



## DRILL STEM TEST REPORT

Prepared For: **Valhalla Exploration L.L.C**  
133 N Glendale Wichita KS 67206

ATTN: Derek Patterson

**Ringwald #1-33**

**33-18s-10w Rice**

Start Date: 2012.02.06 @ 10:53:00

End Date: 2012.02.06 @ 15:01:00

Job Ticket #: 18738                      DST #: 1

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

Printed: 2012.02.06 @ 15:15:20

Valhalla Exploration L.L.C

33-18s-10w Rice

Ringwald #1-33

DST # 1

Topeka (Plattsmouth)

2012.02.06



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**Ringwald #1-33**  
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 Test Start: 2012.02.06 @ 10:53:00

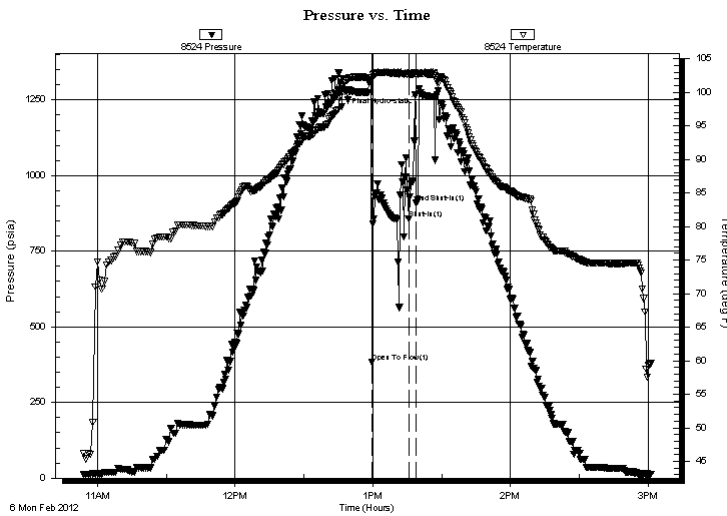
## GENERAL INFORMATION:

Formation: **Topeka (Plattsmouth)**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 12:59:30  
 Time Test Ended: 15:01:00  
 Interval: **2664.00 ft (KB) To 2690.00 ft (KB) (TVD)**  
 Total Depth: 2690.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition:  
 Test Type: Inflate Bottom Hole (Initial)  
 Tester: Jared Scheck  
 Unit No: 3320-GB-70  
 Reference Elevations: 1743.00 ft (KB)  
 1735.00 ft (CF)  
 KB to GR/CF: 8.00 ft

## Serial #: 8524

Press @ RunDepth: 856.23 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2012.02.06 End Date: 2012.02.06 Last Calib.: 2012.02.06  
 Start Time: 10:53:00 End Time: 15:01:00 Time On Btm: 2012.02.06 @ 12:58:30  
 Time Off Btm: 2012.02.06 @ 13:20:00

TEST COMMENT: 1st Opening 20 Minutes-chased tool 11 feet to bottom no blow flushed tool good surge pulled tool  
 1st Shut-in -Pulled tool



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1307.45	102.24	Initial Hydro-static
1	383.13	101.85	Open To Flow (1)
18	856.23	102.68	Shut-In(1)
21	910.62	102.74	End Shut-In(1)
22	1285.72	102.80	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud	0.32

## Gas Rates

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



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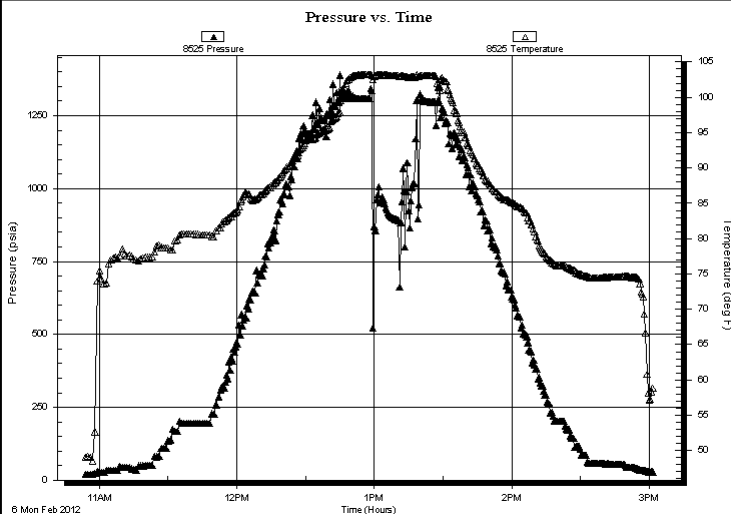
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 Test Type: Inflate Bottom Hole (Initial)  
 Tester: Jared Scheck  
 Unit No: 3320-GB-70  
 Reference Elevations: 1743.00 ft (KB)  
 1735.00 ft (CF)  
 KB to GR/CF: 8.00 ft

## Serial #: 8525

Press @ RunDepth: psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2012.02.06 End Date: 2012.02.06 Last Calib.: 2012.02.06  
 Start Time: 10:53:00 End Time: 15:01:30 Time On Btm:  
 Time Off Btm:

TEST COMMENT: 1st Opening 20 Minutes-chased tool 11 feet to bottom no blow flushed tool good surge pulled tool  
 1st Shut-in -Pulled tool



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud	0.32

## Gas Rates

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



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**TOOL DIAGRAM**

Valhalla Exploration L.L.C  
 133 N Glendale Wichita KS 67206  
 A T T N : Derek Patterson

**33-18s-10w Rice**  
**Ringwald #1-33**  
 Job Ticket: 18738      **DST#: 1**  
 Test Start: 2012.02.06 @ 10:53:00

**Tool Information**

Drill Pipe:	Length: 2364.00 ft	Diameter: 3.80 inches	Volume: 33.16 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: 300.00 ft	Diameter: 2.25 inches	Volume: 1.48 bbl	Weight to Pull Loose:	50000.00 lb
			<u>Total Volume: 34.64 bbl</u>	Tool Chased	11.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial	43000.00 lb
Depth to Top Packer:	2664.00 ft			Final	43000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	26.00 ft				
Tool Length:	54.00 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	2641.00	
Hydraulic Tool	5.00			2646.00	
Jars	6.00			2652.00	
Safety Joint	2.00			2654.00	
Packer	5.00			2659.00	28.00      Bottom Of Top Packer
Packer	5.00			2664.00	
Anchor	21.00			2685.00	
Recorder	1.00	8524	Inside	2686.00	
Recorder	1.00	8525	Outside	2687.00	
Bullnose	3.00			2690.00	26.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>54.00</b>				



# DRILL STEM TEST REPORT

## 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: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.00 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 5800.00 ppm			
Filter Cake: 1.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Mud	0.320

Total Length: 65.00 ft      Total Volume: 0.320 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: Miss run

