



## DRILL STEM TEST REPORT

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

9431 east Central Suite 100  
Wichita, Kansas 67206

ATTN: Rene Husted

### **Button "A" Unit #1-24**

#### **29-19s-15w Barton**

Start Date: 2012.09.09 @ 00:00:00

End Date: 2012.09.09 @ 00:00:00

Job Ticket #: 17799                      DST #: 10

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

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# DRILL STEM TEST REPORT

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

**29-19s-15w Barton**

9431 east Central Suite 100  
Wichita, Kansas 67206

**Button "A" Unit #1-24**

Job Ticket: 17799

**DST#: 10**

ATTN: Rene Hustedad

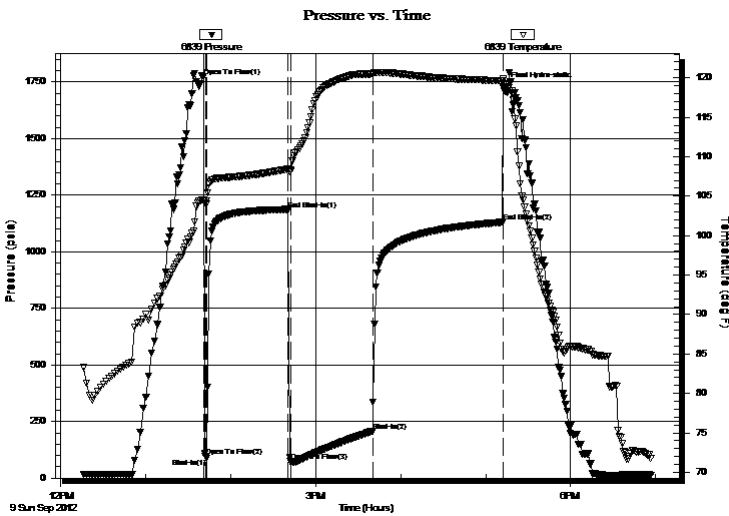
Test Start: 2012.09.09 @ 00:00:00

## GENERAL INFORMATION:

Formation: **Regan**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 00:00:00  
 Time Test Ended: 00:00:00  
 Interval: **3562.00 ft (KB) To 3577.00 ft (KB) (TVD)**  
 Total Depth: 3577.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Gene Budig  
 Unit No: 3335  
 Reference Elevations: 1915.00 ft (KB)  
 1907.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 6839 Outside**  
 Press @ Run Depth: 1130.89 psia @ 3574.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2012.09.09 End Date: 2012.09.09 Last Calib.: 2012.09.09  
 Start Time: 12:15:00 End Time: 18:56:30 Time On Btm:  
 Time Off Btm: 2012.09.09 @ 17:13:00

**TEST COMMENT:** 1st Opening 2 Minutes-Strong blow built to the bottom of a 5 gallon bucekt in 30 seconds  
 1st Shut-In 60 Minutes-No blow back\  
 2nd Opening 60 Minutes-Strong blow -Gas to surface in 6 minutes-See gas report  
 2nd Shut-In 90 Minutes-Fair blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1775.75	104.55	Open To Flow (1)
2	96.31	104.15	Open To Flow (2)
3	87.14	104.44	Shut-In(1)
60	1187.32	108.45	End Shut-In(1)
62	75.34	108.13	Open To Flow (3)
120	207.62	120.49	Shut-In(2)
212	1130.89	119.65	End Shut-In(2)
213	1728.20	119.29	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
35.00	Oil and gas cut muddy w ater	0.49
0.00	10%Gas 16%Oil 50%Mud 24%Water	0.00
120.00	Oil and Gas cut muddy w ater	1.68
0.00	28%Gas 12%Oil 30%Mud 30%Water	0.00
120.00	Slightly oil,mud and gas cut w ater	1.68
0.00	5%Gas 5% Oil 8%Mud 82%Water	0.00

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	13.50	5.36
Last Gas Rate	0.13	6.00	2.38
Max. Gas Rate	0.13	14.75	5.85



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Job Ticket: 17799

**DST#: 10**

ATTN: Rene Hustedad

Test Start: 2012.09.09 @ 00:00:00

## GENERAL INFORMATION:

Formation: **Regan**

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: 3562.00 ft (KB) To 3577.00 ft (KB) (TVD)**

Reference Elevations: 1915.00 ft (KB)

Total Depth: 3577.00 ft (KB) (TVD)

1907.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 6938 Inside**

Press @ RunDepth: 1131.90 psia @ 3573.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.09.09

End Date:

2012.09.09

Last Calib.:

2012.09.09

Start Time: 12:15:00

End Time:

18:58:30

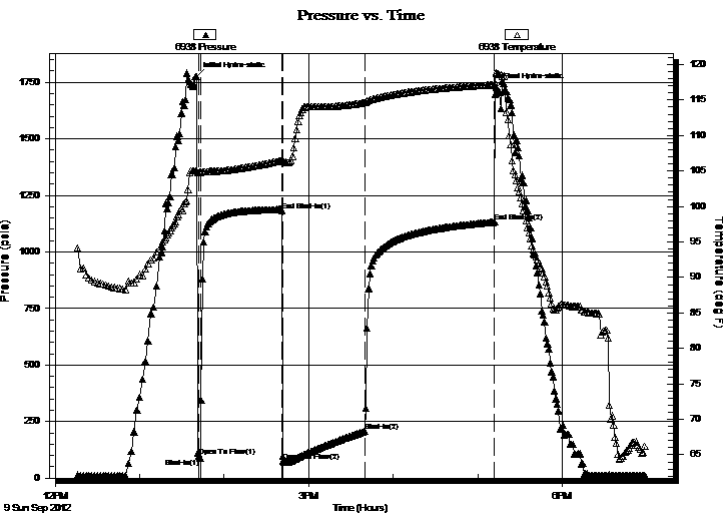
Time On Btm:

2012.09.09 @ 13:40:30

Time Off Btm:

2012.09.09 @ 17:13:00

**TEST COMMENT:** 1st Opening 2 Minutes-Strong blow built to the bottom of a 5 gallon bucekt in 30 seconds  
1st Shut-In 60 Minutes-No blow back\  
2nd Opening 60 Minutes-Strong blow -Gas to surface in 6 minutes-See gas report  
2nd Shut-In 90 Minutes-Fair blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1775.85	105.03	Initial Hydro-static
2	97.44	104.76	Open To Flow (1)
3	87.49	104.83	Shut-In(1)
61	1183.65	106.48	End Shut-In(1)
62	76.52	106.29	Open To Flow (2)
120	207.85	114.65	Shut-In(2)
212	1131.90	117.14	End Shut-In(2)
213	1725.87	118.89	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
35.00	Oil and gas cut muddy water	0.49
0.00	10%Gas 16%Oil 50%Mud 24%Water	0.00
120.00	Oil and Gas cut muddy w ater	1.68
0.00	28%Gas 12%Oil 30%Mud 30%Water	0.00
120.00	Slightly oil,mud and gas cut w ater	1.68
0.00	5%Gas 5% Oil 8%Mud 82%Water	0.00

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	13.50	5.36
Last Gas Rate	0.13	6.00	2.38
Max. Gas Rate	0.13	14.75	5.85



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

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

**29-19s-15w Barton**

9431 east Central Suite 100  
Wichita, Kansas 67206

**Button "A" Unit #1-24**

Job Ticket: 17799

**DST#: 10**

ATTN: Rene Husted

Test Start: 2012.09.09 @ 00:00:00

## Tool Information

Drill Pipe:	Length: 3564.00 ft	Diameter: 3.80 inches	Volume: 49.99 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: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 48000.00 lb
			<u>Total Volume: 49.99 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3562.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	1	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			3539.00	
Hydraulic Tool	5.00			3544.00	
Jars	6.00			3550.00	
Safety Joint	2.00			3552.00	
Packer	5.00			3557.00	28.00 Bottom Of Top Packer
Packer	5.00			3562.00	
Perforations	10.00			3572.00	
Recorder	1.00	6938	Inside	3573.00	
Recorder	1.00	6939	Outside	3574.00	
Bull Plug	3.00			3577.00	15.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>43.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

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**DST#: 10**

ATTN: Rene Husted

Test Start: 2012.09.09 @ 00:00:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 49.00 sec/qt  
Water Loss: 10.40 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 7400.00 ppm  
Filter Cake: 1.00 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
35.00	Oil and gas cut muddy water	0.491
0.00	10%Gas 16%Oil 50%Mud 24%Water	0.000
120.00	Oil and Gas cut muddy water	1.683
0.00	28%Gas 12%Oil 30%Mud 30%Water	0.000
120.00	Slightly oil,mud and gas cut water	1.683
0.00	5%Gas 5% Oil 8%Mud 82%Water	0.000
120.00	Slightly mud cut water with a slight	1.683
0.00	Show of oil 2%Mud 98%Water	0.000
0.00	Chlorides 28,000	0.000

Total Length: 395.00 ft      Total Volume: 5.540 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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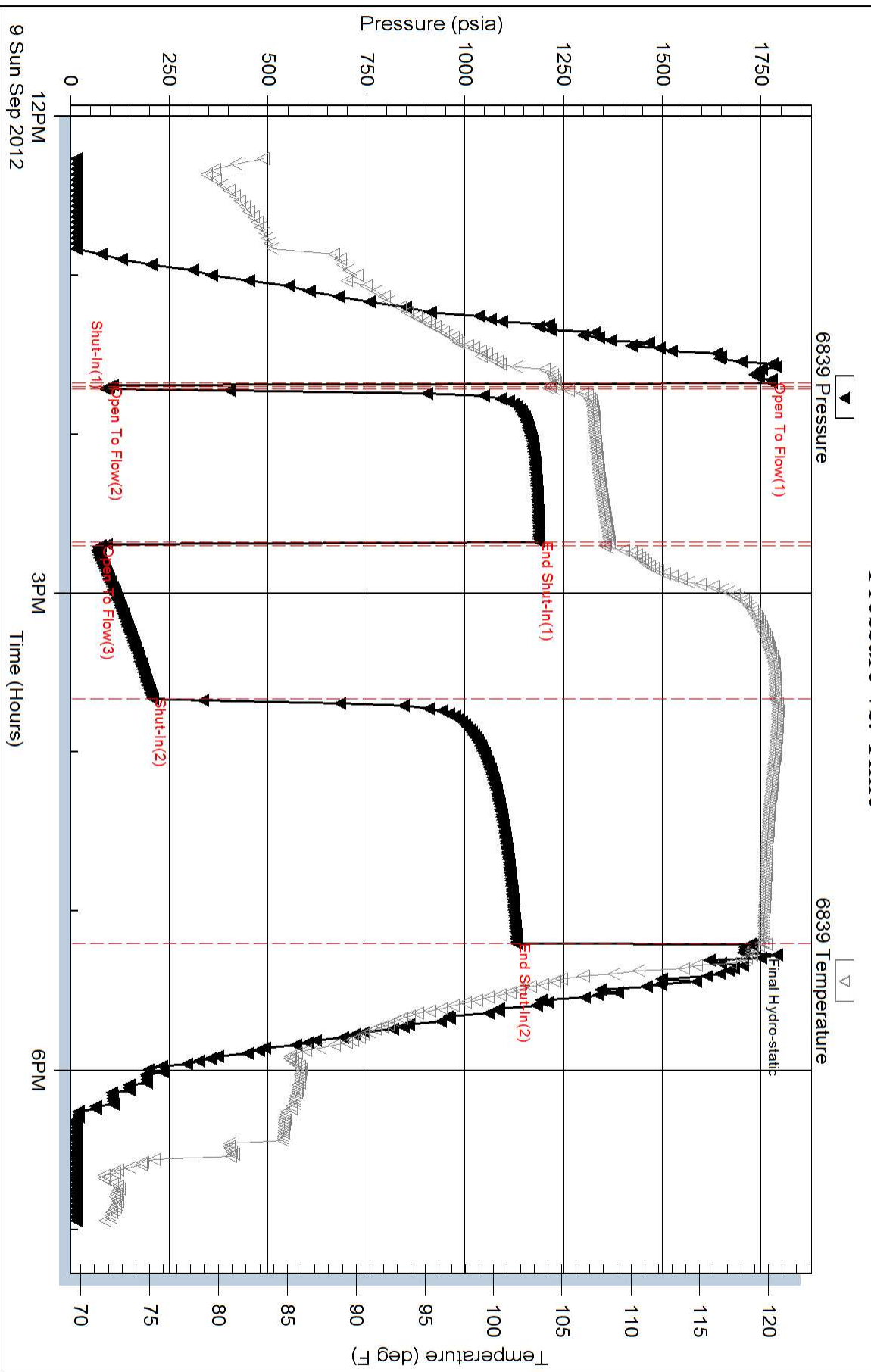
## Gas Rates Information

Temperature: 2 (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	0.13	13.50	5.36
2	20	0.13	14.75	5.85
2	30	0.13	12.00	4.76
2	40	0.13	10.50	4.17
2	50	0.13	8.00	3.17
2	60	0.13	6.00	2.38

### Pressure vs. Time



### Pressure vs. Time

