



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: 2013.10.13 @ 02:37:00

End Date: 2013.10.13 @ 08:15:00

Job Ticket #: 18169 DST #: 8

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

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Job Ticket: 18169

DST#: 8

Test Start: 2013.10.13 @ 02:37:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:19:30

Time Test Ended: 08:15:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Great Bend/36

Interval: 3808.00 ft (KB) To 3814.00 ft (KB) (TVD)

Reference Elevations: 1946.00 ft (KB)

Total Depth: 3814.00 ft (KB) (TVD)

1938.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 6749

Inside

Press @ Run Depth: 69.38 psia @ 3810.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.10.13

End Date: 2013.10.13

Last Calib.: 2013.10.13

Start Time: 02:37:00

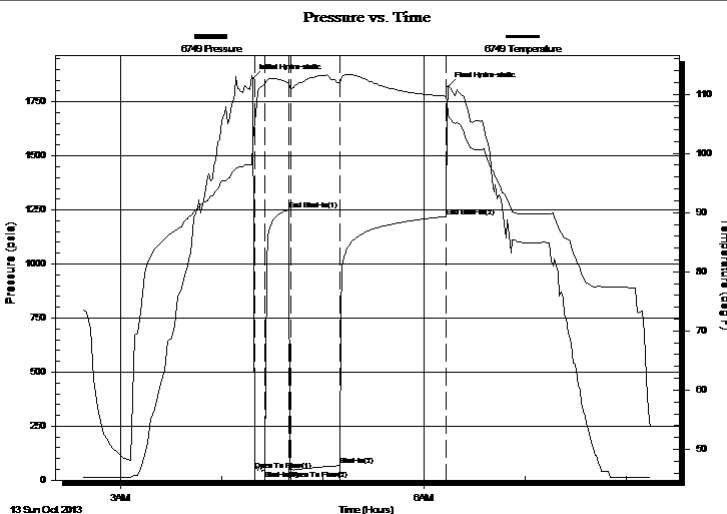
End Time: 08:15:00

Time On Btm: 2013.10.13 @ 04:18:30

Time Off Btm: 2013.10.13 @ 06:14:30

TEST COMMENT: 1ST Open 5 Minutes/Good blow /Blow built to 3 1/2 inches
1ST Shut In 15 Minutes/No blow back
2ND Open 30 Minutes/Good blow /Blow built to 8 1/2 inches
2ND Shut In 60 Minutes/Light surface blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1855.65	102.00	Initial Hydro-static
1	45.22	105.28	Open To Flow (1)
7	45.75	111.63	Shut-In(1)
22	1251.80	111.79	End Shut-In(1)
23	46.70	110.85	Open To Flow (2)
52	69.38	111.95	Shut-In(2)
115	1219.93	109.65	End Shut-In(2)
116	1820.13	106.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Clean Oil 100%	0.42
60.00	Muddy Oil	0.84
0.00	Mud 40% Oil 60%	0.00
0.00	Corrected Grav. Oil 27	0.00

Gas Rates

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



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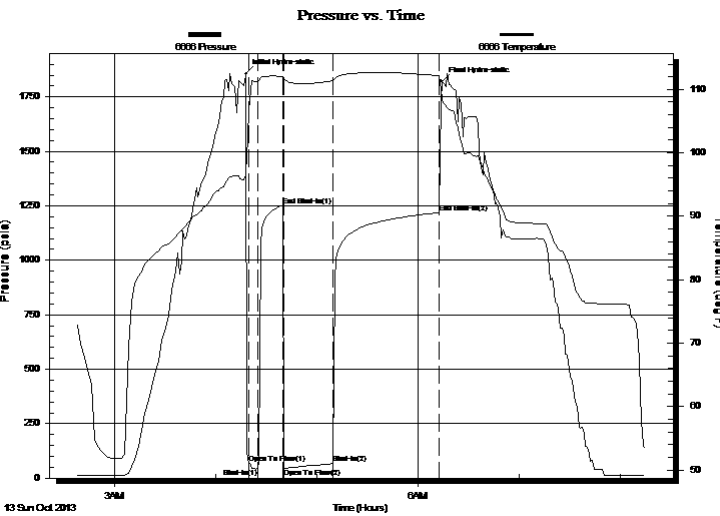
10/22S/14W/Stafford
Krupp 3-10
 Job Ticket: 18169 **DST#: 8**
 Test Start: 2013.10.13 @ 02:37:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 04:19:30 Tester: Ken Swinney
 Time Test Ended: 08:15:00 Unit No: 3325 Great Bend/36
 Interval: **3808.00 ft (KB) To 3814.00 ft (KB) (TVD)** Reference Elevations: 1946.00 ft (KB)
 Total Depth: 3814.00 ft (KB) (TVD) 1938.00 ft (CF)
 Hole Diameter: 7.80 inches Hole Condition: Poor KB to GR/CF: 8.00 ft

Serial #: 6666 Outside
 Press @ Run Depth: 1218.42 psia @ 3811.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.10.13 End Date: 2013.10.13 Last Calib.: 2013.10.13
 Start Time: 02:37:00 End Time: 08:15:00 Time On Btm: 2013.10.13 @ 04:18:00
 Time Off Btm: 2013.10.13 @ 06:14:00

TEST COMMENT: 1ST Open 5 Minutes/Good blow /Blow built to 3 1/2 inches
 1ST Shut In 15 Minutes/No blow back
 2ND Open 30 Minutes/Good blow /Blow built to 8 1/2 inches
 2ND Shut In 60 Minutes/Light surface blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1855.39	97.33	Initial Hydro-static
2	69.40	106.67	Open To Flow (1)
7	44.26	111.31	Shut-In(1)
22	1250.23	112.09	End Shut-In(1)
23	45.89	111.59	Open To Flow (2)
52	68.03	111.35	Shut-In(2)
115	1218.42	112.18	End Shut-In(2)
116	1821.99	108.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Clean Oil 100%	0.42
60.00	Muddy Oil	0.84
0.00	Mud 40% Oil 60%	0.00
0.00	Corrected Grav. Oil 27	0.00

Gas Rates

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



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TOOL DIAGRAM

FG Holl Company LLC

10/22S/14W/Stafford

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Job Ticket: 18169

DST#: 8

Test Start: 2013.10.13 @ 02:37:00

Tool Information

Drill Pipe:	Length: 3787.00 ft	Diameter: 3.80 inches	Volume: 53.12 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:	58000.00 lb
			<u>Total Volume: 53.12 bbl</u>	Tool Chased	3.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3808.00 ft			Final	51000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	6.00 ft				
Tool Length:	33.00 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			3786.00	
Hydraulic Tool	5.00			3791.00	
Jars	5.00			3796.00	
Safety Joint	2.00			3798.00	
Packer	5.00			3803.00	27.00 Bottom Of Top Packer
Packer	5.00			3808.00	
Anchor	1.00			3809.00	
Recorder	1.00	6749	Inside	3810.00	
Recorder	1.00	6666	Outside	3811.00	
Bullnose	3.00			3814.00	6.00 Bottom Packers & Anchor
Total Tool Length:	33.00				



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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: 45.00 sec/qt
Water Loss: 8.80 in³
Resistivity: ohm.m
Salinity: 5300.00 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
30.00	Clean Oil 100%	0.421
60.00	Muddy Oil	0.842
0.00	Mud 40% Oil 60%	0.000
0.00	Corrected Grav. Oil 27	0.000

Total Length: 90.00 ft Total Volume: 1.263 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

