

BORE SECTION HYDROTEST PROCEDURE

CORE Linepipe® Recommended Test Procedure for Above Ground Hydrotests:

- Vent lines are to remain open for all tests.
- Plugs, seals, and caps are to be properly installed.
- No shrink sleeves are to be installed prior to Hydrotest.
- Use only medium density foam pigs.
- Install a digital pressure gauge to monitor bore pressure.
- Record volume of fluid pumped into pipe for each step below.

1. Structural hydro-test:

	300 ANSI (PN 50)		600 ANSI (PN 100)		900 ANSI (PN 150)	
	MAOP 720 psi (4.96 MPa)		MAOP 1440 psi (9.93 MPa)		MAOP 2160 psi (14.89 MPa)	
a. Fill line, removing all trapped air. Record volume to fill pipe.						
b. Bump to pressure for at least 15 minutes and until there is no air flow at vents . Record volume of fluid pumped into pipe.	50 psi 0.3 MPa		50 psi 0.3 MPa		50 psi 0.3 MPa	
c. Bump to pressure for 10 minutes. Record volume of fluid pumped into pipe.	300 psi 2.1 MPa		500 psi 3.4 MPa		500 psi 3.4 MPa	
d. Bump to pressure for 10 minutes. Record volume of fluid pumped into pipe.	500 psi 3.4 MPa		1000 psi 6.9 MPa		1200 psi 8.3 MPa	
e. Bump to pressure for 10 minutes. Record volume of fluid pumped into pipe.	700 psi 4.8 MPa		1500 psi 10.3 MPa		2200 psi 15.2 MPa	
f. Bump to pressure and hold for 30 minutes. Record volume of fluid pumped into pipe. Walk the above ground pipeline and listen / look for signs of a leak.	Min	Max	Min	Max	Min	Max
	1010 psi 7.1 MPa	1080 psi 7.4 MPa	2020 psi 13.9 MPa	2160 psi 14.9 MPa	2700 psi 18.6 MPa	2970 psi 20.5 MPa

2. Liner leak test:

- Following the structural test, reduce the pressure to 2 MPa (290 psi) and hold for 30 minutes.
- During the liner leak test, the annulus vents shall be periodically monitored for flow of liquids.

3. De-water/de-pressure line.