



## DRILL STEM TEST REPORT

Prepared For: **Arrowhead Exploration LLC.**

2919 Hall Street  
Hayas Kansas, 67601

ATTN: herb Deines

### **Sander Witt Unit #1**

### **9-14s-15w Russell**

Start Date: 2017.08.14 @ 00:00:00

End Date:

Job Ticket #:

DST #: 2

Eagle Testers  
1309 Patton Road Great Bend, Kansas 67530  
620-791-7394

Printed: 2017.08.14 @ 07:51:13





# DRILL STEM TEST REPORT

TOOL DIAGRAM

Arrow head Exploration LLC.

9-14s-15w Russell

2919 Hall Street  
Hayas Kansas, 67601

Sander Witt Unit #1

ATTN: herb Deines

Job Ticket: **DST#: 2**

Test Start: 2017.08.14 @ 00:00:00

## Tool Information

Drill Pipe:	Length: 2996.00 ft	Diameter: 3.80 inches	Volume: 42.03 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 35000.00 lb
			<u>Total Volume: 42.03 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 35000.00 lb
Depth to Top Packer:	3000.00 ft			Final 35000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	0.00 ft			
Tool Length:	326.19 ft			
Number of Packers:	1	Diameter:	inches	
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			2985.00	
Hydraulic tool	5.00			2990.00	
Top Packer	5.00			2995.00	
Packer	5.00			3000.00	20.00 Bottom Of Top Packer
Anchor	32.00			3032.00	
Change Over Sub	0.75		Inside	3032.75	
Drill Pipe	93.71			3126.46	
Change Over Sub	0.75			3127.21	
Recorder	0.00	9119	Inside	3127.21	
Recorder	0.00	91716	Outside	3127.21	
Blank Off Sub	1.00			3128.21	0.00 Tool Interval
Packer	5.00		Outside	3133.21	
Change Over Sub	0.75			3133.96	
Drill Pipe	157.48			3291.44	
Change Over Sub	0.75			3292.19	
Anchor	9.00			3301.19	
Recorder	0.00	9139	Outside	3301.19	
Bullnose	5.00			3306.19	1000325.19 Bottom Packers & Anchor

**Total Tool Length: 326.19**



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## FLUID SUMMARY

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Test Start: 2017.08.14 @ 00:00:00

### 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: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.60 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6500.00 ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
600.00	Drilling Mud	8.416

Total Length: 600.00 ft      Total Volume: 8.416 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:

