

CONFIDENTIAL

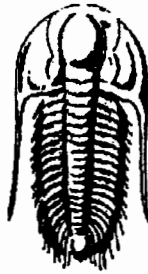
ORIGINAL  
30-15s-22w

KCC

APR 16 2003

CONFIDENTIAL

15-195-22232



TRILOBITE  
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Co.**

200 E. 1st. Ste. 307  
Wichita, Ks. 67202

ATTN: Ronald N. Sinclair

30-15s-22w

Schwartzkoph #1-30

Start Date: 2003.04.06 @ 20:28:38

End Date: 2003.04.07 @ 02:07:53

Job Ticket #: 17785      DST #: 1

RECEIVED  
APR 17 2003  
KCC WICHITA

Grand Mesa Operating Co.

Schwartzkoph #1-30

30-15s-22w

DST # 1

Cherokee

2003.04.06

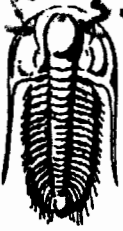
Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

CONFIDENTIAL

ORIGINAL



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Grand Mesa Operating Co.  
200 E.1st.Ste.307  
Wichita,Ks. 67202  
ATTN: Ronald N.Sinclair

Schwartzkoph #1-30  
30-15s-22w  
Job Ticket: 17785 DST#: 1  
Test Start: 2003.04.06 @ 20:28:38

GENERAL INFORMATION:

Formation: Cherokee  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 22:12:38  
Time Test Ended: 02:07:53  
Interval: 4166.00 ft (KB) To 4259.00 ft (KB) (TVD)  
Total Depth: 4259.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair

KCC  
APR 16 2003  
CONFIDENTIAL

Test Type: Conventional Bottom Hole  
Tester: John Schmidt  
Unit No: 18  
Reference Elevations: 2285.00 ft (KB)  
2280.00 ft (CF)  
KB to GR/CF: 5.00 ft

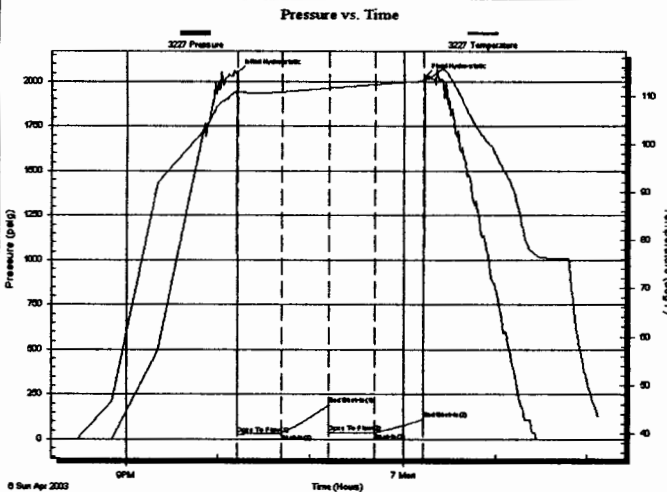
Serial #: 3227

Inside

Press@RunDepth: 37.05 psig @ 4172.01 ft (KB)  
Start Date: 2003.04.06 End Date: 2003.04.07  
Start Time: 20:28:39 End Time: 02:07:53

Capacity: 7000.00 psig  
Last Calib.: 2003.04.07  
Time On Btrm: 2003.04.06 @ 22:12:23  
Time Off Btrm: 2003.04.07 @ 00:13:08

TEST COMMENT: F-Weak Dead in 18 min. ISI-Dead  
FF-Dead FSI-Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2048.97	111.01	Initial Hydro-static
1	25.47	110.84	Open To Flow (1)
29	33.63	110.82	Shut-In(1)
60	190.18	111.69	End Shut-In(1)
60	34.79	111.68	Open To Flow (2)
89	37.05	112.42	Shut-In(2)
121	112.05	113.20	End Shut-In(2)
121	2026.92	113.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Drilling Mud	0.05

Gas Rates

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

CONFIDENTIAL

ORIGINAL



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Grand Mesa Operating Co.

Schwartzkoph #1-30

200 E.1st.Ste.307  
Wichita,Ks. 67202

30-15s-22w

Job Ticket: 17785

DST#: 1

ATTN: Ronald N.Sinclair

Test Start: 2003.04.06 @ 20:28:38

**Tool Information**

Drill Pipe:	Length: 3951.00 ft	Diameter: 3.80 inches	Volume: 55.42 bbl	Tool Weight: 3500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 220.00 ft	Diameter: 2.25 inches	Volume: 1.08 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 56.50 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4166.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	93.02 ft			
Tool Length:	120.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

**KCC**

**APR 16 2003**

**CONFIDENTIAL**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			4140.00	
S.I. Tool	5.00			4145.00	
HMV	5.00			4150.00	
Jars	5.00			4155.00	
Safety Joint	2.00			4157.00	
Packer	4.00			4161.00	27.00 Bottom Of Top Packer
Packer	5.00			4166.00	
Stubb	1.00			4167.00	
Perforations	4.00			4171.00	
C.O. Sub	1.00			4172.00	
Recorder	0.01	3227	Inside	4172.01	
Blank Spacing	63.00			4235.01	
C.O. Sub	1.00			4236.01	
Perforations	20.00			4256.01	
Recorder	0.01	13308	Outside	4256.02	
Bullnose	3.00			4259.02	93.02 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>120.02</b>				



**TRILOBITE  
TESTING, INC**

### DRILL STEM TEST REPORT

**FLUID SUMMARY**

Grand Mesa Operating Co.

**Schwartzkopf #1-30**

200 E.1st.Ste.307  
Wichita,Ks. 67202

**30-15s-22w**

Job Ticket: 17785

DST#: 1

ATTN: Ronald N.Sinclair

Test Start: 2003.04.06 @ 20:28:38

#### 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: 45.00 sec/qt

Cushion Volume:

bbf

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

Gas Cushion Type:

Gas Cushion Pressure:

psig

Resistivity: ohm.m

Salinity: ppm

Filter Cake: inches

#### Recovery Information

Recovery Table

Length ft	Description	Volume bbf
10.00	Drilling Mud	0.049

Total Length: 10.00 ft      Total Volume: 0.049 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

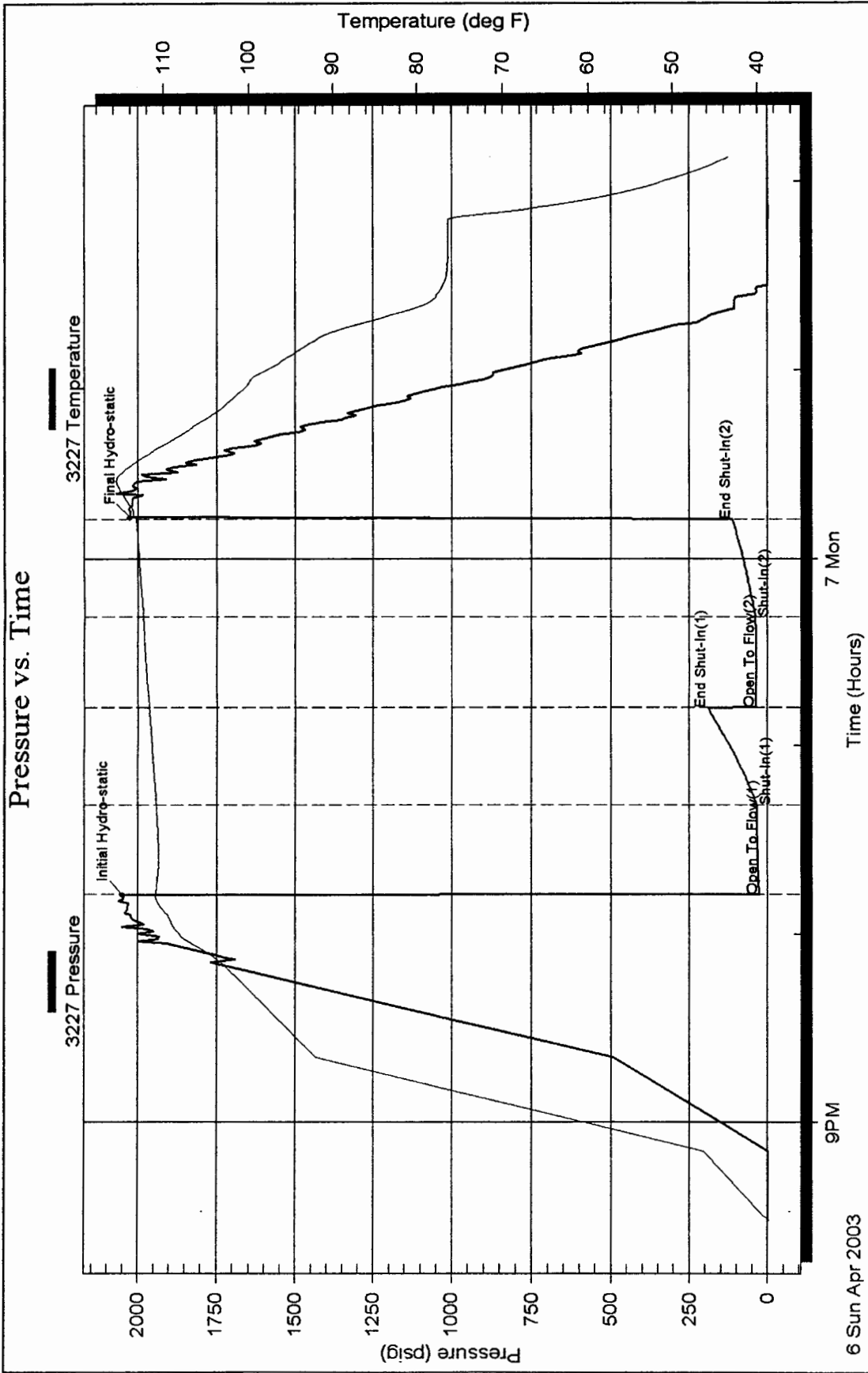
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100