



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: 2011.08.31 @ 00:38:00

End Date: 2011.08.31 @ 09:29:00

Job Ticket #: 18626 DST #: 1

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

Printed: 2011.09.01 @ 09:51:49

Grand Mesa Operating Company

Hess #6-32

32-13s-31w Gove

DST # 1

Lansing KC " J zone "

2011.08.31



DRILL STEM TEST REPORT

Grand Mesa Operating Company

Hess #6-32

1700 N Waterfront PKWY Bldg 600 Wichita KS
67206+5514

32-13s-31w Gove

Job Ticket: 18626

DST#: 1

ATTN: Kent Matson

Test Start: 2011.08.31 @ 00:38:00

GENERAL INFORMATION:

Formation: **Lansing KC " J zone "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:24:00

Time Test Ended: 09:29:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3320-Scott City-70

Interval: 4197.00 ft (KB) To 4225.00 ft (KB) (TVD)

Reference Elevations: 2943.00 ft (KB)

Total Depth: 4225.00 ft (KB) (TVD)

2938.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8419 Inside

Press @ RunDepth: 418.50 psia @ 4221.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2011.08.31

End Date:

2011.08.31

Last Calib.:

2011.08.31

Start Time: 00:39:00

End Time:

09:29:00

Time On Btm:

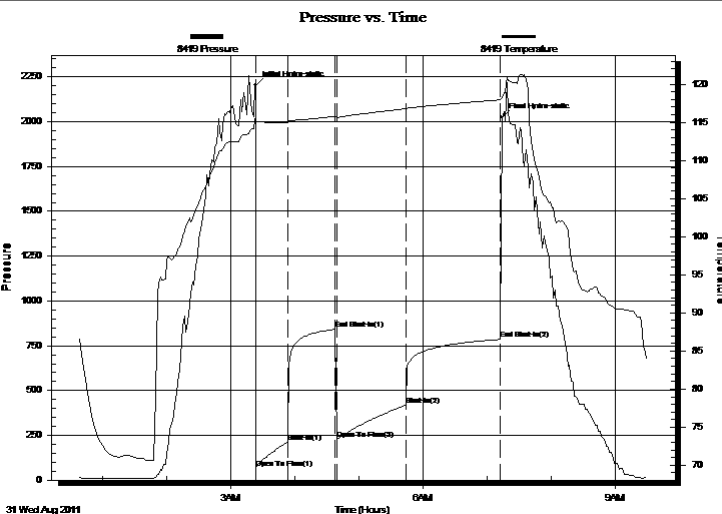
2011.08.31 @ 03:23:30

Time Off Btm:

2011.08.31 @ 07:13:30

TEST COMMENT: 1st Opening 30 Minutes-Strong blow built bottom of bucket in 10 minutes
1st Shut-in 45 Minutes-No blow back
2nd Opening 60 Minutes-Strong blow built bottom of bucket in 12 minutes
2nd Shut-in 90 Minutes-No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2201.83	115.59	Initial Hydro-static
1	67.74	115.15	Open To Flow (1)
30	214.02	115.01	Shut-In(1)
74	841.64	115.79	End Shut-In(1)
76	228.74	115.66	Open To Flow (2)
141	418.50	116.76	Shut-In(2)
229	785.09	117.96	End Shut-In(2)
230	2023.98	118.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Muddy w ater 15% mud 85%w ater	0.59
700.00	Muddy w ater 15% mud 85%w ater	9.82
20.00	Slightley oil cut muddy w ater	0.28
0.00	10%oil 15%mud 75%w ater	0.00
3.00	Clean Oil 100% Oil	0.04
0.00	100 feet of gas in the pipe	0.00

Gas Rates

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



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Reference Elevations: 2943.00 ft (KB)

Total Depth: 4225.00 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: 784.29 psia @ 4222.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2011.08.31

End Date:

2011.08.31

Last Calib.:

2011.08.31

Start Time: 00:39:00

End Time:

09:28:30

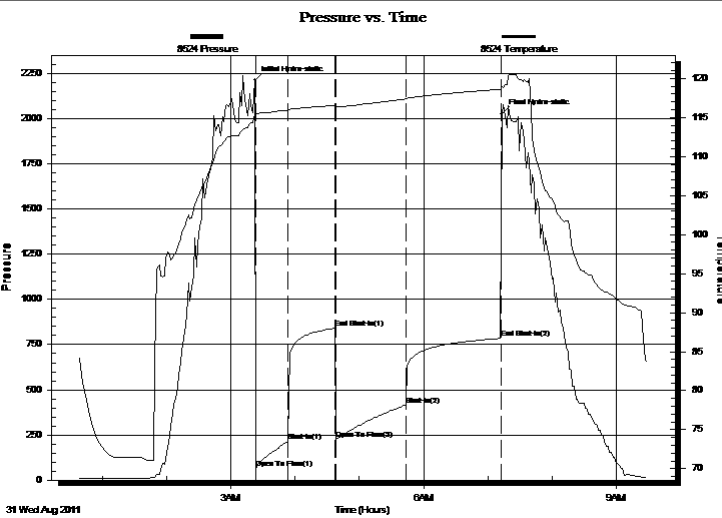
Time On Btm:

2011.08.31 @ 03:22:30

Time Off Btm:

2011.08.31 @ 07:13:00

TEST COMMENT: 1st Opening 30 Minutes-Strong blow built bottom of bucket in 10 minutes
1st Shut-in 45 Minutes-No blow back
2nd Opening 60 Minutes-Strong blow built bottom of bucket in 12 minutes
2nd Shut-in 90 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2212.55	115.75	Initial Hydro-static
1	66.22	115.45	Open To Flow (1)
31	214.06	115.86	Shut-In(1)
75	840.17	116.55	End Shut-In(1)
76	224.22	116.39	Open To Flow (2)
141	416.24	117.37	Shut-In(2)
230	784.29	118.63	End Shut-In(2)
231	2026.56	119.01	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Muddy w ater 15% mud 85%w ater	0.59
700.00	Muddy w ater 15% mud 85%w ater	9.82
20.00	Slightley oil cut muddy w ater	0.28
0.00	10%oil 15%mud 75%w ater	0.00
3.00	Clean Oil 100% Oil	0.04
0.00	100 feet of gas in the pipe	0.00

Gas Rates

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



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TOOL DIAGRAM

Grand Mesa Operating Company

Hess #6-32

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67206+5514

32-13s-31w Gove

Job Ticket: 18626

DST#: 1

ATTN: Kent Matson

Test Start: 2011.08.31 @ 00:38:00

Tool Information

Drill Pipe:	Length: 4055.00 ft	Diameter: 3.80 inches	Volume: 56.88 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: 85000.00 lb
			<u>Total Volume: 57.47 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4197.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	56.00 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	4174.00	
Hydraulic Tool	5.00			4179.00	
Jars	6.00			4185.00	
Safety Joint	2.00			4187.00	
Packer	5.00			4192.00	28.00 Bottom Of Top Packer
Packer	5.00			4197.00	
Anchor	23.00			4220.00	
Recorder	1.00	8419	Inside	4221.00	
Recorder	1.00	8524	Outside	4222.00	
Bullnose	3.00			4225.00	28.00 Bottom Packers & Anchor
Total Tool Length:	56.00				



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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: 77.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.18 in³

Gas Cushion Type:

Resistivity: 2.00 ohm.m

Gas Cushion Pressure:

psia

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	Muddy w ater 15% mud 85%w ater	0.590
700.00	Muddy w ater 15%mud 85%w ater	9.819
20.00	Slightley oil cut muddy w ater	0.281
0.00	10%oil 15%mud 75%w ater	0.000
3.00	Clean Oil 100% Oil	0.042
0.00	100 feet of gas in the pipe	0.000
0.00	Chlorides 55,000	0.000
0.00	Resistivity 2 @ 70 Degrees	0.000

Total Length: 843.00 ft Total Volume: 10.732 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

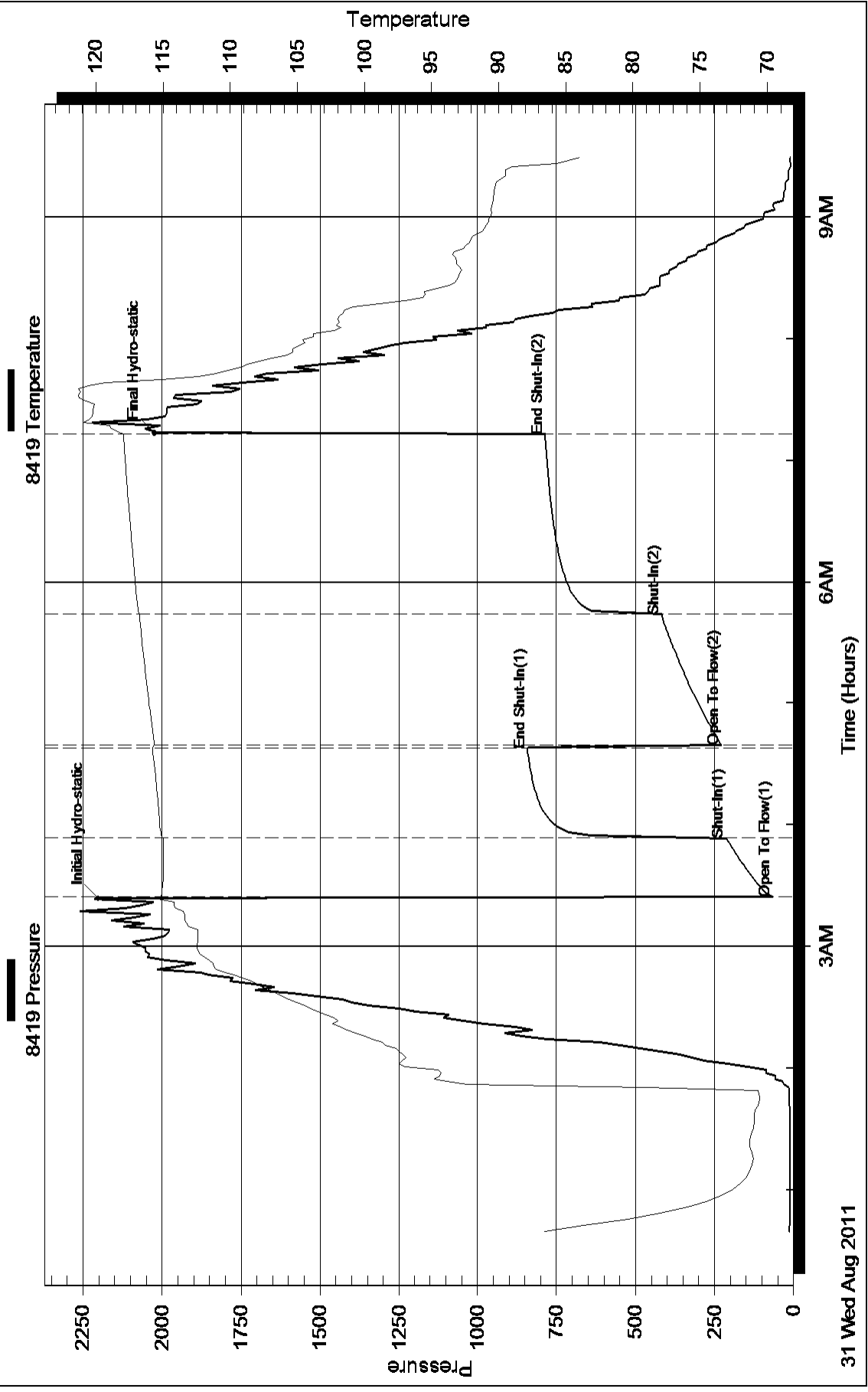
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Chlorides 55,000 / Resistivity 2 @70 degrees /there w as 3 feet clean oil on top of total fluid

Pressure vs. Time



Pressure vs. Time

