

DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Co**

200 E First St
Suite 307
Wichita Ks 67202

ATTN: Ron Sinclair

29-15s-22w Trego

NLT #1-29

Start Date: 2004.02.23 @ 08:54:39

End Date: 2004.02.23 @ 16:35:38

Job Ticket #: 19834 DST #: 1

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



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TESTING, INC.

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NLT #1-29

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DST#: 1

Test Start: 2004.02.23 @ 08:54:39

GENERAL INFORMATION:

Formation: **Cher Sd**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 11:05:38

Time Test Ended: 16:35:38

Test Type: **Conventional Bottom Hole**

Tester: **Ray Schwager**

Unit No: **28**

Interval: **4203.00 ft (KB) To 4265.00 ft (KB) (TVD)**

Total Depth: **4203.00 ft (KB) (TVD)**

Hole Diameter: **7.85 inches** Hole Condition: **Fair**

Reference Elevations: **2312.00 ft (KB)**

2307.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: **6668**

Inside

Press@RunDepth: **368.30 psig @ 4210.01 ft (KB)**

Start Date: **2004.02.23**

End Date:

2004.02.23

Start Time: **08:54:39**

End Time:

16:35:38

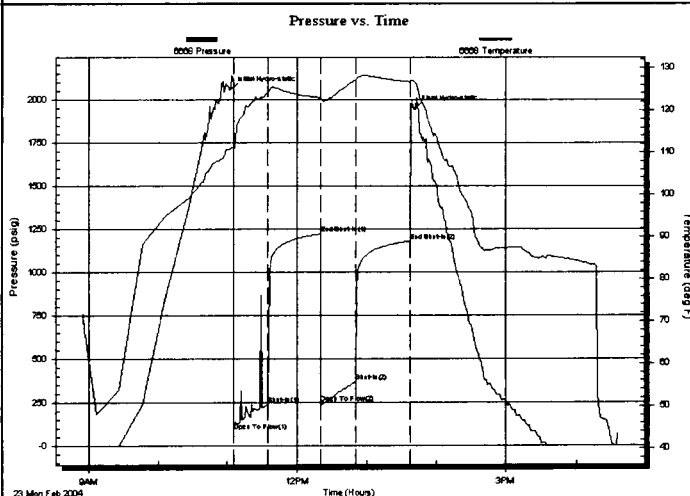
Capacity: **7000.00 psig**

Last Calib.: **2004.02.23**

Time On Btm: **2004.02.23 @ 11:02:38**

Time Off Btm: **2004.02.23 @ 13:41:38**

TEST COMMENT: IFP-wk to strg in 5 min ISIP-surface bl died in 25 min
FFP-wk to strg in 7min FSIP-surface bl died in 15 min
Times 30-45-30-45



PRESSURE SUMMARY

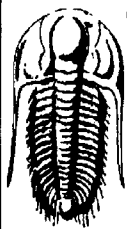
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2056.85	110.84	Initial Hydro-static
3	83.34	110.78	Open To Flow (1)
33	240.11	124.31	Shut-In (1)
78	1220.27	123.02	End Shut-In (1)
78	243.16	122.58	Open To Flow (2)
108	368.30	127.17	Shut-In (2)
155	1177.35	126.69	End Shut-In (2)
159	1944.85	126.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
310.00	SMGO 10%gas 85%oil 10%mud	3.26
124.00	MGO 14%gas 56%oil 30%mud	1.74
511.00	Clean Oil	7.17
0.00	120 GIP	0.00

Gas Rates

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

Grand Mesa Operating Co

NLT #1-29

200 E First St
Suite 307
Wichita Ks 67202
ATTN: Ron Sinclair

29-15s-22w Trego

Job Ticket: 19834

DST#: 1

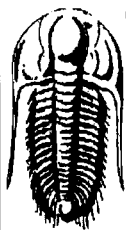
Test Start: 2004.02.23 @ 08:54:39

Tool Information

Drill Pipe:	Length: 4061.00 ft	Diameter: 3.80 inches	Volume: 56.97 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume: 57.56 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	4203.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	62.02 ft			
Tool Length:	90.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			4176.00	
Shut In Tool	5.00			4181.00	
Hydraulic tool	5.00			4186.00	
Jars	5.00			4191.00	
Safety Joint	2.00			4193.00	
Packer	5.00			4198.00	28.00 Bottom Of Top Packer
Packer	5.00			4203.00	
Stubb	1.00			4204.00	
Perforations	5.00			4209.00	
Change Over Sub	1.00			4210.00	
Recorder	0.01	6668	Inside	4210.01	
Blank Spacing	31.00			4241.01	
Change Over Sub	1.00			4242.01	
Recorder	0.01	11085	Outside	4242.02	
Perforations	20.00			4262.02	
Bullnose	3.00			4265.02	62.02 Bottom Packers & Anchor
Total Tool Length:	90.02				



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FLUID SUMMARY

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ATTN: Ron Sinclair

29-15s-22w Trego

Job Ticket: 19834

DST#: 1

Test Start: 2004.02.23 @ 08:54:39

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
310.00	SMGO 10%gas 85%oil 10%mud	3.255
124.00	MGO 14%gas 56%oil 30%mud	1.739
511.00	Clean Oil	7.168
0.00	120 GIP	0.000

Total Length: 945.00 ft

Total Volume: 12.162 bbl

Num Fluid Samples: 0

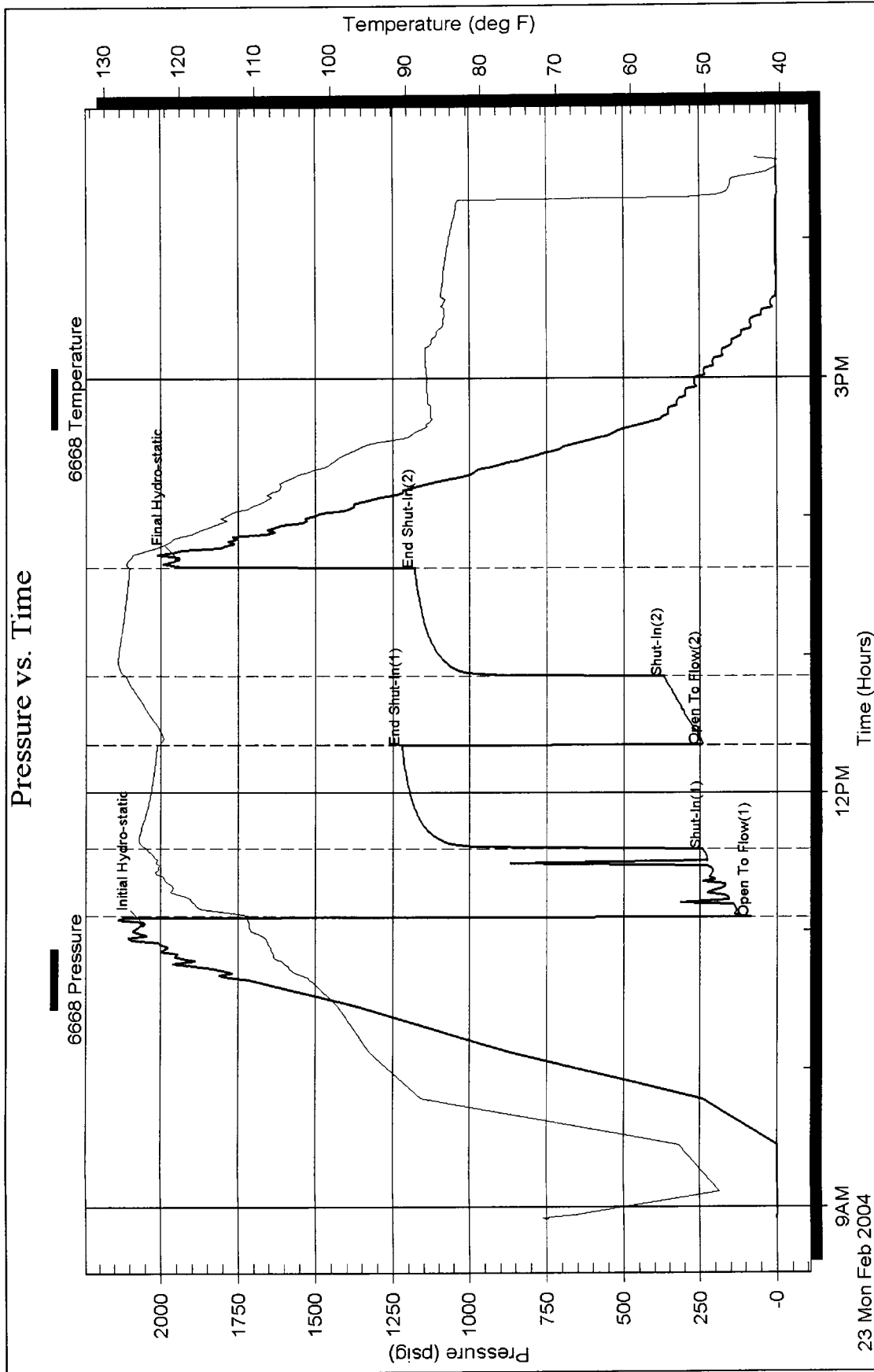
Num Gas Bombs: 0

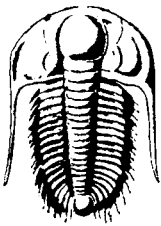
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No. 19834

05/03

Test Ticket

Well Name & No. NLT #1-29 Test No. 1 Date 2-23-04
Company Grand Mesa Operating Company Zone Tested Cher sd
Address 200 E. FIRST ST, SUITE 307 WICHITA, KS 67202 Elevation 2312 KB 2307 GL
Co. Rep / Geo. PAT Deenihan Cont. MURFIN 24 Est. Ft. of Pay - Por. - %
Location: Sec. 29 Twp. 15 Rge. 22 Co. rego State Ks
No. of Copies Reg Distribution Sheet (Y, N) - Turnkey (Y, N) - Evaluation (Y, N) -

Interval Tested 4203-4265 Initial Str Wt./Lbs. 51000 Unseated Str Wt./Lbs. 55000
Anchor Length 62 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 60000
Top Packer Depth 4198 Tool Weight 2500
Bottom Packer Depth 4203 Hole Size 7 7/8" - Rubber Size 6 3/4" -
Total Depth 4265 Wt. Pipe Run - Drill Collar Run 120
Mud Wt. 9.2 LCM 1# Vis. 47 WL 10.4 Drill Pipe Size 4 1/2 XH Ft. Run 4061

Blow Description IFP - WEAK TO STRONG in 5 min
FIF - WEAK TO STRONG in 7 min
ISIP - SURFACE BLOW BACK, died in 25 min
F5IP - SURFACE BLOW BACK, died in 15 min

Recovery - Total Feet 945 GIP 120 Ft. in DC 120 Ft. in DP 825
Rec. 511 Feet of CLEAN OIL %gas - %oil - %water - %mud -
Rec. 124 Feet of M60 14 %gas 56 %oil - %water 30 %mud -
Rec. 310 Feet of SM60 10 %gas 85 %oil - %water 10 %mud -
Rec. - Feet of - %gas - %oil - %water - %mud -
Rec. - Feet of - %gas - %oil - %water - %mud -
BHT 126 °F Gravity 40 °API D @ 60 °F Corrected Gravity 40 °API
RW - @ - °F Chlorides - ppm Recovery - Chlorides 4200 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>2056</u> PSI	<u>6668</u>	<u>800</u>
(B) First Initial Flow Pressure		<u>83</u> PSI	(depth) <u>4210</u>	Elec. Rec. <u>✓</u> <u>150</u>
(C) First Final Flow Pressure		<u>240</u> PSI	Recorder No. <u>11085</u>	Jars <u>✓</u> <u>200</u>
(D) Initial Shut-In Pressure		<u>1220</u> PSI	(depth) <u>4242</u>	Safety Jt. <u>✓</u> <u>50</u>
(E) Second Initial Flow Pressure		<u>243</u> PSI	Recorder No. <u>-</u>	Circ Sub <u>-</u>
(F) Second Final Flow Pressure		<u>368</u> PSI	(depth) <u>-</u>	Sampler <u>-</u>
(G) Final Shut-In Pressure		<u>1177</u> PSI	Initial Opening <u>30</u>	Straddle <u>-</u>
(Q) Final Hydrostatic Mud		<u>1944</u> PSI	Initial Shut-In <u>45</u>	Ext. Packer <u>-</u>
			Final Flow <u>30</u>	Shale Packer <u>-</u>
			Final Shut-In <u>45</u>	Mileage <u>✓</u> <u>94 RT</u> <u>79.90</u>
			T-On Location <u>0815</u>	Sub Total: <u>1279.90</u>
			T-Started <u>0854</u>	Std. By <u>-</u>
			T-Open <u>1110</u>	Other <u>-</u>
			T-Pulled <u>1340</u>	Total: <u>-</u>
			T-Out <u>1635</u>	

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Approved By Patric Deenihan

Our Representative RAY Schwager Thank You

CHART PAGE

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

