

DRILL STEM TEST REPORT

Prepared For: **F.G.Holl Company L.L.C.**

9431 East Central Suite 100
Wichita, Kansas 67206-2563

ATTN: Ryan Greenbaum

10-22s-14w Stafford

Krupp #1-10

Start Date: 2011.03.31 @ 07:00:00

End Date: 2011.03.31 @ 00:00:00

Job Ticket #: 16040 DST #: 5

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

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F.G.Holl Company L.L.C. Krupp #1-10 10-22s-14w Stafford DST # 5 Kansas City "J" 2011.03.31

DRILL STEM TEST REPORT

F.G.Holl Company L.L.C.
 9431 East Central Suite 100
 Wichita, Kansas 67206-2563
 ATTN: Ryan Greenbaum

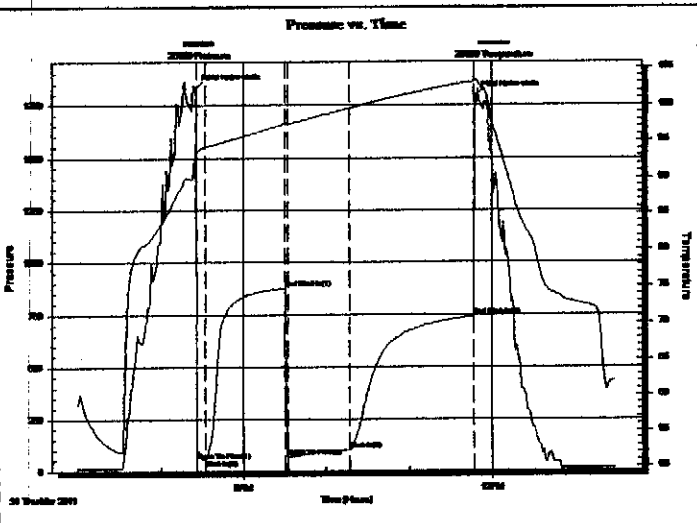
Krupp #1-10
10-22s-14w Stafford
 Job Ticket: 16040 DST#: 5
 Test Start: 2011.03.31 @ 07:00:00

GENERAL INFORMATION:

Formation: **Kansas City "J"**
 Deviated: **No Whipstock:** ft (KB)
 Test Type: **Conventional Bottom Hole (Initial)**
 Time Tool Opened: **00:00:00**
 Tester: **Gene Budig**
 Time Test Ended: **00:00:00**
 Unit No: **3335-42**
 Interval: **3619.00 ft (KB) To 3640.00 ft (KB) (TVD)**
 Reference Elevations: **1943.00 ft (KB)**
3640.00 ft (KB) (TVD)
1935.00 ft (CF)
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**
 KB to GR/CF: **8.00 ft**

Serial #: 26180 Inside
 Press@RunDepth: **743.63 psia @ 3636.00 ft (KB)** Capacity: **5000.00 psia**
 Start Date: **2011.03.31** End Date: **2011.03.31** Last Calib.: **2011.03.31**
 Start Time: **07:00:30** End Time: **13:30:00** Time On Btrm: **2011.03.31 @ 08:25:30**
 Time Off Btrm: **2011.03.31 @ 11:48:00**

TEST COMMENT: 1st Opening 5 Minutes-Fair blow built to the bottom of a 5 gallon bucket in 4 minutes
 1st Shut-In 60 Minutes-Very weak surface blow
 2nd Opening 45 Minutes Good blow built to the bottom of a 5 gallon bucket in 1 1/2 minutes
 2nd Shut-In 90 Minutes-Fair blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1829.10	92.92	Initial Hydro-static
1	50.46	93.28	Open To Flow (1)
8	53.29	94.18	Shut-In(1)
65	876.15	97.32	End Shut-In(1)
67	69.89	97.33	Open To Flow (2)
112	101.29	99.52	Shut-In(2)
202	743.63	103.14	End Shut-In(2)
203	1794.60	103.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
720.00	Gas in the pipe	10.10
180.00	Clean oil to thick to check gravity	2.52
20.00	Heavy oil cut mud 30%Oil 70%Mud	0.28
0.00		0.00

Gas Rates

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

DRILL STEM TEST REPORT

F.G.Holl Company L.L.C.

Krupp #1-10

9431 East Central Suite 100
Wichita, Kansas 67206-2563

10-22s-14w Stafford

Job Ticket: 16040 DST#: 5

ATTN: Ryan Greenbaum

Test Start: 2011.03.31 @ 07:00:00

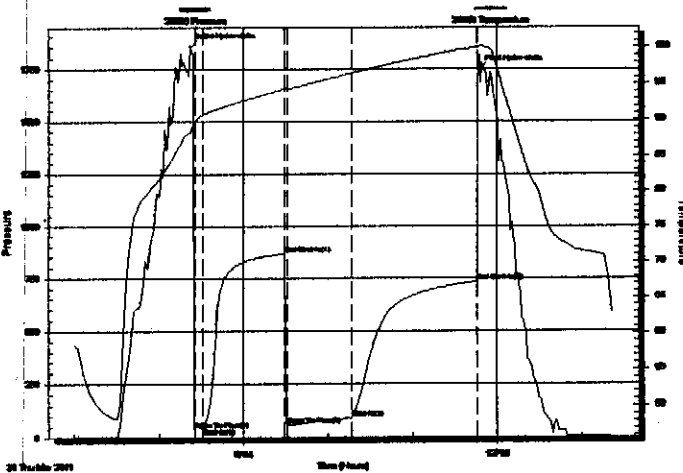
GENERAL INFORMATION:

Formation: **Kansas City "J"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:00:00
 Time Test Ended: 00:00:00
 Interval: **3619.00 ft (KB) To 3640.00 ft (KB) (TVD)**
 Total Depth: **3640.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Gene Budig
 Unit No: 3335-42
 Reference Elevations: 1943.00 ft (KB)
 1935.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: **29636** Outside
 Press@RunDepth: 732.93 psia @ 3637.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2011.03.31 End Date: 2011.03.31 Last Calib.: 2011.03.31
 Start Time: 07:00:30 End Time: 13:22:00 Time On Btmr: 2011.03.31 @ 08:22:30
 Time Off Btmr: 2011.03.31 @ 11:47:00

TEST COMMENT: 1st Opening 5 Minutes-Fair blow built to the bottom of a 5 gallon bucket in 4 minutes
 1st Shut-in 60 Minutes-Very weak surface blow
 2nd Opening 45 Minutes Good blow built to the bottom of a 5 gallon bucket in 1 1/2 minutes
 2nd Shut-in 90 Minutes-Fair blow back

Pressure vs. Time



PRESSURE SUMMARY

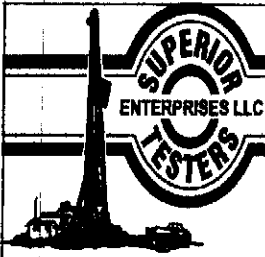
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1851.06	88.21	Initial Hydro-static
3	37.97	89.68	Open To Flow (1)
9	42.69	90.77	Shut-in(1)
67	865.63	94.31	End Shut-in(1)
69	81.04	94.35	Open To Flow (2)
115	92.47	96.50	Shut-in(2)
204	732.93	100.05	End Shut-in(2)
205	1742.47	100.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
720.00	Gas in the pipe	10.10
180.00	Clean oil to thick to check gravity	2.52
20.00	Heavy oil cut mud 30%Oil 70%Mud	0.28
0.00		0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G.Holl Company L.L.C.
 9431 East Central Suite 100
 Wichita, Kansas 67206-2563
 ATTN: Ryan Greenbaum

Krupp #1-10
10-22s-14w Stafford
 Job Ticket: 16040 DST#: 5
 Test Start: 2011.03.31 @ 07:00:00

Tool Information

Drill Pipe:	Length: 3607.00 ft	Diameter: 3.80 inches	Volume: 50.60 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.86 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 50.60 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3619.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	21.00 ft			
Tool Length:	42.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3599.00	
Shut-in Tool	5.00			3604.00	
Hydroic Tool	5.00			3609.00	
Packer	5.00			3614.00	21.00 Bottom Of Top Packer
Packer	5.00			3619.00	
Perforations	16.00			3635.00	
Recorder	1.00	91716	Inside	3636.00	
Recorder	1.00	95172	Outside	3637.00	
Bullhose	3.00			3640.00	21.00 Bottom Packers & Anchor
Total Tool Length:	42.00				

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FLUID SUMMARY

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Wichita, Kansas 67206-2563

10-22s-14w Stafford

Job Ticket: 16040

DST#: 5

ATTN: Ryan Greenbaum

Test Start: 2011.03.31 @ 07:00:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 6000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
720.00	Gas in the pipe	10.100
180.00	Clean oil to thick to check gravity	2.525
20.00	Heavy oil cut mud 30%Oil 70%Mud	0.281
0.00		0.000

Total Length: 920.00 ft Total Volume: 12.906 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

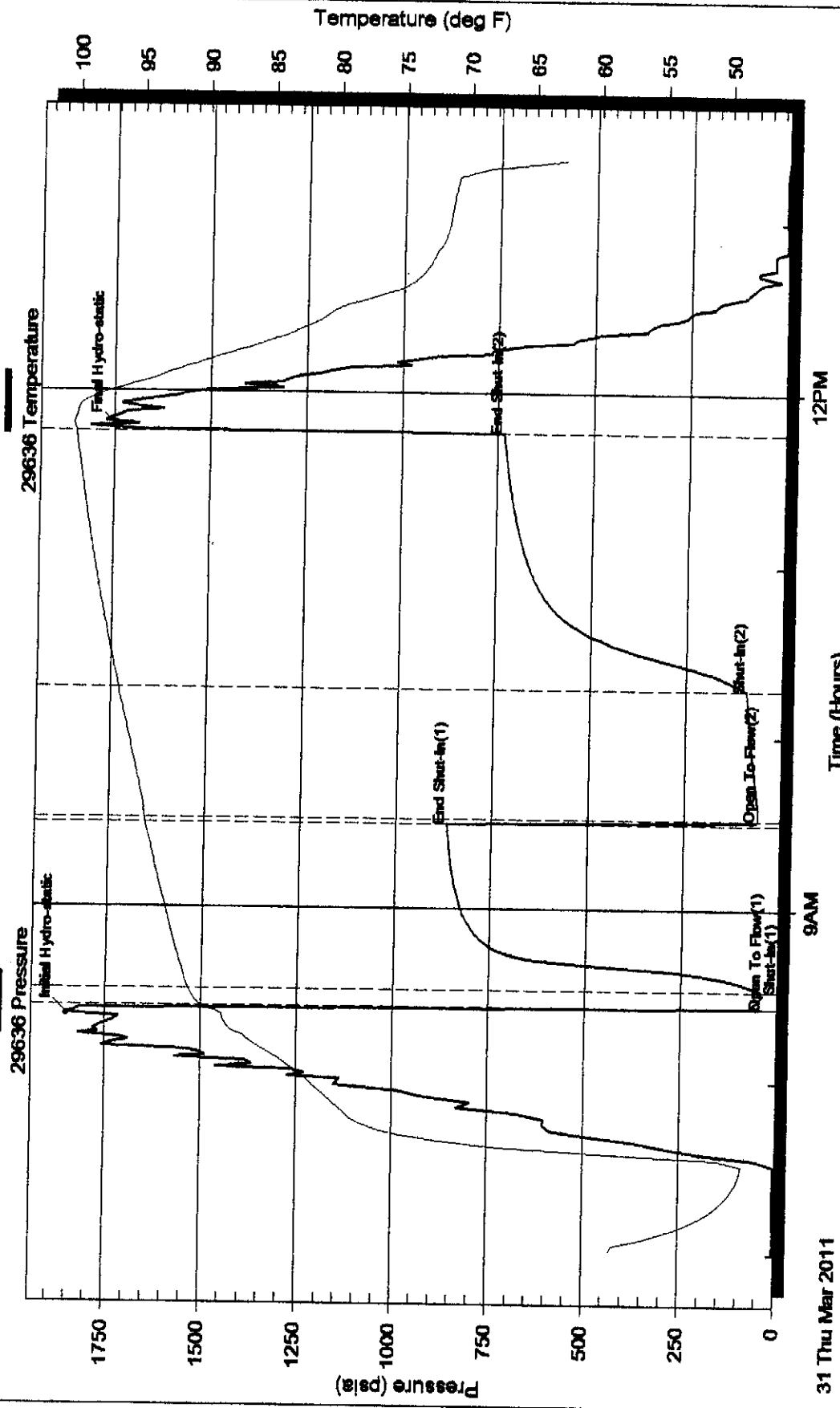
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time

