



DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating**

1700 North Waterfront Parkway Building 600
Wichita Kansas 67206

ATTN: Steve Carl

9/14S/31W Gove Co.

Hund # 2-9

Start Date: 2011.05.07 @ 00:00:00

End Date: 2011.05.07 @ 00:00:00

Job Ticket #: 16529 DST #: 1

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

Printed: 2011.05.07 @ 22:28:41

Grand Mesa Operating

Hund # 2-9

9/14S/31W Gove Co.

DST # 1

Lansing "C-D" Zone

2011.05.07



DRILL STEM TEST REPORT

Grand Mesa Operating

Hund # 2-9

1700 North Waterfront Parkway Building 600
Wichita Kansas 67206

9/14S/31W Gove Co.

Job Ticket: 16529

DST#: 1

ATTN: Steve Carl

Test Start: 2011.05.07 @ 00:00:00

GENERAL INFORMATION:

Formation: **Lansing " C-D" Zone**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Dylan E Ellis

Unit No: 3345/Great Bend/356

Interval: 4012.00 ft (KB) To 4057.00 ft (KB) (TVD)

Reference Elevations: 2936.00 ft (KB)

Total Depth: 4057.00 ft (KB) (TVD)

2931.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8400 Outside

Press @ Run Depth: 942.79 psia @ 4053.84 ft (KB)

Capacity: 5000.00 psia

Start Date: 2011.05.07

End Date: 2011.05.07

Last Calib.: 2011.05.07

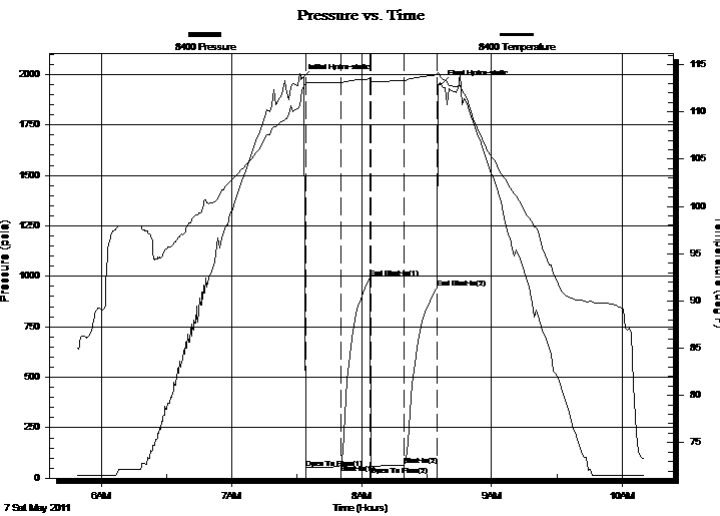
Start Time: 05:49:00

End Time: 10:10:30

Time On Btm: 2011.05.07 @ 07:32:30

Time Off Btm: 2011.05.07 @ 08:36:30

TEST COMMENT: 1ST Opening 15 Minutes very weak surface blow /blow blew just under surface
 1ST Shut-In 15 Minutes no blow blow back
 2ND Opening 15 Minutes opened tool dead/blow blew at surface after 10 minutes/didn't build
 2ND Shut-In 15 Minutes n blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1977.64	112.28	Initial Hydro-static
2	50.92	113.04	Open To Flow (1)
18	65.96	113.12	Shut-In(1)
32	989.85	113.51	End Shut-In(1)
32	59.16	113.25	Open To Flow (2)
47	63.82	113.35	Shut-In(2)
63	942.79	113.95	End Shut-In(2)
64	1950.52	113.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Lightly Oil Spotted Mud 100%/Mud	0.02

Gas Rates

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



DRILL STEM TEST REPORT

Grand Mesa Operating

Hund # 2-9

1700 North Waterfront Parkway Building 600
Wichita Kansas 67206

9/14S/31W Gove Co.

Job Ticket: 16529

DST#: 1

ATTN: Steve Carl

Test Start: 2011.05.07 @ 00:00:00

GENERAL INFORMATION:

Formation: **Lansing " C-D" Zone**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Dylan E Ellis

Unit No: 3345/Great Bend/356

Interval: 4012.00 ft (KB) To 4057.00 ft (KB) (TVD)

Reference Elevations: 2936.00 ft (KB)

Total Depth: 4057.00 ft (KB) (TVD)

2931.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8405

Inside

Press @ Run Depth: 938.15 psia @ 4052.84 ft (KB)

Capacity: 5000.00 psia

Start Date: 2011.05.07

End Date:

2011.05.07

Last Calib.:

2011.05.07

Start Time: 05:49:00

End Time:

10:09:30

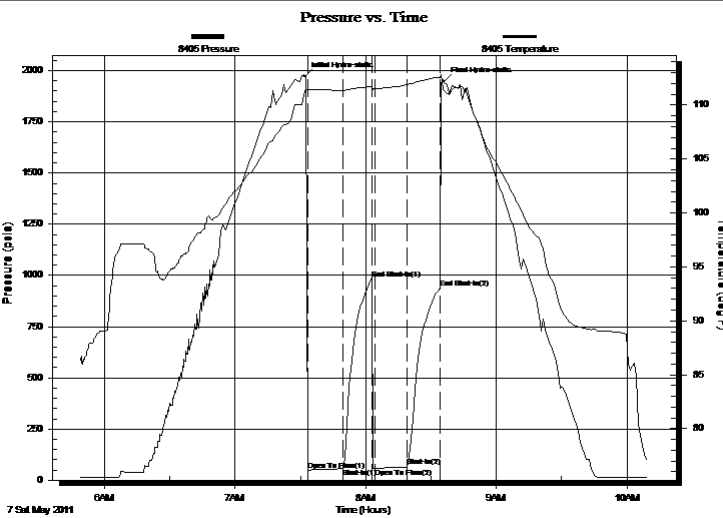
Time On Btm:

2011.05.07 @ 07:32:00

Time Off Btm:

2011.05.07 @ 08:36:00

TEST COMMENT: 1ST Opening 15 Minutes very weak surface blow /blow blew just under surface
 1ST Shut-In 15 Minutes no blow blow back
 2ND Opening 15 Minutes opened tool dead/blow blew at surface after 10 minutes/didn't build
 2ND Shut-In 15 Minutes n blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1972.64	111.26	Initial Hydro-static
2	49.30	111.37	Open To Flow (1)
18	59.18	111.34	Shut-In(1)
31	984.96	111.73	End Shut-In(1)
32	57.83	111.55	Open To Flow (2)
47	67.53	111.87	Shut-In(2)
62	938.15	112.60	End Shut-In(2)
64	1946.77	111.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Lightly Oil Spotted Mud 100%/Mud	0.02

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating

Hund # 2-9

1700 North Waterfront Parkway Building 600
Wichita Kansas 67206

9/14S/31W Gove Co.

Job Ticket: 16529

DST#: 1

ATTN: Steve Carl

Test Start: 2011.05.07 @ 00:00:00

Tool Information

Drill Pipe:	Length: 3876.00 ft	Diameter: 3.80 inches	Volume: 54.37 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: 119.12 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 27000.00 lb
			<u>Total Volume: 54.96 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.12 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4012.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.84 ft			
Tool Length:	72.84 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			3989.00	
Hydraulic Tool	5.00			3994.00	
Jars	6.00			4000.00	
Safety Joint	2.00			4002.00	
Packer	5.00			4007.00	28.00 Bottom Of Top Packer
Packer	5.00			4012.00	
Perforations	5.00			4017.00	
Change Over Sub	0.75			4017.75	
Drill Pipe	31.34			4049.09	
Change Over Sub	0.75			4049.84	
Perforations	2.00			4051.84	
Recorder	1.00	8405	Inside	4052.84	
Recorder	1.00	8400	Outside	4053.84	
Bull Plug	3.00			4056.84	44.84 Bottom Packers & Anchor

Total Tool Length: 72.84



DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating

Hund # 2-9

1700 North Waterfront Parkway Building 600
Wichita Kansas 67206

9/14S/31W Gove Co.

Job Ticket: 16529

DST#: 1

ATTN: Steve Carl

Test Start: 2011.05.07 @ 00:00:00

Mud and Cushion Information

Mud Type: Gel Chem

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:

bbbl

Water Loss: 6.40 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 3800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
5.00	Lightly Oil Spotted Mud 100%/Mud	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

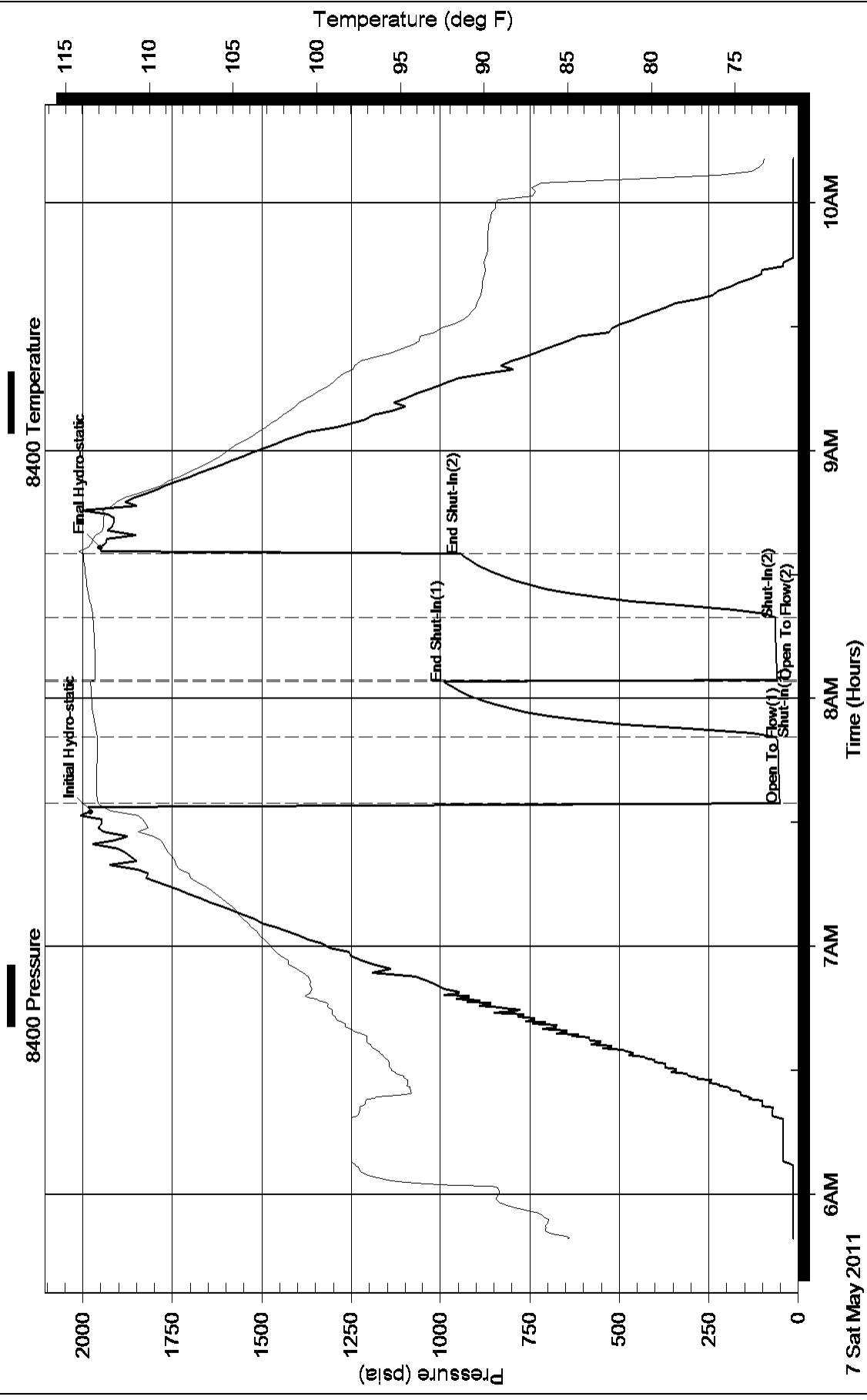
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time

