



DRILL STEM TEST REPORT

Prepared For: **FG Holl Company LLC**

9431 East Central
Suite 100
Wichita, Kansas 67206+2563

ATTN: Ryan Greenbaum

Krupp 3-10

10/22S/14W/Stafford

Start Date: 2013.10.11 @ 08:30:00

End Date: 2013.10.11 @ 14:03:00

Job Ticket #: 18166 DST #: 5

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

Printed: 2013.10.11 @ 14:12:00



DRILL STEM TEST REPORT

FG Holl Company LLC

10/22S/14W/Stafford

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ATTN: Ryan Greenbaum

Krupp 3-10

Job Ticket: 18166

DST#: 5

Test Start: 2013.10.11 @ 08:30:00

GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:02:00

Time Test Ended: 14:03:00

Interval: 3650.00 ft (KB) To 3770.00 ft (KB) (TVD)

Total Depth: 3770.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Great Bend/36

Reference Elevations: 1946.00 ft (KB)

1938.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6749

Inside

Press @ RunDepth: 96.98 psia @ 3765.68 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.10.11 End Date: 2013.10.11

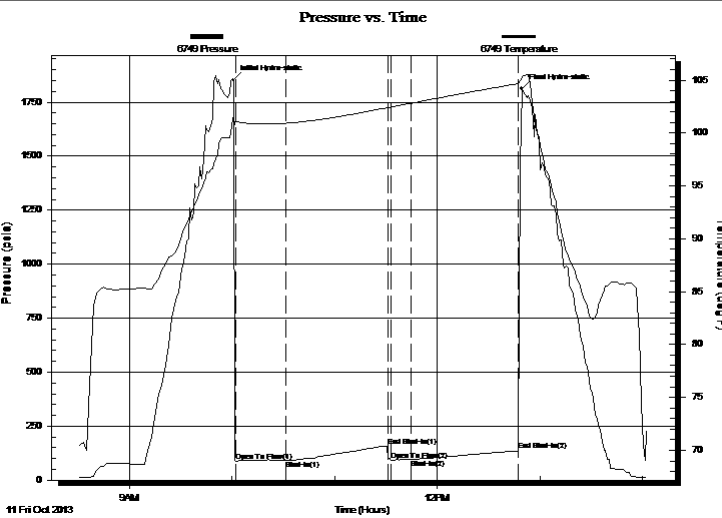
Last Calib.: 2013.10.11

Start Time: 08:30:00 End Time: 14:03:00

Time On Btm: 2013.10.11 @ 10:01:00

Time Off Btm: 2013.10.11 @ 12:49:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Blow built to 1/2 inch
1ST Shut Inn 60 Minutes/No blow back
2ND Open 15 Minutes/Dead no blow /Flush tool no help
2ND Shut in 60 Minutes/No blow back



PRESSURE SUMMARY

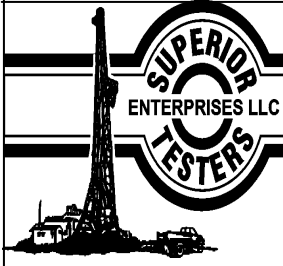
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1852.47	101.52	Initial Hydro-static
1	88.81	101.16	Open To Flow (1)
31	91.99	100.93	Shut-In(1)
90	158.48	102.40	End Shut-In(1)
92	93.61	102.44	Open To Flow (2)
104	96.98	102.81	Shut-In(2)
167	136.16	104.67	End Shut-In(2)
169	1812.61	105.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud 100%	0.21

Gas Rates

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



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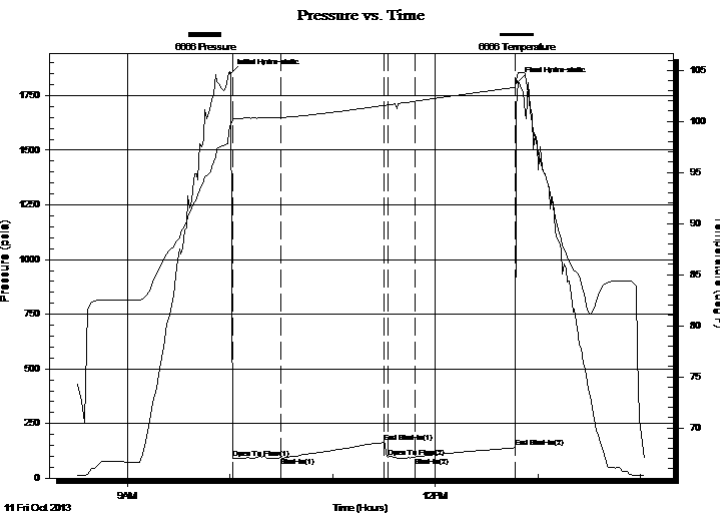
10/22S/14W/Stafford
Krupp 3-10
 Job Ticket: 18166 **DST#: 5**
 Test Start: 2013.10.11 @ 08:30:00

GENERAL INFORMATION:

Formation: **Viola**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 10:02:00 Tester: Ken Swinney
 Time Test Ended: 14:03:00 Unit No: 3325 Great Bend/36
 Interval: **3650.00 ft (KB) To 3770.00 ft (KB) (TVD)** Reference Elevations: 1946.00 ft (KB)
 Total Depth: 3770.00 ft (KB) (TVD) 1938.00 ft (CF)
 Hole Diameter: 7.80 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 6666 Outside
 Press @ Run Depth: 139.16 psia @ 3766.68 ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.10.11 End Date: 2013.10.11 Last Calib.: 2013.10.11
 Start Time: 08:30:00 End Time: 14:02:30 Time On Btm: 2013.10.11 @ 10:00:30
 Time Off Btm: 2013.10.11 @ 12:48:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Blow built to 1/2 inch
 1ST Shut Inn 60 Minutes/No blow back
 2ND Open 15 Minutes/Dead no blow /Flush tool no help
 2ND Shut in 60 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1852.48	99.80	Initial Hydro-static
1	88.51	100.06	Open To Flow (1)
30	93.59	100.38	Shut-In(1)
90	163.95	101.56	End Shut-In(1)
92	95.23	101.59	Open To Flow (2)
108	95.82	101.96	Shut-In(2)
166	139.16	103.31	End Shut-In(2)
168	1812.15	104.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud 100%	0.21

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

FG Holl Company LLC

10/22S/14W/Stafford

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

Krupp 3-10

Job Ticket: 18166

DST#: 5

Test Start: 2013.10.11 @ 08:30:00

Tool Information

Drill Pipe:	Length: 3631.00 ft	Diameter: 3.80 inches	Volume: 50.93 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: 66000.00 lb
			<u>Total Volume: 50.93 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	3650.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	119.68 ft			
Tool Length:	146.68 ft			
Number of Packers:	2	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			3628.00	
Hydraulic Tool	5.00			3633.00	
Jars	5.00			3638.00	
Safety Joint	2.00			3640.00	
Packer	5.00			3645.00	27.00 Bottom Of Top Packer
Packer	5.00			3650.00	
Perforations	3.00			3653.00	
Change Over Sub	0.75			3653.75	
Drill Pipe	95.18			3748.93	
Change Over Sub	0.75			3749.68	
Anchor	15.00			3764.68	
Recorder	1.00	6749	Inside	3765.68	
Recorder	1.00	6666	Outside	3766.68	
Bullnose	3.00			3769.68	119.68 Bottom Packers & Anchor

Total Tool Length: 146.68



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FLUID SUMMARY

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DST#: 5

Test Start: 2013.10.11 @ 08:30:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 8.79 in³
Resistivity: ohm.m
Salinity: 4700.00 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
15.00	Mud 100%	0.210

Total Length: 15.00 ft Total Volume: 0.210 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

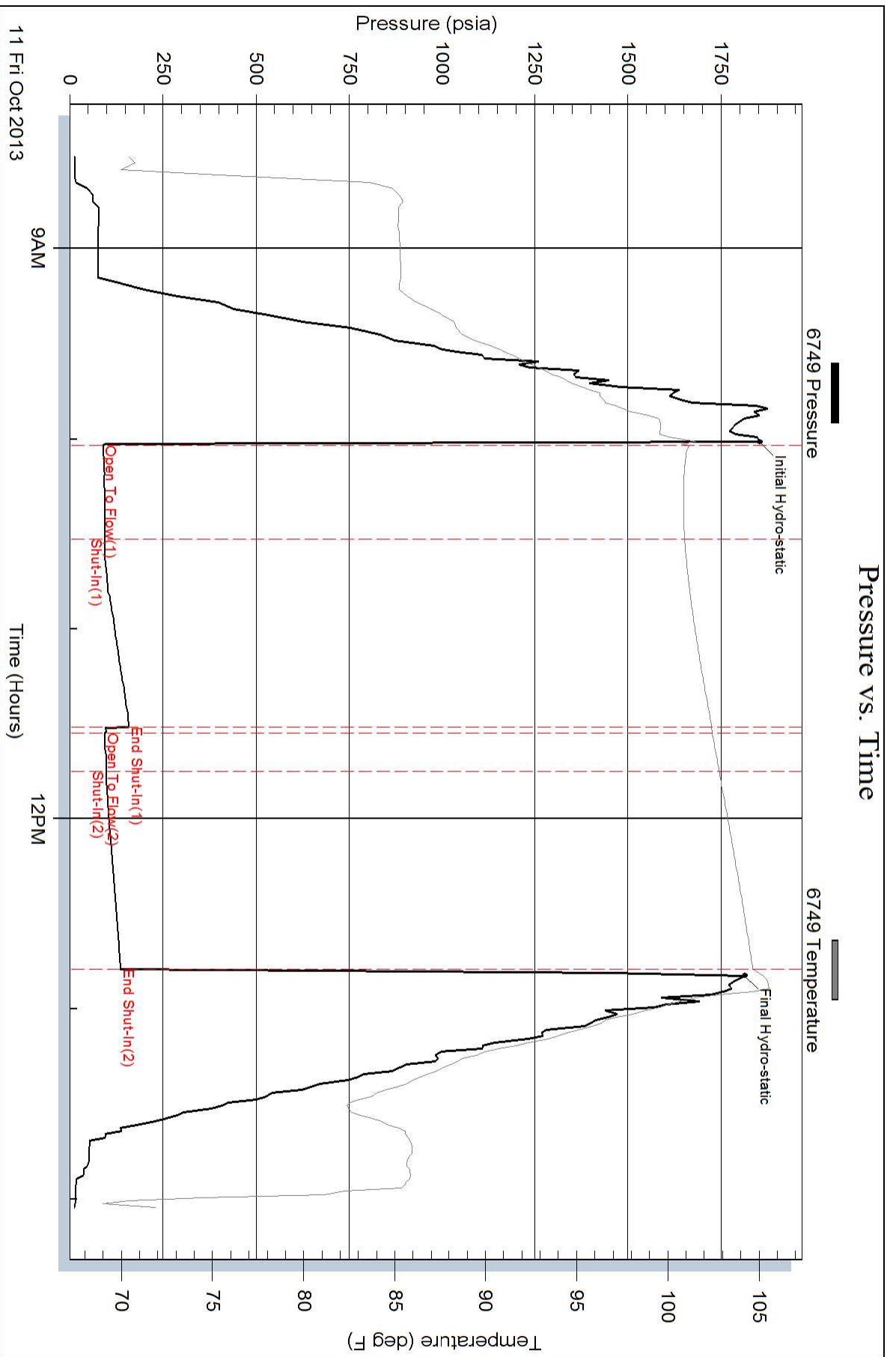
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time

