



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: 2012.02.06 @ 04:35:00

End Date: 2012.02.06 @ 11:17:00

Job Ticket #: 17181 DST #: 1

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

Printed: 2012.02.06 @ 23:32:39

Captiva 2
13-21s-16w-Pawnee
F-N Unit # 1-B
DST # 1
Arbuckle
2012.02.06



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13-21s-16w-Pawnee
F-N Unit # 1-B
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 Test Start: 2012.02.06 @ 04:35:00

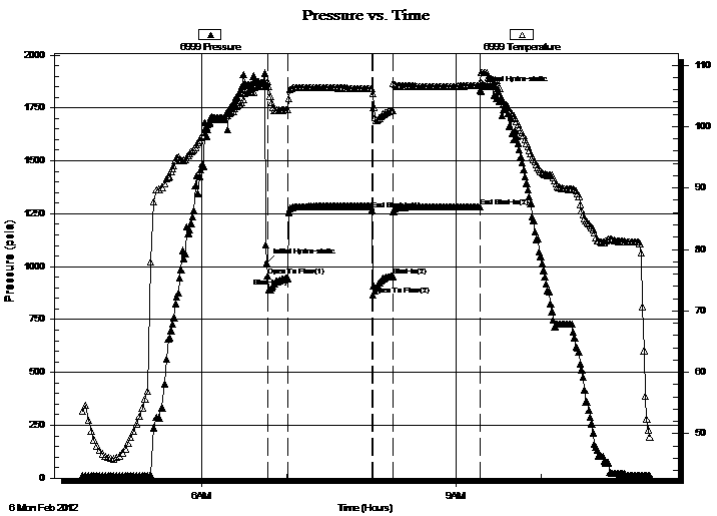
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 06:46:30 Tester: Dustin Ellis
 Time Test Ended: 11:17:00 Unit No: 3315-Great Bend -30
 Interval: **3760.00 ft (KB) To 3805.00 ft (KB) (TVD)** Reference Elevations: 1973.00 ft (KB)
 Total Depth: 3805.00 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 @ Run Depth: 1283.49 psia @ 3801.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.02.06 End Date: 2012.02.06 Last Calib.: 2012.02.06
 Start Time: 04:35:00 End Time: 11:16:30 Time On Btm: 2012.02.06 @ 06:46:00
 Time Off Btm: 2012.02.06 @ 09:17:00

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

PRESSURE SUMMARY



Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1017.50	107.17	Initial Hydro-static
1	955.75	107.36	Open To Flow (1)
15	944.26	102.75	Shut-In(1)
75	1268.79	106.17	End Shut-In(1)
75	865.42	105.41	Open To Flow (2)
89	953.93	102.64	Shut-In(2)
151	1283.49	106.72	End Shut-In(2)
151	1830.56	107.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud 100%	0.32

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	12.00	344.99
Last Gas Rate	1.00	13.20	379.48
Max. Gas Rate	1.00	13.20	379.48



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TOOL DIAGRAM

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Tool Information

Drill Pipe:	Length: 3497.00 ft	Diameter: 3.80 inches	Volume: 49.05 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: 75000.00 lb
			<u>Total Volume: 50.29 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.50 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3760.00 ft			Final 71000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	73.00 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			3737.00	
Hydraulic Tool	5.00			3742.00	
Jars	6.00			3748.00	
Safety Joint	2.00			3750.00	
Packer	5.00			3755.00	28.00 Bottom Of Top Packer
Packer	5.00			3760.00	
Perforations	40.00			3800.00	
Recorder	1.00	6999	Inside	3801.00	
Recorder	1.00	6663	Outside	3802.00	
Bull Plug	3.00			3805.00	45.00 Bottom Packers & Anchor
Total Tool Length:	73.00				



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FLUID SUMMARY

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F-N Unit # 1-B

Job Ticket: 17181

DST#: 1

ATTN: Charlie Strurdavant

Test Start: 2012.02.06 @ 04:35:00

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:

bbbl

Water Loss: 7.20 in³

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
65.00	Mud 100%	0.320

Total Length: 65.00 ft Total Volume: 0.320 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gas to surface.



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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)
1	10	1.00	12.00	344.99
2	20	1.00	12.00	344.99
3	30	1.00	13.20	379.48
4	40	1.00	13.20	379.48

