



DRILL STEM TEST REPORT

Prepared For: **Valhalla Exploration LLC.**

133 North Glendale ST.
Wichita Kansas 67208

ATTN: Adam Kennedy

Morgenstern #1-33

33-17s-13w-Barton

Start Date: 2012.10.15 @ 03:12:00

End Date: 2012.10.15 @ 08:50:30

Job Ticket #: 17858 DST #: 3

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

Printed: 2012.10.15 @ 07:06:30



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DST#: 3

ATTN: Adam Kennedy

Test Start: 2012.10.15 @ 03:12:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:28:00

Time Test Ended: 08:50:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Great Bend-25

Interval: 3365.00 ft (KB) To 3371.00 ft (KB) (TVD)

Reference Elevations: 1877.00 ft (KB)

Total Depth: 3371.00 ft (KB) (TVD)

1869.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8400

Press @ RunDepth: 46.94 psia @ ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.10.15 End Date: 2012.10.15

Last Calib.: 2012.10.15

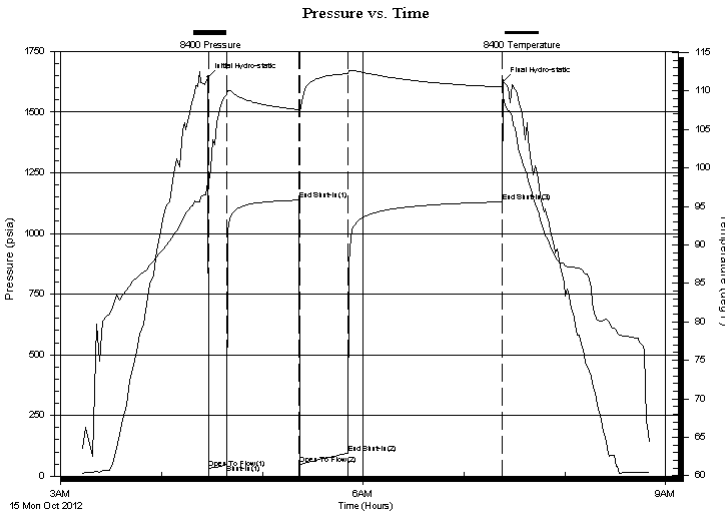
Start Time: 03:12:00 End Time: 08:50:30

Time On Btm: 2012.10.15 @ 04:27:30

Time Off Btm: 2012.10.15 @ 07:23:30

TEST COMMENT: 1st Open 10 minutes Fair building blow blew 2.5 inches
1st Shut in 45 minutes No blow back
2nd Open 30 minutes Fair building blow 28 minutes bottom bucket
2nd Shut in 90 minutes No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1643.06	98.20	Initial Hydro-static
1	31.86	98.42	Open To Flow (1)
11	46.94	109.49	Shut-In(1)
55	1137.86	107.61	End Shut-In(1)
55	48.34	107.32	Open To Flow (2)
84	95.77	112.26	End Shut-In(2)
175	1130.06	110.50	End Shut-In(3)
176	1626.71	109.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
130.00	Water cut mud Mud 30% Water 70%	1.82
0.00	Chlorides 36,000 @56 degrees	0.00

Gas Rates

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



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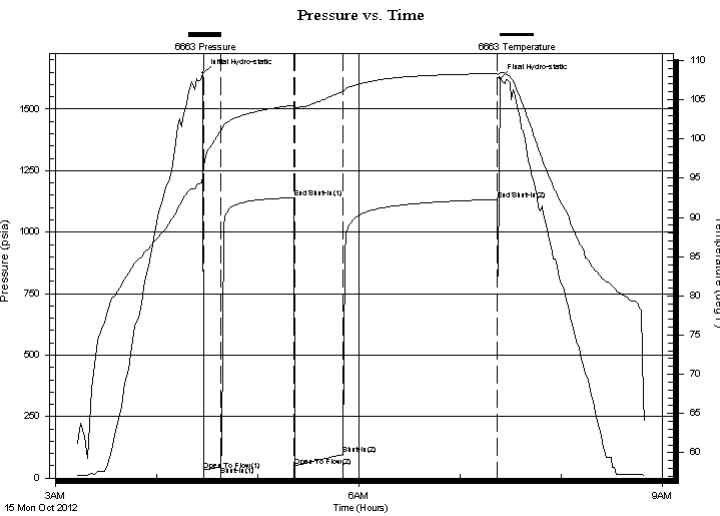
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:28:00
 Time Test Ended: 08:50:30
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend-25
 Interval: **3365.00 ft (KB) To 3371.00 ft (KB) (TVD)**
 Total Depth: 3371.00 ft (KB) (TVD)
 Reference Elevations: 1877.00 ft (KB)
 1869.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 KB to GR/CF: 8.00 ft

Serial #: 6663

Press @ Run Depth: 1132.40 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.10.15 End Date: 2012.10.15 Last Calib.: 2012.10.15
 Start Time: 03:12:00 End Time: 08:50:00 Time On Btm: 2012.10.15 @ 04:27:30
 Time Off Btm: 2012.10.15 @ 07:23:30

TEST COMMENT: 1st Open 10 minutes Fair building blow blew 2.5 inches
 1st Shut in 45 minutes No blow back
 2nd Open 30 minutes Fair building blow 28 minutes bottom bucket
 2nd Shut in 90 minutes No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1646.07	95.17	Initial Hydro-static
1	33.88	96.46	Open To Flow (1)
11	47.35	101.06	Shut-In(1)
54	1140.22	104.31	End Shut-In(1)
55	49.69	104.03	Open To Flow (2)
83	95.30	106.01	Shut-In(2)
175	1132.40	108.36	End Shut-In(2)
176	1625.52	108.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
130.00	Water cut mud Mud 30% Water 70%	1.82
0.00	Chlorides 36,000 @56 degrees	0.00

Gas Rates

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



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TOOL DIAGRAM

Valhalla Exploration LLC.

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Test Start: 2012.10.15 @ 03:12:00

Tool Information

Drill Pipe:	Length: 3351.00 ft	Diameter: 3.80 inches	Volume: 47.01 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: 67000.00 lb
			<u>Total Volume: 47.01 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	3365.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	6.00 ft			
Tool Length:	34.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			3342.00	
Hydraulic Tool	5.00			3347.00	
Jars	6.00			3353.00	
Safety Joint	2.00			3355.00	
Packer	5.00			3360.00	28.00 Bottom Of Top Packer
Packer	5.00			3365.00	
Anchor	1.00			3366.00	
Recorder	1.00	6663	Inside	3367.00	
Recorder	1.00	8400	Outside	3368.00	
Bull Plug	3.00			3371.00	6.00 Bottom Packers & Anchor
Total Tool Length:	34.00				



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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: 49.00 sec/qt
Water Loss: 8.79 in³
Resistivity: 0.40 ohm.m
Salinity: 6700.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psia

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
130.00	Water cut mud Mud 30% Water 70%	1.824
0.00	Chlorides 36,000 @56 degrees	0.000

Total Length: 130.00 ft Total Volume: 1.824 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

