



DRILL STEM TEST REPORT

Prepared For: **Valhalla Exploration L.L.C**
133 N Glendale Wichita KS 67206

ATTN: Derek Patterson

Helmerts#1-1

1-22s-12w Stafford

Start Date: 2012.05.08 @ 21:10:00

End Date: 2012.05.09 @ 03:14:30

Job Ticket #: 17136 DST #: 2

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

Printed: 2012.05.09 @ 03:42:35



DRILL STEM TEST REPORT

Valhalla Exploration L.L.C
 133 N Glendale Wichita KS 67206
 ATTN: Derek Patterson

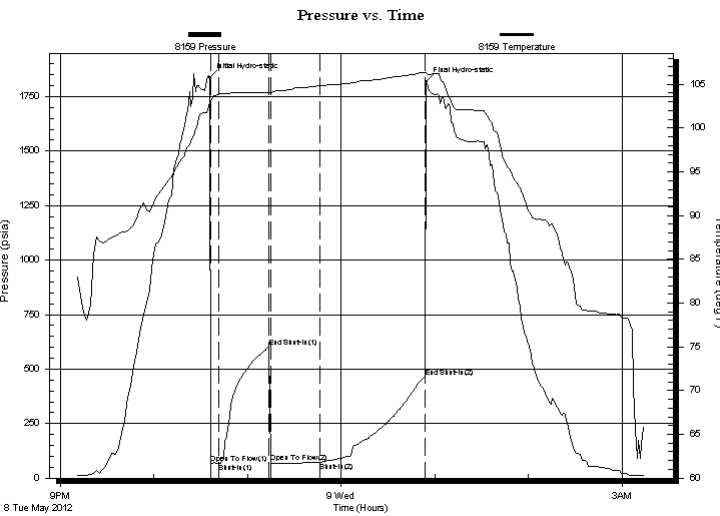
1-22s-12w Stafford
Helmerts#1-1
 Job Ticket: 17136 **DST#: 2**
 Test Start: 2012.05.08 @ 21:10:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 22:36:30 Tester: Jared Scheck
 Time Test Ended: 03:14:30 Unit No: 3320-50-Great Bend
 Interval: **3524.00 ft (KB) To 3586.00 ft (KB) (TVD)** Reference Elevations: 1814.00 ft (KB)
 Total Depth: 3586.00 ft (KB) (TVD) 1807.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 7.00 ft

Serial #: 8159 Inside
 Press @ Run Depth: 71.72 psia @ 3582.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.05.08 End Date: 2012.05.09 Last Calib.: 2012.05.09
 Start Time: 21:10:00 End Time: 03:14:30 Time On Btm: 2012.05.08 @ 22:35:30
 Time Off Btm: 2012.05.09 @ 00:54:30

TEST COMMENT: 1st Opening 5 Minutes-Weak blow built 1 1/4 in 5 minutes
 1st Shut-in 30 Minutes-No blow back
 2nd Opening 30 Minutes-Weak blow built 1 1/4 into bucket in 30 minutes
 2nd Shut-in 60 Minutes-No blow back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1838.00	102.96	Initial Hydro-static
1	66.09	103.19	Open To Flow (1)
6	69.09	103.89	Shut-In(1)
38	599.20	104.07	End Shut-In(1)
39	71.23	103.94	Open To Flow (2)
71	71.72	104.83	Shut-In(2)
138	462.83	106.36	End Shut-In(2)
139	1818.22	106.37	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
20.00	Mud Oil 20% Oil 80% Mud	0.10

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



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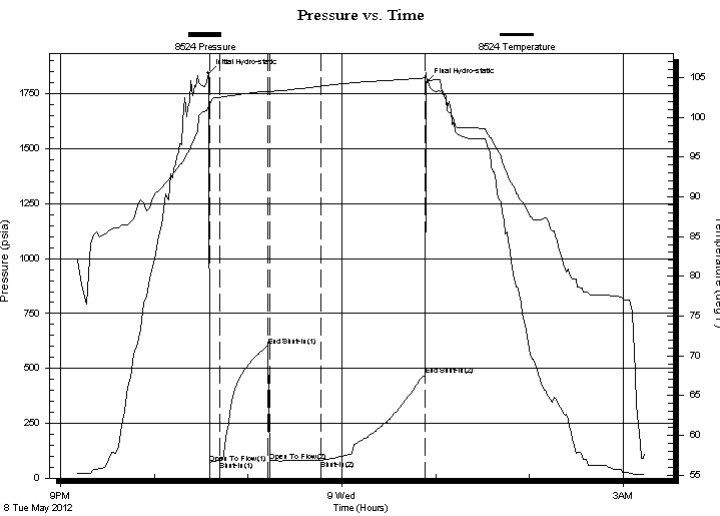
1-22s-12w Stafford
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 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 7.00 ft

Serial #: 8524 Outside
 Press @ Run Depth: 467.46 psia @ 3583.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.05.08 End Date: 2012.05.09 Last Calib.: 2012.05.09
 Start Time: 21:10:00 End Time: 03:14:00 Time On Btm: 2012.05.08 @ 22:34:30
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 1st Shut-in 30 Minutes-No blow back
 2nd Opening 30 Minutes-Weak blow built 1 1/4 into bucket in 30 minutes
 2nd Shut-in 60 Minutes-No blow back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1844.96	101.50	Initial Hydro-static
1	68.79	101.62	Open To Flow (1)
8	78.17	102.53	Shut-In(1)
38	601.76	103.30	End Shut-In(1)
39	77.69	103.14	Open To Flow (2)
72	81.82	103.92	Shut-In(2)
139	467.46	104.96	End Shut-In(2)
140	1799.78	105.28	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
20.00	Mud Oil 20%Oil 80%Mud	0.10

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Valhalla Exploration L.L.C
 133 N Glendale Wichita KS 67206
 A T T N : Derek Patterson

1-22s-12w Stafford
Helmers#1-1
 Job Ticket: 17136 **DST#: 2**
 Test Start: 2012.05.08 @ 21:10:00

Tool Information

Drill Pipe:	Length: 3407.00 ft	Diameter: 3.80 inches	Volume: 47.79 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume: 48.38 bbl</u>	Tool Chased	2.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3524.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	62.00 ft				
Tool Length:	90.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
SHut-InTool	5.00		Inside	3501.00	
Hydraulic Tool	5.00			3506.00	
Jars	6.00			3512.00	
Safety Joint	2.00			3514.00	
Packer	5.00			3519.00	28.00 Bottom Of Top Packer
Packer	5.00			3524.00	
Anchor	0.00			3524.00	
Change Over Sub	0.75			3524.75	
Drill Pipe	30.50		Outside	3555.25	
Change Over Sub	0.75		Outside	3556.00	
Anchor	25.00			3581.00	
Recorder	1.00	8159	Inside	3582.00	
Recorder	1.00	8524	Outside	3583.00	
Bullnose	3.00			3586.00	62.00 Bottom Packers & Anchor

Total Tool Length: 90.00



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FLUID SUMMARY

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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: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.00 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 7900.00 ppm			
Filter Cake: 1.00 inches			

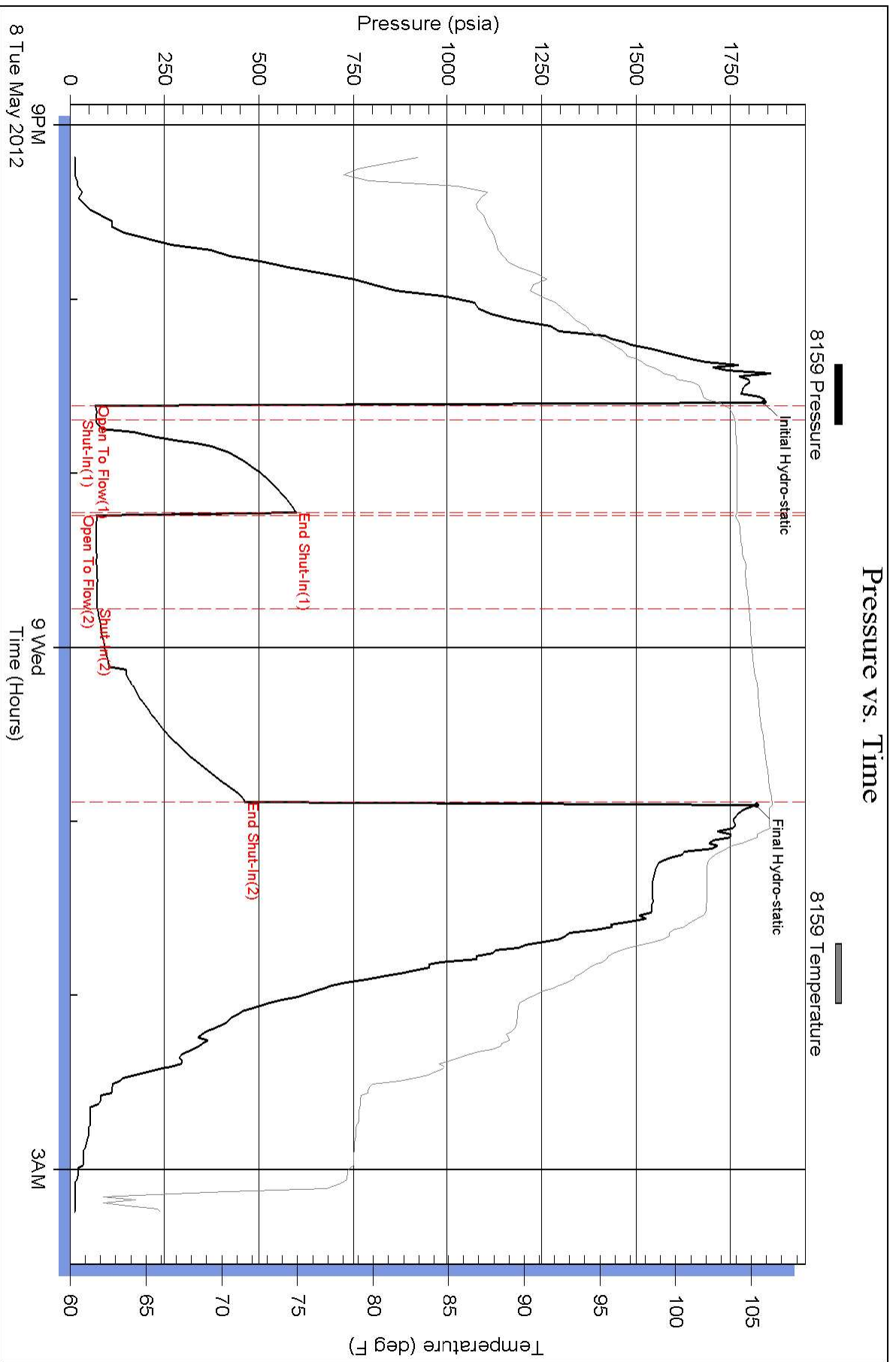
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud Oil 20%Oil 80%Mud	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Pressure vs. Time



Pressure vs. Time

