



DRILL STEM TEST REPORT

Prepared For: **Captiva 2**

2717 Canal Blvd. Hays
Kansas 67601

ATTN: Charlie Sturdavant

7-22s-16w -Pawnee

Eakin Unit 5-7

Start Date: 2011.10.27 @ 04:18:00

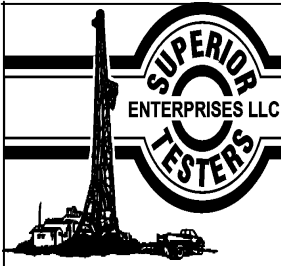
End Date: 2011.10.27 @ 11:53:30

Job Ticket #: 17229 DST #: 2

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

Printed: 2011.10.27 @ 12:09:36

Captiva 2 Eakin Unit 5-7 7-22s-16w -Pawnee DST # 2 Conglomerate 2011.10.27



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 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Sturdavant

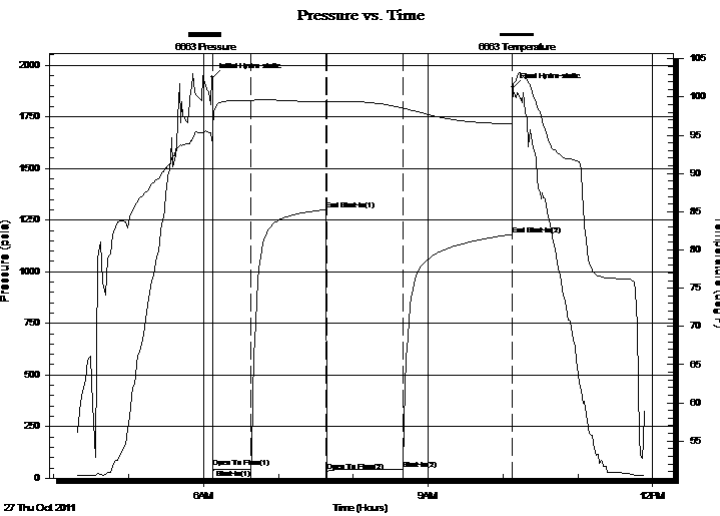
Eakin Unit 5-7
7-22s-16w -Pawnee
 Job Ticket: 17229 **DST#: 2**
 Test Start: 2011.10.27 @ 04:18:00

GENERAL INFORMATION:

Formation: **Conglomerate**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 06:07:30 Tester: Dustin Ellis
 Time Test Ended: 11:53:30 Unit No: 3315-GB-55
 Interval: **3894.00 ft (KB) To 3903.00 ft (KB) (TVD)** Reference Elevations: 2021.00 ft (KB)
 Total Depth: 3903.00 ft (KB) (TVD) 2010.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 6663 Outside
 Press @ Run Depth: 42.50 psia @ 3900.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2011.10.27 End Date: 2011.10.27 Last Calib.: 2011.10.27
 Start Time: 04:18:00 End Time: 11:53:30 Time On Btm: 2011.10.27 @ 06:07:00
 Time Off Btm: 2011.10.27 @ 10:08:00

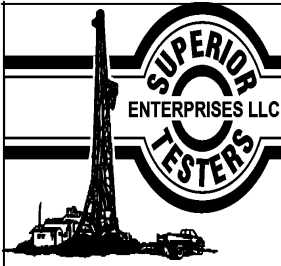
TEST COMMENT: 1st open 30 minutes Strong blow blew bottom of bucket instantly
 1st shut in 60 minutes No blow
 2nd open 60 minutes Strong blow blew bottom of bucket instantly
 2nd shut in 90 minutes No blow



PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1942.26	94.12	Initial Hydro-static
1	53.39	95.79	Open To Flow (1)
31	43.69	99.47	Shut-In(1)
91	1299.21	99.39	End Shut-In(1)
92	33.95	99.67	Open To Flow (2)
153	42.50	98.54	Shut-In(2)
240	1180.08	96.56	End Shut-In(2)
241	1893.13	101.33	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
56.00	Mud 100%	0.28

Gas Rates			
	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	3.00	86.25
Last Gas Rate	0.75	3.00	46.86
Max. Gas Rate	0.75	4.00	62.48



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 Test Start: 2011.10.27 @ 04:18:00

GENERAL INFORMATION:

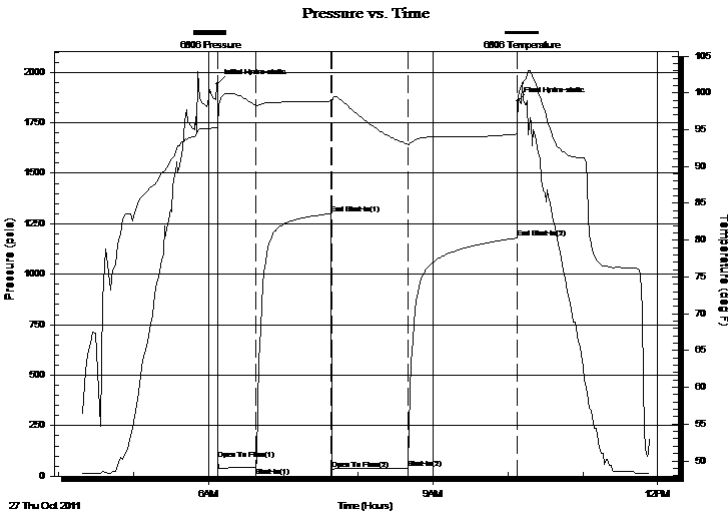
Formation: **Conglomerate**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:07:30
 Time Test Ended: 11:53:30
 Interval: **3894.00 ft (KB) To 3903.00 ft (KB) (TVD)**
 Total Depth: 3903.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-GB-55
 Reference Elevations: 2021.00 ft (KB)
 2010.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 6806 Inside
 Press @ Run Depth: 1179.25 psia @ 3899.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2011.10.27 End Date: 2011.10.27 Last Calib.: 2011.10.27
 Start Time: 04:18:00 End Time: 11:53:30 Time On Btm: 2011.10.27 @ 06:07:00
 Time Off Btm: 2011.10.27 @ 10:07:30

TEST COMMENT: 1st open 30 minutes Strong blow blew bottom of bucket instantly
 1st shut in 60 minutes No blow
 2nd open 60 minutes Strong blow blew bottom of bucket instantly
 2nd shut in 90 minutes No blow

PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1942.68	95.25	Initial Hydro-static
1	83.89	95.09	Open To Flow (1)
31	41.88	98.28	Shut-In(1)
91	1299.57	98.89	End Shut-In(1)
92	35.20	98.85	Open To Flow (2)
153	40.65	93.03	Shut-In(2)
240	1179.25	94.42	End Shut-In(2)
241	1856.52	95.08	Final Hydro-static



Recovery

Length (ft)	Description	Volume (bbl)
56.00	Mud 100%	0.28

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	3.00	86.25
Last Gas Rate	0.75	3.00	46.86
Max. Gas Rate	0.75	4.00	62.48



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TOOL DIAGRAM

Captiva 2
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Eakin Unit 5-7
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 Test Start: 2011.10.27 @ 04:18:00

Tool Information

Drill Pipe:	Length: 3672.00 ft	Diameter: 3.80 inches	Volume: 51.51 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: 213.00 ft	Diameter: 2.25 inches	Volume: 1.05 bbl	Weight to Pull Loose:	72000.00 lb
			<u>Total Volume: 52.56 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial	70000.00 lb
Depth to Top Packer:	3894.00 ft			Final	70000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	9.00 ft				
Tool Length:	37.00 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			3871.00	
Hydraulic Tool	5.00			3876.00	
Jars	6.00			3882.00	
Safety Joint	2.00			3884.00	
Packer	5.00			3889.00	28.00 Bottom Of Top Packer
Packer	5.00			3894.00	
Perforations	4.00			3898.00	
Recorder	1.00	6806	Inside	3899.00	
Recorder	1.00	6663	Outside	3900.00	
Bull Plug	3.00			3903.00	9.00 Bottom Packers & Anchor
Total Tool Length:	37.00				



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FLUID SUMMARY

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Test Start: 2011.10.27 @ 04:18:00

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: 49.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.60 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 8600.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
56.00	Mud 100%	0.275

Total Length: 56.00 ft Total Volume: 0.275 bbl

Num Fluid Samples: 0

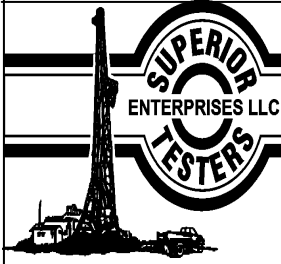
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



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GAS RATES

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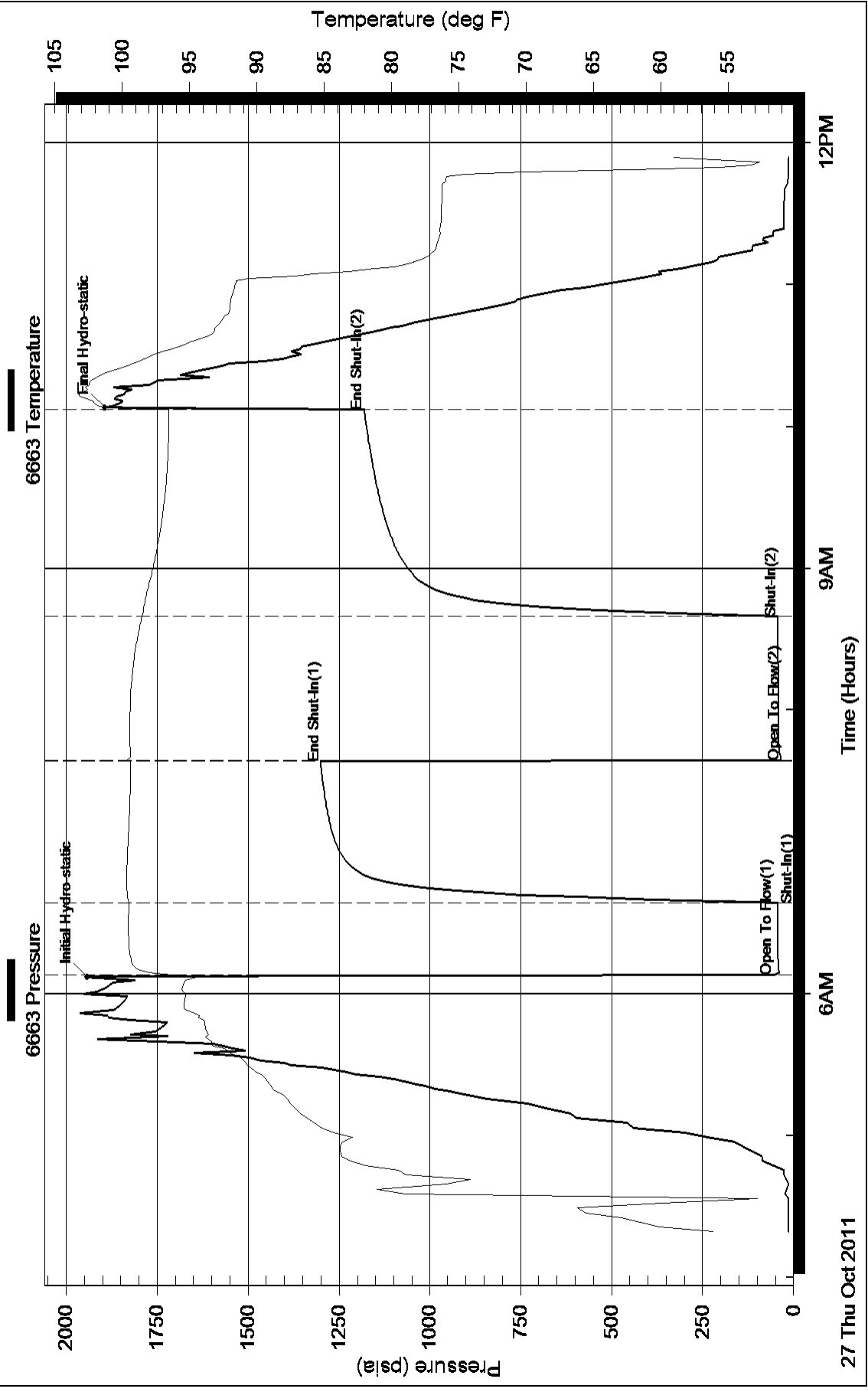
Gas Rates Information

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)
1	10	1.00	3.00	86.25
2	20	0.75	4.00	62.48
3	30	0.75	3.00	46.86
4	40	0.75	3.00	46.86
5	50	0.75	3.00	46.86

Pressure vs. Time



Pressure vs. Time

