



## DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Company**

1700 N Waterfront PKWY Bldg 600 Wichita  
KS 67206+5514

ATTN: Kent Matson

**32-13s-31w Gove**

**Hess #6-32**

Start Date: 2011.09.01 @ 08:28:00

End Date: 2011.09.01 @ 14:12:00

Job Ticket #: 18628                      DST #: 3

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

Printed: 2011.09.01 @ 15:55:38

Grand Mesa Operating Company

Hess #6-32

32-13s-31w Gove

DST # 3

Lansing " L zone "

2011.09.01



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**32-13s-31w Gove**

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Test Start: 2011.09.01 @ 08:28:00

## GENERAL INFORMATION:

Formation: **Lansing " L zone"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:12:30

Time Test Ended: 14:12:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3320-GB-70

**Interval: 4275.00 ft (KB) To 4305.00 ft (KB) (TVD)**

Total Depth: 4305.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2943.00 ft (KB)

2938.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8419**

**Inside**

Press @ RunDepth: 76.41 psia @ 4301.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2011.09.01

End Date: 2011.09.01

Last Calib.: 2011.09.01

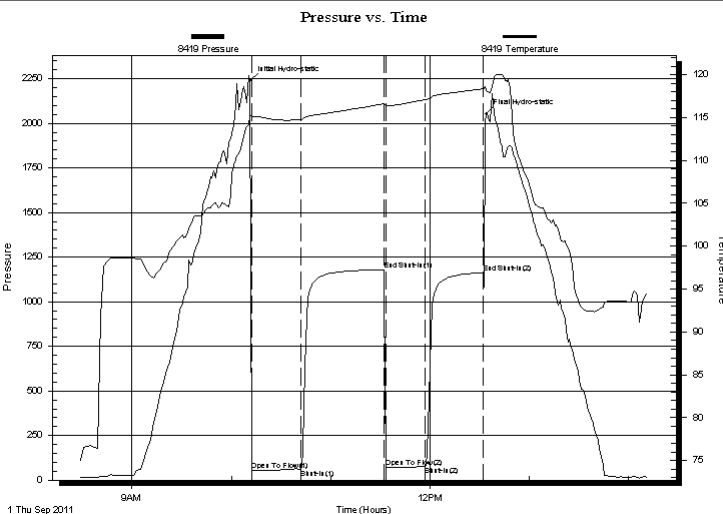
Start Time: 08:29:00

End Time: 14:12:00

Time On Btm: 2011.09.01 @ 10:11:30

Time Off Btm: 2011.09.01 @ 12:34:00

**TEST COMMENT:** 1st Opening 30 Minutes-Very weak surface blow built 1 1/4 into water in 30 minutes  
1st Shut-in 45 Minutes-No blow back  
2nd Opening 30 Minutes-Very weak surface blow did not build  
2nd Shut-in 30 Minutes-No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2239.14	115.20	Initial Hydro-static
1	56.40	115.06	Open To Flow (1)
31	62.65	114.76	Shut-In(1)
81	1180.07	116.59	End Shut-In(1)
82	73.18	116.35	Open To Flow (2)
106	76.41	117.06	Shut-In(2)
141	1162.45	118.32	End Shut-In(2)
143	2051.81	118.20	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud 100%	0.32

## Gas Rates

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



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Reference Elevations: 2943.00 ft (KB)

Total Depth: 4305.00 ft (KB) (TVD)

2938.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8524 Outside**

Press @ RunDepth: 1161.41 psia @ 4302.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2011.09.01

End Date: 2011.09.01

Last Calib.: 2011.09.01

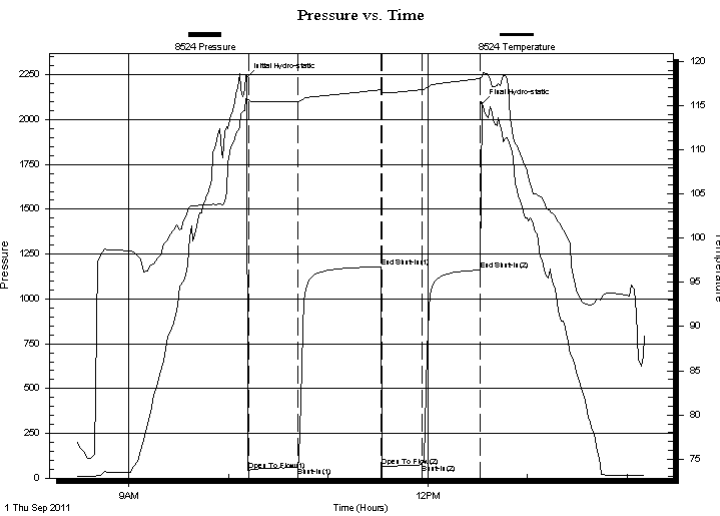
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1st Shut-in 45 Minutes-No blow back  
2nd Opening 30 Minutes-Very weak surface blow did not build  
2nd Shut-in 30 Minutes-No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2235.74	115.88	Initial Hydro-static
1	45.99	115.61	Open To Flow (1)
31	60.71	115.44	Shut-In(1)
81	1178.69	116.76	End Shut-In(1)
82	65.13	116.46	Open To Flow (2)
106	74.44	116.80	Shut-In(2)
141	1161.41	118.03	End Shut-In(2)
142	2090.72	118.31	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud 100%	0.32

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Grand Mesa Operating Company

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## Tool Information

Drill Pipe:	Length: 4147.00 ft	Diameter: 3.80 inches	Volume: 58.17 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: 80000.00 lb
			<u>Total Volume: 58.76 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4275.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	58.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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SHut-InTool	5.00		Inside	4252.00	
Hydraulic Tool	5.00			4257.00	
Jars	6.00			4263.00	
Safety Joint	2.00			4265.00	
Packer	5.00			4270.00	28.00 Bottom Of Top Packer
Packer	5.00			4275.00	
Anchor	25.00			4300.00	
Recorder	1.00	8419	Inside	4301.00	
Recorder	1.00	8524	Outside	4302.00	
Bullnose	3.00			4305.00	30.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>58.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

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### 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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 3200.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Mud 100%	0.320

Total Length: 65.00 ft      Total Volume: 0.320 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time

