



DRILL STEM TEST REPORT

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

9431 East Central Suite100
Wichita, Kansas 67206-2563

ATTN: Ryan Greenbaum

McDonald #1-19

19-20s-13w Barton

Start Date: 2013.07.25 @ 00:00:00

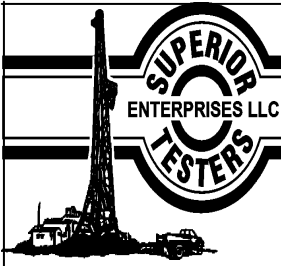
End Date: 2013.07.25 @ 00:00:00

Job Ticket #: 17104 DST #: 8

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

Printed: 2013.07.25 @ 09:50:11

F.G. Holl Company L.L.C. 19-20s-13w Barton McDonald #1-19 DST # 8 Arbuckle 2013.07.25



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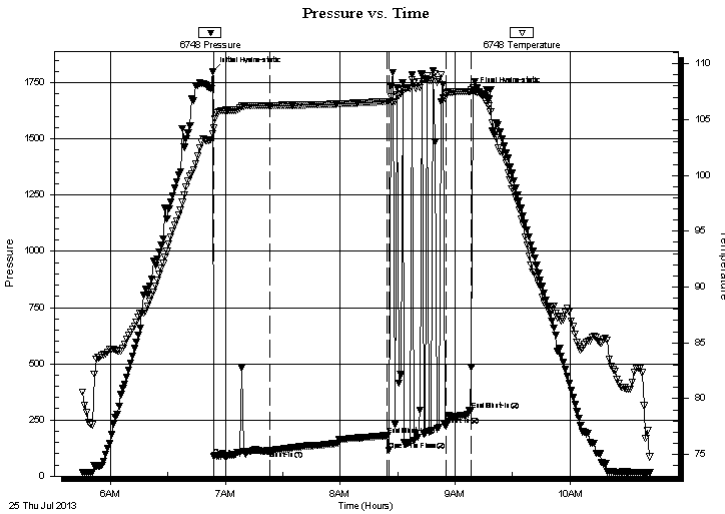
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:00:00
 Time Test Ended: 00:00:00
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Gene Budig
 Unit No: 3335
 Interval: **3445.00 ft (KB) To 3535.00 ft (KB) (TVD)**
 Reference Elevations: 1888.00 ft (KB)
 Total Depth: 3535.00 ft (KB) (TVD) 1880.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 6748 Inside
 Press@RunDepth: 292.58 psia @ 3531.68 ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.07.25 End Date: 2013.07.25 Last Calib.: 2013.07.25
 Start Time: 02:30:00 End Time: 10:41:30 Time On Btm: 2013.07.25 @ 06:53:30
 Time Off Btm: 2013.07.25 @ 09:09:30

TEST COMMENT: 1st Opening 30 Minutes Weak building surging blow died
 1st Shut-In 60 Minutes No blow back
 2nd Opening 30 Minutes-w eak building surging blow died
 2nd Shut-in 15 Minutes No blow back

PRESSURE SUMMARY



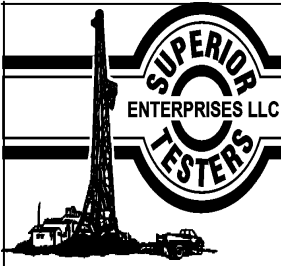
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1797.82	103.75	Initial Hydro-static
1	88.96	104.23	Open To Flow (1)
30	112.88	106.27	Shut-In(1)
91	180.64	106.63	End Shut-In(1)
92	113.73	106.62	Open To Flow (2)
122	228.52	107.32	Shut-In(2)
135	292.58	107.50	End Shut-In(2)
136	1709.60	107.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
300.00	very thick heavy mud	4.21
0.00	Flushed tool 12+ Times	0.00
0.00		0.00

Gas Rates

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



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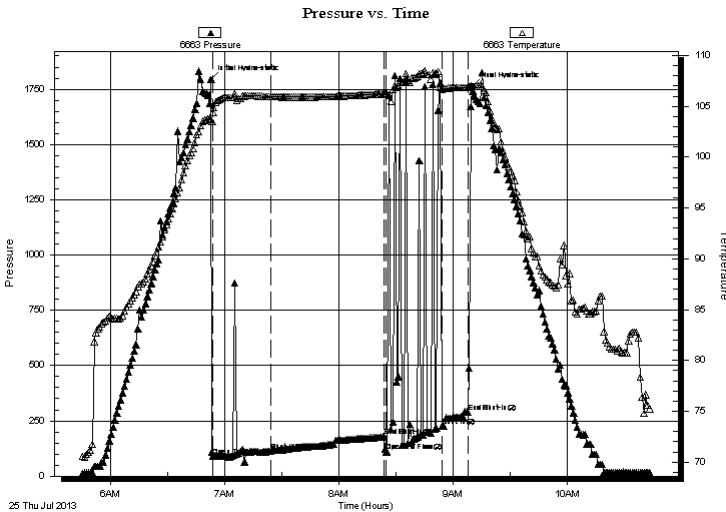
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 Deviated: No Whipstock: ft (KB)
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 Time Tool Opened: 00:00:00 Tester: Gene Budig
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 Interval: **3445.00 ft (KB) To 3535.00 ft (KB) (TVD)** Reference Elevations: 1888.00 ft (KB)
 Total Depth: 3535.00 ft (KB) (TVD) 1880.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 6663 Inside
 Press@RunDepth: 289.62 psia @ 3530.68 ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.07.25 End Date: 2013.07.25 Last Calib.: 2013.07.25
 Start Time: 02:30:00 End Time: 10:44:00 Time On Btm: 2013.07.25 @ 06:53:00
 Time Off Btm: 2013.07.25 @ 09:10:00

TEST COMMENT: 1st Opening 30 Minutes Weak building surging blow died
 1st Shut-In 60 Minutes No blow back
 2nd Opening 30 Minutes-w eak building surging blow died
 2nd Shut-in 15 Minutes No blow back

PRESSURE SUMMARY



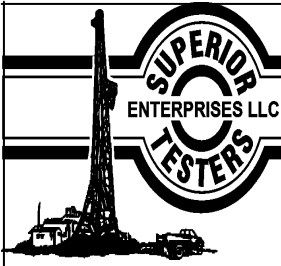
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1794.12	103.72	Initial Hydro-static
1	89.87	104.36	Open To Flow (1)
32	112.19	105.96	Shut-In(1)
91	178.47	106.24	End Shut-In(1)
92	110.63	106.23	Open To Flow (2)
122	225.03	106.62	Shut-In(2)
135	289.62	106.87	End Shut-In(2)
137	1762.23	106.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
300.00	very thick heavy mud	4.21
0.00	Flushed tool 12+ Times	0.00
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.
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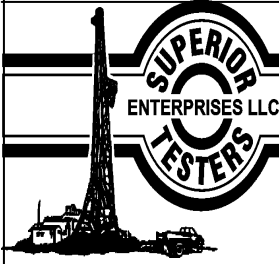
Tool Information

Drill Pipe:	Length: 3435.00 ft	Diameter: 3.80 inches	Volume: 48.18 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: 56000.00 lb
			<u>Total Volume: 48.18 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3445.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	89.68 ft			
Tool Length:	117.68 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			3422.00	
Hydraulic Tool	5.00			3427.00	
Safety Joint	2.00			3429.00	
Jars	6.00			3435.00	
Packer	5.00			3440.00	28.00 Bottom Of Top Packer
Packer	5.00			3445.00	
Change Over Sub	0.75			3445.75	
Drill Pipe	62.18			3507.93	
Change Over Sub	0.75			3508.68	
Anchor	21.00			3529.68	
Recorder	1.00	6663	Inside	3530.68	
Recorder	1.00	6748	Inside	3531.68	
Bullnose	3.00			3534.68	89.68 Bottom Packers & Anchor

Total Tool Length: 117.68



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FLUID SUMMARY

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ATTN: Ryan Greenbaum

Test Start: 2013.07.25 @ 00:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 68.00 sec/qt

Water Loss: 9.20 in³

Resistivity: ohm.m

Salinity: 8200.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psia

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
300.00	very thick heavy mud	4.208
0.00	Flushed tool 12+ Times	0.000
0.00		0.000

Total Length: 300.00 ft Total Volume: 4.208 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

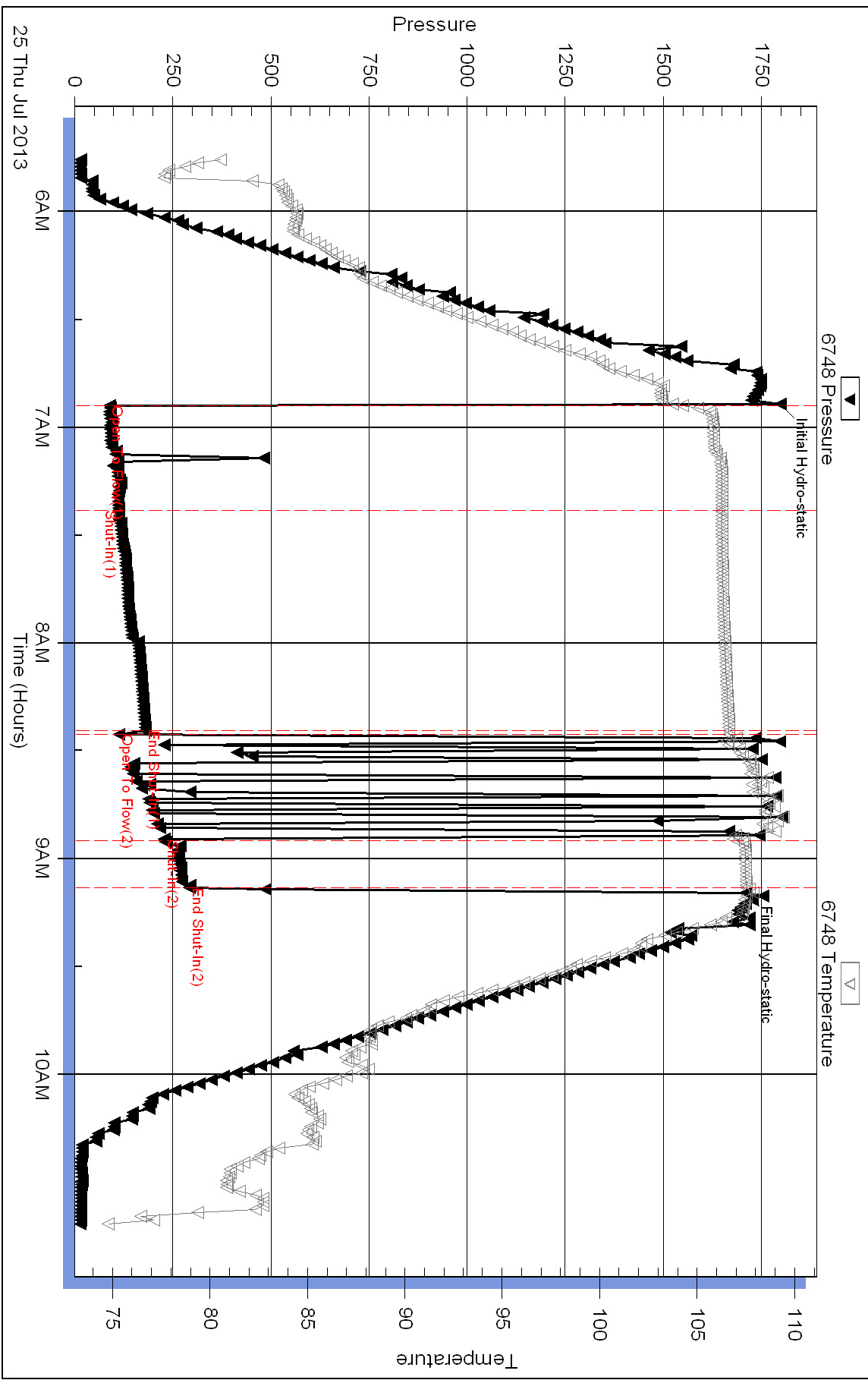
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time

