



DRILL STEM TEST REPORT

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

ATTN: Derek Patterson

Helmers#1-1

1-22s-12w Stafford

Start Date: 2012.05.09 @ 09:50:00

End Date: 2012.05.09 @ 14:40:00

Job Ticket #: 17137 DST #: 3

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

Printed: 2012.05.10 @ 03:28:56



DRILL STEM TEST REPORT

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

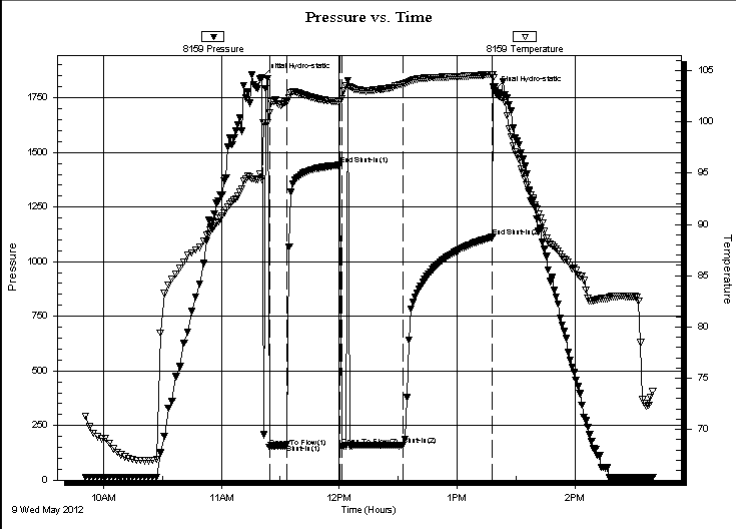
1-22s-12w Stafford
Helmers#1-1
Job Ticket: 17137 **DST#: 3**
Test Start: 2012.05.09 @ 09:50:00

GENERAL INFORMATION:

Formation: Arbuckle		Test Type: Conventional Bottom Hole (Initial)
Deviated: No Whipstock: ft (KB)		Tester: Jared Scheck
Time Tool Opened: 11:24:30		Unit No: 3320-50-Great Bend
Time Test Ended: 14:40:00		Reference Elevations: 1814.00 ft (KB) 1807.00 ft (CF)
Interval: 3586.00 ft (KB) To 3592.00 ft (KB) (TVD)		KB to GR/CF: 7.00 ft
Total Depth: 3592.00 ft (KB) (TVD)		
Hole Diameter: 7.88 inches	Hole Condition: Poor	

Serial #: 8159	Inside				
Press @ RunDepth: 158.96 psia @ 3588.00 ft (KB)		Capacity: 5000.00 psia			
Start Date: 2012.05.09	End Date: 2012.05.09	Last Calib.: 2012.05.09			
Start Time: 09:51:00	End Time: 14:40:00	Time On Btm: 2012.05.09 @ 11:20:30			
		Time Off Btm: 2012.05.09 @ 13:19:00			

TEST COMMENT: 1st Opening 7 Minutes-Fair blow built 6 inches into water lost mud in hole so picked up reset tool fair blow built 4 inches onto water in 7 minutes
1st Shut-in 30 Minutes-No blow back
2nd Opening 30 Minutes-Weak surge did not build flushed tool weak surge did not build



PRESSURE SUMMARY

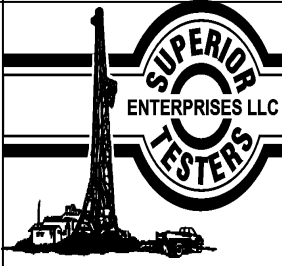
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1840.63	94.39	Initial Hydro-static
4	150.06	100.92	Open To Flow (1)
13	163.91	101.89	Shut-In(1)
40	1442.87	102.00	End Shut-In(1)
41	155.94	102.27	Open To Flow (2)
72	158.96	103.68	Shut-In(2)
118	1112.03	104.63	End Shut-In(2)
119	1784.11	103.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	Mud	1.43
60.00	Mud with Spot oil 1%oil 99%mud	0.84

Gas Rates

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



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Valhalla Exploration L.L.C

1-22s-12w Stafford

133 N Glendale Wichita KS 67206

Helmers#1-1

ATTN: Derek Patterson

Job Ticket: 17137

DST#: 3

Test Start: 2012.05.09 @ 09:50:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:24:30

Time Test Ended: 14:40:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 3320-50-Great Bend

Interval: **3586.00 ft (KB) To 3592.00 ft (KB) (TVD)**

Reference Elevations: 1814.00 ft (KB)

Total Depth: 3592.00 ft (KB) (TVD)

1807.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 7.00 ft

Serial #: **8525** Outside

Press @ RunDepth: 1248.25 psia @ 3589.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.05.09

End Date: 2012.05.09

Last Calib.: 2012.05.09

Start Time: 09:51:00

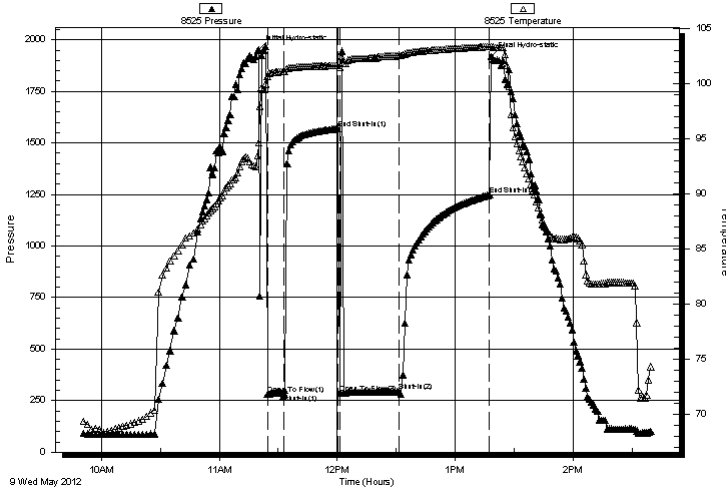
End Time: 14:39:30

Time On Btm: 2012.05.09 @ 11:20:00

Time Off Btm: 2012.05.09 @ 13:18:30

TEST COMMENT: 1st Opening 7 Minutes-Fair blow built 6 inches into water lost mud in hole so picked up reset tool fair blow built 4 inches onto w ater in 7 minutes
1st Shut-in 30 Minuites-No blow back
2nd Opening 30 Minutes-Weak surge did not build flushed tool weak surge didnot build

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1953.45	94.67	Initial Hydro-static
5	281.15	100.63	Open To Flow (1)
13	281.85	101.11	Shut-In(1)
41	1569.35	101.67	End Shut-In(1)
42	288.15	101.53	Open To Flow (2)
72	295.40	102.57	Shut-In(2)
118	1248.25	103.39	End Shut-In(2)
119	1920.28	103.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	Mud	1.43
60.00	Mud w ith Spot oil 1%oil 99%mud	0.84

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
 ATTN: Derek Patterson

1-22s-12w Stafford
Helmerts#1-1
 Job Ticket: 17137 **DST#: 3**
 Test Start: 2012.05.09 @ 09:50:00

Tool Information

Drill Pipe:	Length: 3468.00 ft	Diameter: 3.80 inches	Volume: 48.65 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:	65000.00 lb
			<u>Total Volume: 49.24 bbl</u>	Tool Chased	5.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3586.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	6.00 ft				
Tool Length:	29.00 ft				
Number of Packers:	1	Diameter: 6.75 inches			

Tool Comments: Tool chased 5 feet to bottom /2nd open flushed tool weak surge did not build

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
SHut-InTool	5.00		Inside	3568.00	
Hydraulic Tool	5.00			3573.00	
Jars	6.00			3579.00	
Safety Joint	2.00			3581.00	
Packer	5.00			3586.00	23.00 Bottom Of Top Packer
Anchor	1.00			3587.00	
Recorder	1.00	8159	Inside	3588.00	
Recorder	1.00	8525	Outside	3589.00	
Bullnose	3.00			3592.00	6.00 Anchor Tool
Total Tool Length:	29.00				



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FLUID SUMMARY

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 Job Ticket: 17137 **DST#: 3**
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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: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 9300.00 ppm			
Filter Cake: 1.00 inches			

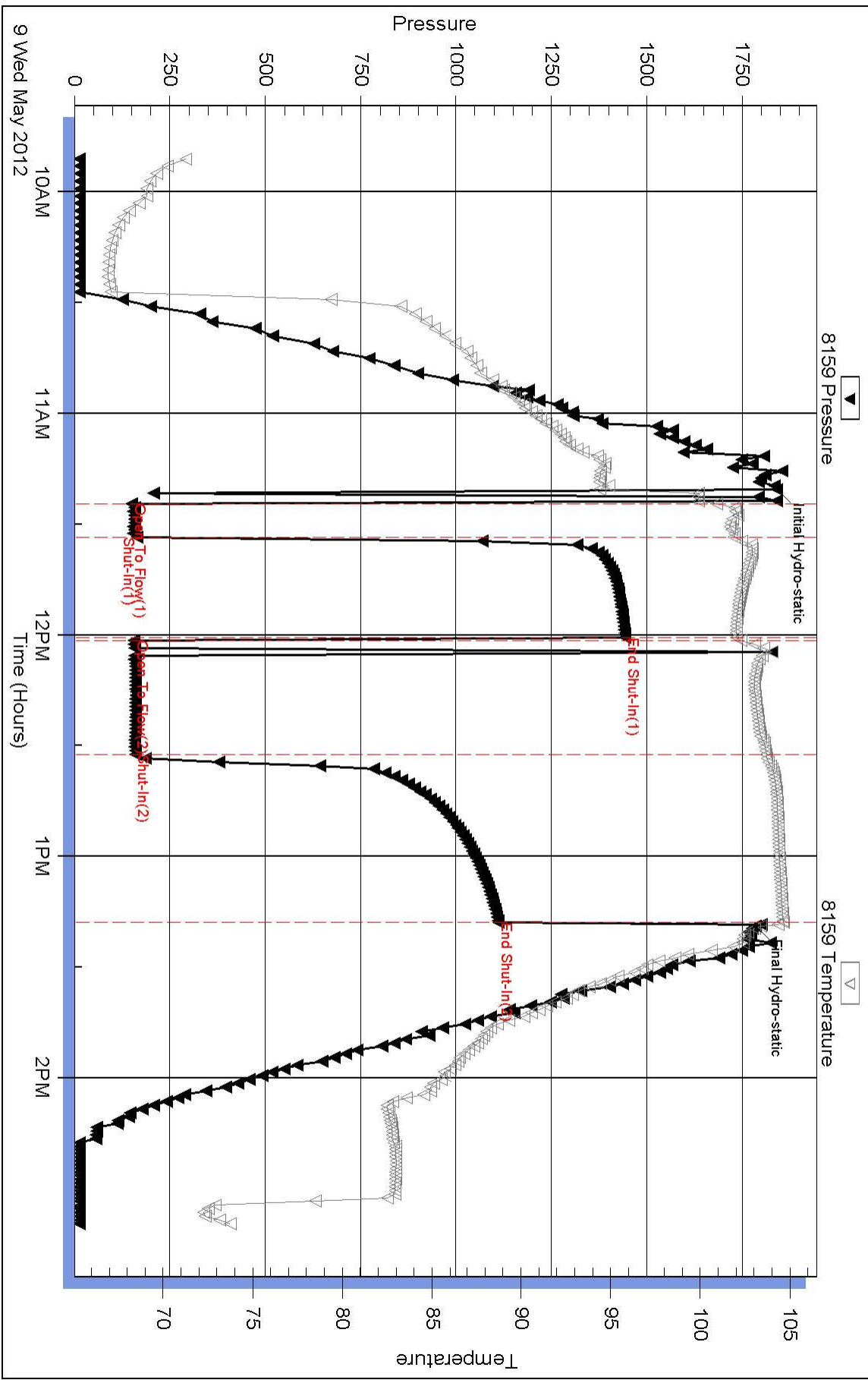
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	Mud	1.432
60.00	Mud with Spot oil 1%oil 99%mud	0.842

Total Length: 240.00 ft Total Volume: 2.274 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time



Pressure vs. Time

