



## DRILL STEM TEST REPORT

Prepared For: **GRAND MESA OPERATING**

1700 N WATERFRONT PKWY BLDG 600  
WICHITA KS 67206

ATTN: WES HANSON

**23-14S-32W**

**ELLIS 1-23**

Start Date: 2011.04.23 @ 16:00:00

End Date: 2011.04.23 @ 21:06:30

Job Ticket #: 1020                      DST #: 1

Eagle Testers LLC.

P.O.Box 1011, Great Bend, KS 67530

620-617-7548

Printed: 2011.04.23 @ 16:57:09

GRAND MESA OPERATING  
ELLIS 1-23  
23-14S-32W  
DST # 1  
LKC-H-  
2011.04.23



# DRILL STEM TEST REPORT

GRAND MESA OPERATING

ELLIS 1-23

1700 N WATERFRONT PKWY BLDG 600  
WICHITA KS 67206

23-14S-32W

ATTN: WES HANSON

Job Ticket: 1020

DST#: 1

Test Start: 2011.04.23 @ 16:00:00

## GENERAL INFORMATION:

Formation: **LKC -H-**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:21:30

Time Test Ended: 21:06:30

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15

Interval: **3970.00 ft (KB) To 4004.00 ft (KB) (TVD)**

Reference Elevations: 2785.00 ft (KB)

Total Depth: 4004.00 ft (KB) (TVD)

2780.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: **6666**

Inside

Press @ Run Depth: 46.97 psig @ 4000.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.04.23

End Date:

2011.04.23

Last Calib.:

2011.04.23

Start Time: 16:00:00

End Time:

21:06:30

Time On Btm:

2011.04.23 @ 18:21:00

Time Off Btm:

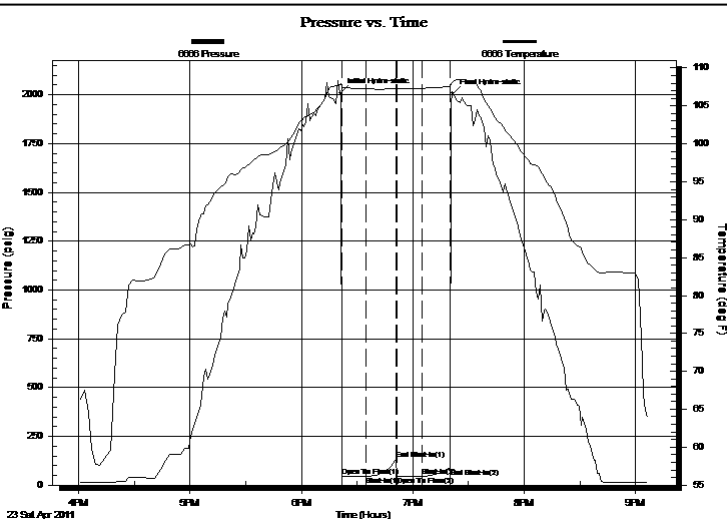
2011.04.23 @ 19:21:30

TEST COMMENT: 15-INITIAL OPENING VERY WEAK SURFACE BLOW DIED AFTER 3 MINS

15-INITIAL SHUT IN NO BLOW BACK

15-FINAL OPENING VERY WEAK SURFACE BLOW DIED IN 1 MIN

15-FINAL SHUT IN NO BLOW BACK



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2009.06	107.90	Initial Hydro-static
1	45.56	107.52	Open To Flow (1)
14	46.50	107.24	Shut-In(1)
30	133.65	107.26	End Shut-In(1)
31	46.33	107.23	Open To Flow (2)
44	46.97	107.33	Shut-In(2)
59	87.19	107.55	End Shut-In(2)
61	2006.74	108.19	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
2.00	MUD 100% MUD	0.01

## Gas Rates

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



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23-14S-32W

Job Ticket: 1020

DST#: 1

ATTN: WES HANSON

Test Start: 2011.04.23 @ 16:00:00

## GENERAL INFORMATION:

Formation: **LKC -H-**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:21:30

Time Test Ended: 21:06:30

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15

Interval: **3970.00 ft (KB) To 4004.00 ft (KB) (TVD)**

Reference Elevations: 2785.00 ft (KB)

Total Depth: 4004.00 ft (KB) (TVD)

2780.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: **6663**

Outside

Press @ Run Depth: 90.06 psig @ 4001.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.04.23

End Date: 2011.04.23

Last Calib.: 2011.04.23

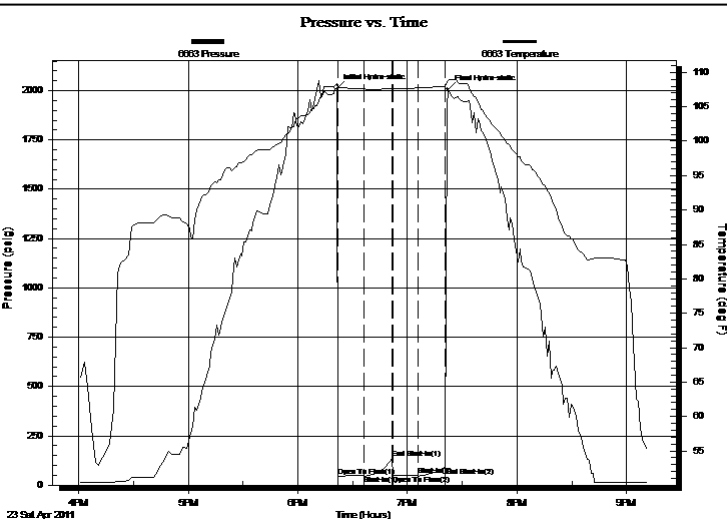
Start Time: 16:00:00

End Time: 21:12:00

Time On Btm: 2011.04.23 @ 18:21:30

Time Off Btm: 2011.04.23 @ 19:22:00

TEST COMMENT: 15-INITIAL OPENING VERY WEAK SURFACE BLOW DIED AFTER 3 MINS  
15-INITIAL SHUT IN NO BLOW BACK  
15-FINAL OPENING VERY WEAK SURFACE BLOW DIED IN 1 MIN  
15-FINAL SHUT IN NO BLOW BACK



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2009.94	108.36	Initial Hydro-static
1	46.79	107.82	Open To Flow (1)
15	47.46	107.58	Shut-In(1)
30	135.11	107.62	End Shut-In(1)
31	47.56	107.59	Open To Flow (2)
44	48.20	107.73	Shut-In(2)
59	90.06	108.00	End Shut-In(2)
61	2007.53	108.82	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
2.00	MUD 100% MUD	0.01

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

GRAND MESA OPERATING

**ELLIS 1-23**

1700 N WATERFRONT PKWY BLDG 600  
WICHITA KS 67206

**23-14S-32W**

Job Ticket: 1020

**DST#: 1**

ATTN: WES HANSON

Test Start: 2011.04.23 @ 16:00:00

## Tool Information

Drill Pipe:	Length: 3764.00 ft	Diameter: 3.88 inches	Volume: 55.05 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: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 55.94 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	3970.00 ft			Final	52000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	34.00 ft				
Tool Length:	63.00 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-in tool	5.00			3946.00	
Hydraulic tool	5.00			3951.00	
Change over sub	1.00			3952.00	
Jars	6.00			3958.00	
Safety Joint	2.00			3960.00	
Packer	5.00			3965.00	29.00 Bottom Of Top Packer
Packer	5.00			3970.00	
Anchor	29.00			3999.00	
Recorder	1.00	6666	Inside	4000.00	
Recorder	1.00	6663	Outside	4001.00	
Bullnose	3.00			4004.00	34.00 Bottom Packers & Anchor

**Total Tool Length: 63.00**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

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WICHITA KS 67206

**23-14S-32W**

Job Ticket: 1020

**DST#: 1**

ATTN: WES HANSON

Test Start: 2011.04.23 @ 16:00:00

### 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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.50 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	MUD 100% MUD	0.010

Total Length: 2.00 ft      Total Volume: 0.010 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

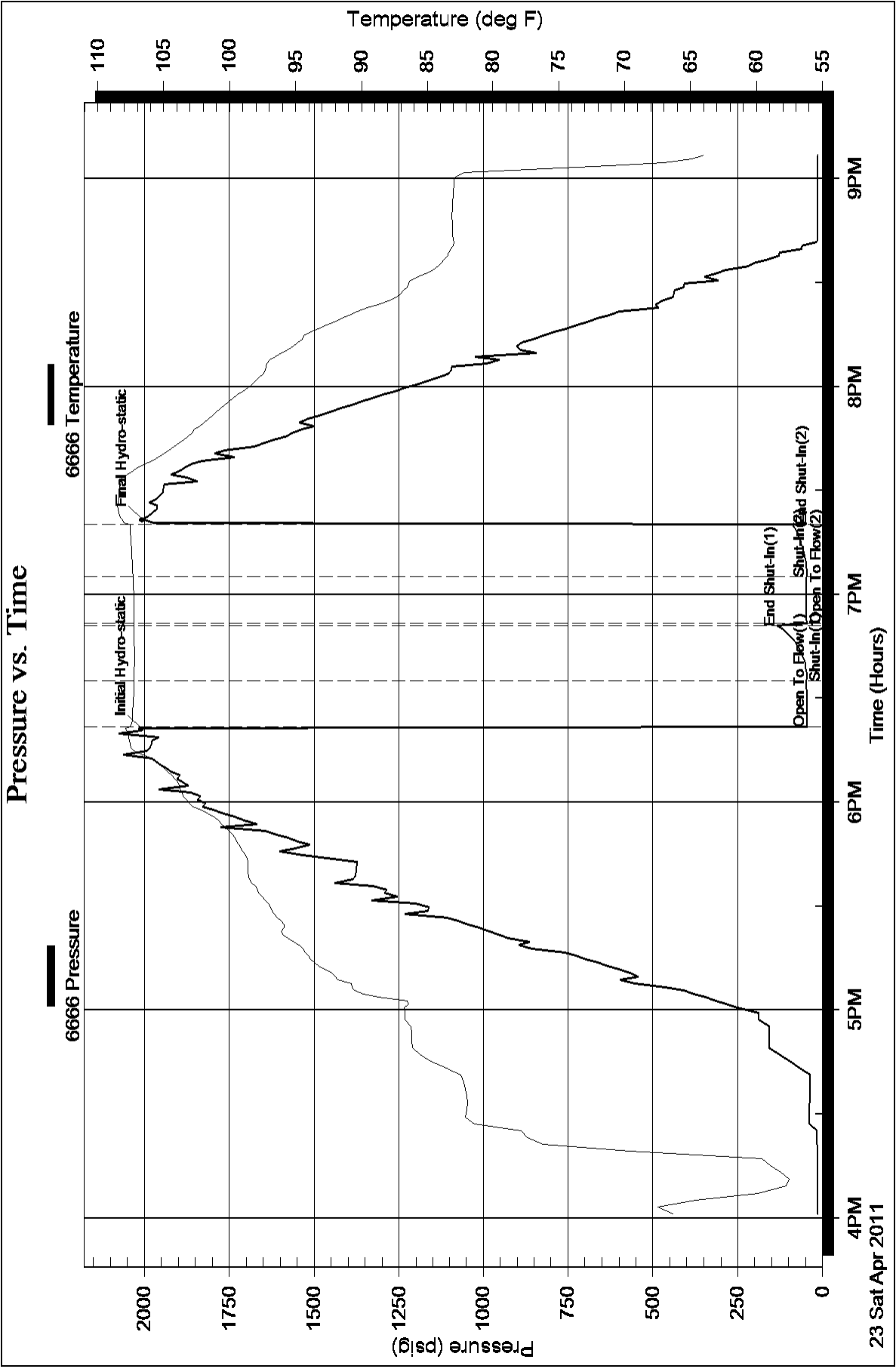
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time



### Pressure vs. Time

