



DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Co**

200 E 1st St Ste 307
Wichita KS 67202

ATTN: Lary Friend

18-19-23-Ness-Ks

Kerr-Rorhe # 1-18

Start Date: 2006.01.27 @ 01:25:40

End Date: 2006.01.27 @ 09:02:10

Job Ticket #: 24422 DST #: 1

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



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DRILL STEM TEST REPORT

Grand Mesa Operating Co

Kerr-Rorhe # 1-18

200 E 1st St Ste 307
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ATTN: Larry Friend

Job Ticket: 24422

DST#: 1

Test Start: 2006.01.27 @ 01:25:40

GENERAL INFORMATION:

Formation: **Cher Sd**

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

Time Tool Opened: 03:20:10

Time Test Ended: 09:02:10

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: **4222.00 ft (KB) To 4267.00 ft (KB) (TVD)**

Total Depth: 4267.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2214.00 ft (KB)

2209.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6672 Inside

Press@RunDepth: 287.10 psig @ 4223.00 ft (KB)

Start Date: 2006.01.27

End Date:

2006.01.27

Start Time: 01:25:41

End Time:

09:02:10

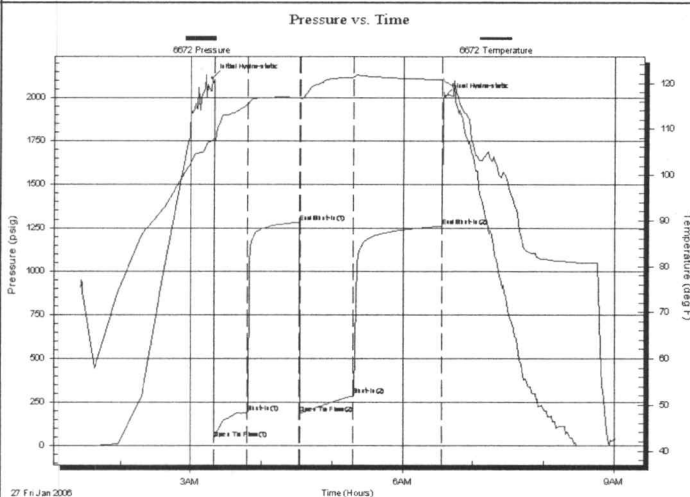
Capacity: 7000.00 psig

Last Calib.: 2006.01.27

Time On Btm: 2006.01.27 @ 03:18:10

Time Off Btm: 2006.01.27 @ 06:35:40

TEST COMMENT: IF-Weak building to strong B-B in 19 min
FF-Weak building to strong B-B in 20 min
Times-30-45-45-75



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2114.92	107.50	Initial Hydro-static
2	39.34	107.43	Open To Flow (1)
30	188.61	115.43	Shut-In(1)
74	1282.15	116.79	End Shut-In(1)
75	185.45	116.48	Open To Flow (2)
120	287.10	121.29	Shut-In(2)
195	1259.43	120.77	End Shut-In(2)
198	2009.56	120.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	Mdy Wtr Rw .15 @ 80 = 40000ppm	0.61
125.00	MCO 70%o 30%m	0.63
248.00	CGsyO 10%g 90%o	3.48
62.00	HOCM 40%o 60%m	0.87
130.00	OCM 30%o 70%m	1.82
0.00	125 GIP	0.00

Gas Rates

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



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TOOL DIAGRAM

Grand Mesa Operating Co

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18-19-23-Ness-Ks

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DST#: 1

ATTN: Larry Friend

Test Start: 2006.01.27 @ 01:25:40

Tool Information

Drill Pipe:	Length: 3976.00 ft	Diameter: 3.80 inches	Volume: 55.77 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: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 56.99 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4222.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	74.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4194.00	
Shut In Tool	5.00			4199.00	
Hydraulic tool	5.00			4204.00	
Jars	5.00			4209.00	
Safety Joint	3.00			4212.00	
Packer	5.00			4217.00	29.00 Bottom Of Top Packer
Packer	5.00			4222.00	
Stubb	1.00			4223.00	
Recorder	0.00	6672	Inside	4223.00	
Perforations	41.00			4264.00	
Recorder	0.00	13254	Outside	4264.00	
Bullnose	3.00			4267.00	45.00 Bottom Packers & Anchor

Total Tool Length: 74.00



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FLUID SUMMARY

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Wichita KS 67202

18-19-23-Ness-Ks

Job Ticket: 24422

DST#: 1

ATTN: Larry Friend

Test Start: 2006.01.27 @ 01:25:40

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 34 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 40000 ppm
Viscosity: 47.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.79 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 4000.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	Mdy Wtr Rw .15 @ 80 = 40000ppm	0.615
125.00	MCO 70%o 30%m	0.633
248.00	CGsyO 10%g 90%o	3.479
62.00	HOCM 40%o 60%m	0.870
130.00	OCM 30%o 70%m	1.824
0.00	125 GIP	0.000

Total Length: 690.00 ft Total Volume: 7.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6672

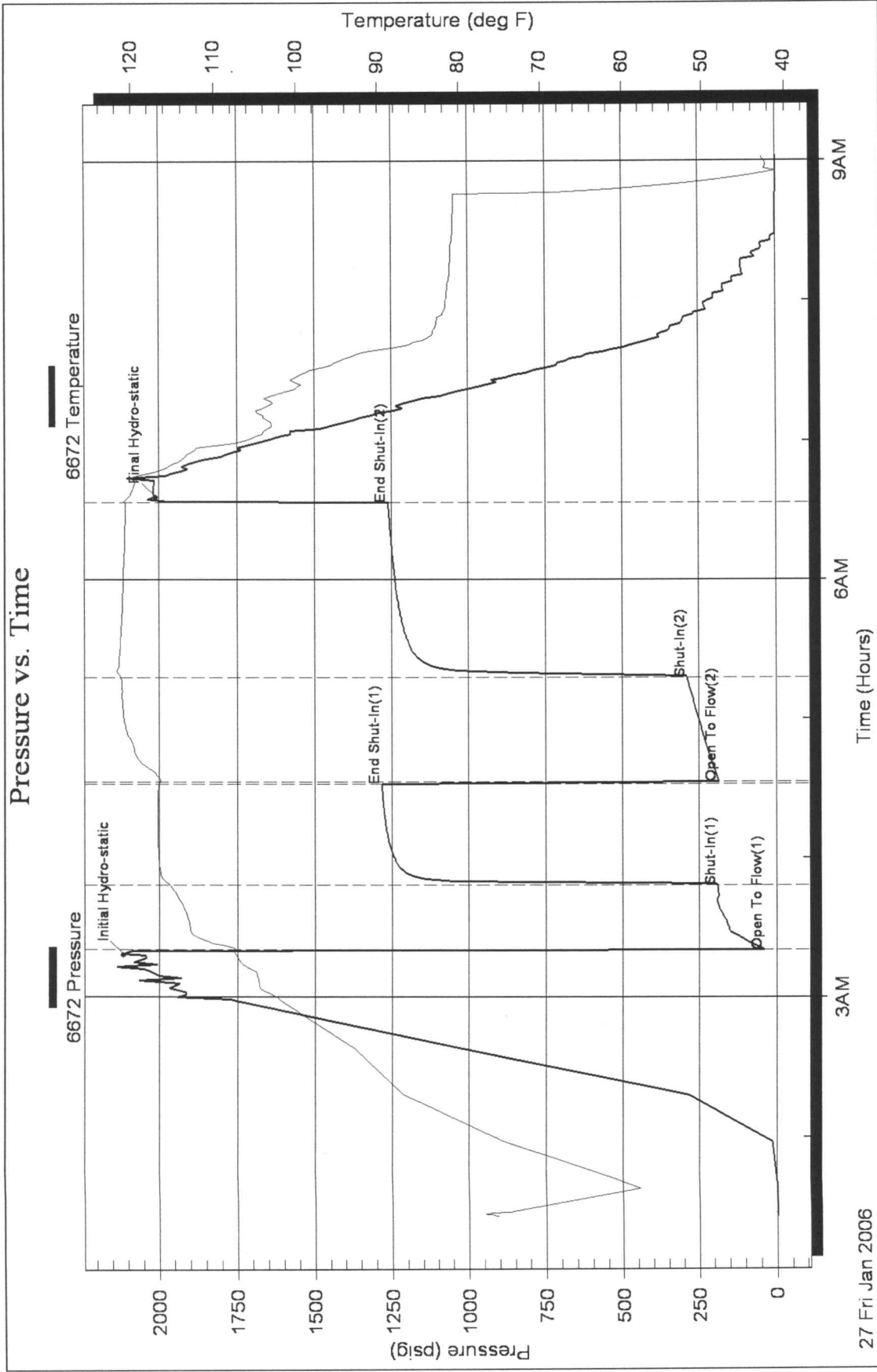
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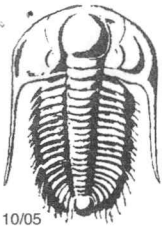
Grand Mesa Operating Co

18-19-23-Ness-Ks

DST Test Number: 1

Pressure vs. Time





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No. 24422

8262

Test Ticket

Well Name & No. Kerr-Rothe #1-18 Test No. 1 Date 1-27-06
 Company Grand Mesa Operating Co. Zone Tested Cher Sd
 Address 200 E. 1st ST. Ste 307, Wichita, Ks. 67202 Elevation 2214 KB 2209 GL
 Co. Rep / Geo. Wes Hansen Rig Mallard
 Location: Sec. 18 Twp. 19 Rge. 23 Co. Ness State Ks
 Comment: _____ Release date / time: _____

Interval Tested 4222 — 4267 Initial Str Wt./Lbs. 19,000 Unseated Str Wt./Lbs. 54,000
 Anchor Length 45' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 60,000
 Top Packer Depth 4217 Tool Weight 1800
 Bottom Packer Depth 4222 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 4267 Wt. Pipe Run _____ Drill Collar Run 248
 Mud Wt. 9.1 LCM _____ Vis. 47 WL 8.8 Drill Pipe Size 4.5XH Ft. Run 3976
 Blow Description I.F. Weak-building to strong B-B in 19 min.

I.F. Weak-building to strong B-B in 20 min.

Recovery - Total Feet 690 GIP 125' Ft. in DC 248 Ft. in DP 442
 Rec. 130 Feet of OCM %gas 30%oil _____ %water 70 %mud _____
 Rec. 62 Feet of HOCM %gas 40%oil _____ %water 60 %mud _____
 Rec. 248 Feet of CGSYO 10%gas 90%oil _____ %water _____ %mud _____
 Rec. 125' Feet of MCO %gas 70%oil _____ %water 30 %mud _____
 Rec. 125' Feet of MDY WTR %gas _____ %oil _____ %water _____ %mud _____
 BHT 120 °F Gravity _____ °API D @ _____ °F Corrected Gravity 34 °API
 RW 0.15 @ 85' °F Chlorides 40,000 ppm Recovery _____ Chlorides 4,000 ppm System

(A) Initial Hydrostatic Mud	AK-1	Alpine	2114	PSI	Recorder No.	6672	Test	1100
(B) First Initial Flow Pressure			39	PSI	(depth)	4223	Jars	X 200
(C) First Final Flow Pressure			188	PSI	Recorder No.	13254	Safety Jt.	X 50
(D) Initial Shut-In Pressure			1282	PSI	(depth)	4264	Circ Sub	_____
(E) Second Initial Flow Pressure			185'	PSI	Recorder No.	_____	Sampler	_____
(F) Second Final Flow Pressure			287	PSI	(depth)	_____	Straddle	_____
(G) Final Shut-In Pressure			1259	PSI	Initial Opening	30	Ext. Packer	_____
(Q) Final Hydrostatic Mud			2009	PSI	Initial Shut-In	45'	Shale Packer	_____
					Final Flow	45'	Ruined Packer	_____
					Final Shut-In	25'	Mileage	130 130
					T-On Location	00:30	Sub Total:	1480
					T-Started	01:25	Std. By	2hr 25
					T-Open	03:20	Acc. Chg:	_____
					T-Pulled	06:20	Other:	_____
					T-Out	09:02	Total:	\$ 1505

Approved By Wesley Hansen
 Our Representative Don Bangle

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CHART PAGE

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

