



## DRILL STEM TEST REPORT

Prepared For: **LB Exploration Inc.**

2135 2nd RD.  
Holyrod Ks, 67450-9021

ATTN: Steve Petermann

### **Spencer's Bluffs #6**

#### **16/32s/13w/Barber**

Start Date: 2013.11.05 @ 16:25:00

End Date: 2013.11.06 @ 00:46:00

Job Ticket #: 8516                      DST #: 5

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

Printed: 2013.11.06 @ 01:03:07



# DRILL STEM TEST REPORT

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 Holyrood Ks, 67450-9021  
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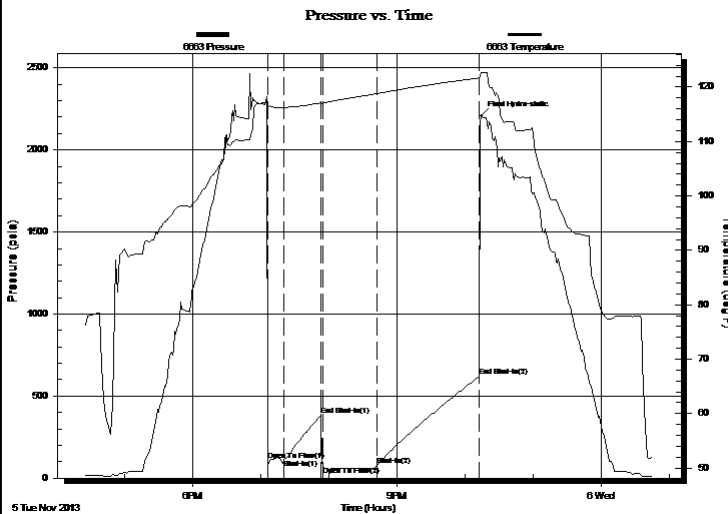
**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 8516 **DST#: 5**  
 Test Start: 2013.11.05 @ 16:25:00

## GENERAL INFORMATION:

Formation: **Mississippian**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 19:06:30 Tester: Shane Konzem  
 Time Test Ended: 00:46:00 Unit No: 3330/196/Great Bend  
 Interval: **4571.00 ft (KB) To 4616.00 ft (KB) (TVD)** Reference Elevations: 1828.00 ft (KB)  
 Total Depth: 4616.00 ft (KB) (TVD) 1815.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 13.00 ft

**Serial #: 6663 Inside**  
 Press @ RunDepth: 77.09 psia @ 4612.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.11.05 End Date: 2013.11.06 Last Calib.: 2013.11.06  
 Start Time: 16:25:00 End Time: 00:46:00 Time On Btm:  
 Time Off Btm: 2013.11.05 @ 22:14:30

**TEST COMMENT:** 1st Open/ 15 Minutes. Strong blow built to bottom of 5 gallon bucket in 35 seconds.  
 1st Shut In/ 30 Minutes. No blow back.  
 2nd Open/ 45 Minutes. Sstrong blow built to bottom of 5 gallon bucket in 15 seconds. Gas to surface in 15 minutes.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	108.20	116.52	Open To Flow (1)
15	114.62	116.27	Shut-In(1)
47	385.84	117.11	End Shut-In(1)
49	72.62	117.05	Open To Flow (2)
96	77.09	118.80	Shut-In(2)
187	621.88	121.70	End Shut-In(2)
188	2208.20	122.60	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
31.00	5% gas, 10% oil, 85% mud	0.43

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	4.50	1.68
Last Gas Rate	0.13	5.26	1.97
Max. Gas Rate	0.13	5.26	1.97



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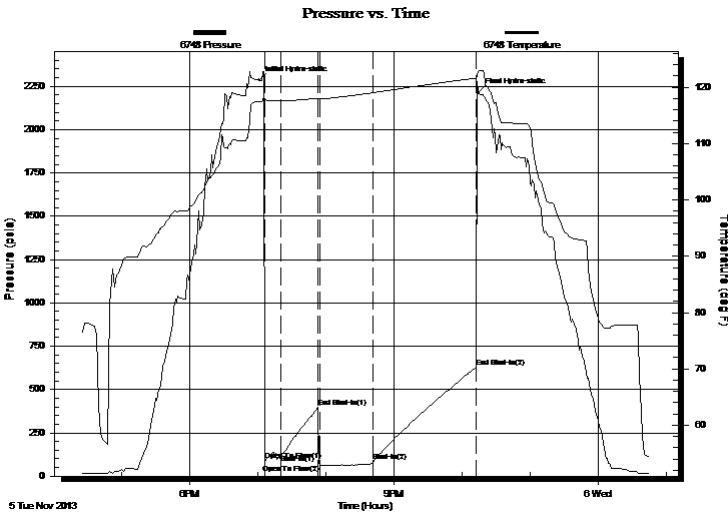
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 Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 13.00 ft

**Serial #: 6748 Outside**  
 Press @ RunDepth: 629.16 psia @ 4613.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.11.05 End Date: 2013.11.06 Last Calib.: 2013.11.06  
 Start Time: 16:25:00 End Time: 00:46:00 Time On Btm: 2013.11.05 @ 19:01:30  
 Time Off Btm: 2013.11.05 @ 22:14:30

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 1st Shut In/ 30 Minutes. No blow back.  
 2nd Open/ 45 Minutes. Sstrong blow built to bottom of 5 gallon bucket in 15 seconds. Gas to surface in 15 minutes.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2284.95	117.49	Initial Hydro-static
5	90.87	117.75	Open To Flow (1)
20	126.50	117.63	Shut-In(1)
53	395.37	118.08	End Shut-In(1)
54	68.37	117.96	Open To Flow (2)
101	82.93	119.04	Shut-In(2)
191	629.16	121.63	End Shut-In(2)
193	2212.77	122.82	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
31.00	5% gas, 10% oil, 85% mud	0.43

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	4.50	1.68
Last Gas Rate	0.13	5.26	1.97
Max. Gas Rate	0.13	5.26	1.97



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**TOOL DIAGRAM**

LB Exploration Inc.  
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**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 8516      **DST#: 5**  
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**Tool Information**

Drill Pipe:	Length: 4579.00 ft	Diameter: 3.80 inches	Volume: 64.23 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:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	72000.00 lb
			<u>Total Volume: 64.23 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial	54000.00 lb
Depth to Top Packer:	4571.00 ft			Final	57000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	45.00 ft				
Tool Length:	66.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4551.00	
Shut-In Tool	5.00			4556.00	
Hydroic Tool	5.00			4561.00	
Packer	5.00			4566.00	21.00      Bottom Of Top Packer
Packer	5.00			4571.00	
Perforations	40.00			4611.00	
Recorder	1.00	6663	Inside	4612.00	
Recorder	1.00	6748	Outside	4613.00	
Bullnose	3.00			4616.00	45.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>66.00</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:	58.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	11.20 in <sup>3</sup>	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	6000.00 ppm				
Filter Cake:	inches				

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
31.00	5% gas, 10% oil, 85% mud	0.435

Total Length: 31.00 ft      Total Volume: 0.435 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:



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**GAS RATES**

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## Gas Rates Information

Temperature: 59 (deg F)  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
2	20	0.13	4.50	1.68
2	30	0.13	5.25	1.97
2	40	0.13	5.25	1.97
2	45	0.13	5.26	1.97

