

DRILL STEM TEST REPORT

Prepared For: **F.G. Holl Company LLC**

9431 East Central Suite 100
Wichita, Kansas 67206-2563

ATTN: Ryan Greenbaum

Mermis"A"Unit #1-21

21-20s-15w Barton

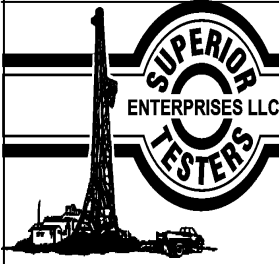
Start Date: 2012.09.24 @ 00:00:00

End Date: 2012.09.24 @ 00:00:00

Job Ticket #: 17754 DST #: 4

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

Printed: 2012.09.24 @ 08:48:12



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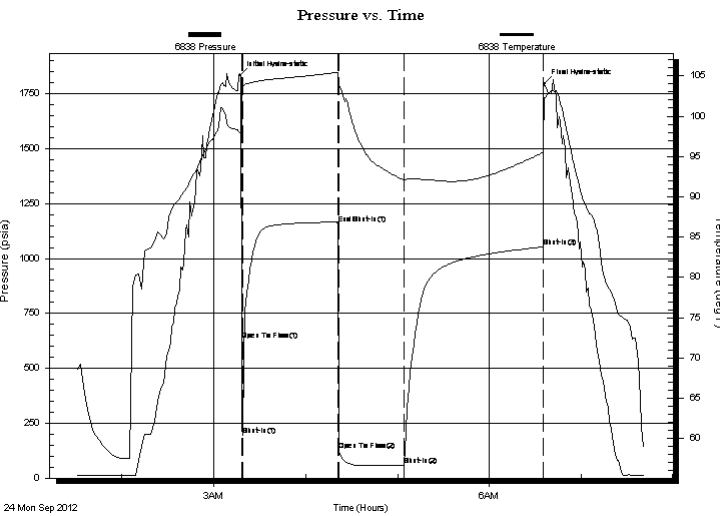
GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 00:00:00 Tester: Gene Budig
Time Test Ended: 00:00:00 Unit No: 3335
Interval: 3742.00 ft (KB) To 3750.00 ft (KB) (TVD) Reference Elevations: 2012.00 ft (KB)
Total Depth: 3750.00 ft (KB) (TVD) 2004.00 ft (CF)
Hole Diameter: 7.88 inchesHole Condition: Poor KB to GR/CF: 8.00 ft

Serial #: 6838

Press@RunDepth: 1156.71 psia @ ft (KB) Capacity: psia
Start Date: 2012.09.24 End Date: 2012.09.24 Last Calib.: 1899.12.30
Start Time: 01:30:00 End Time: 07:42:00 Time On Btm: 2012.09.24 @ 03:17:00
Time Off Btm: 2012.09.24 @ 06:36:00

TEST COMMENT: 1st Openi 1 Minute-Strong blow built to the bottom of a 5 gallon bucket in 15 seconds
1stnShut-In 60 Minutes-fair blow back
2nd Opening 45 Minutes-Strong blow w ith gas to surface-see gas flow report
2nd Shut-In-90 Minutes-Fair blow back



PRESSURE SUMMARY

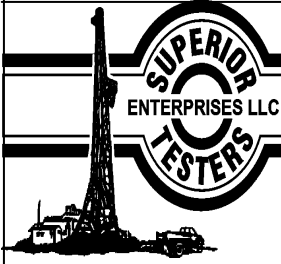
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1833.32	97.93	Initial Hydro-static
1	626.89	99.14	Open To Flow (1)
2	195.34	103.59	Shut-In(1)
64	1156.71	105.43	End Shut-In(1)
65	126.77	103.59	Open To Flow (2)
108	56.79	92.09	Shut-In(2)
198	1052.50	95.49	Shut-In(3)
199	1794.75	102.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	Drilling Mud	0.70

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	9.05	260.18
Last Gas Rate	1.00	5.45	156.68
Max. Gas Rate	1.00	9.05	260.18



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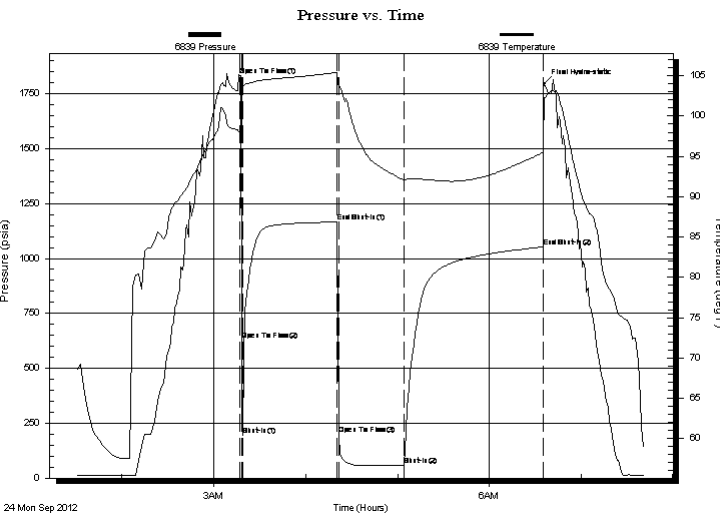
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 Total Depth: 3750.00 ft (KB) (TVD) 2004.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 8.00 ft

Serial #: 6839

Press@RunDepth: 1052.50 psia @ ft (KB) Capacity: psia
 Start Date: 2012.09.24 End Date: 2012.09.24 Last Calib.: 1899.12.30
 Start Time: 01:30:00 End Time: 07:42:00 Time On Btm:
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 2nd Shut-In-90 Minutes-Fair blow back



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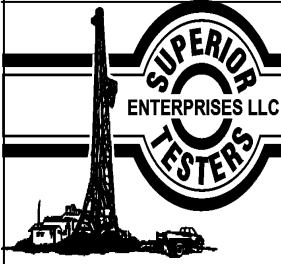
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1833.32	97.93	Open To Flow (1)
1	626.89	99.14	Open To Flow (2)
2	195.34	103.59	Shut-In(1)
64	1166.39	105.42	End Shut-In(1)
65	201.72	103.23	Open To Flow (3)
108	56.79	92.09	Shut-In(2)
198	1052.50	95.49	End Shut-In(2)
199	1794.75	102.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	Drilling Mud	0.70

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	9.05	260.18
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TOOL DIAGRAM

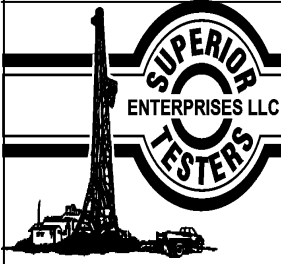
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Tool Information

Drill Pipe:	Length: 3732.00 ft	Diameter: 3.80 inches	Volume: 52.35 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:	75000.00 lb
			<u>Total Volume: 52.35 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3742.00 ft			Final	40000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	7.00 ft				
Tool Length:	30.00 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			3724.00	
Hydraulic Tool	5.00			3729.00	
Jars	6.00			3735.00	
Safety Joint	2.00			3737.00	
Packer	5.00			3742.00	23.00 Bottom Of Top Packer
Anchor	2.00			3744.00	
Recorder	1.00	6838	Inside	3745.00	
Recorder	1.00	6839	Outside	3746.00	
Bullnose	3.00			3749.00	7.00 Anchor Tool
Total Tool Length:	30.00				



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FLUID SUMMARY

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Mud and Cushion Information

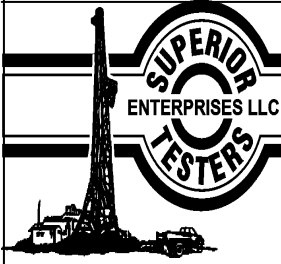
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 65.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.19 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 5500.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	Drilling Mud	0.701

Total Length: 50.00 ft Total Volume: 0.701 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	5	1.00	9.05	260.18
2	15	1.00	4.85	139.43
2	25	1.00	5.45	156.68
2	35	1.00	5.45	156.68
2	45	1.00	5.45	156.68

