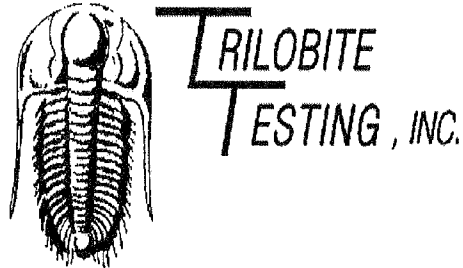


ORIGINAL

15-185-23155

6-21s-13w



DRILL STEM TEST REPORT

Prepared For: **Gilbert & Stewart Oper.Co.**

518 17th St. Ste.940
Denver CO 80202

ORIGINAL

ATTN: Kris Kennedy

6-21s-13w Stafford K

GWB #1

Start Date: 2002.05.22 @ 15:59:12

End Date: 2002.05.22 @ 21:38:12

Job Ticket #: 15678 DST #: 1

RECEIVED

DEC 12 2002

KCC WICHITA

Gilbert & Stewart Oper.Co.

GWB #1

6-21s-13w Stafford K

DST # 1

2363-2381

2002.05.22

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Figure 1 consists of 12 subplots, labeled (a) through (l), arranged in a single column. Each subplot shows the time evolution of a specific quantity over time. The x-axis for all plots is 'Time' (ranging from 0 to 100). The y-axis for all plots is 'Order parameter S' (ranging from 0 to 1). The subplots show various patterns of evolution, including steady states, oscillations, and transitions. Subplot (a) shows a steady state at S=1. Subplot (b) shows a steady state at S=0. Subplot (c) shows a steady state at S=0.5. Subplot (d) shows a steady state at S=0. Subplot (e) shows a steady state at S=1. Subplot (f) shows a steady state at S=0. Subplot (g) shows a steady state at S=0. Subplot (h) shows a steady state at S=0. Subplot (i) shows a steady state at S=0. Subplot (j) shows a steady state at S=0. Subplot (k) shows a steady state at S=0. Subplot (l) shows a steady state at S=0.



Gilbert & Stewart Oper. Co.

ATTN: Kris Kennedy

6-21s-13w Stafford K

DST#: 1

Test Start: 2002.05.22 @ 15:59:12

Formation: 2363-2381

Time Tool Opened: 17:52:42

Time Test Ended: 21:38:12

Tester: Gary Pevoteaux

Unit No: 23

Reference Elevations: 1919.00 ft (KB)

1911.00 ft (CF)

KB to GR/CF: 8.00 ft

Inside

Capacity: 7000.00 psig

End Date:

2002.05.22

Last Calib.: 2002.05.23

End Time:

21:38:12

Time On Btm: 2002.05.22 @ 17:52:27

Time Off Btm: 2002.05.22 @ 19:58:57

ISI:No blow .

FF:No blow .

FSI:No blow .

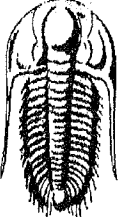


Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1165.16	86.53	Initial Hydro-static
1	21.39	86.52	Open To Flow (1)
37	27.10	86.56	Shut-In(1)
67	739.65	86.95	End Shut-In(1)
67	27.69	86.95	Open To Flow (2)
98	32.81	87.16	Shut-In(2)
127	681.23	87.52	End Shut-In(2)
127	1077.96	87.53	Final Hydro-static

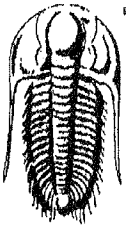
Length (ft)	Description	Volume (bbl)
15.00	Drig.mud	0.07

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

ORIGINAL

 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT		TOOL DIAGRAM																																																							
	Gilbert & Stewart Oper. Co. 518 17th St. Ste. 940 Denver CO 80202 ATTN: Kris Kennedy		GWB #1 6-21s-13w Stafford K Job Ticket: 15678 DST#:1 Test Start: 2002.05.22 @ 15:59:12																																																							
Tool Information																																																										
<table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Drill Pipe:</td> <td style="width: 15%;">Length: 2171.00 ft</td> <td style="width: 15%;">Diameter: 3.80 inches</td> <td style="width: 15%;">Volume: 30.45 bbl</td> <td style="width: 15%;">Tool Weight: 2100.00 lb</td> </tr> <tr> <td>Heavy Wt. Pipe:</td> <td>Length: 0.00 ft</td> <td>Diameter: 0.00 inches</td> <td>Volume: 0.00 bbl</td> <td>Weight set on Packer: 24000.00 lb</td> </tr> <tr> <td>Drill Collar:</td> <td>Length: 180.00 ft</td> <td>Diameter: 2.25 inches</td> <td>Volume: 0.89 bbl</td> <td>Weight to Pull Loose: 46000.00 lb</td> </tr> <tr> <td colspan="3"></td> <td style="text-align: center;">Total Volume: 31.34 bbl</td> <td>Tool Chased 0.00 ft</td> </tr> <tr> <td>Drill Pipe Above KB:</td> <td>10.00 ft</td> <td colspan="2"></td> <td>String Weight: Initial 40000.00 lb</td> </tr> <tr> <td>Depth to Top Packer:</td> <td>2363.00 ft</td> <td colspan="2"></td> <td style="text-align: right;">Final 40000.00 lb</td> </tr> <tr> <td>Depth to Bottom Packer:</td> <td>ft</td> <td colspan="3"></td> </tr> <tr> <td>Interval between Packers:</td> <td>18.00 ft</td> <td colspan="3"></td> </tr> <tr> <td>Tool Length:</td> <td>40.00 ft</td> <td colspan="3"></td> </tr> <tr> <td>Number of Packers:</td> <td>2</td> <td>Diameter:</td> <td>6.75 inches</td> <td></td> </tr> <tr> <td colspan="5">Tool Comments:</td> </tr> </table>				Drill Pipe:	Length: 2171.00 ft	Diameter: 3.80 inches	Volume: 30.45 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: 24000.00 lb	Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 46000.00 lb				Total Volume: 31.34 bbl	Tool Chased 0.00 ft	Drill Pipe Above KB:	10.00 ft			String Weight: Initial 40000.00 lb	Depth to Top Packer:	2363.00 ft			Final 40000.00 lb	Depth to Bottom Packer:	ft				Interval between Packers:	18.00 ft				Tool Length:	40.00 ft				Number of Packers:	2	Diameter:	6.75 inches		Tool Comments:				
Drill Pipe:	Length: 2171.00 ft	Diameter: 3.80 inches	Volume: 30.45 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: 24000.00 lb																																																						
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 46000.00 lb																																																						
			Total Volume: 31.34 bbl	Tool Chased 0.00 ft																																																						
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 40000.00 lb																																																						
Depth to Top Packer:	2363.00 ft			Final 40000.00 lb																																																						
Depth to Bottom Packer:	ft																																																									
Interval between Packers:	18.00 ft																																																									
Tool Length:	40.00 ft																																																									
Number of Packers:	2	Diameter:	6.75 inches																																																							
Tool Comments:																																																										
RECEIVED DEC 12 2002 KCC WICHITA																																																										
Tool Description																																																										
Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths																																																						
C.O. Sub	1.00		2342.00																																																							
S.I. Tool	5.00		2347.00																																																							
HMV	5.00		2352.00																																																							
Safety Joint	2.00		2354.00																																																							
Packer	4.00		2358.00	22.00 Bottom Of Top Packer																																																						
Packer	5.00		2363.00																																																							
Stubb	1.00		2364.00																																																							
Recorder	0.00	2342 Inside	2364.00																																																							
Perforations	12.00		2376.00																																																							
Recorder	0.00	10248 Outside	2376.00																																																							
Bullnose	5.00		2381.00	18.00 Bottom Packers & Anchor																																																						
Total Tool Length:		40.00																																																								

JAN 20



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Gilbert & Stewart Oper. Co.

GWB #1

518 17th St. Ste. 940
Denver CO 80202

6-21s-13w Stafford K

Job Ticket: 15678

DST#: 1

ATTN: Kris Kennedy

Test Start: 2002.05.22 @ 15:59:12

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API: deg API

Mud Weight: 10.00 lb/gal

Cushion Length: ft

Water Salinity: 66000 ppm

Viscosity: 27.00 sec/qt

Cushion Volume: bbl

Water Loss: 18.76 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure: psig

Salinity: 66000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Drilg.mud	0.074

Total Length: 15.00 ft

Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

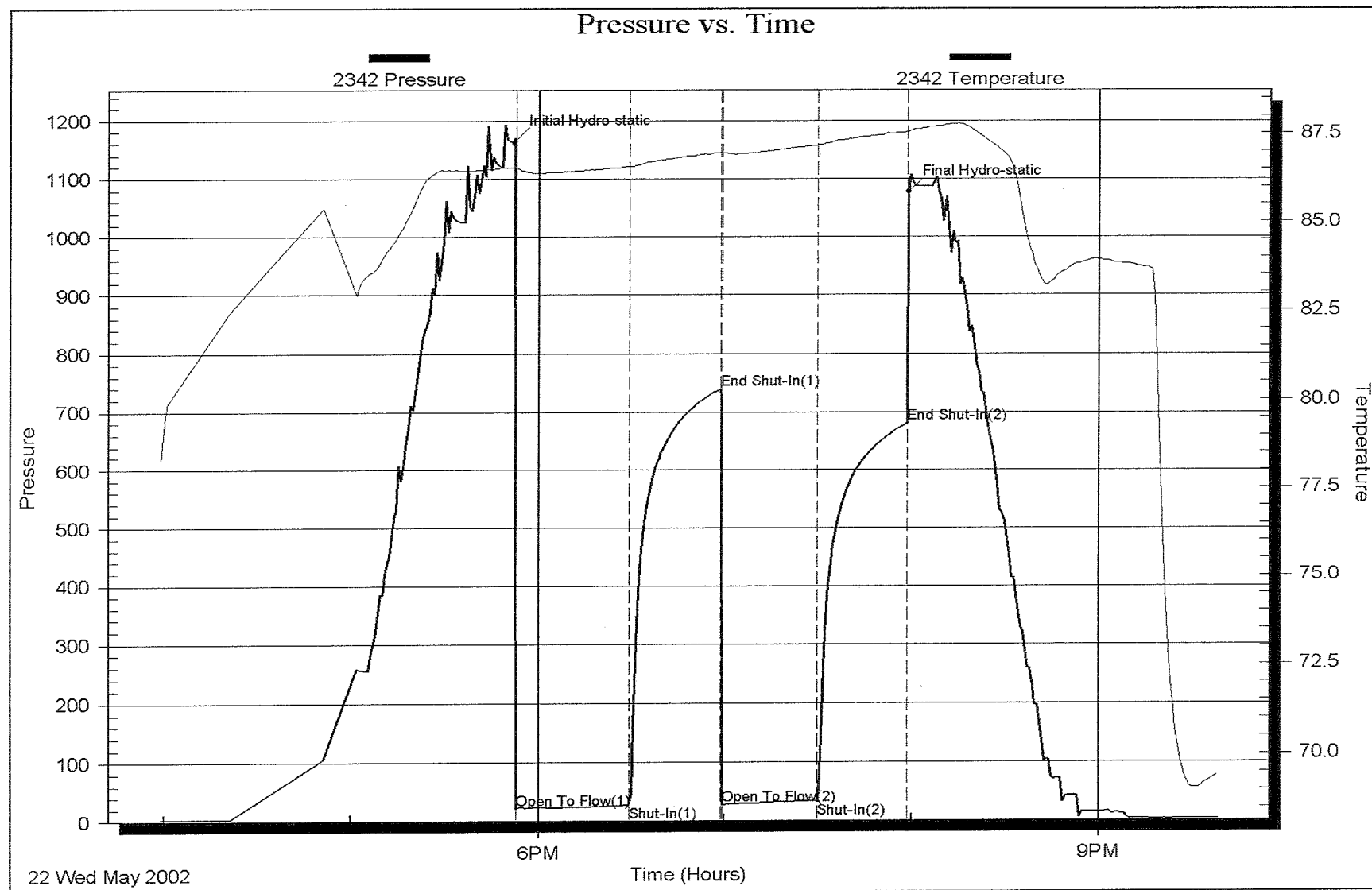
Recovery Comments:

Serial #: 2342

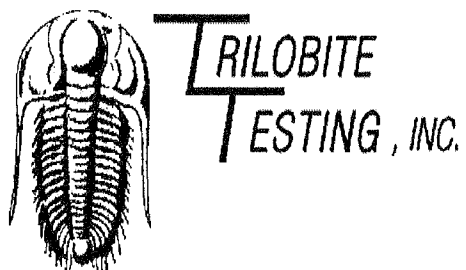
Inside Gilbert & Stewart Oper.Co.

6-21s-13w Stafford K

DST Test Number: 1



RECEIVED
 DEC 12 2002
 KCC WICHITA



DRILL STEM TEST REPORT

Prepared For: **Gilbert & Stewart Oper.Co.**

518 17th St. Ste.940
Denver CO 80202

ATTN: Kris Kennedy

6-21s-13w Stafford K

GWB #1

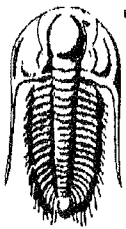
Start Date: 2002.05.25 @ 10:07:55

End Date: 2002.05.25 @ 14:36:08

Job Ticket #: 15718 DST #: 2

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

RECEIVED
DEC 12 2002
KCC WICHITA



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Gilbert & Stewart Oper.Co.

GWB #1

518 17th St. Ste.940
Denver CO 80202

6-21s-13w Stafford K

Job Ticket: 15718

DST#: 2

ATTN: Kris Kennedy

Test Start: 2002.05.25 @ 10:07:55

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 14:36:08

Test Type: Conventional Bottom Hole

Tester: Darren L.Amerne

Unit No: 19

Interval: **3549.00 ft (KB) To 3607.00 ft (KB) (TVD)**

Reference Elevations: 1919.00 ft (KB)

Total Depth: 3607.00 ft (KB) (TVD)

1911.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 3302 Inside

Press@RunDepth: psig @ 3550.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2002.05.25

End Date: 2002.05.25

Last Calib.: 2002.05.25

Start Time: 10:07:55

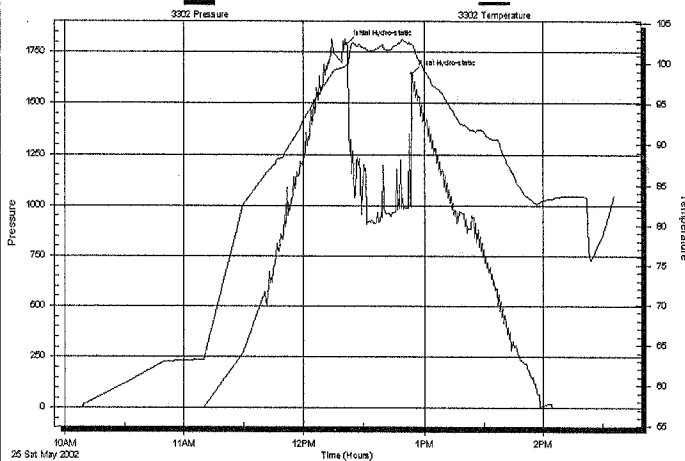
End Time: 14:36:08

Time On Btm: 2002.05.25 @ 12:21:38

Time Off Btm: 2002.05.25 @ 12:53:53

TEST COMMENT: IF: Strong blow b.o.b in 30 sec. PACKER Failure.

Pressure vs. Time



PRESSURE SUMMARY

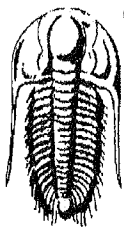
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1789.08	99.88	Initial Hydro-static
33	1643.82	102.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Gilbert & Stewart Oper.Co.

GWB #1

518 17th St. Ste.940
Denver CO 80202

6-21s-13w Stafford K

Job Ticket: 15718

DST#: 2

ATTN: Kris Kennedy

Test Start: 2002.05.25 @ 10:07:55

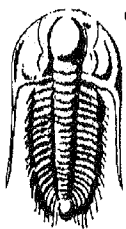
Tool Information

Drill Pipe:	Length: 3350.63 ft	Diameter: 3.80 inches	Volume: 47.00 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: 183.37 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 60000.00 lb
			Total Volume: 47.90 bbl	Tool Chased ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3549.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	81.00 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			3527.00		
S.I. Tool	5.00			3532.00		
HMV	5.00			3537.00		
Safety Joint	2.00			3539.00		
Packer	5.00			3544.00	23.00	Bottom Of Top Packer
Packer	5.00			3549.00		
Stubb	1.00			3550.00		
Recorder	0.00	3302	Inside	3550.00		
Anchor	23.00			3573.00		
Blank Spacing	31.00			3604.00		
Recorder	0.00	10991	Outside	3604.00		
Bullnose	3.00			3607.00	58.00	Bottom Packers & Anchor

Total Tool Length: 81.00

RECEIVED
DEC 12 2002
KCC WICHITA



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Gilbert & Stewart Oper.Co.

GWB #1

518 17th St. Ste.940
Denver CO 80202

6-21s-13w Stafford K

Job Ticket: 15718

DST#: 2

ATTN: Kris Kennedy

Test Start: 2002.05.25 @ 10:07:55

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: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: 0.10 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2600.00 ppm

Filter Cake: 0.32 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl

Total Length:

ft

Total Volume:

bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

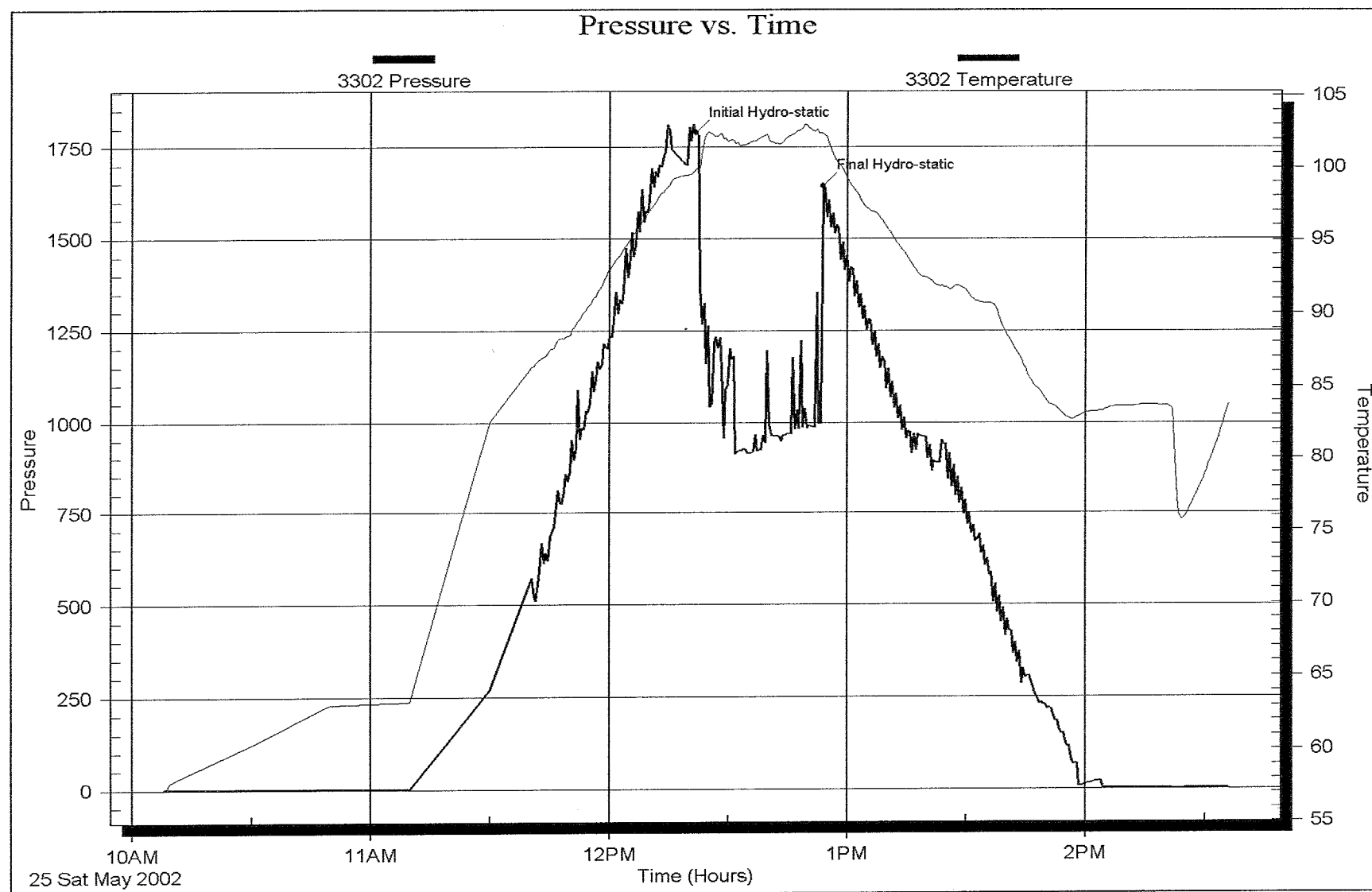
Recovery Comments:

Serial #: 3302

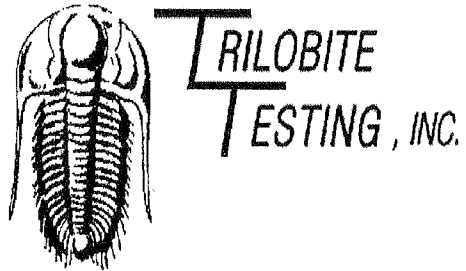
Inside Gilbert & Stewart Oper.Co.

6-21s-13w Stafford K

DST Test Number: 2



RECEIVED
DEC 12 2002
KCC WICHITA



DRILL STEM TEST REPORT

Prepared For: **Gilbert & Stewart Oper.Co.**

518 17th St. Ste.940
Denver CO 80202

ATTN: Kris Kennedy

6-21s-13w Stafford K

GWB #1

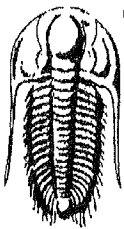
Start Date: 2002.05.25 @ 14:47:54

End Date: 2002.05.25 @ 23:36:39

Job Ticket #: 15719 DST #: 3

RECEIVED
DEC 12 2002
KCC WICHITA

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Gilbert & Stewart Oper.Co.

518 17th St. Ste.940
Denver CO 80202

ATTN: Kris Kennedy

GWB #1

6-21s-13w Stafford K

Job Ticket: 15719

DST#: 3

Test Start: 2002.05.25 @ 14:47:54

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:48:24

Time Test Ended: 23:36:39

Test Type: Conventional Bottom Hole

Tester: Darren L.Amerine

Unit No: 19

Interval: **3523.00 ft (KB) To 3607.00 ft (KB) (TVD)**

Total Depth: 3607.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1919.00 ft (KB)

1911.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 3302

Inside

Press@RunDepth: 341.35 psig @ 3524.00 ft (KB)

Start Date: 2002.05.25

End Date: 2002.05.25

Capacity: 7000.00 psig

Last Calib.: 2002.05.26

Start Time: 14:47:56

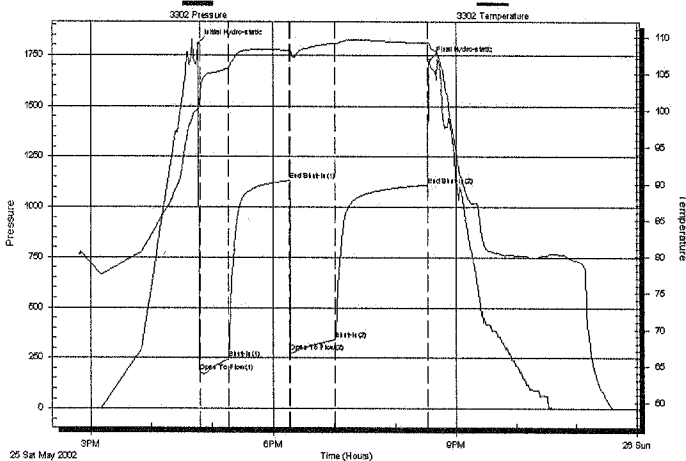
End Time: 23:36:39

Time On Btm: 2002.05.25 @ 16:46:24

Time Off Btm: 2002.05.25 @ 20:34:09

TEST COMMENT: IF: Strong blow b.o.b in 90 sec.
IS: Bled down n for 2 min. built back to 3-1/2" in H2O bucket.
FF: Strong blow b.o.b in 2 min. 50 sec.
FSI: Bled down n for 5 min. no blow back.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1803.72	100.34	Initial Hydro-static
2	182.31	102.36	Open To Flow (1)
30	245.80	105.73	Shut-In (1)
90	1131.60	108.05	End Shut-In (1)
91	279.44	108.15	Open To Flow (2)
134	341.35	109.06	Shut-In (2)
226	1110.59	109.09	End Shut-In (2)
228	1724.79	109.07	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	01 - Gas	1.70
650.00	51 - Gas cut Oil 15%g 85%o	9.12
210.00	52 - Mud and Gas cut Oil 30%g 55%o	152.95

Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)
--	----------------	-----------------	------------------



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Gilbert & Stewart Oper.Co.

GWB #1

518 17th St. Ste.940
Denver CO 80202

6-21s-13w Stafford K

Job Ticket: 15719

DST#: 3

ATTN: Kris Kennedy

Test Start: 2002.05.25 @ 14:47:54

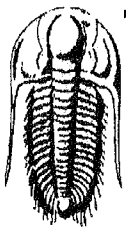
Tool Information

Drill Pipe:	Length: 3345.63 ft	Diameter: 3.80 inches	Volume: 46.93 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: 183.37 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose:	70000.00 lb
		Total Volume:	47.83 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial	45000.00 lb
Depth to Top Packer:	3523.00 ft			Final	53000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	84.00 ft				
Tool Length:	107.00 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			3501.00		
S.I. Tool	5.00			3506.00		
HMV	5.00			3511.00		
Safety Joint	2.00			3513.00		
Packer	5.00			3518.00	23.00	Bottom Of Top Packer
Packer	5.00			3523.00		
Stubb	1.00			3524.00		
Recorder	0.00	3302	Inside	3524.00		
Anchor	18.00			3542.00		
Blank Spacing	62.00			3604.00		
Recorder	0.00	10991	Outside	3604.00		
Anchor	3.00			3607.00	84.00	Bottom Packers & Anchor

Total Tool Length: 107.00

RECEIVED
DEC 12 2002
KCC WICHITA



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Gilbert & Stewart Oper.Co.

GWB #1

518 17th St. Ste.940
Denver CO 80202

6-21s-13w Stafford K

Job Ticket: 15719

DST#: 3

ATTN: Kris Kennedy

Test Start: 2002.05.25 @ 14:47:54

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: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: 0.10 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2600.00 ppm

Filter Cake: 0.32 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
240.00	01 - Gas	1.696
650.00	51 - Gas cut Oil 15%g 85%o	9.118
210.00	52 - Mud and Gas cut Oil 30%g 55%o 15%m	2.946

Total Length: 1100.00 ft

Total Volume: 13.760 bbl

Num Fluid Samples: 0

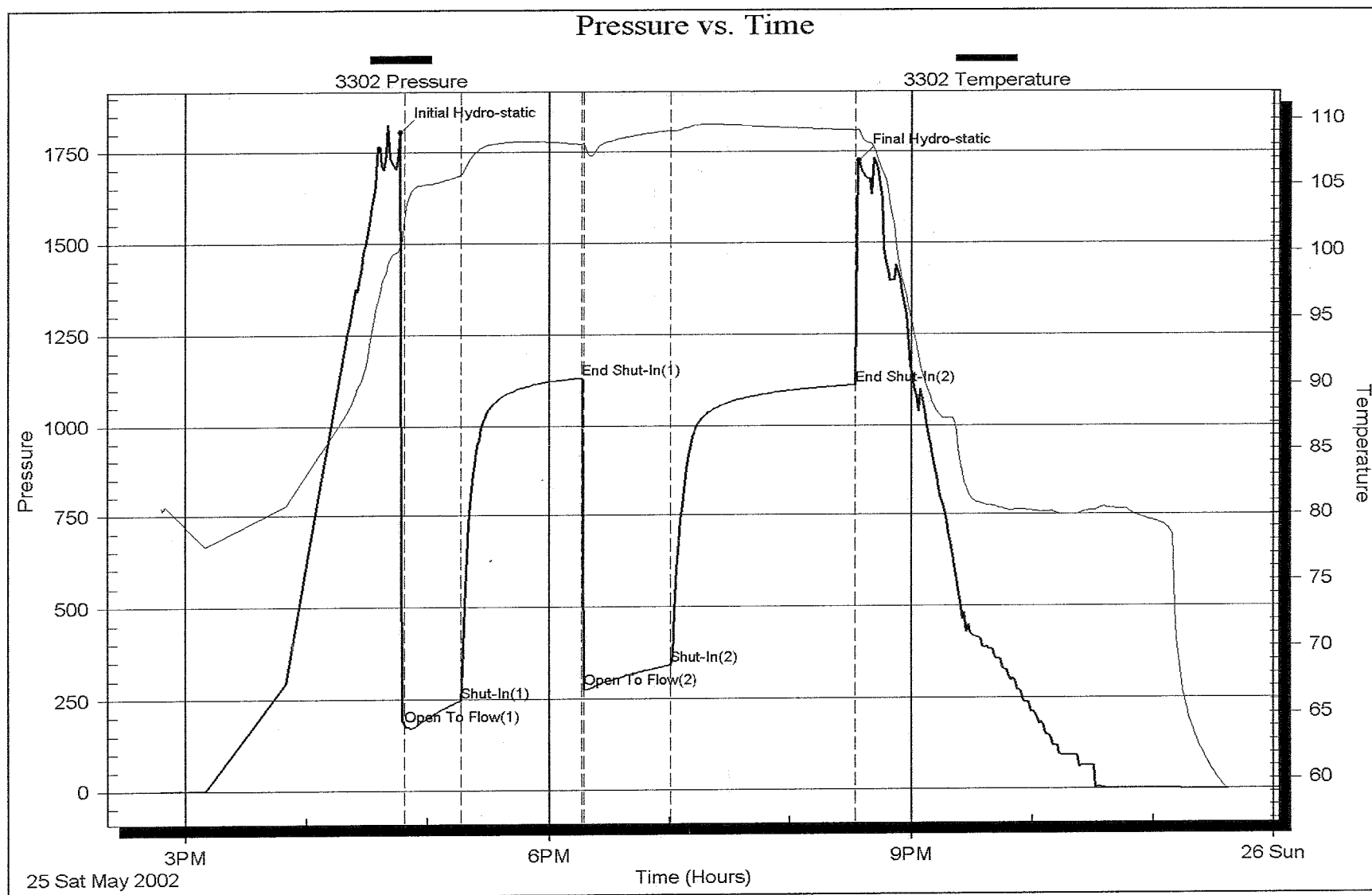
Num Gas Bombs: 0

Serial #:

Laboratory Name:

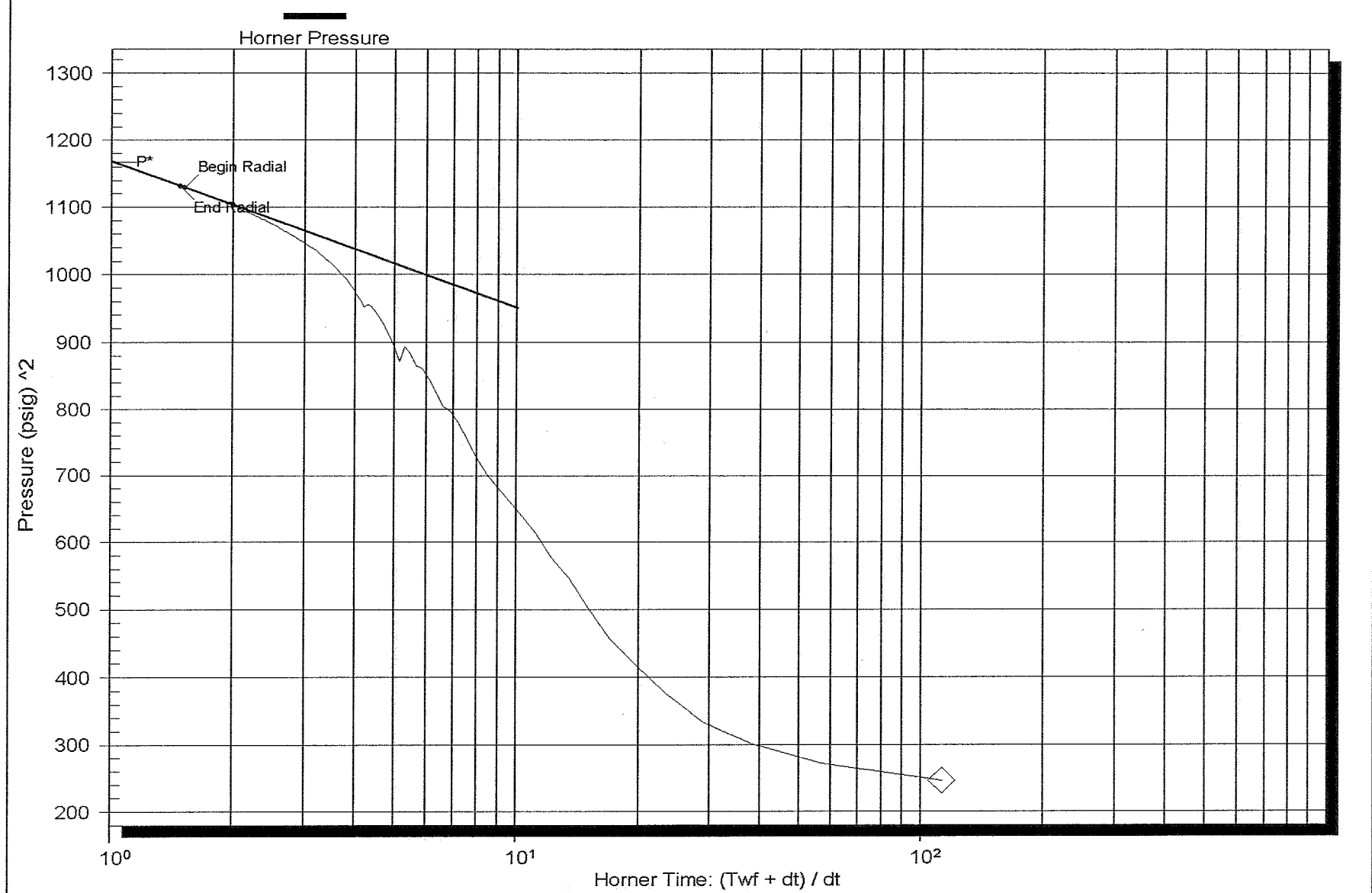
Laboratory Location:

Recovery Comments:



RECEIVED
DEC 12 2002
KCC WICHITA

Horner Plot



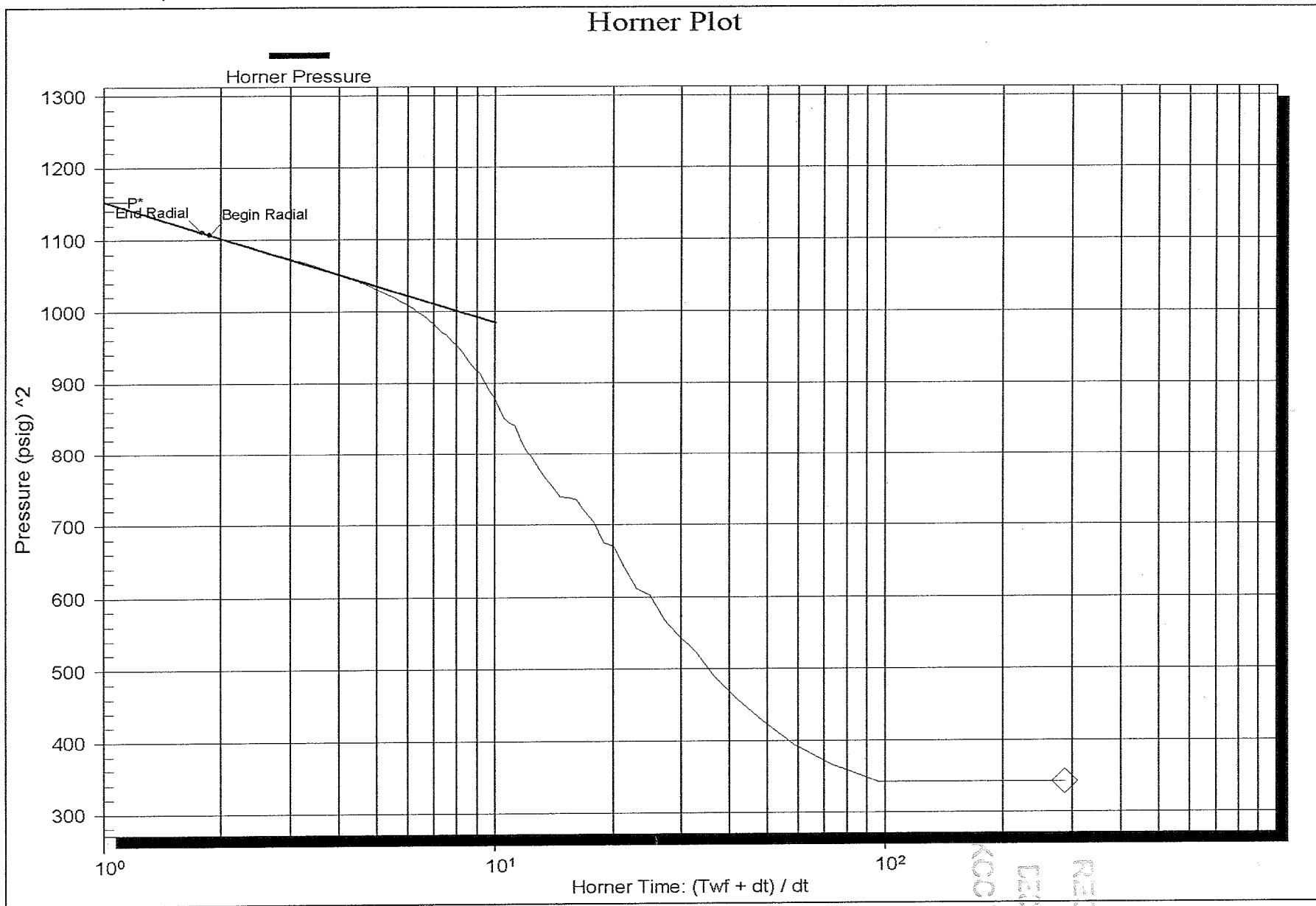
Serial Number: 3302 (Inside)

P* : 34.17

Slope (m) : 216.79 kpa/log cycle

Flow Cycle: 1

Horner Plot



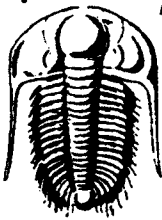
Serial Number: 3302 (Inside)

P* : 33.95

Slope (m) : 168.62 kpa/log cycle

Flow Cycle: 2

RECEIVED
DEC 12 2002
KCC WICHITA



TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 15678

Test Ticket

Well Name & No. <u>GW13 #1</u>	Test No. <u>1</u>	Date <u>5-22-2002</u>
Company <u>Gilbert & Stewart Oper. Co.</u>	Zone Tested <u>2363 - 2381</u>	
Address <u>518 17th St. Ste. 940, Denver Co. 80202</u>	Elevation <u>1919</u>	KB <u>1911</u> GL
Co. Rep / Geo. <u>Kris Kennedy</u>	Cont. <u>Stirling Dreg. #1</u>	Est. Ft. of Pay <u> </u> Por. <u> </u> %
Location: Sec. <u>6</u> Twp. <u>21S</u> Rge. <u>13E</u>	Co. <u>Stafford</u>	State <u>Ks.</u>
No. of Copies <u>5</u>	Distribution Sheet (Y, N) <u>N</u>	Turnkey (Y, N) <u> </u> Evaluation (Y, N) <u> </u>

Interval Tested <u>2363 - 2381'</u>	Initial Str Wt./Lbs. <u>40,000</u>	Unseated Str Wt./Lbs. <u>40,000</u>
Anchor Length <u>18'</u>	Wt. Set Lbs. <u>24,000</u>	Wt. Pulled Loose/Lbs. <u>46,000</u>
Top Packer Depth <u>2358'</u>	Tool Weight <u>2100#</u>	
Bottom Packer Depth <u>2363'</u>	Hole Size — 7 7/8" <u>✓</u>	Rubber Size — 6 3/4" <u>✓</u>
Total Depth <u>2381'</u>	Wt. Pipe Run <u>None</u>	Drill Collar Run <u>180'</u>
Mud Wt. <u>9.7</u> LCM <u>0</u> Vis. <u>27</u> WL <u>18.8</u>	Drill Pipe Size <u>4 1/2" x H.</u>	Ft. Run <u>2171'</u>
Blow Description <u>IF: Weak blow. (surface)</u>	<u>FSI: No blow.</u>	

FF: No blow. FSI: No blow.

Recovery — Total Feet <u>15</u>	GIP <u>0</u>	Ft. in DC <u>15'</u>	Ft. in DP <u>0</u>
Rec. <u>15</u> Feet Of <u>Drly 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>88</u> °F Gravity <u>N/A</u>	°API D@ <u> </u>	°F Corrected Gravity <u>N/A</u>	°API
RW <u>NIC. @</u> °F	Chlorides <u>66,000</u> ppm	Recovery Chlorides <u>66,000</u> ppm	System

(A) Initial Hydrostatic Mud	AK-1 <u>1164</u>	Alpine <u>1164</u>	PSI Recorder No. <u>2342</u>	T-On Location <u>1445</u>
(B) First Initial Flow Pressure	<u>21</u>	PSI (depth) <u>2364</u>	T-Started <u>1559</u>	
(C) First Final Flow Pressure	<u>27</u>	PSI Recorder No. <u>10248</u>	T-Open <u>1752</u>	
(D) Initial Shut-In Pressure	<u>740</u>	PSI (depth) <u>2376</u>	T-Pulled <u>1958</u>	
(E) Second Initial Flow Pressure	<u>27</u>	PSI Recorder No. <u> </u>	T-Out <u>2138</u>	
(F) Second Final Flow Pressure	<u>33</u>	PSI (depth) <u> </u>	T-Off Location <u>2240</u>	
(G) Final Shut-in Pressure	<u>681</u>	PSI Initial Opening <u>35</u>	Test <u>✓ 700°</u>	
(Q) Final Hydrostatic Mud	<u>1107</u>	PSI Initial Shut-in <u>30</u>	Jars <u> </u>	
		Final Flow <u>30</u>	Safety Joint <u>✓ 60°</u>	
		Final Shut-in <u>30</u>	Straddle <u> </u>	
			Circ. Sub <u> </u>	
			Sampler <u> </u>	
			Extra Packer <u> </u>	
			Elec. Rec. <u>✓ 150°</u>	
			Mileage <u>✓ 50°</u>	
			Other <u>1 hr 30</u>	
			TOTAL PRICE \$ <u>✓ 980°</u>	

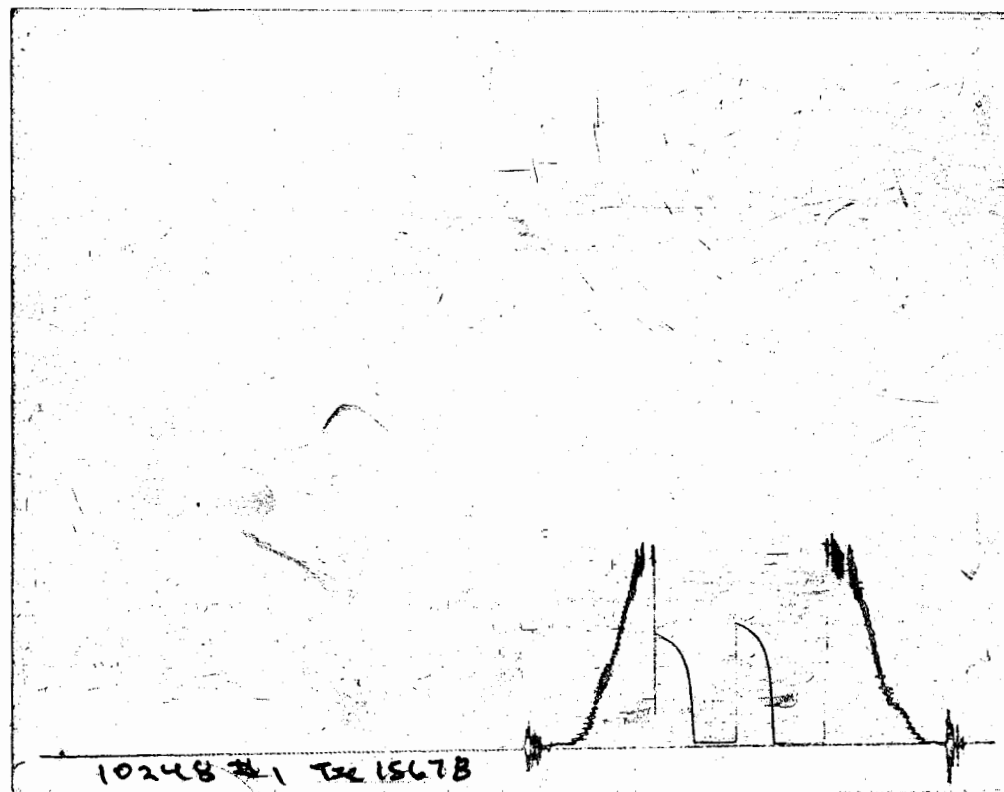
TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST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

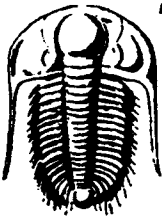
Approved By [Signature]

Our Representative [Signature]

CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 15718

Test Ticket

Well Name & No. <u>6WB #1</u>	Test No. <u>#2</u>	Date <u>05/25/02</u>
Company <u>Gilbert Stewart Operating, LLC</u>	Zone Tested <u>Arbuckle</u>	
Address <u>518 17th St. Ste. 940 Denver, Co 80202</u>	Elevation <u>1920</u>	KB <u>1920</u> GL
Co. Rep / Geo. <u>Chris Kennedy</u>	Cont. <u>Sterling #1</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>6</u> Twp. <u>21S</u> Rge. <u>13W</u>	Co. <u>Stafford</u>	State <u>KS</u>
No. of Copies <u>5</u>	Distribution Sheet (Y, N) _____	Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested <u>3549' - 3607'</u>	Initial Str Wt./Lbs. <u>45000</u>	Unseated Str Wt./Lbs. <u>54000</u>
Anchor Length <u>58'</u>	Wt. Set Lbs. <u>20000</u>	Wt. Pulled Loose/Lbs. <u>65000</u>
Top Packer Depth <u>3544'</u>	Tool Weight <u>2100</u>	
Bottom Packer Depth <u>3549'</u>	Hole Size — 7 7/8" ☒	Rubber Size — 6 3/4" ☒
Total Depth <u>3607'</u>	Wt. Pipe Run <u>N/A</u>	Drill Collar Run <u>183.37</u>
Mud Wt. <u>9.4</u> LCM Vis. <u>47</u> WL	Drill Pipe Size <u>7 1/2 x 14</u>	Ft. Run _____

Blow Description IF Strong blow b.o.b in 30 sec.

IST:

FF:

Packer Failure

FST:

Recovery — Total Feet _____	GIP _____	Ft. in DC _____	Ft. in DP _____
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 _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____	%water _____ %mud _____	
BHT <u>103°</u> °F Gravity _____	°API D@ _____	°F Corrected Gravity _____	°API _____
RW _____ @ _____ °F	Chlorides _____ ppm Recovery _____	Chlorides <u>2600</u> ppm System	

(A) Initial Hydrostatic Mud _____	AK-1 <u>1789</u> Alpine	PSI Recorder No. <u>3302</u>	T-On Location <u>0845</u>
(B) First Initial Flow Pressure _____		PSI (depth) <u>3550'</u>	T-Started <u>1007</u>
(C) First Final Flow Pressure _____		PSI Recorder No. <u>10991</u>	T-Open <u>1222</u>
(D) Initial Shut-In Pressure _____		PSI (depth) <u>3604'</u>	T-Pulled _____
(E) Second Initial Flow Pressure _____		PSI Recorder No. _____	T-Out <u>1436</u>
(F) Second Final Flow Pressure _____		PSI (depth) _____	T-Off Location _____
(G) Final Shut-in Pressure _____		PSI Initial Opening <u>4"</u>	Test ☒ <u>500</u>
(Q) Final Hydrostatic Mud _____	<u>1644</u>	PSI Initial Shut-in _____	Jars _____

Final Flow _____	Safety Joint ☒ <u>50</u>
Final Shut-in _____	Straddle _____

TRILOBITE TESTING INC. 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.

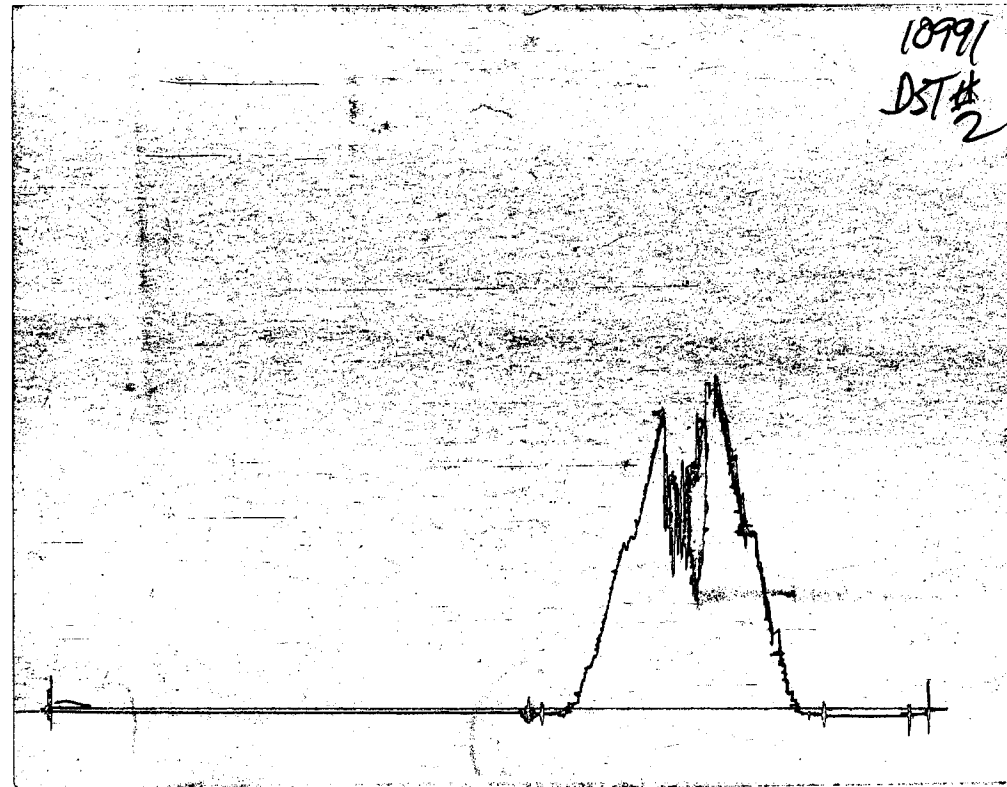
Approved By Kurt L. Gilbert

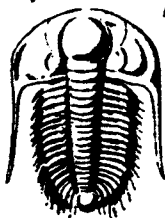
Our Representative Darren J. Amern

Circ. Sub ☒	Sampler _____
Extra Packer _____	Elec. Rec. ☒ <u>150</u>
Mileage <u>50</u>	Other _____
TOTAL PRICE \$ <u>1750</u>	

CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 15719

Test Ticket

Well Name & No.	<u>GWB#1</u>	Test No.	<u>#3</u>	Date	<u>05/25/02</u>
Company	<u>Gilbert & Stewart Operating LLC</u>	Zone Tested	<u>Arbuckle</u>		
Address	<u>518 17th St. Ste 940 Denver, Co. 80202</u>	Elevation	<u>1920</u>	KB	<u>1911</u> GL
Co. Rep / Geo.	<u>Chris Kennedy</u>	Cont.	<u>Sterling #1</u>	Est. Ft. of Pay	<u> </u> Por. <u> </u> %
Location: Sec.	<u>6</u>	Twp.	<u>21S</u>	Rge.	<u>13W</u> Co. <u>Stafford</u> State <u>KS</u>
No. of Copies	<u>5</u>	Distribution Sheet (Y, N)	<u> </u>	Turnkey (Y, N)	<u> </u> Evaluation (Y, N) <u> </u>

Interval Tested	<u>3523' - 3607'</u>	Initial Str Wt./Lbs.	<u>45,000</u>	Unseated Str Wt./Lbs.	<u>53,000</u>
Anchor Length	<u>84'</u>	Wt. Set Lbs.	<u>20,000</u>	Wt. Pulled Loose/Lbs.	<u>70,000</u>
Top Packer Depth	<u>3518</u>	Tool Weight	<u>2100</u>		
Bottom Packer Depth	<u>3523</u>	Hole Size — 7 7/8"	<u>✓</u>	Rubber Size — 6 3/4"	<u>✓</u>
Total Depth	<u>3607</u>	Wt. Pipe Run	<u>N/A</u>	Drill Collar Run	<u>183.37</u>
Mud Wt.	<u>9.3</u> LCM <u>0</u> Vis. <u>52</u> WL <u>8.8</u>	Drill Pipe Size	<u>4 1/2 x 11</u>	Ft. Run	<u>3348.63</u>

Blow Description FF: Strong blow b.o.b in 90 sec.
ISI: Bled down for 2 mins built back to 3 1/2" int 120 bucket.
FF: Strong blow b.o.b in 2 mins 50 sec.
FST: Bled down for 5 mins. No blow back.

Recovery — Total Feet	<u>860'</u>	GIP	<u>240'</u>	Ft. in DC	<u>181</u>	Ft. in DP	<u>679'</u>
Rec.	<u>650'</u>	Feet Of	<u>Free Oil 6C</u>	15 %gas	<u>85%</u> oil	%water	%mud
Rec.	<u>210'</u>	Feet Of	<u>ME6CO</u>	30 %gas	<u>55%</u> oil	%water	<u>15%</u> mud
Rec.	<u>240'</u>	Feet Of	<u>6TP</u>	%gas	%oil	%water	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud
BHT	<u>109°</u>	°F Gravity	<u>40</u>	°API D@	<u>60</u>	°F Corrected Gravity	°API
RW	@	°F Chlorides		ppm Recovery	Chlorides <u>2600</u>	ppm System	

(A) Initial Hydrostatic Mud	<u>AK-1</u>	Alpine	<u>1804</u>	PSI Recorder No.	<u>3302</u>	T-On Location	<u>0845</u>
(B) First Initial Flow Pressure			<u>182</u>	PSI (depth)	<u>3524'</u>	T-Started	<u>1448</u>
(C) First Final Flow Pressure			<u>246</u>	PSI Recorder No.	<u>10991</u>	T-Open	<u>01711</u>
(D) Initial Shut-In Pressure			<u>1132</u>	PSI (depth)	<u>3604'</u>	T-Pulled	<u>2056</u>
(E) Second Initial Flow Pressure			<u>279</u>	PSI Recorder No.		T-Out	<u>2336</u>
(F) Second Final Flow Pressure			<u>341</u>	PSI (depth)		T-Off Location	<u>0100</u>
(G) Final Shut-in Pressure			<u>1111</u>	PSI Initial Opening	<u>30</u>	Test	<u>✓ 700</u>
(Q) Final Hydrostatic Mud			<u>1725</u>	PSI Initial Shut-in	<u>60</u>	Jars	
				Final Flow	<u>95</u>	Safety Joint	<u>✓ 50</u>
				Final Shut-in	<u>90</u>	Straddle	

TRILOBITE TESTING INC. 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 [Signature]
 Our Representative Darren J. Amrine

Extra Packer
 Elec. Rec. ✓ 150
 Mileage 49 50
 Other 7 hrs 120 + 180
 TOTAL PRICE \$ 1250

CHART PAGE

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

