



DRILL STEM TEST REPORT

Prepared For: **Captiva 2**

2717 Canal Blvd. Hays
Kansas 67601

ATTN: Charlie Strurdavant

F-N Unit # 1-B

13-21s-16w-Pawnee

Start Date: 2012.02.07 @ 06:39:00

End Date: 2012.02.07 @ 12:28:30

Job Ticket #: 17182 DST #: 2

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

Printed: 2012.02.07 @ 12:41:52



DRILL STEM TEST REPORT

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Strurdavant

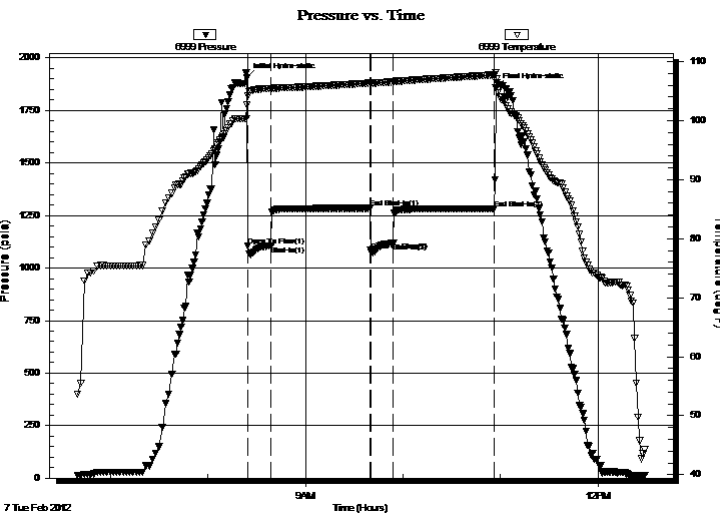
13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17182 **DST#: 2**
 Test Start: 2012.02.07 @ 06:39:00

GENERAL INFORMATION:

Formation: Arbuckle		Test Type: Conventional Bottom Hole (Initial)
Deviated: No Whipstock:	ft (KB)	Tester: Dustin Ellis
Time Tool Opened: 08:24:30		Unit No: 3315-Great Bend -30
Time Test Ended: 12:28:30		
Interval: 3807.00 ft (KB) To 3820.00 ft (KB) (TVD)		Reference Elevations: 1973.00 ft (KB)
Total Depth: 3820.00 ft (KB) (TVD)		1964.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Fair	KB to GR/CF: 9.00 ft

Serial #: 6999	Inside		
Press @ RunDepth: 1119.38 psia @ 3816.00 ft (KB)		Capacity: 5000.00 psia	
Start Date: 2012.02.07	End Date: 2012.02.07	Last Calib.: 2012.02.07	
Start Time: 06:39:00	End Time: 12:28:30	Time On Btm: 2012.02.07 @ 08:24:00	
		Time Off Btm: 2012.02.07 @ 10:57:00	

TEST COMMENT: 1st Open 15 minutes Strong blow blew bottom bucket instantly.
 1st Shut in 60 minutes Yes blow back
 2nd Open 15 minutes Strong blow blew bottom bucket instantly.
 2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

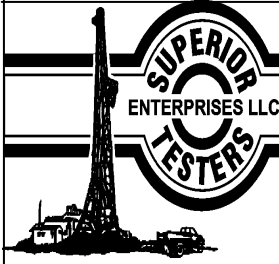
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1903.92	102.61	Initial Hydro-static
1	1103.75	104.18	Open To Flow (1)
15	1105.57	105.45	Shut-In(1)
76	1284.31	106.37	End Shut-In(1)
76	1083.60	106.32	Open To Flow (2)
90	1119.38	106.59	Shut-In(2)
152	1282.60	107.76	End Shut-In(2)
153	1858.12	108.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Clean oil 100%	0.01

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	13.80	396.73
Last Gas Rate	1.00	13.80	396.73



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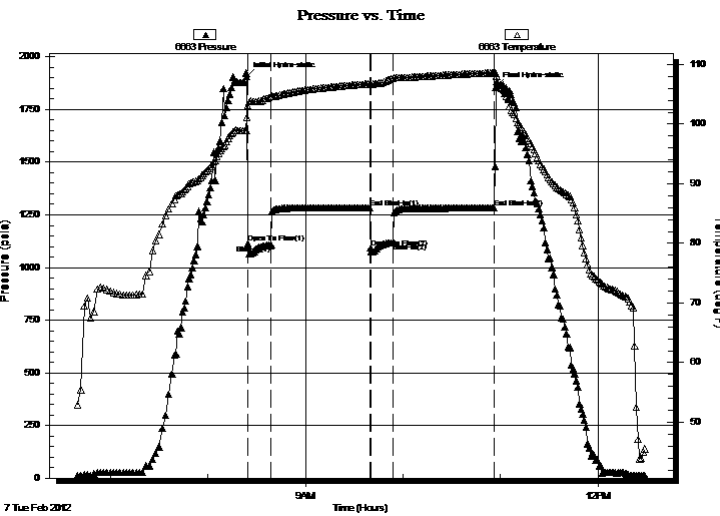
13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17182 **DST#: 2**
 Test Start: 2012.02.07 @ 06:39:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 08:24:30 Tester: Dustin Ellis
 Time Test Ended: 12:28:30 Unit No: 3315-Great Bend -30
 Interval: **3807.00 ft (KB) To 3820.00 ft (KB) (TVD)** Reference Elevations: 1973.00 ft (KB)
 Total Depth: 3820.00 ft (KB) (TVD) 1964.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 9.00 ft

Serial #: 6663 Outside
 Press @ Run Depth: 1282.65 psia @ 3817.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.02.07 End Date: 2012.02.07 Last Calib.: 2012.02.07
 Start Time: 06:39:00 End Time: 12:28:30 Time On Btm: 2012.02.07 @ 08:24:00
 Time Off Btm: 2012.02.07 @ 10:57:00

TEST COMMENT: 1st Open 15 minutes Strong blow blew bottom bucket instantly.
 1st Shut in 60 minutes Yes blow back
 2nd Open 15 minutes Strong blow blew bottom bucket instantly.
 2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1905.36	101.19	Initial Hydro-static
1	1115.43	103.07	Open To Flow (1)
15	1106.37	104.66	Shut-In(1)
76	1284.20	106.75	End Shut-In(1)
76	1094.22	106.68	Open To Flow (2)
90	1119.27	107.68	Shut-In(2)
152	1282.65	108.60	End Shut-In(2)
153	1856.99	108.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Clean oil 100%	0.01

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	13.80	396.73
Last Gas Rate	1.00	13.80	396.73



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TOOL DIAGRAM

Captiva 2
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 ATTN: Charlie Strurdavant

13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17182 **DST#: 2**
 Test Start: 2012.02.07 @ 06:39:00

Tool Information

Drill Pipe:	Length: 3535.00 ft	Diameter: 3.80 inches	Volume: 49.59 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: 252.50 ft	Diameter: 2.25 inches	Volume: 1.24 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 50.83 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.50 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3807.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	13.00 ft			
Tool Length:	41.00 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			3784.00	
Hydraulic Tool	5.00			3789.00	
Jars	6.00			3795.00	
Safety Joint	2.00			3797.00	
Packer	5.00			3802.00	28.00 Bottom Of Top Packer
Packer	5.00			3807.00	
Perforations	8.00			3815.00	
Recorder	1.00	6999	Inside	3816.00	
Recorder	1.00	6663	Outside	3817.00	
Bull Plug	3.00			3820.00	13.00 Bottom Packers & Anchor
Total Tool Length:	41.00				



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FLUID SUMMARY

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Job Ticket: 17182 **DST#: 2**
Test Start: 2012.02.07 @ 06:39:00

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: 44.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.20 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 6800.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Clean oil 100%	0.010

Total Length: 2.00 ft Total Volume: 0.010 bbl

Num Fluid Samples: 0

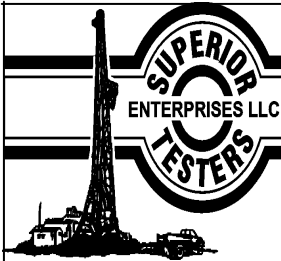
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



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GAS RATES

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13-21s-16w-Pawnee
F-N Unit # 1-B
Job Ticket: 17182 **DST#: 2**
Test Start: 2012.02.07 @ 06:39:00

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)
1	10	1.00	13.80	396.73
1	10	1.00	13.80	396.73

