



DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating**

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514

ATTN: Steve Stribling

4/16S/33W/Scott

Dirks 1-4

Start Date: 2011.06.21 @ 19:31:00

End Date: 2011.06.22 @ 00:57:30

Job Ticket #: 16591 DST #: 8

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

Printed: 2011.06.21 @ 23:18:43

Grand Mesa Operating
Dirks 1-4
4/16S/33W/Scott
DST # 8
Johnson
2011.06.21



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkw ay
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4/16S/33W/Scott

Job Ticket: 16591

DST#: 8

Test Start: 2011.06.21 @ 19:31:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:03:30

Time Test Ended: 00:57:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/28

Interval: **4613.00 ft (KB) To 4660.00 ft (KB) (TVD)**

Reference Elevations: 3068.00 ft (KB)

Total Depth: 4660.00 ft (KB) (TVD)

3063.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: **6749** Inside

Press @ Run Depth: 64.74 psig @ 4656.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.21

End Date: 2011.06.22

Last Calib.: 2011.06.21

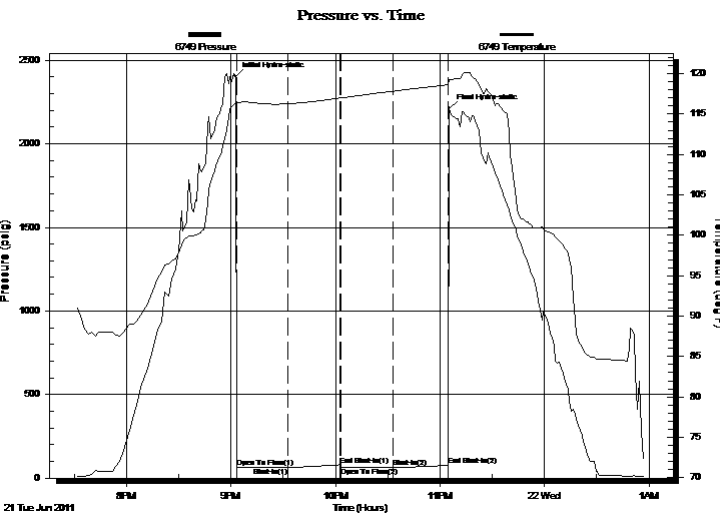
Start Time: 19:31:00

End Time: 00:57:30

Time On Btm: 2011.06.21 @ 21:02:30

Time Off Btm: 2011.06.21 @ 23:05:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Blow just below surface
 1ST Shut In 30 Minutes/No blow back
 2ND Open 30 Minutes/No blow
 2ND Shut In 30 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2404.66	116.46	Initial Hydro-static
1	64.99	116.25	Open To Flow (1)
30	65.05	116.25	Shut-In(1)
60	80.07	116.97	End Shut-In(1)
61	62.18	116.97	Open To Flow (2)
91	64.74	117.82	Shut-In(2)
122	76.60	118.61	End Shut-In(2)
124	2210.86	119.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud 100%	0.07

Gas Rates

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



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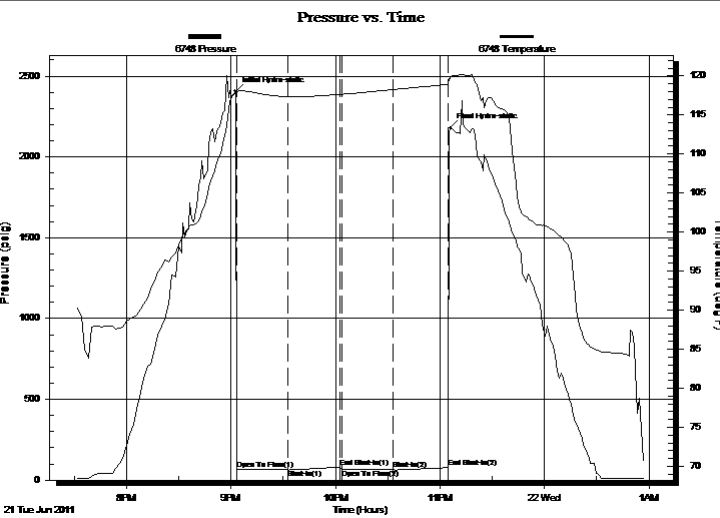
Dirks 1-4
4/16S/33W/Scott
 Job Ticket: 16591 **DST#: 8**
 Test Start: 2011.06.21 @ 19:31:00

GENERAL INFORMATION:

Formation: **Johnson**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 21:03:30
 Time Test Ended: 00:57:30
 Interval: **4613.00 ft (KB) To 4660.00 ft (KB) (TVD)**
 Total Depth: 4660.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney
 Unit No: 3325 Scott City/28
 Reference Elevations: 3068.00 ft (KB)
 3063.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6748 Outside
 Press @ Run Depth: 77.47 psig @ 4657.00 ft (KB) Capacity: 5000.00 psig
 Start Date: 2011.06.21 End Date: 2011.06.22 Last Calib.: 2011.06.21
 Start Time: 19:31:00 End Time: 00:58:00 Time On Btm: 2011.06.21 @ 21:02:30
 Time Off Btm: 2011.06.21 @ 23:06:00

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Blow just below surface
 1ST Shut In 30 Minutes/No blow back
 2ND Open 30 Minutes/No blow
 2ND Shut In 30 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2405.29	117.73	Initial Hydro-static
1	65.36	117.82	Open To Flow (1)
30	65.78	117.35	Shut-In(1)
60	80.88	117.64	End Shut-In(1)
61	64.38	117.65	Open To Flow (2)
91	65.26	118.25	Shut-In(2)
122	77.47	118.91	End Shut-In(2)
124	2178.27	119.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud 100%	0.07

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
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 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16591

DST#: 8

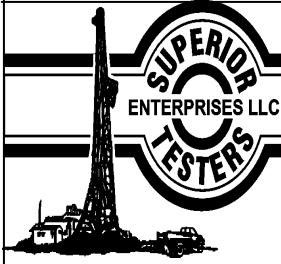
Test Start: 2011.06.21 @ 19:31:00

Tool Information

Drill Pipe:	Length: 4490.00 ft	Diameter: 3.88 inches	Volume: 65.66 bbl	Tool Weight:	2000.00 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:	70000.00 lb
			<u>Total Volume: 66.25 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.75 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4613.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	47.00 ft				
Tool Length:	75.75 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-in tool	5.00			4589.25	
Hydraulic tool	5.00			4594.25	
Change over sub	0.75			4595.00	
Jars	6.00			4601.00	
Safety Joint	2.00			4603.00	
Packer	5.00			4608.00	28.75 Bottom Of Top Packer
Packer	5.00			4613.00	
Anchor	0.00			4613.00	
change over sub	0.75			4613.75	
drill pipe	31.50			4645.25	
change over sub	0.75			4646.00	
anchor	9.00			4655.00	
Recorder	1.00	6749	Inside	4656.00	
Recorder	1.00	6748	Outside	4657.00	
bull plug	3.00			4660.00	47.00 Bottom Packers & Anchor

Total Tool Length: 75.75



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FLUID SUMMARY

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Job Ticket: 16591

DST#: 8

Test Start: 2011.06.21 @ 19:31:00

Mud and Cushion Information

Mud Type: Gel Chem
 Mud Weight: 9.00 lb/gal
 Viscosity: 57.00 sec/qt
 Water Loss: 10.00 in³
 Resistivity: ohm.m
 Salinity: 7500.00 ppm
 Filter Cake: 1.00 inches

Cushion Type:
 Cushion Length: ft
 Cushion Volume: bbl
 Gas Cushion Type:
 Gas Cushion Pressure: psig

Oil API: deg API
 Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Mud 100%	0.074

Total Length: 15.00 ft Total Volume: 0.074 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 6749

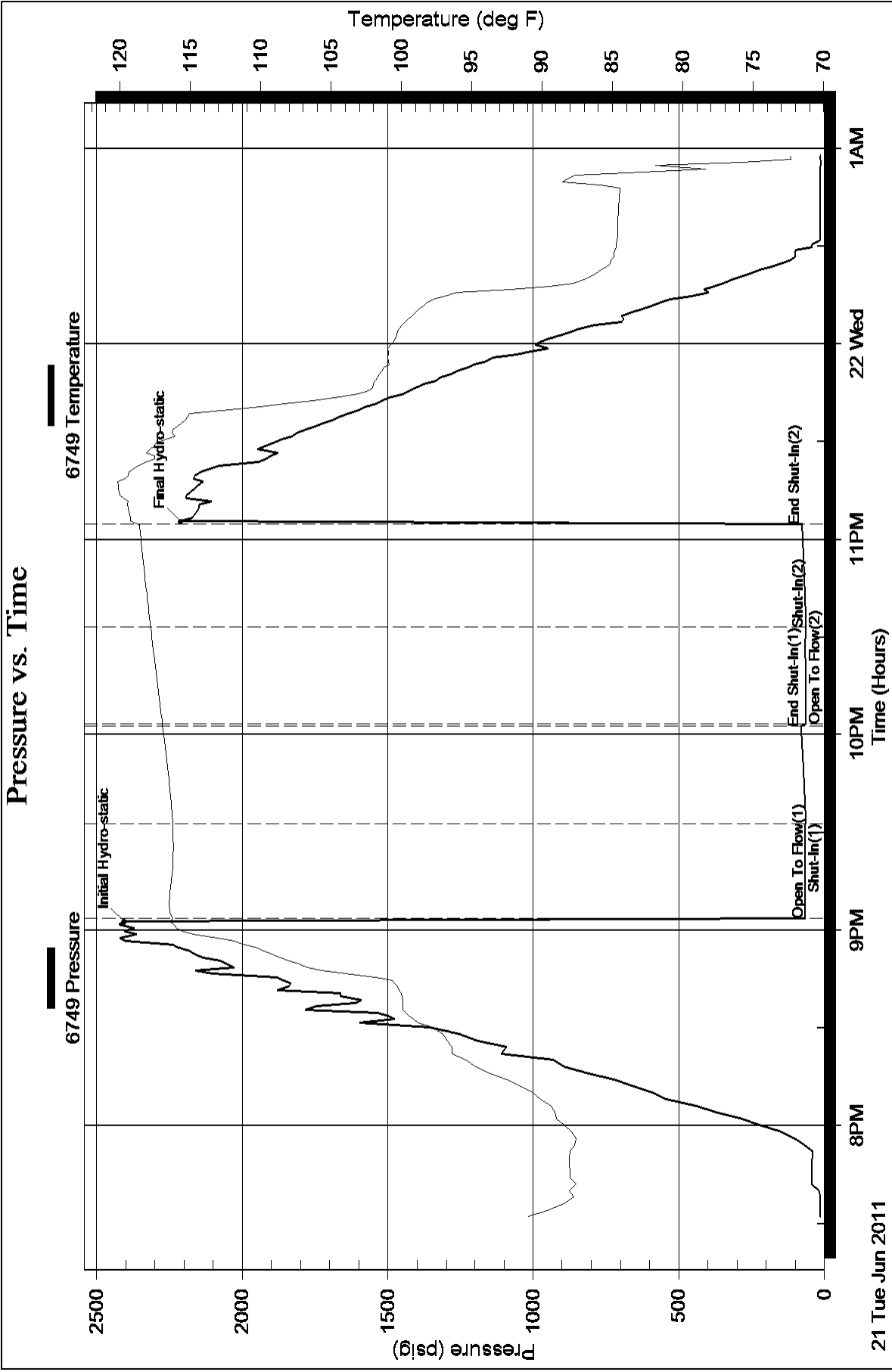
Inside

Grand Mesa Operating

4/16S/33W/Scott

DST Test Number: 8

Pressure vs. Time



Ref. No: 16591

Superior Testers Enterprises LLC

Printed: 2011.06.21 @ 23:18:45

Pressure vs. Time

