



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 @ 07:30:00

End Date: 2012.02.07 @ 16:06:53

Job Ticket #: 17183 DST #: 3

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

Printed: 2012.02.08 @ 05:00:22

Captiva 2
13-21s-16w-Pawnee
F-N Unit # 1-B
DST # 3
Arbuckle
2012.02.07



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 Test Start: 2012.02.07 @ 07:30:00

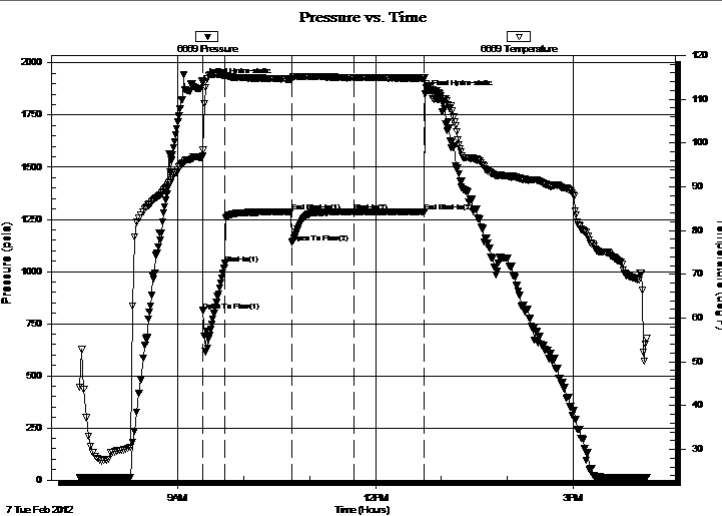
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 09:22:53 Tester: Dustin Ellis
 Time Test Ended: 16:06:53 Unit No: 3315-Great Bend-30 m
 Interval: **3820.00 ft (KB) To 3833.00 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 #: 6669

Press @ Run Depth: 1285.71 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.02.07 End Date: 2012.02.07 Last Calib.: 2012.02.08
 Start Time: 07:30:00 End Time: 16:06:53 Time On Btm: 2012.02.07 @ 09:22:23
 Time Off Btm: 2012.02.07 @ 12:44:53

TEST COMMENT: 1st Open 20 minutes Strong blow bottom bucket instantly.
 1st Shut in 60 minutes Yes blow back
 2nd Open 60 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	1904.18	97.16	Initial Hydro-static
1	812.64	98.38	Open To Flow (1)
21	1039.22	115.45	Shut-In(1)
81	1286.47	114.62	End Shut-In(1)
82	1139.21	114.72	Open To Flow (2)
138	1285.71	114.92	Shut-In(2)
202	1287.02	114.83	End Shut-In(2)
203	1850.41	114.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Oil cut mud 20%Oil 80% Mud	0.30
90.00	Oil and gas cut mud 20%gas 40%oil 50%	0.44
60.00	Clean oil 100%	0.30
90.00	Oil cut muddy w ater 10%oil70%mud20%	0.88
150.00	Mud cut oil 5%oil 95%mud	2.10
2468.00	Salt w ater 100%	34.62

Gas Rates

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



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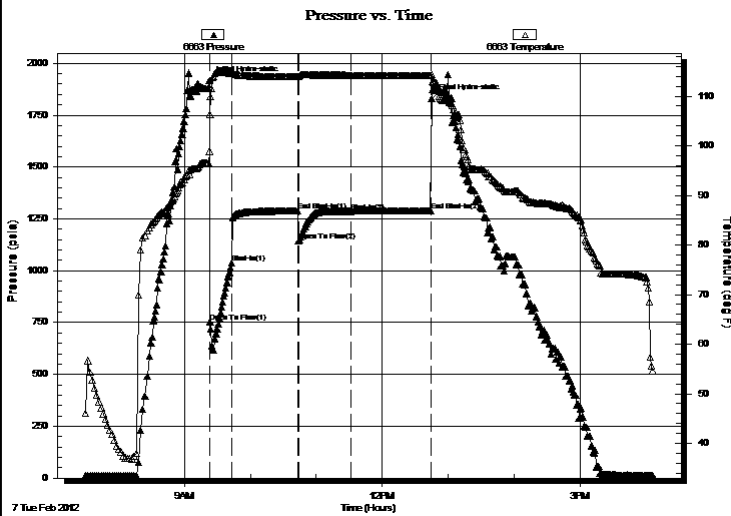
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 Total Depth: 3820.00 ft (KB) (TVD) 1964.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 9.00 ft

Serial #: 6663

Press @ Run Depth: 1288.72 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.02.07 End Date: 2012.02.07 Last Calib.: 2012.02.08
 Start Time: 07:30:00 End Time: 16:06:23 Time On Btm: 2012.02.07 @ 09:22:53
 Time Off Btm: 2012.02.07 @ 12:44:53

TEST COMMENT: 1st Open 20 minutes Strong blow bottom bucket instantly.
 1st Shut in 60 minutes Yes blow back
 2nd Open 60 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	1917.13	98.88	Initial Hydro-static
1	753.58	106.32	Open To Flow (1)
20	1037.97	114.60	Shut-In(1)
81	1288.14	113.96	End Shut-In(1)
81	1143.46	113.94	Open To Flow (2)
129	1285.95	114.17	Shut-In(2)
202	1288.72	114.17	End Shut-In(2)
202	1831.00	114.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Oil cut mud 20%Oil 80% Mud	0.30
90.00	Oil and gas cut mud 20%gas 40%oil 50%	0.44
60.00	Clean oil 100%	0.30
90.00	Oil cut muddy w ater 10%oil70%mud20%	0.88
150.00	Mud cut oil 5%oil 95%mud	2.10
2468.00	Salt w ater 100%	34.62

Gas Rates

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



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TOOL DIAGRAM

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Tool Information

Drill Pipe:	Length: 3568.00 ft	Diameter: 3.80 inches	Volume: 50.05 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:	95000.00 lb
			<u>Total Volume: 51.29 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	28.50 ft			String Weight: Initial	70000.00 lb
Depth to Top Packer:	3820.00 ft			Final	84000.00 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: Gas to surface.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3797.00	
Hydraulic Tool	5.00			3802.00	
Jars	6.00			3808.00	
Safety Joint	2.00			3810.00	
Packer	5.00			3815.00	28.00 Bottom Of Top Packer
Packer	5.00			3820.00	
Perforations	8.00			3828.00	
Recorder	1.00	6999	Inside	3829.00	
Recorder	1.00	6663	Outside	3830.00	
Bull Plug	3.00			3833.00	13.00 Bottom Packers & Anchor
Total Tool Length:	41.00				



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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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.20 in ³	Gas Cushion Type:		
Resistivity: 0.40 ohm.m	Gas Cushion Pressure: psia		
Salinity: 72000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Oil cut mud 20%Oil 80% Mud	0.295
90.00	Oil and gas cut mud 20%gas 40%oil 50%mud	0.443
60.00	Clean oil 100%	0.295
90.00	Oil cut muddy w ater 10%oil70%mud20%w ate	0.875
150.00	Mud cut oil 5%oil 95%mud	2.104
2468.00	Salt w ater 100%	34.620
0.00	Chlorides 18000	0.000

Total Length: 2918.00 ft Total Volume: 38.632 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

