

## DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Inc**

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

ATTN: Steve Striebling

**34/12S/32W/Gove**

**Dale 2-34**

Start Date: 2011.06.28 @ 08:53:00

End Date: 2011.06.28 @ 14:46:30

Job Ticket #: 16592                      DST #: 1

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

Printed: 2011.06.30 @ 09:05:18

Grand Mesa Operating Inc

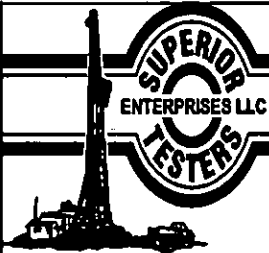
Date 2-34

34/12S/32W/Gove

DST # 1

Lansing Zone D,E

2011.06.28



# DRILL STEM TEST REPORT

Grand Mesa Operating Inc

Date 2-34

1700 N Waterfront Parkw ay  
 Building 600  
 Wichita, KS 67206+5514  
 ATTN: Steve Striebling

34/12S/32W/Gove

Job Ticket: 16592

DST#: 1

Test Start: 2011.06.28 @ 08:53:00

## GENERAL INFORMATION:

Formation: **Lansing Zone D,E**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:55:30

Time Test Ended: 14:46:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/72

Interval: 4096.00 ft (KB) To 4111.00 ft (KB) (TVD)

Reference Elevations: 2995.00 ft (KB)

Total Depth: 4111.00 ft (KB) (TVD)

2990.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6748

Outside

Press@RunDepth: 49.32 psig @ 4108.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.06.28

End Date: 2011.06.28

Last Calib.: 2011.06.28

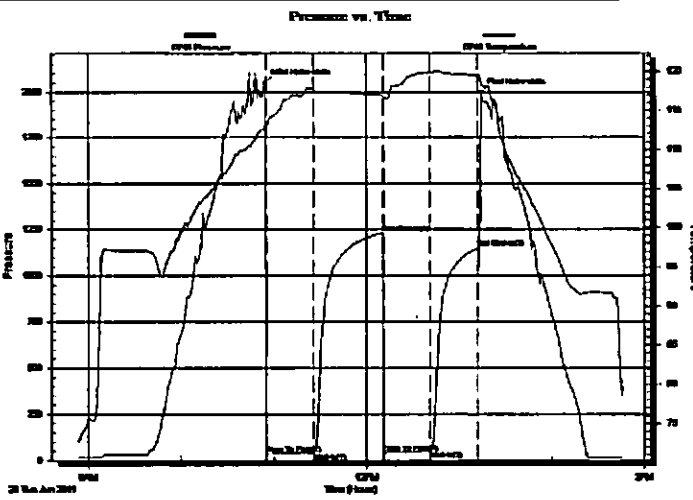
Start Time: 08:54:00

End Time: 14:46:30

Time On Btrr: 2011.06.28 @ 10:54:30

Time Off Btrr: 2011.06.28 @ 13:14:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 1/2 inch  
 1ST Shut In 45 Minutes/No Blow Back  
 2ND Open 30 Minutes/No Blow  
 2ND Shut In 30 Minutes/No Blow Back



## PRESSURE SUMMARY

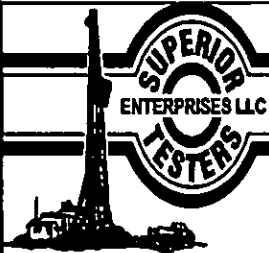
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2051.33	113.09	Initial Hydro-static
1	37.04	112.90	Open To Flow (1)
32	41.67	117.63	Shut-In(1)
76	1231.79	117.02	End Shut-In(1)
77	43.44	116.63	Open To Flow (2)
107	49.32	119.89	Shut-In(2)
138	1150.75	119.58	End Shut-In(2)
140	1999.21	118.59	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Oil cut Mud 5% Oil 95% Mud	0.02

## Gas Rates

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



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1700 N Waterfront Parkway  
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 ATTN: Steve Striebling

34/12S/32W/Gove

Job Ticket: 16592

DST#: 1

Test Start: 2011.06.28 @ 08:53:00

## GENERAL INFORMATION:

Formation: **Lansing Zone D,E**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 10:55:30

Time Test Ended: 14:46:30

Test Type: **Conventional Bottom Hole (Initial)**

Tester: **Ken Swinney**

Unit No: **3325 Scott City/72**

Interval: **4096.00 ft (KB) To 4111.00 ft (KB) (TVD)**

Reference Elevations: **2995.00 ft (KB)**

Total Depth: **4111.00 ft (KB) (TVD)**

**2990.00 ft (CF)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

KB to GR/CF: **5.00 ft**

Serial #: **6749**

Inside

Press@RunDepth: **1148.57 psig @ 4107.00 ft (KB)**

Capacity: **5000.00 psig**

Start Date: **2011.06.28**

End Date: **2011.06.28**

Last Calib.: **2011.06.28**

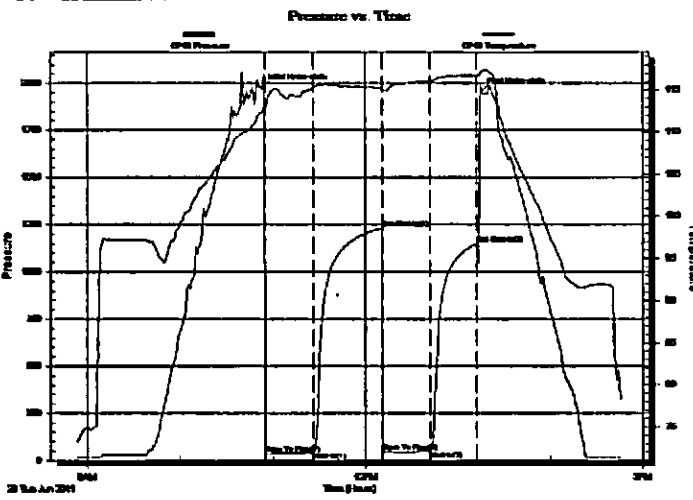
Start Time: **08:54:00**

End Time: **14:47:00**

Time On Btrr: **2011.06.28 @ 10:53:30**

Time Off Btrr: **2011.06.28 @ 13:15:30**

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 1/2 inch  
 1ST Shut In 45 Minutes/No Blow Back  
 2ND Open 30 Minutes/No Blow  
 2ND Shut In 30 Minutes/No Blow Back



## PRESSURE SUMMARY

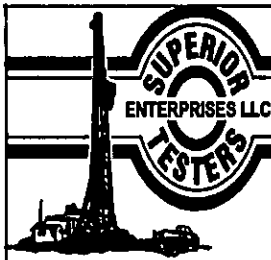
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1973.03	112.40	Initial Hydro-static
2	36.30	112.64	Open To Flow (1)
33	45.46	115.25	Shut-in(1)
77	1231.19	115.30	End Shut-in(1)
78	43.00	114.91	Open To Flow (2)
108	48.13	116.09	Shut-in(2)
139	1148.57	116.79	End Shut-in(2)
142	1955.21	117.25	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Oil cut Mud 5% Oil 95% Mud	0.02

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating Inc

Dale 2-34

1700 N Waterfront Parkway  
 Building 600  
 Wichita, KS 67206+5514  
 ATTN: Steve Striebling

34/12S/32W/Gove

Job Ticket: 16592

DST#: 1

Test Start: 2011.06.28 @ 08:53:00

## Tool Information

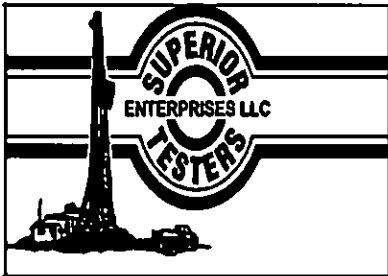
Drill Pipe:	Length: 3963.00 ft	Diameter: 3.88 inches	Volume: 57.96 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 58.55 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4096.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	44.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-in tool	5.00			4072.00	
Hydraulic tool	5.00			4077.00	
Change over sub	1.00			4078.00	
Jars	6.00			4084.00	
Safety Joint	2.00			4086.00	
Packer	5.00			4091.00	29.00 Bottom Of Top Packer
Packer	5.00			4096.00	
Anchor	10.00			4106.00	
Recorder	1.00	6749	Inside	4107.00	
Recorder	1.00	6748	Outside	4108.00	
Bullnose	3.00			4111.00	15.00 Bottom Packers & Anchor

**Total Tool Length: 44.00**



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FLUID SUMMARY

Grand Mesa Operating Inc

Date 2-34

1700 N Waterfront Parkway  
 Building 600  
 Wichita, KS 67206+5514  
 ATTN: Steve Striebling

34/12S/32W/Gove

Job Ticket: 16592

DST#: 1

Test Start: 2011.06.28 @ 08:53:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil APt

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Oil cut Mud 5% Oil 95% Mud	0.025

Total Length: 5.00 ft

Total Volume: 0.025 bbl

Num Fluid Samples: 0

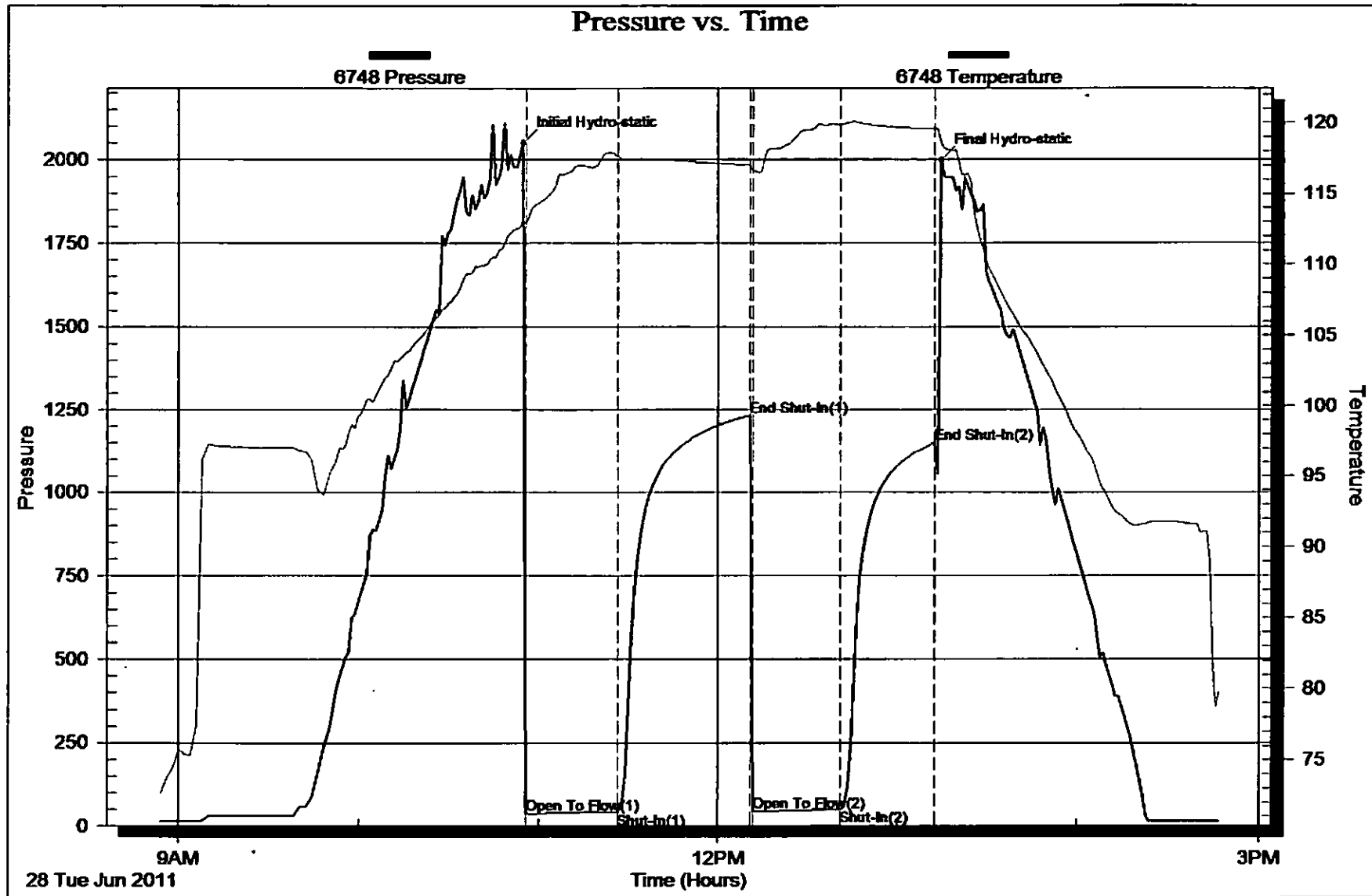
Num Gas Bombs: 0

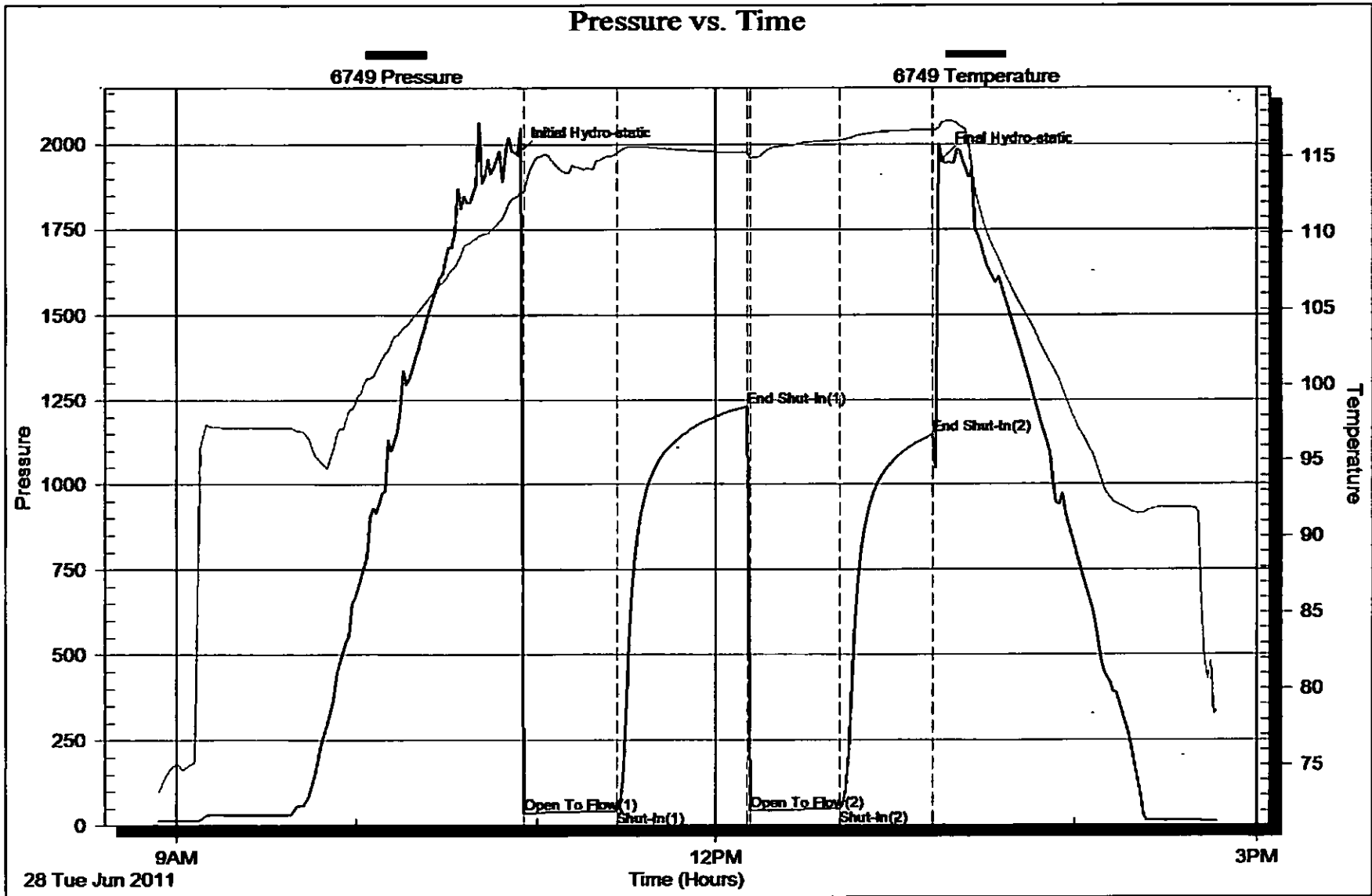
Serial #:

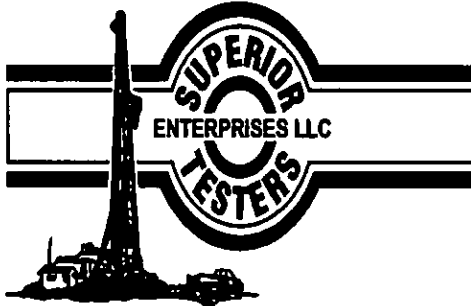
Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Inc**

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

ATTN: Steve Striebling

**34/12S/32W/Gove**

**Dale 2-34**

Start Date: 2011.06.29 @ 14:20:00

End Date: 2011.06.30 @ 00:06:00

Job Ticket #: 16593                      DST #: 2

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

Printed: 2011.06.30 @ 09:26:01

Grand Mesa Operating Inc

Dale 2-34

34/12S/32W/Gove

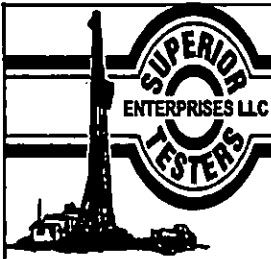
DST # 2

Lansing Zones H,I,J,

2011.06.29







# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Grand Mesa Operating Inc

Date 2-34

1700 N Waterfront Parkway  
 Building 600  
 Wichita, KS 67206+5514  
 ATTN: Steve Striebing

34/12S/32W/Gove

Job Ticket: 16593

DST#: 2

Test Start: 2011.06.29 @ 14:20:00

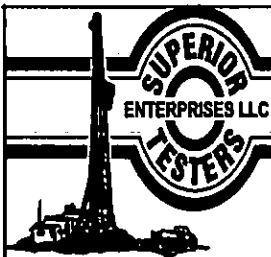
**Tool Information**

Drill Pipe:	Length: 4024.00 ft	Diameter: 3.88 inches	Volume: 58.85 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: 64000.00 lb
			<u>Total Volume: 59.44 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.75 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4165.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	127.10 ft			
Tool Length:	155.85 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			4141.25	
Hydraulic tool	5.00			4146.25	
Change over sub	0.75			4147.00	
Jars	6.00			4153.00	
Safety Joint	2.00			4155.00	
Packer	5.00			4160.00	28.75 Bottom Of Top Packer
Packer	5.00			4165.00	
Anchor	5.00			4170.00	
change over sub	0.75			4170.75	
drill pipe	93.60			4264.35	
change over sub	0.75			4265.10	
anchor	22.00			4287.10	
Recorder	1.00	6749	Inside	4288.10	
Recorder	1.00	6748	Outside	4289.10	
bull plug	3.00			4292.10	127.10 Bottom Packers & Anchor

**Total Tool Length: 155.85**



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1700 N Waterfront Parkway  
 Building 600  
 Wichita, KS 67206+5514  
 ATTN: Steve Striebling

34/12S/32W/Gove

Job Ticket: 16593

DST#: 2

Test Start: 2011.06.29 @ 14:20:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil APt

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 66.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Mud 100%	0.295

Total Length: 60.00 ft

Total Volume: 0.295 bbl

Num Fluid Samples: 0

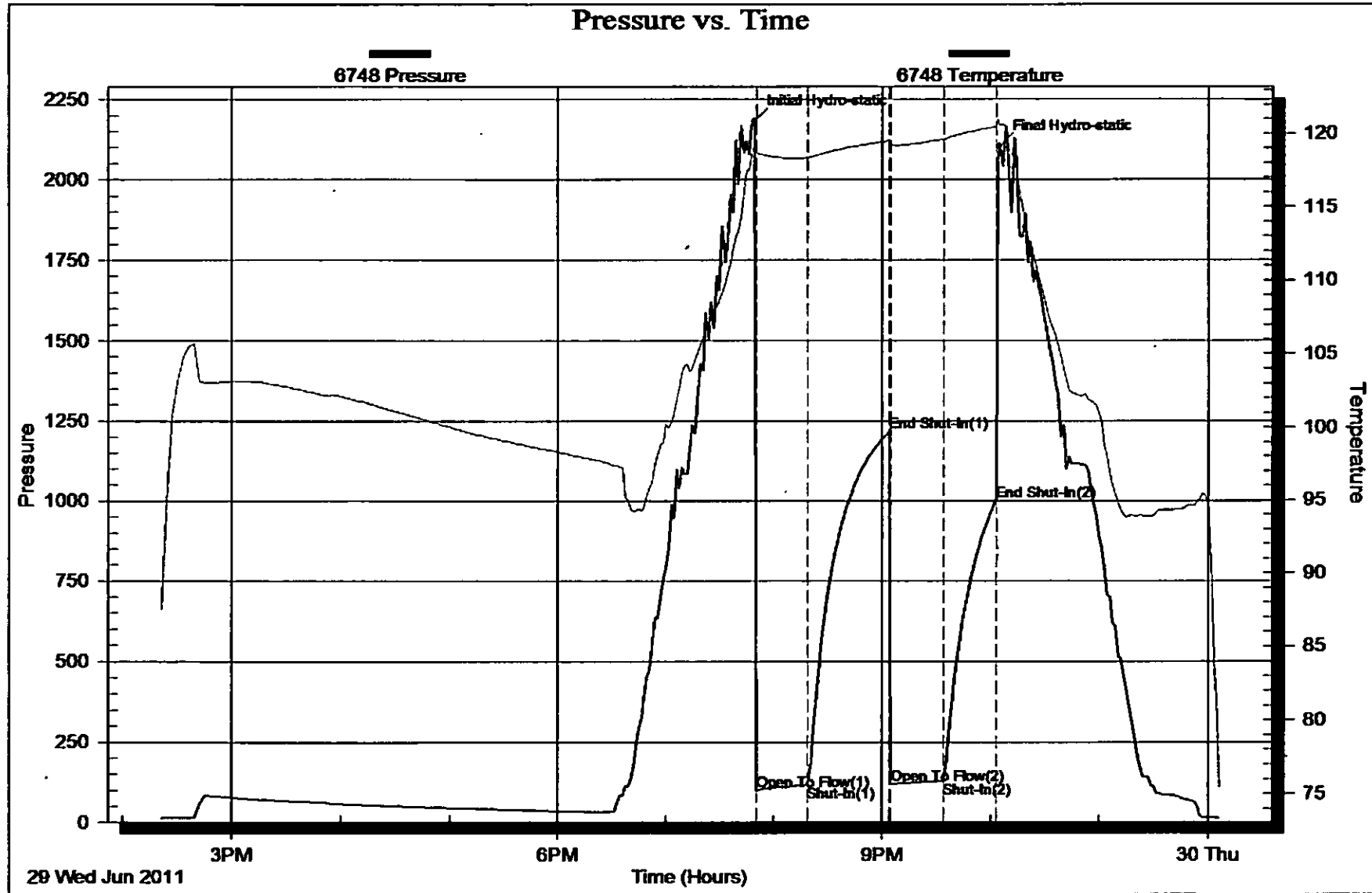
Num Gas Bombs: 0

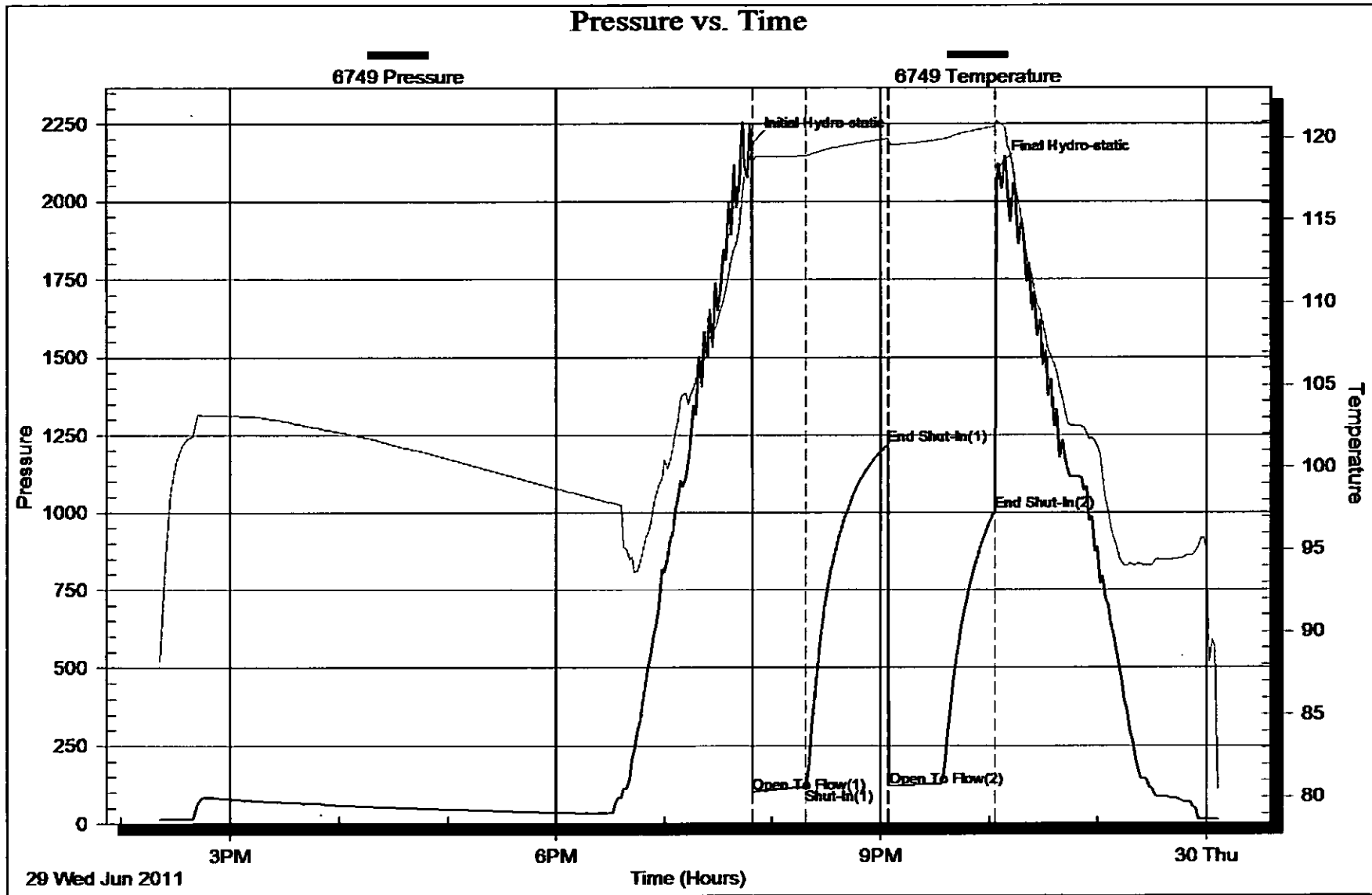
Serial #:

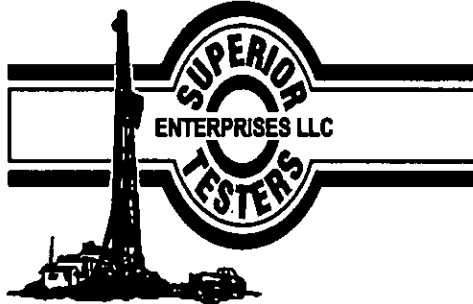
Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

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

ATTN: Steve Striebling

**34/12S/32W/Gove**

**Dale 2-34**

Start Date: 2011.07.01 @ 08:52:00

End Date: 2011.07.01 @ 15:20:30

Job Ticket #: 16594                      DST #: 3

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

Printed: 2011.07.01 @ 13:21:14

Grand Mesa Operating Inc

Dale 2-34

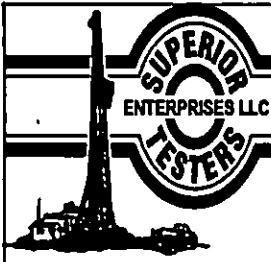
34/12S/32W/Gove

DST # 3

Upper Johnson

2011.07.01





# DRILL STEM TEST REPORT

Grand Mesa Operating Inc

Dale 2-34

1700 N Waterfront Parkway  
Building 600  
Wichita, KS 67206+5514  
ATTN: Steve Striebling

34/12S/32W/Gove

Job Ticket: 16594

DST#: 3

Test Start: 2011.07.01 @ 08:52:00

## GENERAL INFORMATION:

Formation: Upper Johnson

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:50:30

Time Test Ended: 15:20:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/72

Interval: 4537.00 ft (KB) To 4595.00 ft (KB) (TVD)

Reference Elevations: 2995.00 ft (KB)

Total Depth: 4595.00 ft (KB) (TVD)

2990.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6748

Outside

Press@RunDepth: 83.33 psig @ 4591.80 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.07.01

End Date: 2011.07.01

Last Calib.: 2011.07.01

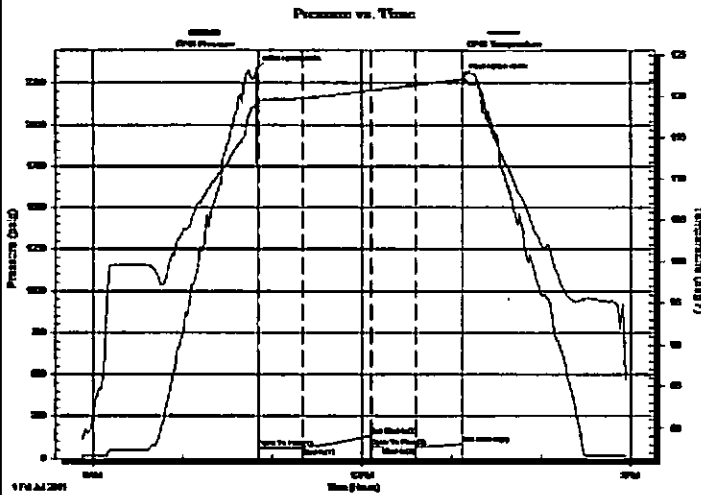
Start Time: 08:52:00

End Time: 14:57:30

Time On Btm: 2011.07.01 @ 10:49:30

Time Off Btm: 2011.07.01 @ 13:08:00

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 1/4 inch  
 1ST Shut In 45 Minutes/No blow back  
 2ND Open 30 Minutes/No blow  
 2ND Shut In 30 Minutes/No blow back



## PRESSURE SUMMARY

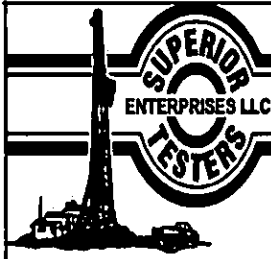
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2334.53	119.54	Initial Hydro-static
1	60.49	119.40	Open To Flow (1)
31	63.37	119.79	Shut-in(1)
77	136.50	120.75	End Shut-in(1)
77	65.59	120.73	Open To Flow (2)
107	65.88	121.40	Shut-in(2)
138	83.33	122.10	End Shut-in(2)
139	2287.54	122.75	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Oil cut Mud 10% oil 90% mud	0.02

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

Grand Mesa Operating Inc

Date 2-34

1700 N Waterfront Parkway  
 Building 600  
 Wichita, KS 67206+5514  
 ATTN: Steve Striebling

34/12S/32W/Gove

Job Ticket: 16594

DST#: 3

Test Start: 2011.07.01 @ 08:52:00

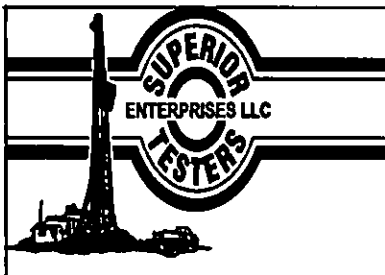
## Tool Information

Drill Pipe:	Length: 4399.00 ft	Diameter: 3.88 inches	Volume: 64.33 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: 84000.00 lb
			<u>Total Volume: 64.92 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.75 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4537.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	57.80 ft			
Tool Length:	86.55 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			4513.25	
Hydraulic tool	5.00			4518.25	
Change over sub	0.75			4519.00	
Jars	6.00			4525.00	
Safety Joint	2.00			4527.00	
Packer	5.00			4532.00	28.75 Bottom Of Top Packer
Packer	5.00			4537.00	
Anchor	5.00			4542.00	
change over sub	0.75			4542.75	
drill pipe	31.30			4574.05	
change over sub	0.75			4574.80	
anchor	15.00			4589.80	
Recorder	1.00	6749	Inside	4590.80	
Recorder	1.00	6748	Outside	4591.80	
bull plug	3.00			4594.80	57.80 Bottom Packers & Anchor

**Total Tool Length: 86.55**



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 ATTN: Steve Striebling

**34/12S/32W/Gove**

Job Ticket: 16594

**DST#: 3**

Test Start: 2011.07.01 @ 08:52:00

## 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: 69.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.00 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Oil cut Mud 10% oil 90% 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:

