

DRILL STEM TEST REPORT

Prepared For: **F.G.Holl Company L.L.C.**

9431 East Central Suite 100
Wichita, Kansas 672

ATTN: Rene Husted

Penne Trut Unit#1-15

15-20s-15w

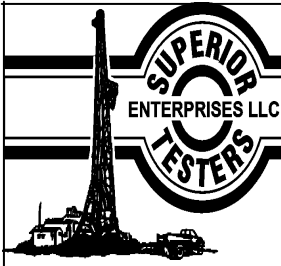
Start Date: 2012.07.25 @ 00:00:00

End Date: 2012.07.25 @ 00:00:00

Job Ticket #: 17781 DST #: 1

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

Printed: 2012.07.25 @ 09:26:55



DRILL STEM TEST REPORT

F.G.Holl Company L.L.C.

15-20s-15w

9431 East Central Suite 100
Wichita, Kansas 672

Penne Trut Unit#1-15

Job Ticket: 17781

DST#: 1

ATTN: Rene Husted

Test Start: 2012.07.25 @ 00:00:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No: 3335

Interval: 3696.00 ft (KB) To 3706.00 ft (KB) (TVD)

Reference Elevations: 1984.00 ft (KB)

Total Depth: 3706.00 ft (KB) (TVD)

1976.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8524 Inside

Press @ Run Depth: 1139.12 psia @ 3702.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.07.25

End Date: 2012.07.25

Last Calib.: 2012.07.25

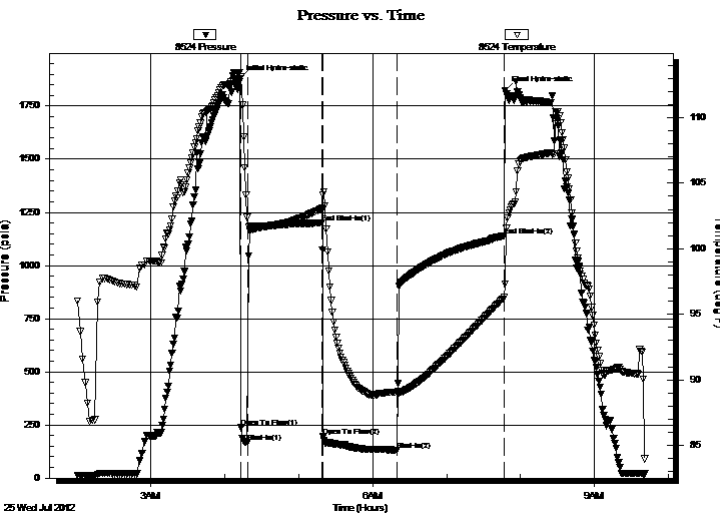
Start Time: 02:00:00

End Time: 09:41:00

Time On Btm: 2012.07.25 @ 04:12:00

Time Off Btm: 2012.07.25 @ 07:47:30

TEST COMMENT: 1ST Opening 5 Minutes Strong blow built to the bottom of a 5 gallon bucket in 1 minute
 1st Shut-In 60 Minutes fair blow back
 2nd Opening 60 Minutes-Strong blow gas to surface in 4 minutes see gas report
 2nd Shut-In 90 Minutes-Fair blow gack



PRESSURE SUMMARY

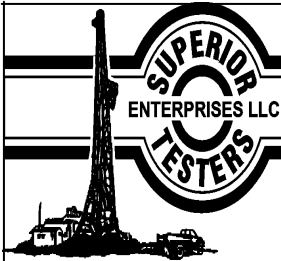
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1876.86	113.42	Initial Hydro-static
2	239.07	113.15	Open To Flow (1)
7	168.08	102.40	Shut-In(1)
67	1200.27	103.08	End Shut-In(1)
68	194.92	104.11	Open To Flow (2)
128	130.35	89.03	Shut-In(2)
215	1139.12	96.28	End Shut-In(2)
216	1823.96	97.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	there was no recovery in the drill pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.75	45.00	702.89
Last Gas Rate	0.75	33.00	515.46
Max. Gas Rate	0.75	45.00	702.89



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Penne Trut Unit#1-15

Job Ticket: 17781

DST#: 1

ATTN: Rene Husted

Test Start: 2012.07.25 @ 00:00:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No: 3335

Interval: 3696.00 ft (KB) To 3706.00 ft (KB) (TVD)

Reference Elevations: 1984.00 ft (KB)

Total Depth: 3706.00 ft (KB) (TVD)

1976.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 91716 Outside

Press @ Run Depth: 1138.31 psia @ 3703.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.07.25

End Date:

2012.07.25

Last Calib.:

2012.07.25

Start Time: 02:00:00

End Time:

09:43:00

Time On Btm:

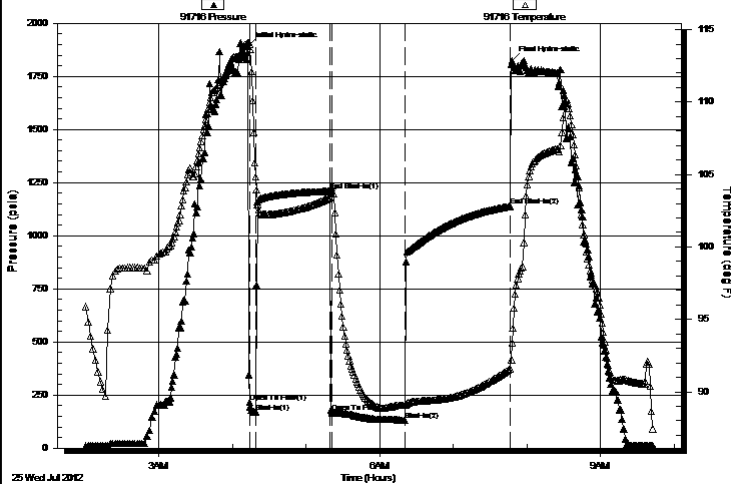
2012.07.25 @ 04:13:00

Time Off Btm:

2012.07.25 @ 07:48:00

TEST COMMENT: 1ST Opening 5 Minutes Strong blow built to the bottom of a 5 gallon bucket in 1 minute
 1st Shut-In 60 Minutes fair blow back
 2nd Opening 60 Minutes-Strong blow gas to surface in 4 minutes see gas report
 2nd Shut-In 90 Minutes-Fair blow gack

Pressure vs. Time



PRESSURE SUMMARY

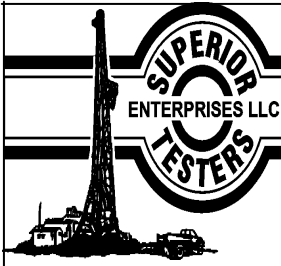
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1889.90	114.11	Initial Hydro-static
1	214.83	114.01	Open To Flow (1)
6	170.37	104.84	Shut-In(1)
67	1209.04	103.42	End Shut-In(1)
68	170.70	104.10	Open To Flow (2)
128	131.25	89.06	Shut-In(2)
214	1138.31	91.60	End Shut-In(2)
215	1825.34	93.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	there was no recovery in the drill pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.75	45.00	702.89
Last Gas Rate	0.75	33.00	515.46
Max. Gas Rate	0.75	45.00	702.89



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G.Holl Company L.L.C.

15-20s-15w

9431 East Central Suite 100
Wichita, Kansas 672

Penne Trut Unit#1-15

Job Ticket: 17781

DST#: 1

ATTN: Rene Husted

Test Start: 2012.07.25 @ 00:00:00

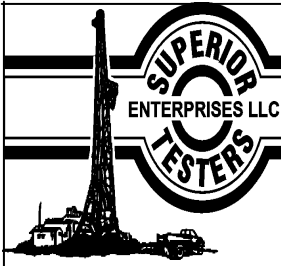
Tool Information

Drill Pipe:	Length: 3699.00 ft	Diameter: 3.80 inches	Volume: 51.89 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 38000.00 lb
			<u>Total Volume: 51.89 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3696.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	38.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			3673.00	
Hydraulic Tool	5.00			3678.00	
Jars	6.00			3684.00	
Safety Joint	2.00			3686.00	
Packer	5.00			3691.00	28.00 Bottom Of Top Packer
Packer	5.00			3696.00	
Perforations	5.00			3701.00	
Recorder	1.00	8524	Inside	3702.00	
Recorder	1.00	91716	Outside	3703.00	
Bull Plug	3.00			3706.00	10.00 Bottom Packers & Anchor
Total Tool Length:	38.00				



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FLUID SUMMARY

F.G.Holl Company L.L.C.

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Penne Trut Unit#1-15

Job Ticket: 17781

DST#: 1

ATTN: Rene Husted

Test Start: 2012.07.25 @ 00:00:00

Mud and Cushion Information

Mud Type: Gel Chem
 Mud Weight: 9.00 lb/gal
 Viscosity: 50.00 sec/qt
 Water Loss: 8.39 in³
 Resistivity: ohm.m
 Salinity: 6000.00 ppm
 Filter Cake: inches

Cushion Type:
 Cushion Length: ft
 Cushion Volume: bbl
 Gas Cushion Type:
 Gas Cushion Pressure: psia

Oil API: deg API
 Water Salinity: ppm

Recovery Information

Recovery Table

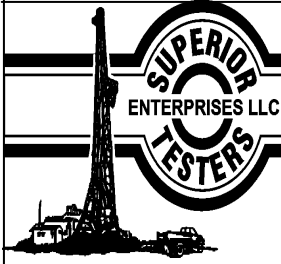
Length ft	Description	Volume bbl
0.00	there was no recovery in the drill pipe	0.000

Total Length: ft Total Volume: bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:



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GAS RATES

F.G.Holl Company L.L.C.

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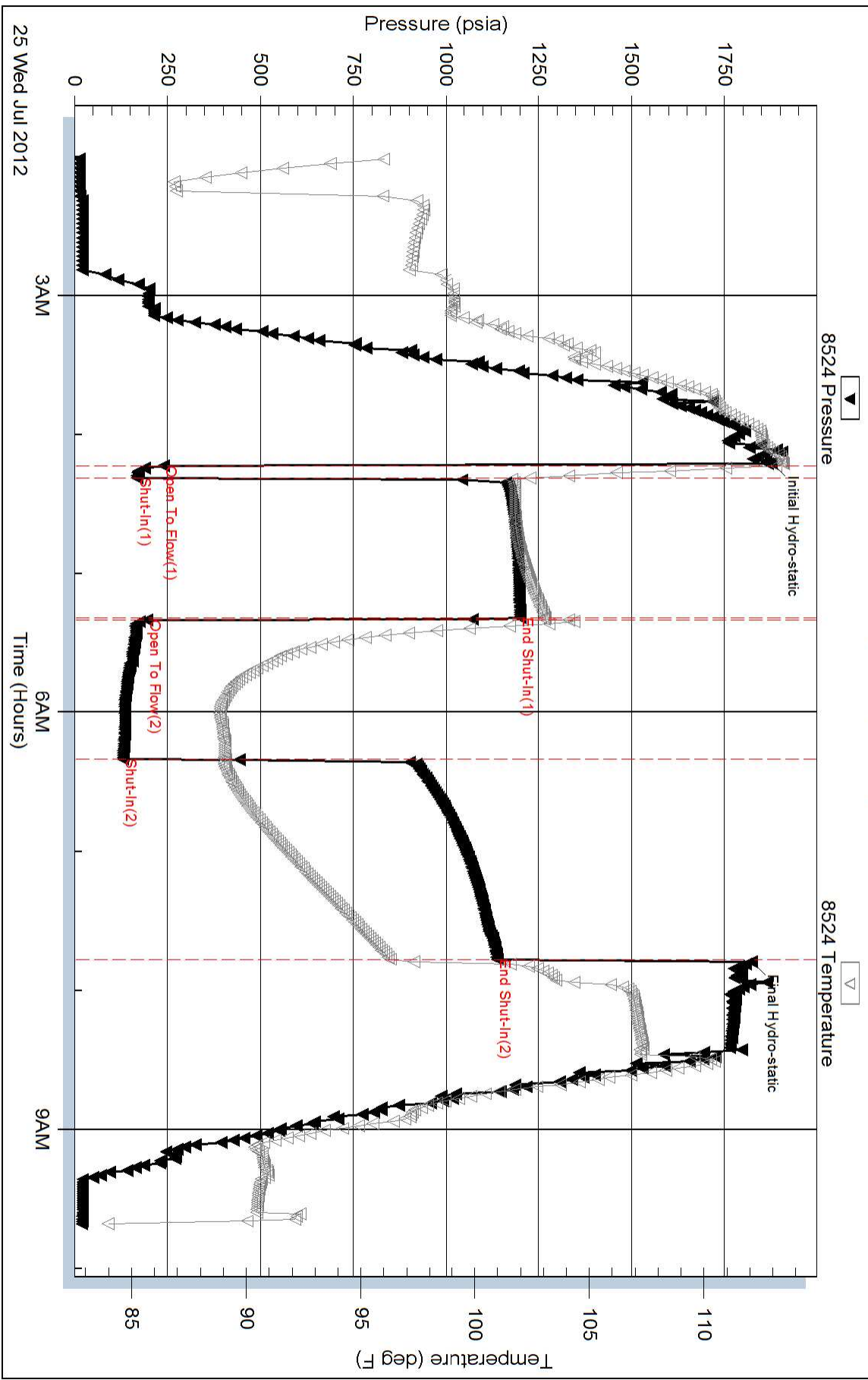
Gas Rates Information

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)
2	10	0.75	45.00	702.89
2	20	0.75	45.00	702.89
2	30	0.75	39.00	609.17
2	40	0.75	38.00	593.55
2	50	0.75	36.00	562.32
2	60	0.75	33.00	515.46

Pressure vs. Time



Pressure vs. Time

