



DRILL STEM TEST REPORT

Prepared For: **FG Holl Company LLC**

9431 East Central
Suite 100
Wichita, Kansas 67206+2563

ATTN: Ryan Greenbaum

Foster Trust A #1-1

1/21S/16W/Pawnee

Start Date: 2014.04.04 @ 11:19:00

End Date: 2014.04.04 @ 19:03:30

Job Ticket #: 18272 DST #: 3

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

Printed: 2014.04.04 @ 19:28:33



DRILL STEM TEST REPORT

FG Holl Company LLC

1/21S/16W/Pawnee

9431 East Central
Suite 100
Wichita, Kansas 67206+2563
ATTN: Ryan Greenbaum

Foster Trust A #1-1

Job Ticket: 18272

DST#: 3

Test Start: 2014.04.04 @ 11:19:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:37:30

Time Test Ended: 19:03:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Great Bend/32

Interval: **3780.00 ft (KB) To 3790.00 ft (KB) (TVD)**

Reference Elevations: 1981.00 ft (KB)

Total Depth: 3790.00 ft (KB) (TVD)

1973.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: **8938** Outside

Press@RunDepth: 1233.89 psig @ 3787.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.04.04

End Date: 2014.04.04

Last Calib.: 2014.04.04

Start Time: 11:19:00

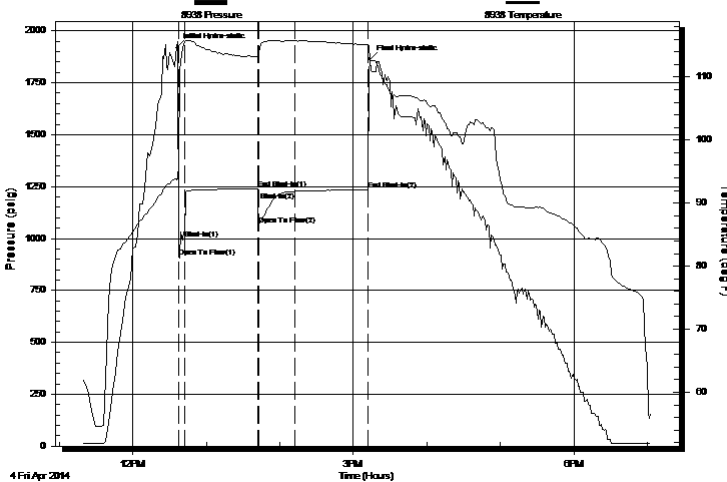
End Time: 19:03:00

Time On Btm: 2014.04.04 @ 12:36:00

Time Off Btm: 2014.04.04 @ 15:13:30

TEST COMMENT: 1ST Open 5 Minutes/Strong blow/Blow built to bottom of bucket in 10 seconds
 1ST Shut In 60 Minutes/Strong blow back/Gas to surface in 9 minutes
 2ND Open 30 Minutes/Strong blow/Blow built to bottom of bucket in 10 seconds
 2ND Shut In 60 Minutes/Strong blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1919.34	93.76	Initial Hydro-static
2	911.40	96.30	Open To Flow (1)
7	999.61	115.52	Shut-In(1)
66	1237.90	113.25	End Shut-In(1)
67	1066.65	113.16	Open To Flow (2)
96	1226.55	115.74	Shut-In(2)
156	1233.89	115.12	End Shut-In(2)
158	1862.33	112.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
248.00	Gas cut Oily Water	3.48
0.00	Gas 20% Oil 30% Water 50%	0.00
1612.00	Gas cut Oily Water	22.61
0.00	Gas 5% Oil 10% Water 85%	0.00
682.00	Gas cut Water	9.57
0.00	Gas 5% Water 95%	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	17.95	12.11
Last Gas Rate	0.13	0.00	5.39
Max. Gas Rate	0.13	19.00	12.50



DRILL STEM TEST REPORT

TOOL DIAGRAM

FG Holl Company LLC

1/21S/16W/Pawnee

9431 East Central
Suite 100
Wichita, Kansas 67206+2563
ATTN: Ryan Greenbaum

Foster Trust A #1-1

Job Ticket: 18272

DST#: 3

Test Start: 2014.04.04 @ 11:19:00

Tool Information

Drill Pipe:	Length: 3778.00 ft	Diameter: 3.80 inches	Volume: 53.00 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: 90000.00 lb
			<u>Total Volume: 53.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3780.00 ft			Final 70000.0 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	33.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut-In Tool	5.00			3762.00	
Hydraulic tool	5.00			3767.00	
Jars	6.00			3773.00	
Safety Joint	2.00			3775.00	
Packer	5.00			3780.00	23.00 Bottom Of Top Packer
Anchor	5.00			3785.00	
Recorder	1.00	6749	Inside	3786.00	
Recorder	1.00	8938	Outside	3787.00	
Bullnose	3.00			3790.00	10.00 Anchor Tool
Total Tool Length:	33.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

FG Holl Company LLC

1/21S/16W/Pawnee

9431 East Central
Suite 100
Wichita, Kansas 67206+2563
ATTN: Ryan Greenbaum

Foster Trust A #1-1

Job Ticket: 18272

DST#: 3

Test Start: 2014.04.04 @ 11:19:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 45.00 sec/qt
Water Loss: 10.00 in³
Resistivity: ohm.m
Salinity: 8600.00 ppm
Filter Cake: 1.00 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
248.00	Gas cut Oily Water	3.479
0.00	Gas 20% Oil 30% Water 50%	0.000
1612.00	Gas cut Oily Water	22.612
0.00	Gas 5% Oil 10% Water 85%	0.000
682.00	Gas cut Water	9.567
0.00	Gas 5% Water 95%	0.000
0.00	Recov. Chlorides 36,000 ppm	0.000
0.00	Recov. Resist. .18 ohms @ 65deg	0.000

Total Length: 2542.00 ft Total Volume: 35.658 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:



DRILL STEM TEST REPORT

GAS RATES

FG Holl Company LLC

1/21S/16W/Pawnee

9431 East Central
Suite 100
Wichita, Kansas 67206+2563
ATTN: Ryan Greenbaum

Foster Trust A #1-1

Job Ticket: 18272

DST#: 3

Test Start: 2014.04.04 @ 11:19:00

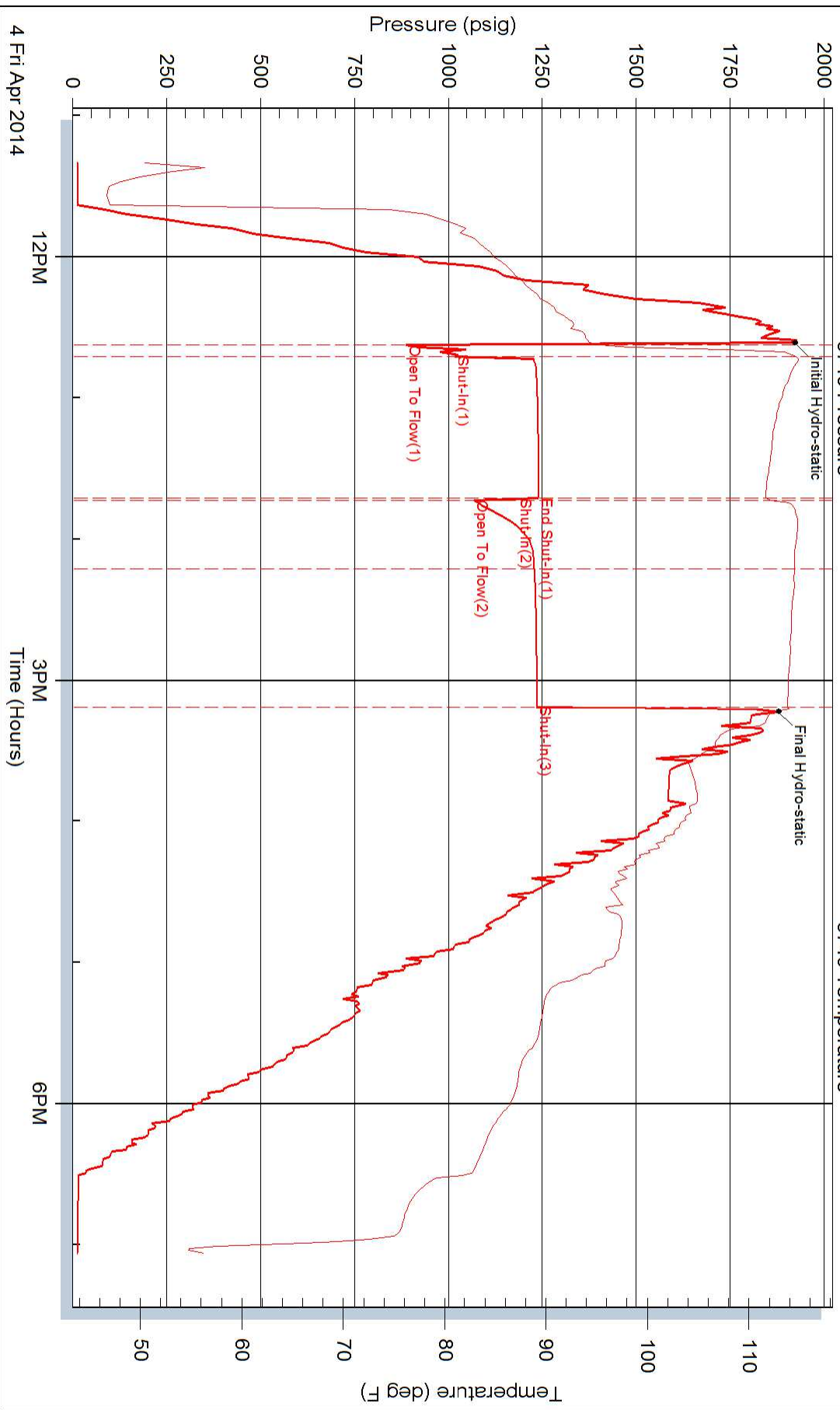
Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	5	0.13	17.95	12.11
2	10	0.13	19.00	12.50
2	20	0.13	0.00	5.39
2	30	0.13	0.00	5.39

Pressure vs. Time



Pressure vs. Time

