



DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Company**

1700 N Waterfront Parkway Bldg 600
Wichita Kansas S 67206 + 5514

ATTN: Steve Carl

33-13-31 Gove

Klause Campbell #1-33

Start Date: 2011.08.22 @ 13:05:00

End Date: 2011.08.22 @ 19:33:30

Job Ticket #: 16524 DST #: 1

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2011.08.23 @ 11:35:52

Grand Mesa Operating Company

Klause Campbell #1-33

33-13-31 Gove

DST # 1

Johnson

2011.08.22



DRILL STEM TEST REPORT

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33-13-31 Gove

Job Ticket: 16524

DST#: 1

ATTN: Steve Carl

Test Start: 2011.08.22 @ 13:05:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:01:30

Time Test Ended: 19:33:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3320- 85 - Scott Cit

Interval: 4508.00 ft (KB) To 4547.00 ft (KB) (TVD)

Reference Elevations: 2898.00 ft (KB)

Total Depth: 4547.00 ft (KB) (TVD)

2893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8524 Inside

Press @ RunDepth: 1166.34 psia @ 4543.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2011.08.22

End Date: 2011.08.22

Last Calib.: 2011.08.22

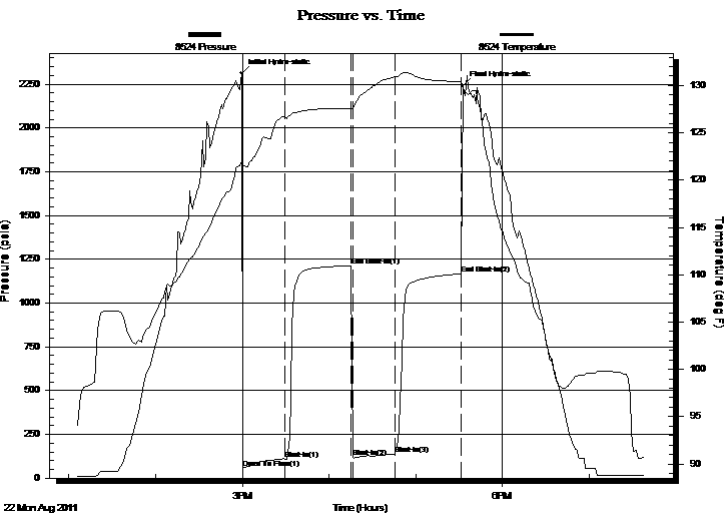
Start Time: 13:06:00

End Time: 19:39:00

Time On Btm: 2011.08.22 @ 14:59:30

Time Off Btm: 2011.08.22 @ 17:32:30

TEST COMMENT: 1st Opening 30 Minutes-Fair blow built to 7 1/2 inches into water
1st Shut-in 45 Minutes-No blow back
2nd Opening 30 Minutes-Weak but building blow built to 1 1/2 inches
2nd Shut-in 45 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2312.28	121.95	Initial Hydro-static
1	53.67	121.55	Open To Flow (1)
30	110.26	126.60	Shut-In(1)
76	1211.95	127.61	End Shut-In(1)
77	117.29	127.51	Shut-In(2)
106	137.93	130.91	Shut-In(3)
152	1166.34	130.39	End Shut-In(2)
153	2239.34	129.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Water and Mud Cut Oil	0.59
0.00	60% Oil 10% Water 30% Mud	0.00
80.00	Water and Mud Cut Oil	1.12
0.00	60% Oil 10% Water 30% Mud	0.00
20.00	Clean Oil	0.28
0.00	60% Oil 10% Water 30% Mud	0.00

Gas Rates

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



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TOOL DIAGRAM

Grand Mesa Operating Company
 1700 N Waterfront Parkway Bldg 600
 Wichita Kansas S 67206 + 5514
 ATTN: Steve Carl

Klause Campbell #1-33
33-13-31 Gove
 Job Ticket: 16524 **DST#: 1**
 Test Start: 2011.08.22 @ 13:05:00

Tool Information

Drill Pipe:	Length: 4370.00 ft	Diameter: 3.80 inches	Volume: 61.30 bbl	Tool Weight: 1000.00 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: 61.89 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4508.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	39.00 ft			
Tool Length:	67.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
SHut-InTool	5.00		Inside	4485.00	
Hydraulic Tool	5.00			4490.00	
Jars	6.00			4496.00	
Safety Joint	2.00			4498.00	
Packer	5.00			4503.00	28.00 Bottom Of Top Packer
Packer	5.00			4508.00	
Anchor	34.00			4542.00	
Recorder	1.00	8524	Inside	4543.00	
Recorder	1.00	8419	Outside	4544.00	
Bullnose	3.00			4547.00	39.00 Bottom Packers & Anchor
Total Tool Length:	67.00				



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FLUID SUMMARY

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 Job Ticket: 16524 **DST#: 1**
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Mud and Cushion Information

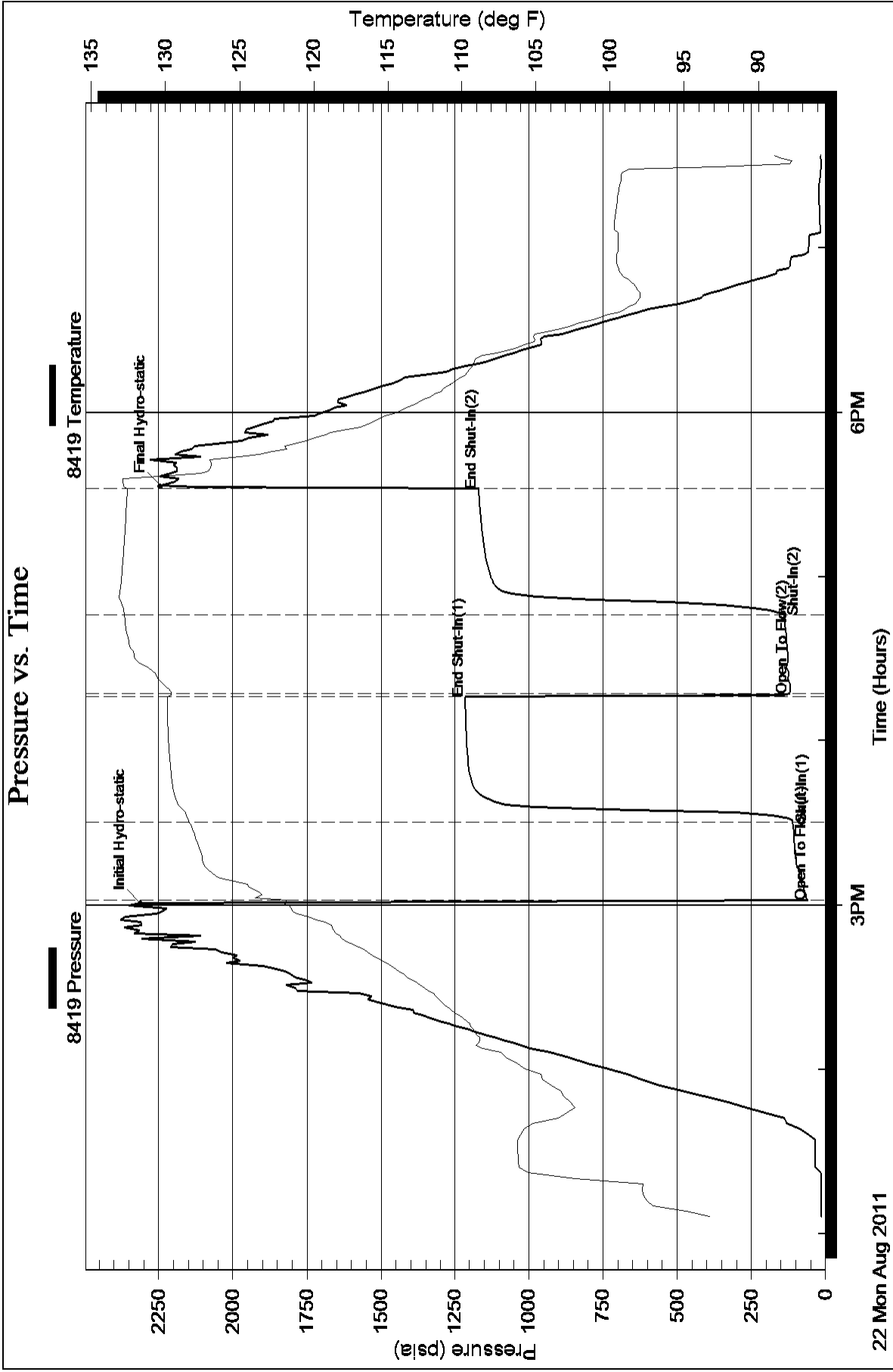
Mud Type: Invert	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.76 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 3000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	Water and Mud Cut Oil	0.590
0.00	60% Oil 10% Water 30% Mud	0.000
80.00	Water and Mud Cut Oil	1.122
0.00	60%Oil 10% Water 30% Mud	0.000
20.00	Clean Oil	0.281
0.00	60%Oil 10% Water 30% Mud	0.000
0.00	180 Gas in the pipe	0.000
0.00	Gravity 43 Corrected	0.000
0.00	Chlorides 30,000	0.000
0.00	Resisitvity .1 @ 78 Degrees	0.000

Total Length: 220.00 ft Total Volume: 1.993 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:



Pressure vs. Time

