4926.00		
Stubb	1.00			4927.00		
Perforations	1.00			4928.00		
C.O. Sub	1.00			4929.00		
Recorder	0.00	3026	Inside	4929.00		
Blank Spacing	122.00			5051.00		
C.O. Sub	1.00			5052.00		
Perforations	15.00			5067.00		
Recorder	0.00	13278	Outside	5067.00		
Bullnose	3.00			5070.00	144.00	Bottom Packers & Anchor

Total Tool Length: 171.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

American Warrior Inc

Randall #2

PO Box 399
Garden City Ks 67846-0399

26-31-20 Comanche

Job Ticket: 14204

DST#: 1

ATTN: Ron Nelson

Test Start: 2001.06.03 @ 12:29:20

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: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.93 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
300.00	gassy mud	1.503

Total Length: 300.00 ft

Total Volume: 1.503 bbl

Num Fluid Samples: 0

Num Gas Bombs: 1

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GAS RATES

American Warrior Inc
PO Box 399
Garden City Ks 67846-0399
ATTN: Ron Nelson

Randall #2
26-31-20 Comanche
Job Ticket: 14204 **DST#: 1**
Test Start: 2001.06.03 @ 12:29:20

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 (m³/d)
1	10	0.75	165.00	2802.20
1	15	0.75	165.00	2802.20
2	10	0.75	42.00	880.96
2	20	0.75	225.00	3739.39
2	30	0.75	300.00	4910.88

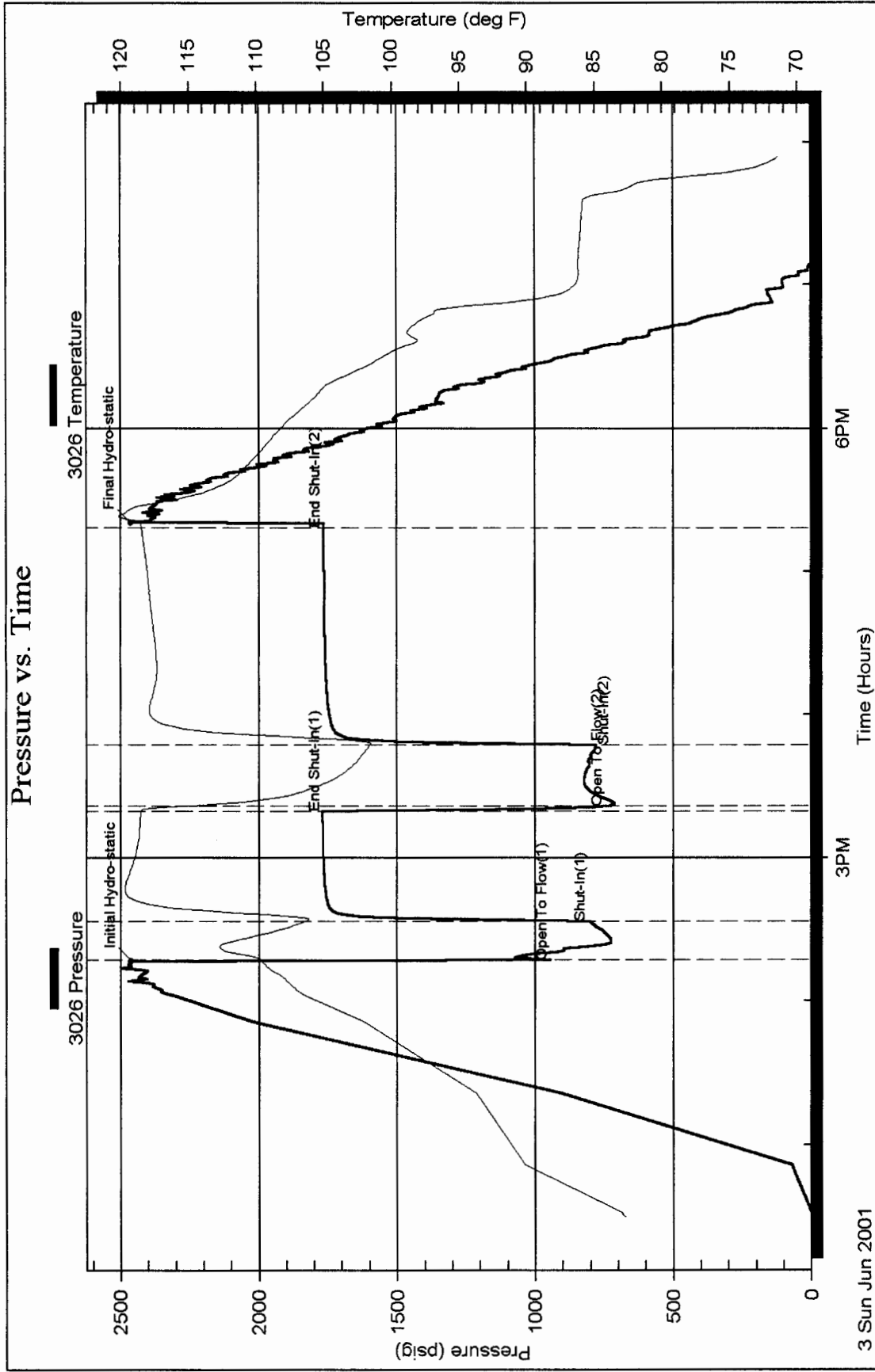
Serial #: 3026

Inside

American Warrior Inc

26-31-20 Comanche

DST Test Number: 1



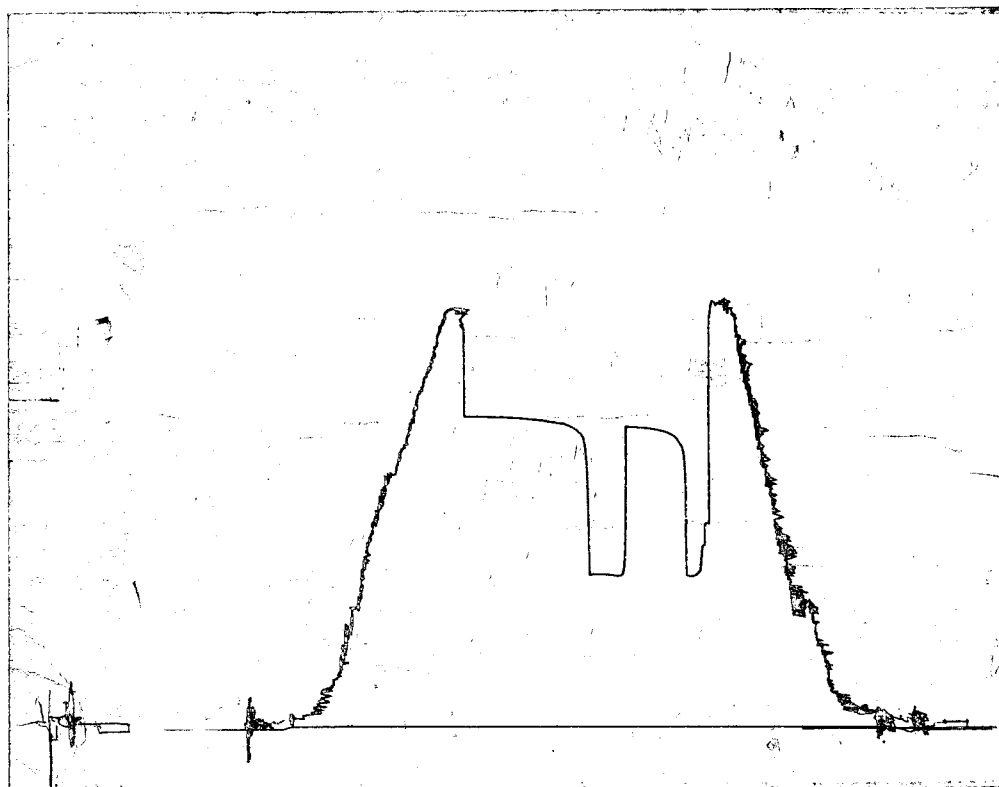
Trilobite Testing, Inc

Ref. No: 14204

Printed: 2001.06.05 @ 10:49:21 Page 6

CHART PAGE

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



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 14204

Test Ticket

Well Name & No.	<u>Rendall #2</u>	Test No.	<u>1</u>	Date	<u>06-03-01</u>
Company	<u>American Well Inc.</u>	Zone Tested	<u>Miss</u>		
Address	<u>P.O. BOX 399 GARDEN CITY, KS 67846-0399</u>	Elevation	<u>1985</u>	KB	<u>1972</u> GL
Co. Rep / Geo.	<u>BON NELSON</u>	Cont.	<u>Duke Rig #7</u>	Est. Ft. of Pay	<u> </u> Por. <u> </u> %
Location: Sec.	<u>26</u>	Twp.	<u>31</u>	Rge.	<u>20</u> Co. <u>Comanche</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>4926-5070</u>	Initial Str Wt./Lbs.	<u>76000</u>	Unseated Str Wt./Lbs.	<u> </u>
Anchor Length	<u>144</u>	Wt. Set Lbs.	<u>89000</u>	Wt. Pulled Loose/Lbs.	<u>98000</u>
Top Packer Depth	<u>4921</u>	Tool Weight	<u>1300</u>		
Bottom Packer Depth	<u>4936</u>	Hole Size — 7 7/8" ☒		Rubber Size — 6 3/4" ☒	
Total Depth	<u>5070</u>	Wt. Pipe Run	<u>NO</u>	Drill Collar Run	<u>297</u>
Mud Wt.	<u>9.2</u> LCM <u>2</u> Vis. <u>56</u> WL <u>8.0</u>	Drill Pipe Size	<u>4 1/2 x H</u>	Ft. Run	<u>4608</u>
Blow Description	<u>STRONG blow BOB 30 sec QTS 3 MIN</u>				

T.S.I.

F.F. STRONG Blow gauging gas

F.S.T.

Recovery — Total Feet	<u>300</u>	GIP	<u> </u>	Ft. in DC	<u>300</u>	Ft. in DP	<u> </u>
Rec.	<u>300</u>	Feet Of	<u>GASSY Mud</u>	%gas	%oil	%water	%mud
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	%oil	%water	%mud
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	%oil	%water	%mud
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	%oil	%water	%mud
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	%oil	%water	%mud
BHT	<u> </u>	°F Gravity	<u> </u>	°API D@	<u> </u>	°F Corrected Gravity	<u> </u> °API
RW	<u> </u>	@	<u> </u>	°F Chlorides	<u> </u>	ppm Recovery	Chlorides <u>5300</u> ppm System

(A) Initial Hydrostatic Mud	<u>2462</u>	PSI Recorder No.	<u>3026</u>	T-Off Location	<u>11:20 A</u>
(B) First Initial Flow Pressure	<u>946</u>	PSI (depth)	<u>4929</u>	T-Started	<u>1229</u>
(C) First Final Flow Pressure	<u>808</u>	PSI Recorder No.	<u> </u>	T-Open	<u>1417</u>
(D) Initial Shut-In Pressure	<u>1770</u>	PSI (depth)	<u> </u>	T-Pulled	<u>1717</u>
(E) Second Initial Flow Pressure	<u>747</u>	PSI Recorder No.	<u>13378</u>	T-Out	<u>1730</u>
(F) Second Final Flow Pressure	<u>779</u>	PSI (depth)	<u> </u>	T-Off Location	<u>2120</u>
(G) Final Shut-in Pressure	<u>1765</u>	PSI Initial Opening	<u>15</u>	Test	<u>900.00</u>
(Q) Final Hydrostatic Mud	<u>2464</u>	PSI Initial Shut-in	<u>45</u>	Jars	☒ <u>200.00</u>
		Final Flow	<u>30</u>	Safety Joint	☒ <u>50.00</u>
		Final Shut-in	<u>90</u>	Straddle	<u> </u>

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By

Our Representative John Kellam

Circ. Sub ☒
Sampler
Extra Packer
Elec. Rec. ☒ 150.00
Mileage 65
Other
TOTAL PRICE \$ 1365

NATURAL GAS ANALYSIS REPORT

Sampled by:

Trilobite Testing, L. L. C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:

Caraway Analytical, Inc
P. O. Box 2137
Liberal, Kansas 67905
Phone: 316-624-5389
Fax: 316-626-7108

Lab Number: 20012549**Analyzed: 06/07/01**

Sample From: Randall #2 DST 1

Pressure:

Producer: American Warrior, Inc.

Temperature:

Date: Location: 26-31-20

Time:

County: Comanche

Sampler:

State: Kansas

Source:

Formation: Miss

	Mole %	GPM
Helium	He: 0.315	0.000
Hydrogen	H2: 0.024	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 7.020	0.000
Carbon Dioxide	CO2: 0.046	0.000
Methane	C1: 86.540	0.000
Ethane	C2: 3.850	1.030
Propane	C3: 1.078	0.297
Iso Butane	iC4: 0.281	0.092
Normal Butane	nC4: 0.383	0.121
Iso Pentane	iC5: 0.169	0.062
Normal Pentane	nC5: 0.101	0.037
Hexanes Plus	C6+: 0.193	0.084

TOTAL: 100.000 1.722

Z Fact: 0.9979

SP.GR.: 0.6327

BTU (SAT): 998.5 @ 14.73 psia

BTU (DRY): 1016.2 @ 14.73 psia

OCTANE RATING: 118.4

COMMENTS: Bottle contained liquids

0.000