



## DRILL STEM TEST REPORT

Prepared For: **Valhalla Exploratoin LLC.**

8100 East 22nd St. N BLDG.  
1800-2 Wichita Kansas  
67226

ATTN: Adam Nighswonger

### **Hullman 1-14**

### **14-22s-13w-Stafford**

Start Date: 2013.10.30 @ 11:45:00

End Date: 2013.10.30 @ 18:48:00

Job Ticket #: 18530                      DST #: 3

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

Printed: 2013.10.31 @ 05:13:41



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**DST#: 3**

Test Start: 2013.10.30 @ 11:45:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:27:30

Time Test Ended: 18:48:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Great Bend-35

**Interval: 3801.00 ft (KB) To 3808.00 ft (KB) (TVD)**

Reference Elevations: 1897.00 ft (KB)

Total Depth: 3808.00 ft (KB) (TVD)

1889.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8524 Inside**

Press @ Run Depth: 144.92 psia @ 3804.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.10.30

End Date: 2013.10.30

Last Calib.: 2013.10.31

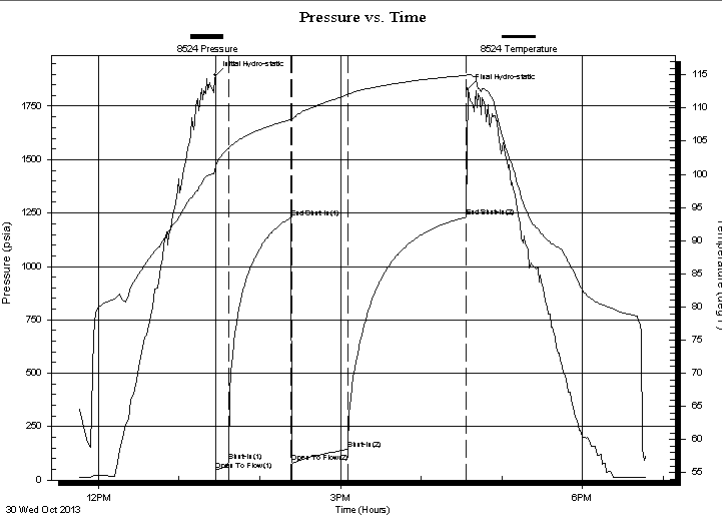
Start Time: 11:45:00

End Time: 18:48:00

Time On Btm: 2013.10.30 @ 13:27:00

Time Off Btm: 2013.10.30 @ 16:34:30

**TEST COMMENT:** 1st Open 10 minutes Good building blow blew off the bottom bucket in 6.5 minutes.  
1st Shut in 45 minutes No blow back  
2nd Open 45 minutes Good building blow built to bottom bucket 18 minutes.  
2nd Shut in 90 minutes No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1894.95	101.17	Initial Hydro-static
1	44.24	101.28	Open To Flow (1)
10	88.53	103.91	Shut-In(1)
56	1227.46	108.25	End Shut-In(1)
57	83.92	108.07	Open To Flow (2)
99	144.92	112.03	Shut-In(2)
187	1230.91	114.92	End Shut-In(2)
188	1830.35	115.06	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
366.00	Clean Oil 100%	5.13
30.00	Oil cut mud Oil 97% Mud3%	0.42
0.00	Gravity of oil 30 Corrected	0.00

## Gas Rates

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



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Time Test Ended: 18:48:00

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Tester: Dustin Ellis

Unit No: 3315-Great Bend-35

**Interval: 3801.00 ft (KB) To 3808.00 ft (KB) (TVD)**

Reference Elevations: 1897.00 ft (KB)

Total Depth: 3808.00 ft (KB) (TVD)

1889.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 6839 Outside**

Press @ RunDepth: 1225.27 psia @ 3805.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.10.30

End Date: 2013.10.30

Last Calib.: 2013.10.31

Start Time: 11:45:00

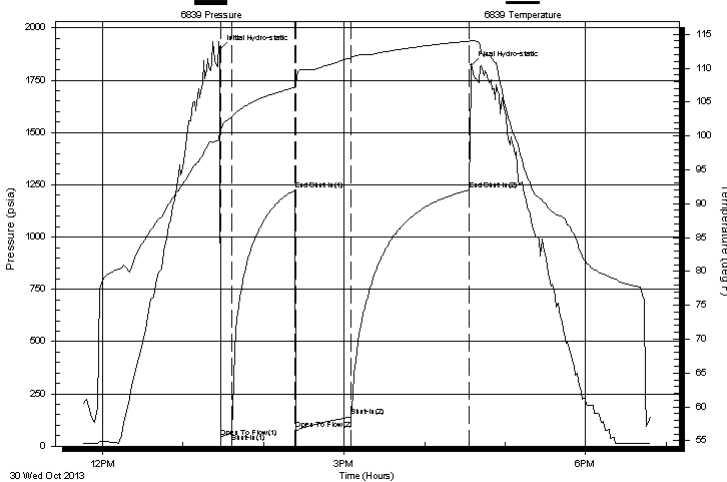
End Time: 18:49:00

Time On Btm: 2013.10.30 @ 13:27:30

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2nd Shut in 90 minutes No blow back

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1897.54	100.74	Initial Hydro-static
1	41.73	100.66	Open To Flow (1)
9	63.10	102.89	Shut-In(1)
56	1224.01	107.16	End Shut-In(1)
57	79.51	107.65	Open To Flow (2)
98	140.34	111.55	Shut-In(2)
186	1225.27	113.98	End Shut-In(2)
188	1821.67	114.08	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
366.00	Clean Oil 100%	5.13
30.00	Oil cut mud Oil 97% Mud3%	0.42
0.00	Gravity of oil 30 Corrected	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Valhalla Exploratoion LLC.

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**Hullman 1-14**

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ATTN: Adam Nighswonger

Test Start: 2013.10.30 @ 11:45:00

## Tool Information

Drill Pipe:	Length: 3792.00 ft	Diameter: 3.80 inches	Volume: 53.19 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: 63000.00 lb
			<u>Total Volume: 53.19 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	3801.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	7.00 ft			
Tool Length:	35.00 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			3778.00	
Hydraulic Tool	5.00			3783.00	
Jars	6.00			3789.00	
Safety Joint	2.00			3791.00	
Packer	5.00			3796.00	28.00 Bottom Of Top Packer
Packer	5.00			3801.00	
Anchor	2.00			3803.00	
Recorder	1.00	8524	Inside	3804.00	
Recorder	1.00	6839	Outside	3805.00	
Bull Plug	3.00			3808.00	7.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>35.00</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: 60.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.80 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psia

Salinity: 8800.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
366.00	Clean Oil 100%	5.134
30.00	Oil cut mud Oil 97% Mud3%	0.421
0.00	Gravity of oil 30 Corrected	0.000

Total Length: 396.00 ft      Total Volume: 5.555 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

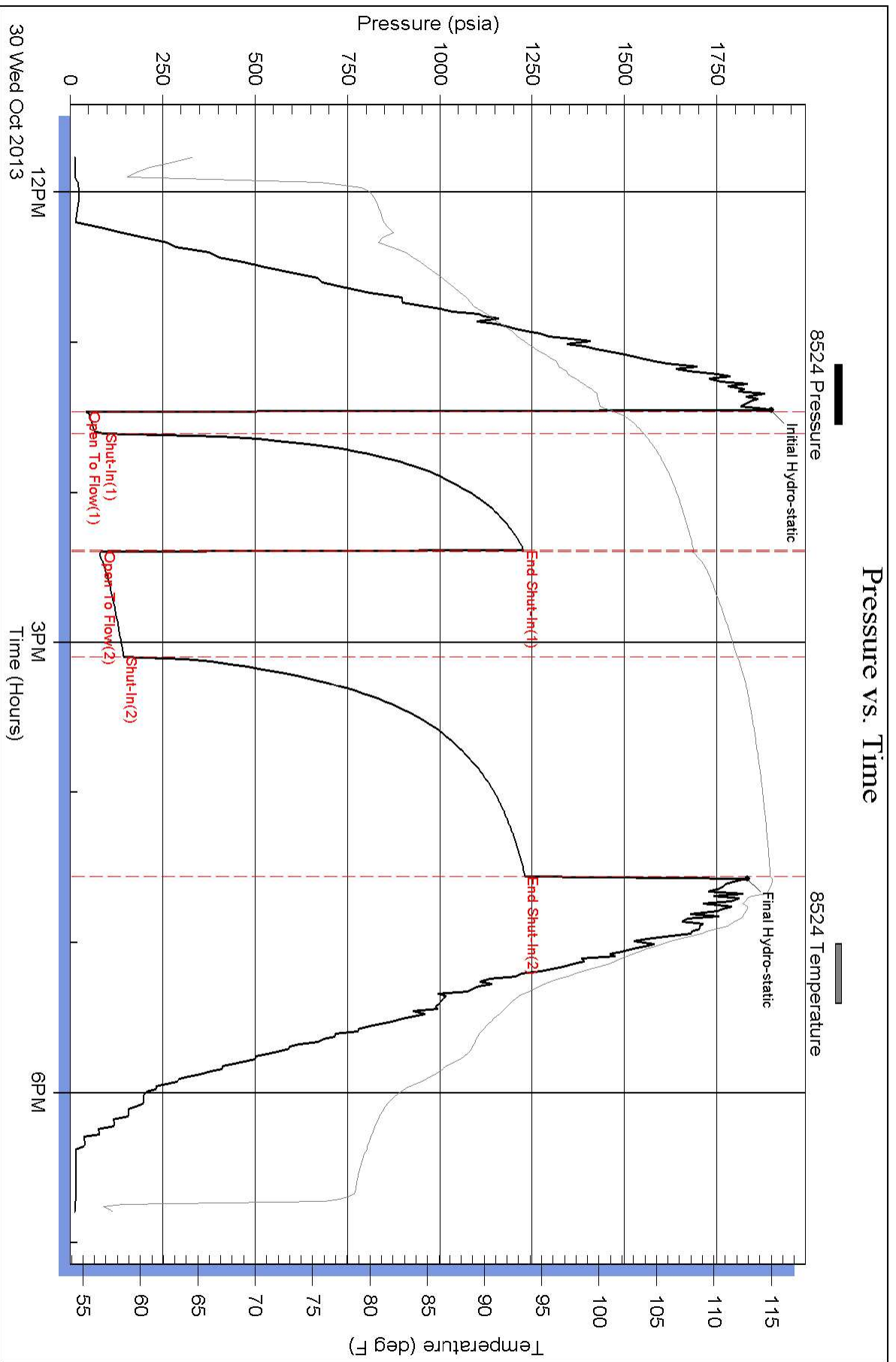
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time



### Pressure vs. Time

