



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 @ 13:15:00

End Date: 2011.06.21 @ 18:32:30

Job Ticket #: 16590 DST #: 7

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

Printed: 2011.06.21 @ 16:55:18

Grand Mesa Operating
Dirks 1-4
4/16S/33W/Scott
DST # 7
Johnson
2011.06.21



DRILL STEM TEST REPORT

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16590

DST#: 7

Test Start: 2011.06.21 @ 13:15:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:23:30

Time Test Ended: 18:32:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/28

Interval: 4612.00 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 #: 6748 Outside

Press @ Run Depth: 53.90 psig @ 4657.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.21

End Date:

2011.06.21

Last Calib.:

2011.06.21

Start Time: 13:15:00

End Time:

18:32:30

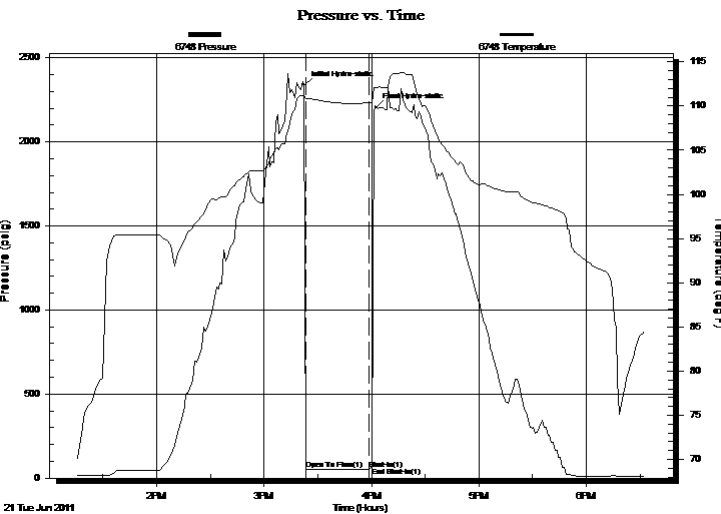
Time On Btm:

2011.06.21 @ 15:22:30

Time Off Btm:

2011.06.21 @ 16:02:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Surface blow/Blow did not build
 1ST Shut In Packer seat failure on shut in



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2335.00	111.21	Initial Hydro-static
1	53.40	110.84	Open To Flow (1)
36	53.90	110.37	Shut-In(1)
38	64.87	110.41	End Shut-In(1)
40	2206.46	112.04	Final Hydro-static

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
840.00	Mud 100%	11.12

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



DRILL STEM TEST REPORT

Grand Mesa Operating
 1700 N Waterfront Parkway
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

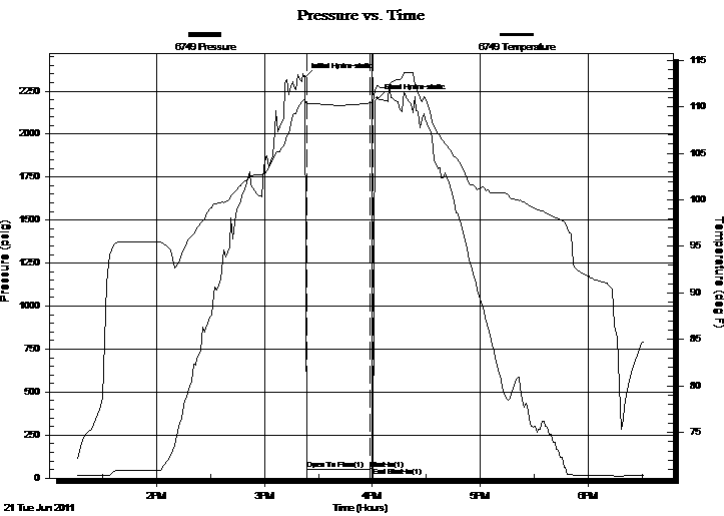
Dirks 1-4
4/16S/33W/Scott
 Job Ticket: 16590 **DST#: 7**
 Test Start: 2011.06.21 @ 13:15:00

GENERAL INFORMATION:

Formation: **Johnson**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:23:30
 Time Test Ended: 18:32:30
 Interval: **4612.00 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 #: 6749 Inside
 Press @ Run Depth: 63.99 psig @ 4656.00 ft (KB) Capacity: 5000.00 psig
 Start Date: 2011.06.21 End Date: 2011.06.21 Last Calib.: 2011.06.21
 Start Time: 13:15:00 End Time: 18:32:00 Time On Btm: 2011.06.21 @ 15:22:30
 Time Off Btm: 2011.06.21 @ 16:03:00

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Surface blow/Blow did not build
 1ST Shut In Packer seat failure on shut in



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2330.73	110.78	Initial Hydro-static
1	52.83	110.38	Open To Flow (1)
36	53.15	110.41	Shut-In(1)
38	63.99	110.47	End Shut-In(1)
41	2208.81	112.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
840.00	Mud 100%	11.12

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
 Building 600
 Wichita, Kansas 67206+5514
 ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16590

DST#: 7

Test Start: 2011.06.21 @ 13:15:00

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:	26.75 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4612.00 ft			Final	64000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	48.00 ft				
Tool Length:	76.75 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			4588.25	
Hydraulic tool	5.00			4593.25	
Change over sub	0.75			4594.00	
Jars	6.00			4600.00	
Safety Joint	2.00			4602.00	
Packer	5.00			4607.00	28.75 Bottom Of Top Packer
Packer	5.00			4612.00	
Anchor	0.00			4612.00	
change over sub	0.75			4612.75	
drill pipe	31.50			4644.25	
change over sub	0.75			4645.00	
anchor	10.00			4655.00	
Recorder	1.00	6749	Inside	4656.00	
Recorder	1.00	6748	Outside	4657.00	
bull plug	3.00			4660.00	48.00 Bottom Packers & Anchor

Total Tool Length: 76.75



DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating

Dirks 1-4

1700 N Waterfront Parkway
Building 600
Wichita, Kansas 67206+5514
ATTN: Steve Stribling

4/16S/33W/Scott

Job Ticket: 16590

DST#: 7

Test Start: 2011.06.21 @ 13:15:00

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:

Water Salinity: ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
840.00	Mud 100%	11.120

Total Length: 840.00 ft Total Volume: 11.120 bbl

Num Fluid Samples: 0

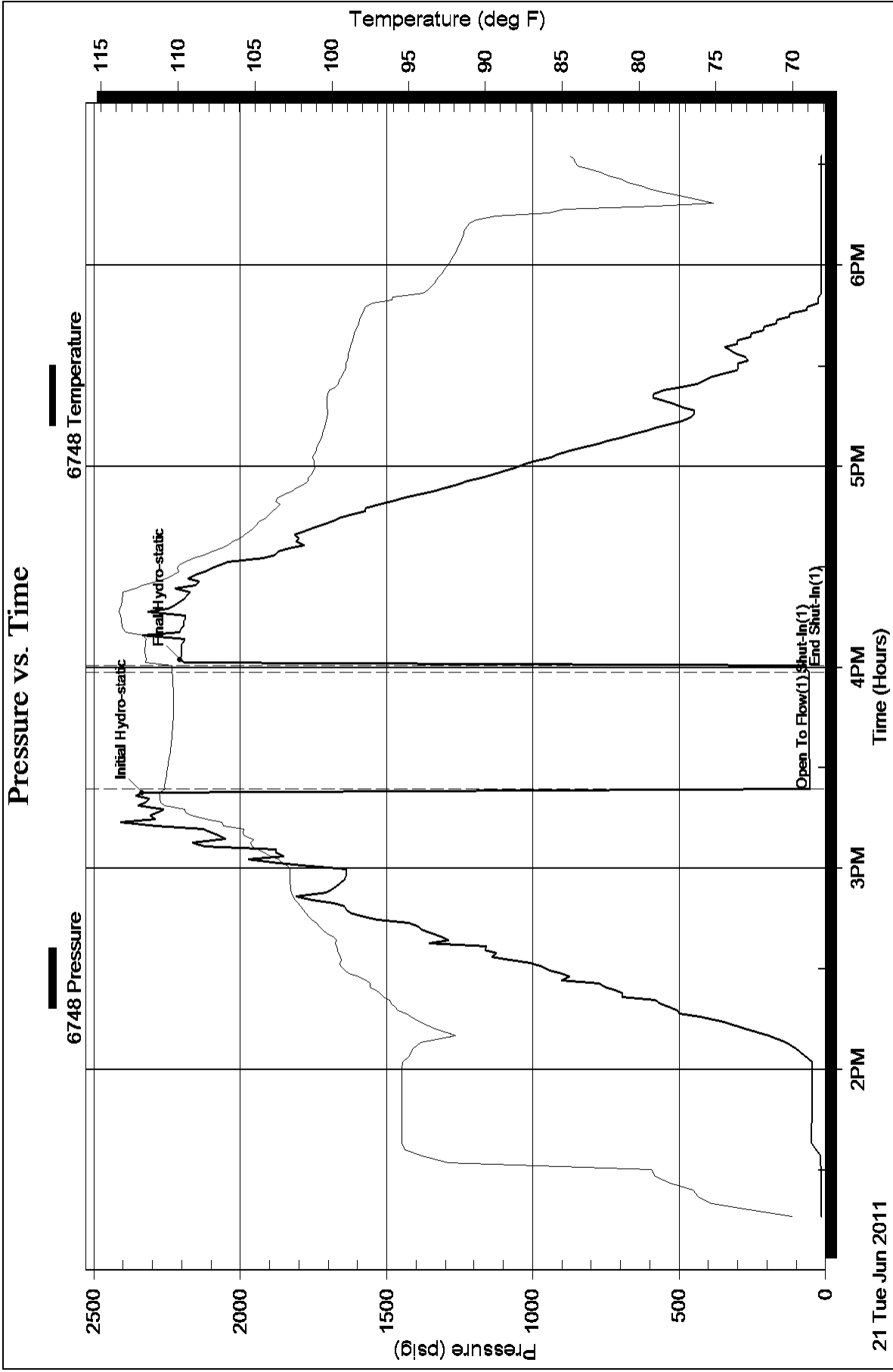
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Serial #: 6749

Inside

Grand Mesa Operating

4/16S/33W/Scott

DST Test Number: 7

Pressure vs. Time

