



DRILL STEM TEST REPORT

Prepared For: **Captiva 11**

2717 Canal Blvd Hays
Ks 67601

ATTN: Charlie Sturdarant

7-22s-16w Pawnee

Charlie Sturdarant

Start Date: 2011.07.02 @ 13:54:00

End Date: 2011.07.03 @ 01:24:00

Job Ticket #: 16503 DST #: 2

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

Printed: 2011.07.03 @ 01:59:01

Captiva 11
Charlie Sturdarant
7-22s-16w Pawnee
DST # 2
Arbuckle
2011.07.02



DRILL STEM TEST REPORT

Captiva 11
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 Ks 67601
 ATTN: Charlie Sturdarant

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7-22s-16w Pawnee
 Job Ticket: 16503 **DST#: 2**
 Test Start: 2011.07.02 @ 13:54:00

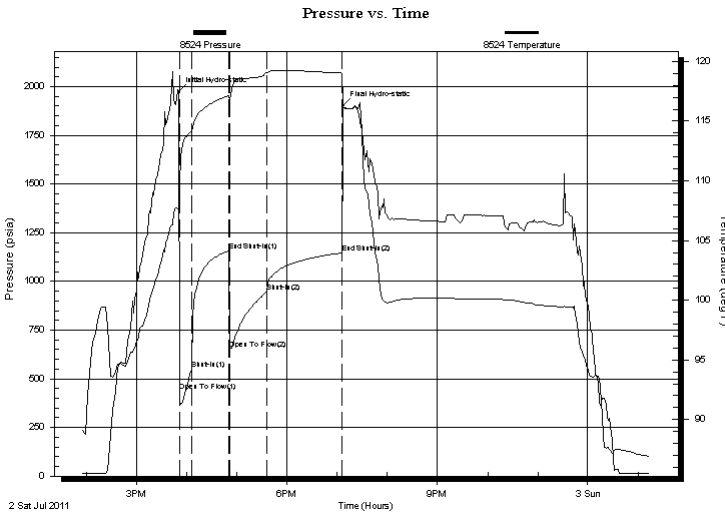
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 15:51:00 Tester: Dustin Ellis/Jared
 Time Test Ended: 01:24:00 Unit No: 3332-GB-62
 Interval: **3890.00 ft (KB) To 3905.00 ft (KB) (TVD)** Reference Elevations: 2021.00 ft (KB)
 Total Depth: 3905.00 ft (KB) (TVD) 2010.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 8524 Inside
 Press @ Run Depth: 944.78 psia @ 3901.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2011.07.02 End Date: 2011.07.03 Last Calib.: 2011.07.03
 Start Time: 13:54:00 End Time: 01:24:00 Time On Btm: 2011.07.02 @ 15:50:00
 Time Off Btm: 2011.07.02 @ 19:07:00

TEST COMMENT: 1st Open 15 minutes Blew bottom of bucket in 1 minutes
 1st Shut in 45 minutes Blow back bottom of bucket gas to surface see gas report
 2nd Open 45 minutes Blew bottom of bucket in 2 minutes
 2nd Shut in 90 minutes Blow back bottom of bucket

PRESSURE SUMMARY



Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1975.64	107.72	Initial Hydro-static
1	436.14	108.85	Open To Flow (1)
16	551.28	114.18	Shut-In(1)
61	1158.49	117.14	End Shut-In(1)
62	651.55	116.83	Open To Flow (2)
106	944.78	119.04	Shut-In(2)
196	1146.43	119.02	End Shut-In(2)
197	1902.89	116.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	Oily cut gas 65% oil 35% gas	0.25
1140.00	Clean gasy oil	14.38
0.00	35% gas 65%oil	0.00
1330.00	Clean oil 100% oil	18.66
0.00	720 Foot gas in pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	5.50	2.06
Last Gas Rate	0.13	7.00	2.62
Max. Gas Rate	0.13	12.60	4.72



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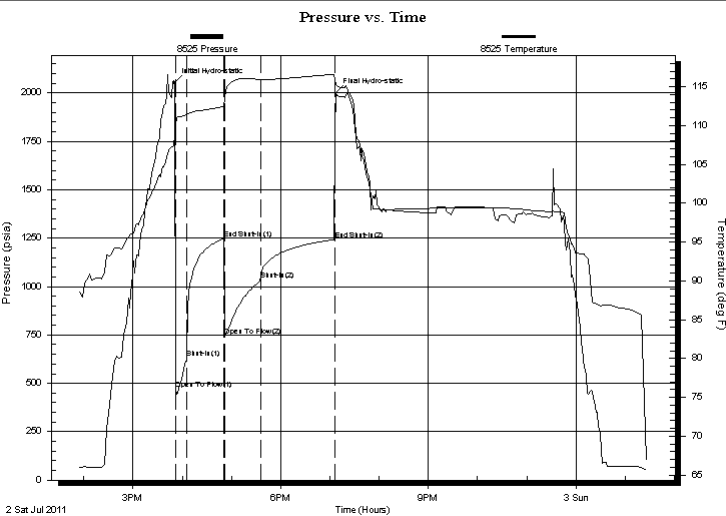
Charlie Sturdarant
7-22s-16w Pawnee
 Job Ticket: 16503 **DST#: 2**
 Test Start: 2011.07.02 @ 13:54:00

GENERAL INFORMATION:

Formation: **Arbuckle**
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 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 15:51:00 Tester: Dustin Ellis/Jared
 Time Test Ended: 01:24:00 Unit No: 3332-GB-62
 Interval: **3890.00 ft (KB) To 3905.00 ft (KB) (TVD)** Reference Elevations: 2021.00 ft (KB)
 Total Depth: 3905.00 ft (KB) (TVD) 2010.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 8525 Outside
 Press @ Run Depth: 1243.35 psia @ 3902.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2011.07.02 End Date: 2011.07.03 Last Calib.: 2011.07.03
 Start Time: 13:54:00 End Time: 01:28:00 Time On Btm: 2011.07.02 @ 15:50:30
 Time Off Btm: 2011.07.02 @ 19:07:00

TEST COMMENT: 1st Open 15 minutes Blew bottom of bucket in 1 minutes
 1st Shut in 45 minutes Blow back bottom of bucket gas to surface see gas report
 2nd Open 45 minutes Blew bottom of bucket in 2 minutes
 2nd Shut in 90 minutes Blow back bottom of bucket



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2053.86	107.39	Initial Hydro-static
1	467.43	110.09	Open To Flow (1)
15	628.14	111.39	Shut-In(1)
60	1247.51	112.49	End Shut-In(1)
61	742.81	113.58	Open To Flow (2)
105	1032.09	115.93	Shut-In(2)
195	1243.35	116.60	End Shut-In(2)
197	2000.43	115.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	Oily cut gas 65% oil 35% gas	0.25
1140.00	Clean gasy oil	14.38
0.00	35% gas 65%oil	0.00
1330.00	Clean oil 100% oil	18.66
0.00	720 Foot gas in pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	5.50	2.06
Last Gas Rate	0.13	7.00	2.62
Max. Gas Rate	0.13	12.60	4.72



DRILL STEM TEST REPORT

TOOL DIAGRAM

Captiva 11
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 Test Start: 2011.07.02 @ 13:54:00

Tool Information

Drill Pipe:	Length: 3665.00 ft	Diameter: 3.80 inches	Volume: 51.41 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: 226.69 ft	Diameter: 2.25 inches	Volume: 1.11 bbl	Weight to Pull Loose: 110000.0 lb
			<u>Total Volume: 52.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.69 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	3890.00 ft			Final 77000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.25 inches		

Tool Comments: Gas to surface on initial shut in see gas reports

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
SHut-InTool	5.00		Inside	3867.00	
Hydraulic Tool	5.00			3872.00	
Jars	6.00			3878.00	
Safety Joint	2.00			3880.00	
Packer	5.00			3885.00	28.00 Bottom Of Top Packer
Packer	5.00			3890.00	
Anchor	10.00			3900.00	
Recorder	1.00	8524	Inside	3901.00	
Recorder	1.00	8525	Outside	3902.00	
Bullnose	3.00			3905.00	15.00 Bottom Packers & Anchor
Total Tool Length:	43.00				



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FLUID SUMMARY

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 Test Start: 2011.07.02 @ 13:54:00

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: 69.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.00 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 5000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

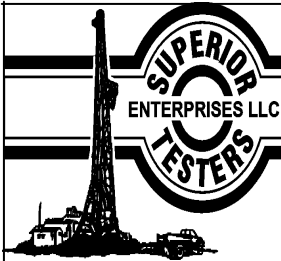
Length ft	Description	Volume bbl
50.00	Oily cut gas 65% oil 35% gas	0.246
1140.00	Clean gasy oil	14.382
0.00	35% gas 65%oil	0.000
1330.00	Clean oil 100% oil	18.656
0.00	720 Foot gas in pipe	0.000

Total Length: 2520.00 ft Total Volume: 33.284 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: Gas to surface initial shutin see gas reports
 Gravity of oil 46 corrected
 Broke circulating sub



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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	5	0.13	5.50	2.06
2	10	0.13	10.20	3.82
3	20	0.13	12.60	4.72
4	30	0.13	12.60	4.72
5	40	0.13	10.90	4.08
-	45	0.13	7.00	2.62

Serial #: 8524

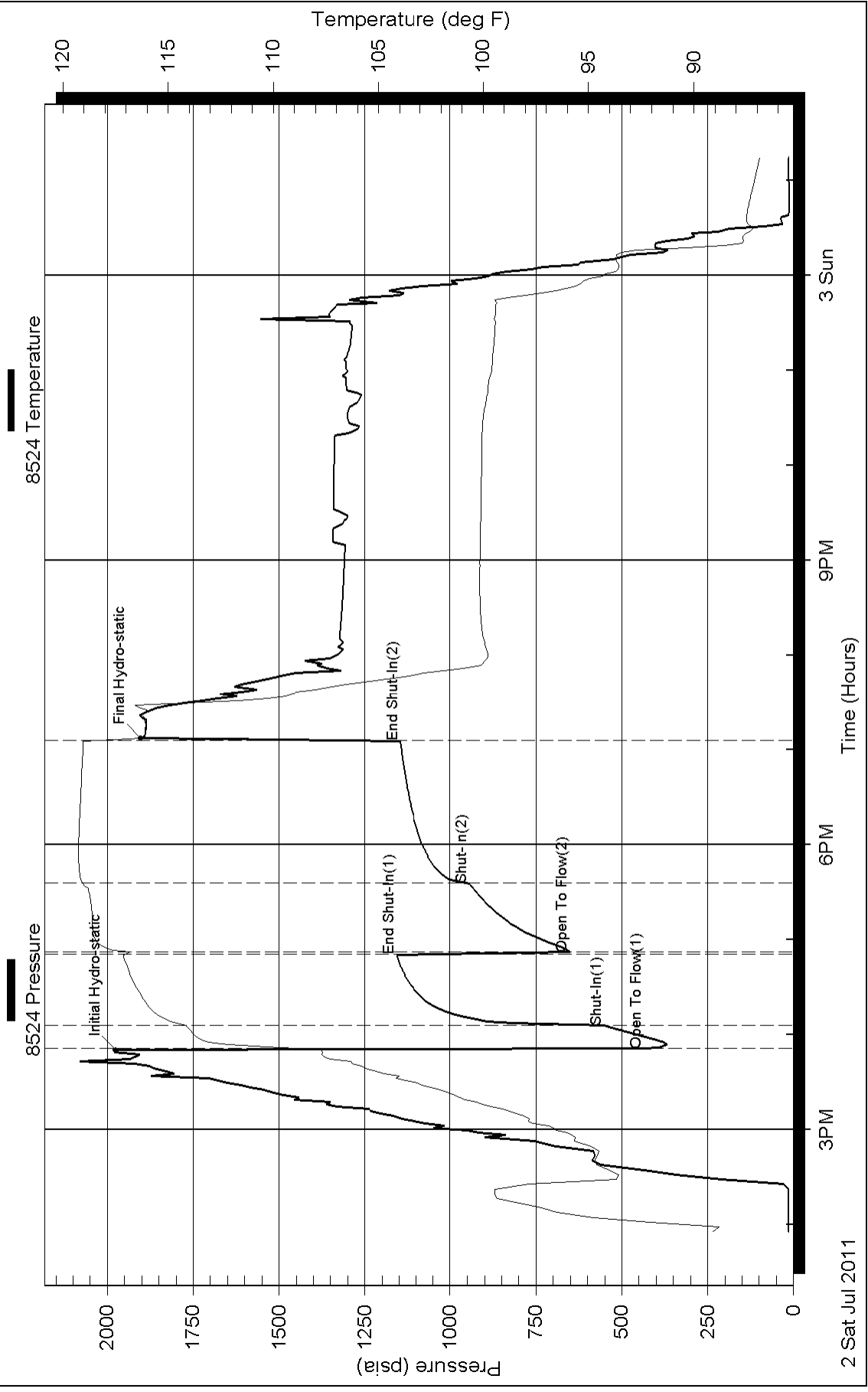
Inside

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7-22s-16w Pawnee

DST Test Number: 2

Pressure vs. Time



Serial #: 8525

Outside Captiva 11

7-22s-16w Pawnee

DST Test Number: 2

Pressure vs. Time

