



DRILL STEM TEST REPORT

Prepared For: **GRAND MESA OPERATING**

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

ATTN: WES HANSON

23-14S-32W LOGAN

ELLIS 1-23

Start Date: 2011.04.25 @ 13:00:00

End Date: 2011.04.25 @ 19:17:30

Job Ticket #: 1021 DST #: 2

Eagle Testers LLC.

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

620-617-7548

Printed: 2011.04.25 @ 14:00:23

GRAND MESA OPERATING
ELLIS 1-23
23-14S-32W LOGAN
DST # 2
JOHNSON
2011.04.25



DRILL STEM TEST REPORT

GRAND MESA OPERATING

ELLIS 1-23

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

23-14S-32W LOGAN

ATTN: WES HANSON

Job Ticket: 1021

DST#: 2

Test Start: 2011.04.25 @ 13:00:00

GENERAL INFORMATION:

Formation: **JOHSON**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:19:30

Time Test Ended: 19:17:30

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15 42 MRT OAKLEY

Interval: **4365.00 ft (KB) To 4420.00 ft (KB) (TVD)**

Reference Elevations: 2785.00 ft (KB)

Total Depth: 4420.00 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 @ RunDepth: 73.20 psig @ 4416.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.04.25

End Date:

2011.04.25

Last Calib.: 2011.04.25

Start Time: 13:00:00

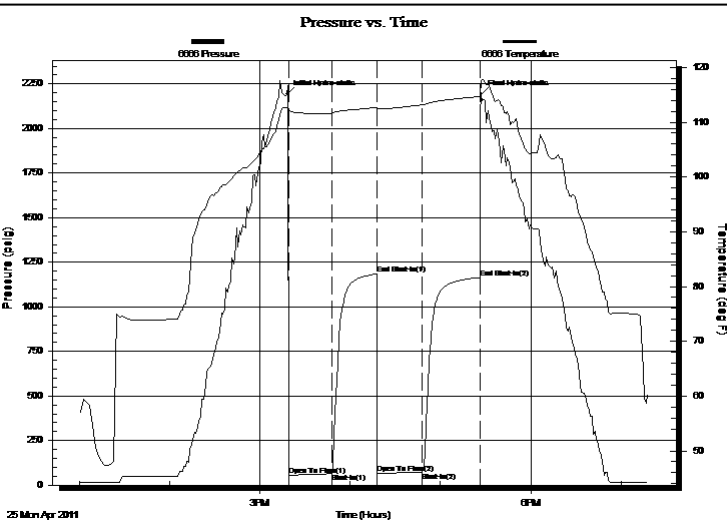
End Time:

19:17:30

Time On Btm: 2011.04.25 @ 15:18:00

Time Off Btm: 2011.04.25 @ 17:27:00

TEST COMMENT: 30-INITIAL OPENING SURFACE BLOW
30-INITIAL SHUT IN NO BLOW BACK
30-FINAL OPENING VERY WEAK SURFACE BLOW
30-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2191.95	112.73	Initial Hydro-static
2	55.44	112.27	Open To Flow (1)
30	64.19	111.64	Shut-In(1)
60	1184.31	112.67	End Shut-In(1)
60	65.35	112.43	Open To Flow (2)
90	73.20	113.15	Shut-In(2)
128	1164.63	114.70	End Shut-In(2)
129	2192.50	117.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	MUD 100%MUD	0.05

Gas Rates

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



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WICHITA KS 67206

23-14S-32W LOGAN

ATTN: WES HANSON

Job Ticket: 1021

DST#: 2

Test Start: 2011.04.25 @ 13:00:00

GENERAL INFORMATION:

Formation: **JOHSON**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:19:30

Time Test Ended: 19:17:30

Interval: **4365.00 ft (KB) To 4420.00 ft (KB) (TVD)**

Total Depth: 4420.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 15 42 MRT OAKLEY

Reference Elevations: 2785.00 ft (KB)

2780.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: **6663**

Outside

Press @ RunDepth: 1166.13 psig @ 4417.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.04.25

End Date:

2011.04.25

Last Calib.:

2011.04.25

Start Time: 13:00:00

End Time:

19:22:00

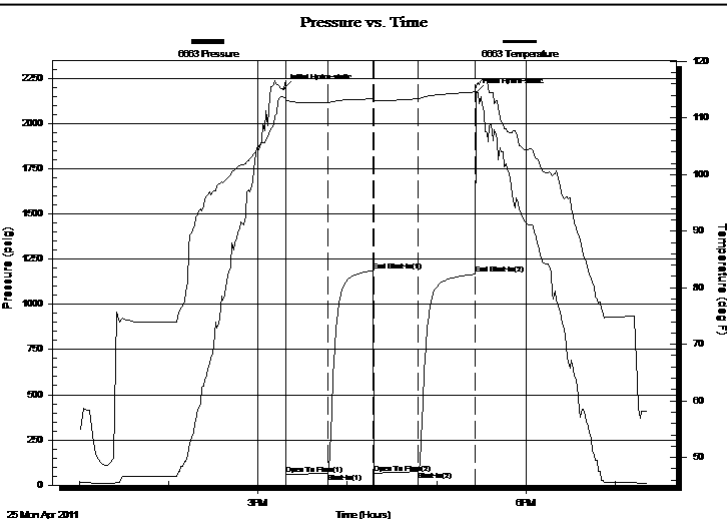
Time On Btm:

2011.04.25 @ 15:17:30

Time Off Btm:

2011.04.25 @ 17:26:30

TEST COMMENT: 30-INITIAL OPENING SURFACE BLOW
30-INITIAL SHUT IN NO BLOW BACK
30-FINAL OPENING VERY WEAK SURFACE BLOW
30-FINAL SHUT IN NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2192.57	113.65	Initial Hydro-static
2	57.55	112.83	Open To Flow (1)
30	65.94	112.68	Shut-In(1)
60	1185.62	113.41	End Shut-In(1)
60	67.25	113.06	Open To Flow (2)
90	75.00	113.40	Shut-In(2)
129	1166.13	114.62	End Shut-In(2)
129	2170.01	115.76	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	MUD 100%MUD	0.05

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 LOGAN

ATTN: WES HANSON

Job Ticket: 1021

DST#: 2

Test Start: 2011.04.25 @ 13:00:00

Tool Information

Drill Pipe:	Length: 4159.00 ft	Diameter: 3.88 inches	Volume: 60.82 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: 61.71 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	2.75 ft			String Weight: Initial	58000.00 lb
Depth to Top Packer:	4365.00 ft			Final	58000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	55.00 ft				
Tool Length:	83.75 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			4341.25	
Hydraulic tool	5.00			4346.25	
Change over sub	0.75			4347.00	
Jars	6.00			4353.00	
Safety Joint	2.00			4355.00	
Packer	5.00			4360.00	28.75 Bottom Of Top Packer
Packer	5.00			4365.00	
Anchor	5.00			4370.00	
change over sub	0.75			4370.75	
drill pipe	31.50			4402.25	
change over sub	0.75			4403.00	
anchor	12.00			4415.00	
Recorder	1.00	6666	Inside	4416.00	
Recorder	1.00	6663	Outside	4417.00	
bull plug	3.00			4420.00	55.00 Bottom Packers & Anchor

Total Tool Length: 83.75



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FLUID SUMMARY

GRAND MESA OPERATING

ELLIS 1-23

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WICHITA KS 67206

23-14S-32W LOGAN

Job Ticket: 1021

DST#: 2

ATTN: WES HANSON

Test Start: 2011.04.25 @ 13:00:00

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: 8.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	MUD 100%MUD	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

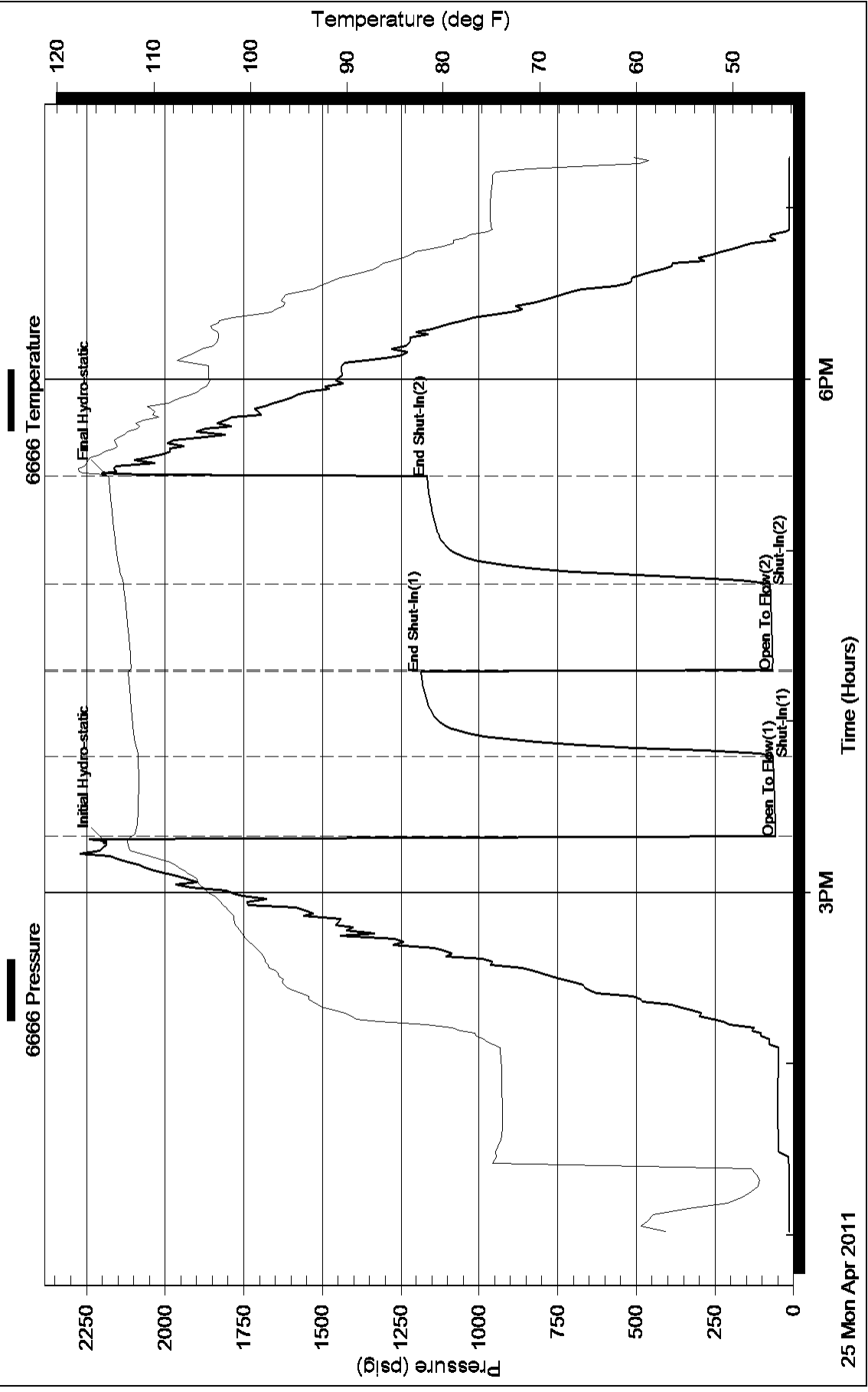
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



25 Mon Apr 2011

3PM

6PM

Time (Hours)

Pressure vs. Time

