



DRILL STEM TEST REPORT

Prepared For: **GRAND MESA OPERATING**

1700 N WATERFRONT
PKWY BLDG 600
WICHITA KS 67206

ATTN: BOB PETERSON

34-12S-32W LOGAN

SMITH 1-34

Start Date: 2010.11.17 @ 19:00:00

End Date: 2010.11.18 @ 03:28:00

Job Ticket #: 1051 DST #: 5

Eagle Testers LLC.

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

620-617-7548

Printed: 2010.11.17 @ 19:55:16

GRAND MESA OPERATING
SMITH 1-34
34-12S-32W LOGAN
DST # 5
JOHNSON
2010.11.17



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GENERAL INFORMATION:

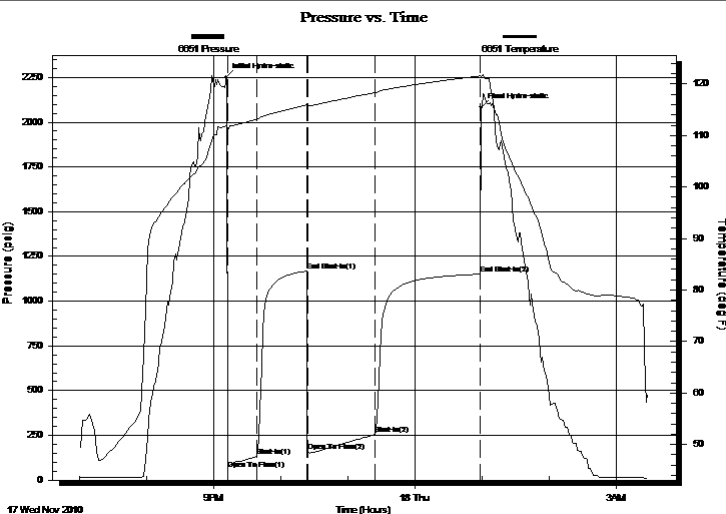
Formation: **JOHNSON**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 21:12:00
 Time Test Ended: 03:28:00
 Interval: **4531.00 ft (KB) To 4564.00 ft (KB) (TVD)**
 Total Depth: 4564.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: DAVID NICHOLS
 Unit No: 15
 Reference Elevations: 2984.00 ft (KB)
 2978.00 ft (CF)
 KB to GR/CF: 6.00 ft

Serial #: 6651

Inside

Press @ Run Depth: 255.02 psig @ 4560.00 ft (KB) Capacity: 5000.00 psig
 Start Date: 2010.11.17 End Date: 2010.11.18 Last Calib.: 2010.11.17
 Start Time: 19:00:00 End Time: 03:28:00 Time On Btm: 2010.11.17 @ 21:11:00
 Time Off Btm: 2010.11.18 @ 00:58:30

TEST COMMENT: 30-INITIAL OPENING FAIR BLOW BOTTOM BUCKET IN 9 MINS
 45-INITIAL SHUT IN VERY WEAK BLOW BACK
 60-FINAL OPENING WEAK BLOW BUILT TO BOTTOM BUCKET IN 20 MINS
 90-FINAL SHUT VERY WEAK BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2250.69	111.95	Initial Hydro-static
1	59.89	111.09	Open To Flow (1)
28	133.47	113.19	Shut-In(1)
72	1167.92	115.93	End Shut-In(1)
73	161.17	115.72	Open To Flow (2)
133	255.02	118.32	Shut-In(2)
227	1150.57	121.57	End Shut-In(2)
228	2081.28	121.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
590.00	GASSY OIL 10%GAS90%OIL	7.45
60.00	MUD CUT OIL 20%MUD80%OIL	0.88
1000.00	GAS IN PIPE 100%GAS	14.62

Gas Rates

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



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TOOL DIAGRAM

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Tool Information

Drill Pipe:	Length: 4388.00 ft	Diameter: 3.88 inches	Volume: 64.17 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: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 64.77 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	1.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4531.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	33.00 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 IN TOOL	5.00			4513.00	
HYD S.I. Tool	5.00			4518.00	
jars	6.00			4524.00	
safty joint	2.00			4526.00	
TRAVEL COLER	2.00			4528.00	
Packer	3.00			4531.00	23.00 Bottom Of Top Packer
travel collar	2.00			4533.00	33.00 Tool Interval
Packer	3.00			4536.00	
Anchor	23.00			4559.00	
Recorder	1.00	6651	Inside	4560.00	
Recorder	1.00		Outside	4561.00	
BULL PLUG	3.00			4564.00	1000055.00 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

Mud Weight: 9.00 lb/gal

Viscosity: 54.00 sec/qt

Water Loss: 8.00 in³

Resistivity: ohm.m

Salinity: 3800.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API: 30 deg API

Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
590.00	GASSY OIL 10%GAS90%OIL	7.454
60.00	MUD CUT OIL 20%MUD80%OIL	0.877
1000.00	GAS IN PIPE 100%GAS	14.624

Total Length: 1650.00 ft Total Volume: 22.955 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: GRAVITY OF OIL 30

Pressure vs. Time

