



DRILL STEM TEST REPORT

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

9431 East Central Ste 100
Wichita Ks. 67206

ATTN: Ryan Greenbaum

Hanson A Unit 1-15

15-20s-16w Pawnee

Start Date: 2013.10.24 @ 07:04:00

End Date: 2013.10.24 @ 12:42:00

Job Ticket #: 18574 DST #: 3

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

Printed: 2013.10.24 @ 10:57:28



DRILL STEM TEST REPORT

F.G Holl Company LLC.

15-20s-16w Pawnee

9431 East Central Ste 100
Wichita Ks. 67206

Hanson A Unit 1-15

Job Ticket: 18574

DST#: 3

ATTN: Ryan Greenbaum

Test Start: 2013.10.24 @ 07:04:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:50:30

Time Test Ended: 12:42:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Great Bend-35

Interval: 3750.00 ft (KB) To 3765.00 ft (KB) (TVD)

Reference Elevations: 2033.00 ft (KB)

Total Depth: 3765.00 ft (KB) (TVD)

2025.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6839

Press @ Run Depth: 210.92 psia @ ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.10.24

End Date: 2013.10.24

Last Calib.: 2013.10.24

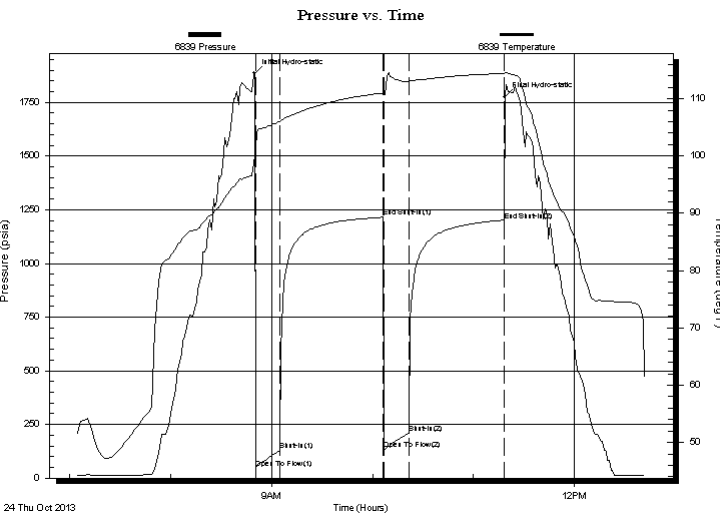
Start Time: 07:04:00

End Time: 12:42:00

Time On Btm: 2013.10.24 @ 08:50:00

Time Off Btm: 2013.10.24 @ 11:18:30

TEST COMMENT: 1st Open 15 minutes Strong building blow blew off the bottom of a 5 gallon bucket of water in 7 minutes.
1st Shut in 60 minutes No blow back
2nd Open 15 minutes Strong building blow built to bottom bucket in 8 minutes.
2nd Shut in 60 minutes No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1886.07	100.23	Initial Hydro-static
1	47.38	101.47	Open To Flow (1)
15	127.72	106.01	Shut-In(1)
77	1215.27	110.99	End Shut-In(1)
77	134.89	110.69	Open To Flow (2)
92	210.92	112.96	Shut-In(2)
148	1199.80	114.39	End Shut-In(2)
149	1774.83	114.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
380.00	Water 100%	5.33
0.00	Chlorides 36,000-.2ohms @55degrees	0.00

Gas Rates

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



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Tester: Dustin Ellis

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Reference Elevations: 2033.00 ft (KB)

Total Depth: 3765.00 ft (KB) (TVD)

2025.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8524

Press @ RunDepth: 1223.03 psia @ ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.10.24

End Date: 2013.10.24

Last Calib.: 2013.10.24

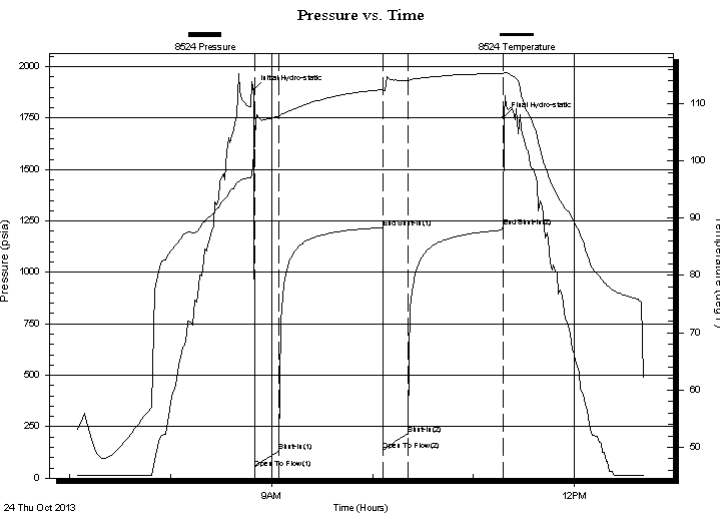
Start Time: 07:04:00

End Time: 12:41:30

Time On Btm: 2013.10.24 @ 08:49:30

Time Off Btm: 2013.10.24 @ 11:18:00

TEST COMMENT: 1st Open 15 minutes Strong building blow blew off the bottom of a 5 gallon bucket of water in 7 minutes.
1st Shut in 60 minutes No blow back
2nd Open 15 minutes Strong building blow built to bottom bucket in 8 minutes.
2nd Shut in 60 minutes No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1890.81	101.07	Initial Hydro-static
1	49.47	103.54	Open To Flow (1)
15	131.94	107.79	Shut-In(1)
77	1218.01	112.40	End Shut-In(1)
77	136.12	112.13	Open To Flow (2)
92	214.66	113.95	Shut-In(2)
148	1223.03	115.24	End Shut-In(2)
149	1755.27	115.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
380.00	Water 100%	5.33
0.00	Chlorides 36,000-.2ohms @55degrees	0.00

Gas Rates

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



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TOOL DIAGRAM

F.G Holl Company LLC.

15-20s-16w Pawnee

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Wichita Ks. 67206

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Job Ticket: 18574

DST#: 3

ATTN: Ryan Greenbaum

Test Start: 2013.10.24 @ 07:04:00

Tool Information

Drill Pipe:	Length: 3755.00 ft	Diameter: 3.80 inches	Volume: 52.67 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:	62000.00 lb
			<u>Total Volume: 52.67 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3750.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	15.00 ft				
Tool Length:	35.00 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			3735.00	
Hydraulic Tool	5.00			3740.00	
Packer	5.00			3745.00	20.00 Bottom Of Top Packer
Packer	5.00			3750.00	
Anchor	10.00			3760.00	
Recorder	1.00	8524	Outside	3761.00	
Recorder	1.00	6839	Inside	3762.00	
Bull Plug	3.00			3765.00	15.00 Bottom Packers & Anchor

Total Tool Length: 35.00



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FLUID SUMMARY

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Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 54.00 sec/qt
Water Loss: 7.60 in³
Resistivity: ohm.m
Salinity: 8500.00 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
380.00	Water 100%	5.330
0.00	Chlorides 36,000-.2ohms@55degrees	0.000

Total Length: 380.00 ft Total Volume: 5.330 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

