



DRILL STEM TEST REPORT

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

9431 East Central Suit 100
Wichita Kansas 67206

ATTN: Ryan Greenbaum

Sonja Phillips 1-22

22-20s-14w-Barton

Start Date: 2014.02.09 @ 11:06:00

End Date: 2014.02.09 @ 15:09:30

Job Ticket #: 19255 DST #: 4

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

Printed: 2014.02.09 @ 16:21:21

F.G Holl Company LLC.

22-20s-14w-Barton

Sonja Phillips 1-22

DST # 4

Lansing KC-1

2014.02.09



DRILL STEM TEST REPORT

F.G Holl Company LLC.
 9431 East Central Suit 100
 Wichita Kansas 67206
 ATTN: Ryan Greenbaum

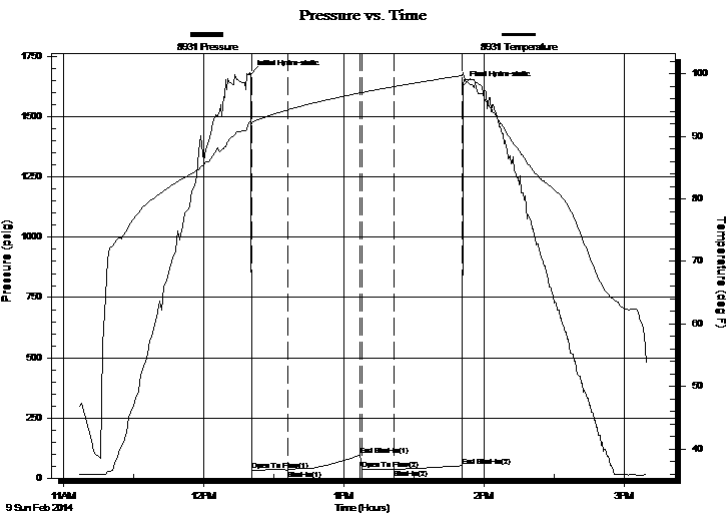
22-20s-14w-Barton
Sonja Phillips 1-22
 Job Ticket: 19255 **DST#: 4**
 Test Start: 2014.02.09 @ 11:06:00

GENERAL INFORMATION:

Formation: **Lansing KC-I**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:20:30
 Time Test Ended: 15:09:30
 Interval: **3412.00 ft (KB) To 3426.00 ft (KB) (TVD)**
 Total Depth: 3426.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend-20
 Reference Elevations: 1895.00 ft (KB)
 1887.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8931 Inside
 Press@RunDepth: 35.22 psig @ 3421.00 ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.02.09 End Date: 2014.02.09 Last Calib.: 2014.02.09
 Start Time: 11:06:00 End Time: 15:09:30 Time On Btm: 2014.02.09 @ 12:20:00
 Time Off Btm: 2014.02.09 @ 13:51:00

TEST COMMENT: 1st Open 15 minutes Weak surface blow through out open.
 1st Shut in 30 minutes No blow back
 2nd Open 15 minutes Weak surface blow through out .
 2nd Shut in 30 minutes No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1678.20	92.38	Initial Hydro-static
1	33.06	92.05	Open To Flow (1)
16	34.03	94.24	Shut-In(1)
47	96.78	96.96	End Shut-In(1)
48	34.85	96.98	Open To Flow (2)
62	35.22	97.95	Shut-In(2)
91	51.15	99.69	End Shut-In(2)
91	1629.00	100.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Oil cut mud 10% Oil 90%Mud	0.03

Gas Rates

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



DRILL STEM TEST REPORT

F.G Holl Company LLC.

22-20s-14w-Barton

9431 East Central Suit 100
Wichita Kansas 67206

Sonja Phillips 1-22

Job Ticket: 19255

DST#: 4

ATTN: Ryan Greenbaum

Test Start: 2014.02.09 @ 11:06:00

GENERAL INFORMATION:

Formation: **Lansing KC-I**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:20:30

Time Test Ended: 15:09:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Great Bend-20

Interval: 3412.00 ft (KB) To 3426.00 ft (KB) (TVD)

Reference Elevations: 1895.00 ft (KB)

Total Depth: 3426.00 ft (KB) (TVD)

1887.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 6651 Outside

Press@RunDepth: 53.63 psig @ 3421.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.02.09 End Date: 2014.02.09

Last Calib.: 2014.02.09

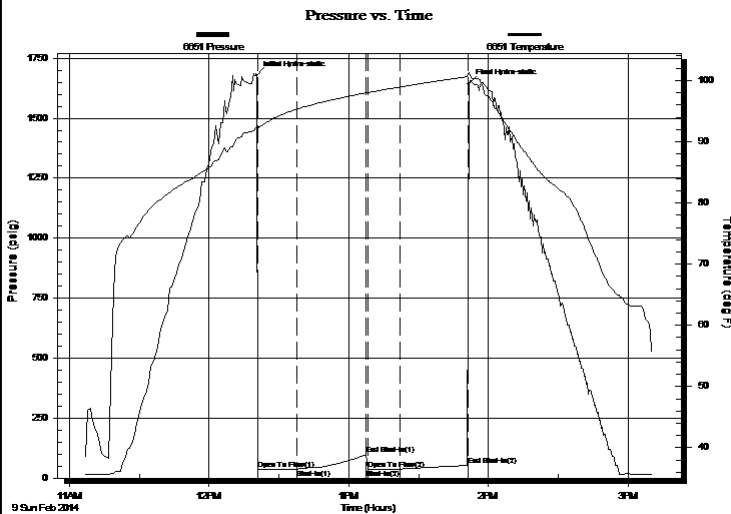
Start Time: 11:06:00 End Time: 15:10:30

Time On Btm: 2014.02.09 @ 12:20:30

Time Off Btm: 2014.02.09 @ 13:51:30

TEST COMMENT: 1st Open 15 minutes Weak surface blow through out open.
1st Shut in 30 minutes No blow back
2nd Open 15 minutes Weak surface blow through out .
2nd Shut in 30 minutes No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1679.65	92.45	Initial Hydro-static
1	36.02	91.99	Open To Flow (1)
17	37.89	95.30	Shut-In(1)
47	98.64	97.99	End Shut-In(1)
48	38.00	98.01	Open To Flow (2)
62	37.90	98.94	Shut-In(2)
91	53.63	100.62	End Shut-In(2)
91	1643.20	101.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Oil cut mud 10% Oil 90%Mud	0.03

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G Holl Company LLC.

22-20s-14w-Barton

9431 East Central Suit 100
Wichita Kansas 67206

Sonja Phillips 1-22

Job Ticket: 19255

DST#: 4

ATTN: Ryan Greenbaum

Test Start: 2014.02.09 @ 11:06:00

Tool Information

Drill Pipe:	Length: 3399.00 ft	Diameter: 3.80 inches	Volume: 47.68 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: 52000.00 lb
			<u>Total Volume: 47.68 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3412.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	14.00 ft			
Tool Length:	42.00 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			3389.00	
Hydraulic tool	5.00			3394.00	
Jars	6.00			3400.00	
Safety Joint	2.00			3402.00	
Top Packer	5.00			3407.00	
Packer	5.00			3412.00	28.00 Bottom Of Top Packer
Perforations	9.00			3421.00	
Recorder	0.00	8931	Inside	3421.00	
Recorder	0.00	6651	Outside	3421.00	
Bull Plug	5.00			3426.00	14.00 Anchor Tool
Total Tool Length:	42.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

F.G Holl Company LLC.

22-20s-14w-Barton

9431 East Central Suit 100
Wichita Kansas 67206

Sonja Phillips 1-22

Job Ticket: 19255

DST#: 4

ATTN: Ryan Greenbaum

Test Start: 2014.02.09 @ 11:06:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 45.00 sec/qt
Water Loss: 8.00 in³
Resistivity: ohm.m
Salinity: 5100.00 ppm
Filter Cake: inches

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

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Oil cut mud 10% Oil 90%Mud	0.028

Total Length: 2.00 ft Total Volume: 0.028 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

