



DRILL STEM TEST REPORT

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

9431 E Central St # 100 Wichita KS 67206

ATTN: Ryan Greenbaum

Zimmer #1-20

20-19s-14w Barton

Start Date: 2014.07.08 @ 20:10:00

End Date: 2014.07.09 @ 03:09:30

Job Ticket #: 19303 DST #: 2

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

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Test Start: 2014.07.08 @ 20:10:00

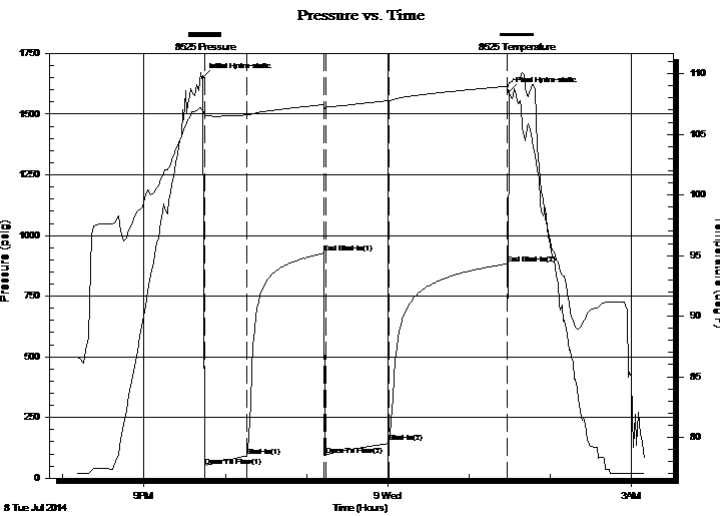
GENERAL INFORMATION:

Formation: **LKC "F" zone**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 21:44:30
 Time Test Ended: 03:09:30
 Interval: **3260.00 ft (KB) To 3280.00 ft (KB) (TVD)**
 Total Depth: 3280.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jared Scheck
 Unit No: 3340 Great Bend -25
 Reference Elevations: 1901.00 ft (KB)
 1893.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8525

Press@RunDepth: 148.10 psig @ ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.07.08 End Date: 2014.07.09 Last Calib.: 2014.07.09
 Start Time: 20:10:00 End Time: 03:09:30 Time On Btm: 2014.07.08 @ 21:43:30
 Time Off Btm: 2014.07.09 @ 01:29:30

TEST COMMENT: 1st Opening 30 Minutes-Fair blow built bottom of bucket in 14 minutes
 1st Shut-in 60 Minutes-Very weak surface blow
 2nd Opening 45 Minutes-Fair blow built bottom of bucket in 19 minutes
 2nd Shut-in 90 Minutes-Very weak surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1650.98	107.03	Initial Hydro-static
1	50.86	106.61	Open To Flow (1)
33	91.55	106.60	Shut-In(1)
90	927.06	107.47	End Shut-In(1)
91	95.31	107.31	Open To Flow (2)
138	148.10	107.79	Shut-In(2)
225	882.77	108.96	End Shut-In(2)
226	1593.38	109.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	gas oil w ater mud 5%g 15%o 30%w 50%	0.28
60.00	oil mud w ater 5%o 45%m 50%w	0.84
120.00	mud w ater 15%mud 85%w	1.68
0.00	180 feet gas in pipe	0.00
0.00	chlorides 100,000 resistivity .7@60deg	0.00

Gas Rates

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



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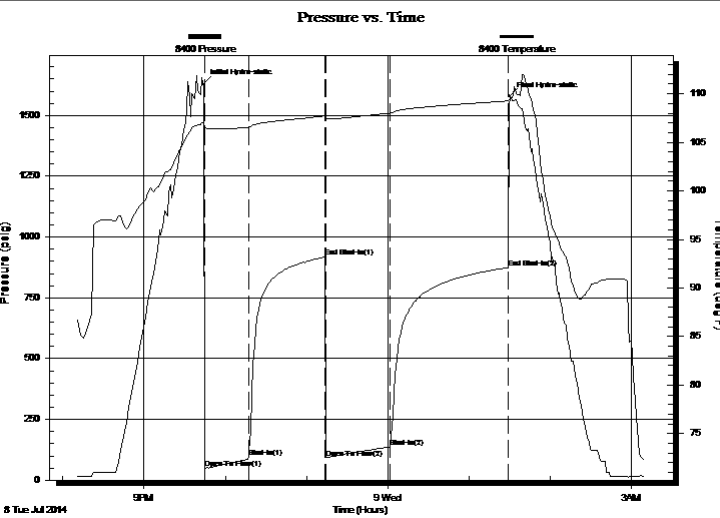
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 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 21:44:30 Tester: Jared Scheck
 Time Test Ended: 03:09:30 Unit No: 3340 Great Bend -25
 Interval: **3260.00 ft (KB) To 3280.00 ft (KB) (TVD)** Reference Elevations: 1901.00 ft (KB)
 Total Depth: 3280.00 ft (KB) (TVD) 1893.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8400

Press@RunDepth: 874.16 psig @ ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.07.08 End Date: 2014.07.09 Last Calib.: 2014.07.09
 Start Time: 20:10:00 End Time: 03:10:00 Time On Btm: 2014.07.08 @ 21:44:00
 Time Off Btm: 2014.07.09 @ 01:30:00

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 1st Shut-in 60 Minutes-Very weak surface blow
 2nd Opening 45 Minutes-Fair blow built bottom of bucket in 19 minutes
 2nd Shut-in 90 Minutes-Very weak surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1629.55	107.03	Initial Hydro-static
1	47.17	106.52	Open To Flow (1)
33	94.49	106.55	Shut-In(1)
90	917.90	107.71	End Shut-In(1)
91	91.68	107.41	Open To Flow (2)
138	136.55	107.99	Shut-In(2)
225	874.16	109.26	End Shut-In(2)
226	1579.82	109.47	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	gas oil w ater mud 5%g 15%o 30%w 50%	0.28
60.00	oil mud w ater 5%o 45%m 50%w	0.84
120.00	mud w ater 15%mud 85%w	1.68
0.00	180 feet gas in pipe	0.00
0.00	chlorides 100,000 resistivity .7@60deg	0.00

Gas Rates

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



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TOOL DIAGRAM

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DST#: 2

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Test Start: 2014.07.08 @ 20:10:00

Tool Information

Drill Pipe:	Length: 3247.00 ft	Diameter: 3.80 inches	Volume: 45.55 bbl	Tool Weight: 1000.00 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: 60000.00 lb
			<u>Total Volume: 45.55 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3260.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	48.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3237.00	
Hydraulic tool	5.00			3242.00	
Jars	6.00			3248.00	
Safety Joint	2.00			3250.00	
Packer	5.00			3255.00	28.00 Bottom Of Top Packer
Packer	5.00			3260.00	
Anchor	15.00			3275.00	
Recorder	1.00			3276.00	
Recorder	1.00			3277.00	
Bullnose	3.00			3280.00	20.00 Bottom Packers & Anchor
Total Tool Length:	48.00				



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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: 46.00 sec/qt
 Water Loss: 7.99 in³
 Resistivity: ohm.m
 Salinity: 6800.00 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
20.00	gas oil water mud 5%g 15%o 30%w 50%m	0.281
60.00	oil mud w ater 5%o 45%m 50%w	0.842
120.00	mud w ater 15%mud 85%w	1.683
0.00	180 feet gas in pipe	0.000
0.00	chlorides 100,000 resistivity .7@60degre	0.000

Total Length: 200.00 ft Total Volume: 2.806 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

