



## DRILL STEM TEST REPORT

Prepared For: **F.G. Holl Company LLC.**

9431 E. Central STE. 100  
Wichita Ks, 67206

ATTN: Frank Greenbaum

**Jost #1-29**

**29/21s/15w/Pawnee**

Start Date: 2013.08.20 @ 03:49:00

End Date: 2013.08.20 @ 09:50:30

Job Ticket #: 18477                      DST #: 4

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

Printed: 2013.08.20 @ 10:09:08



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Test Start: 2013.08.20 @ 03:49:00

## GENERAL INFORMATION:

Formation: **Tarkio/Howard**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:21:30

Time Test Ended: 09:50:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/66/Great Bend

**Interval: 2800.00 ft (KB) To 2994.00 ft (KB) (TVD)**

Reference Elevations: 1978.00 ft (KB)

Total Depth: 2994.00 ft (KB) (TVD)

1970.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

**Serial #: 8405 Inside**

Press @ Run Depth: 1394.99 psia @ 2990.50 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.08.20

End Date: 2013.08.20

Last Calib.: 2013.08.20

Start Time: 03:49:00

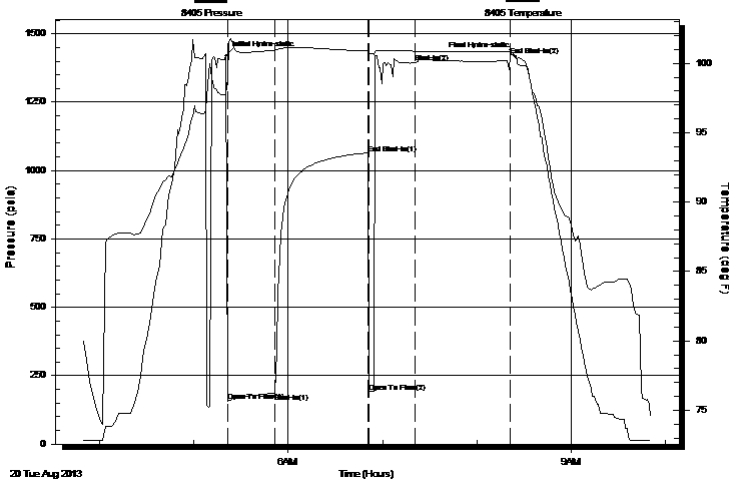
End Time: 09:50:30

Time On Btm: 2013.08.20 @ 05:20:30

Time Off Btm: 2013.08.20 @ 08:25:00

**TEST COMMENT:** 1st Open/ 30 Minutes. Fair blow built to 10 Inches in 5 gallon bucket.  
1st Shut In/ 60 Minutes. No blow back.  
2nd Open/ 30 Minutes. No blow, flushed tool and gained a 2 inche blow in a 5 gallon bucket.  
2nd Shut In/ 60 Minutes. No blow back.

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1420.08	97.73	Initial Hydro-static
1	155.85	98.94	Open To Flow (1)
31	187.89	100.93	Shut-In(1)
90	1062.52	100.88	End Shut-In(1)
91	190.76	100.72	Open To Flow (2)
121	1394.99	100.88	Shut-In(2)
181	1421.43	100.82	End Shut-In(2)
185	1414.74	100.55	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	No gas	0.00
140.00	100% Mud.	1.96

## Gas Rates

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



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Unit No: 3330/66/Great Bend

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Reference Elevations: 1978.00 ft (KB)

Total Depth: 2994.00 ft (KB) (TVD)

1970.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

**Serial #: 8400 Outside**

Press @ Run Depth: 1393.81 psia @ 2991.50 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.08.20

End Date: 2013.08.20

Last Calib.: 2013.08.20

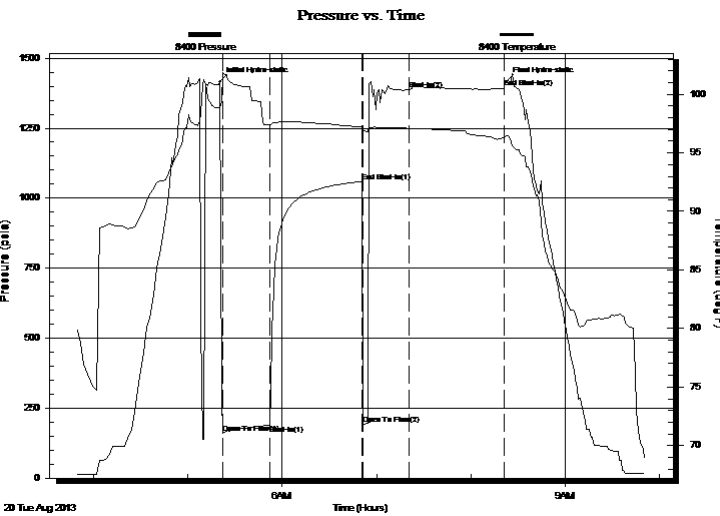
Start Time: 03:49:00

End Time: 09:51:00

Time On Btm: 2013.08.20 @ 05:20:30

Time Off Btm: 2013.08.20 @ 08:22:30

**TEST COMMENT:** 1st Open/ 30 Minutes. Fair blow built to 10 Inches in 5 gallon bucket.  
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2nd Open/ 30 Minutes. No blow, flushed tool and gained a 2 inche blow in a 5 gallon bucket.  
2nd Shut In/ 60 Minutes. No blow back.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1416.08	98.82	Initial Hydro-static
2	161.31	101.87	Open To Flow (1)
32	190.39	97.37	Shut-In(1)
90	1059.38	97.18	End Shut-In(1)
91	192.33	96.90	Open To Flow (2)
121	1387.34	97.09	Shut-In(2)
181	1393.81	96.28	End Shut-In(2)
182	1414.85	96.43	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	No gas	0.00
140.00	100% Mud.	1.96

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

F.G. Holl Company LLC.

**29/21s/15w/Pawnee**

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## Tool Information

Drill Pipe:	Length: 2801.00 ft	Diameter: 3.80 inches	Volume: 39.29 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: 58000.00 lb
			<u>Total Volume: 39.29 bbl</u>	Tool Chased 8.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	2800.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	194.50 ft			
Tool Length:	223.50 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2772.00	
Shut-In Tool	5.00			2777.00	
Hydroic Tool	5.00			2782.00	
Jars	6.00			2788.00	
Safety Joint	2.00			2790.00	
Packer	5.00			2795.00	29.00 Bottom Of Top Packer
Packer	5.00			2800.00	
Perforations	5.00			2805.00	
Change Over Sub	0.75			2805.75	
Drill Pipe	155.00			2960.75	
Change Over Sub	0.75			2961.50	
Perforations	28.00			2989.50	
Recorder	1.00	8405	Inside	2990.50	
Recorder	1.00	8400	Outside	2991.50	
Bullnose	3.00			2994.50	194.50 Bottom Packers & Anchor

**Total Tool Length: 223.50**



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## FLUID SUMMARY

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### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 8.00 lb/gal  
Viscosity: 47.00 sec/qt  
Water Loss: 8.80 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 19000.00 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
0.00	No gas	0.000
140.00	100% Mud.	1.964

Total Length: 140.00 ft      Total Volume: 1.964 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time

