



Description	This procedure is used to establish guidelines for pressure testing plastic pipelines.	
Regulatory Applicability	<input checked="" type="checkbox"/> Transmission Pipelines <input checked="" type="checkbox"/> Gathering Pipelines <input checked="" type="checkbox"/> Distribution Pipelines	
Frequency	Prior to operating a new pipeline or returning to service a pipeline that has been relocated or replaced, pressure test the line according to the requirements of this procedure to substantiate the MAOP (See procedure P-192.619) and locate and eliminate each potentially hazardous leak.	
Reference	49 CFR 192.501	<i>Scope</i>
	49 CFR 192.503	<i>General Requirements</i>
	49 CFR 192.513	<i>Test Requirements for Plastic Pipelines</i>
	49 CFR 192.515	<i>Environmental Protection and Safety Requirements</i>
	49 CFR 192.517	<i>Records</i>
Forms / Record Retention	F-192.513	<i>Plastic Pipeline Pressure Test Record / Life of Pipeline System</i>
	WTG-1400	<i>Project Report Form / Life of Pipeline System</i>
Related Specifications	None	
OQ Covered Task	0561	<i>Pressure Test – Non-Liquid Medium – MAOP Less Than 100 PSI</i>
	0571	<i>Pressure Test – Non-Liquid Medium – MAOP Greater Than or Equal to 100 PSI</i>
	0581	<i>Pressure Test – Liquid Medium</i>
	(In order to perform the tasks listed above, personnel must be qualified in accordance with West Texas Gas's Operator Qualification program or directly supervised by a qualified individual.)	



Procedure Steps

NOTES:

- Written job-specific pressure test procedure/instructions to cover the items discussed in this procedure are suggested for complex tests.
- During the test the temperature of the thermoplastic material may not be more than 100° F or less than 35° F.
- Any leak discovered during testing must be repaired before final testing is complete.
- Safety is the primary consideration during planning and completion of all pressure tests. All associated test equipment and material must be secured or anchored using the appropriate whip check, camlock pins, etc. This will assist in mitigating uncontrolled pressure release.

Test requirements for Plastic Pipeline Mains.

1. The test procedure must ensure discovery of all potentially hazardous leaks in the segment being tested.
2. Pipeline pressure tests are not to exceed the following maximum pressures:

Grade	Type	Maximum Test Pressure (psig)
SDR 11	4710	150
SDR 11	3408	150
SDR 11	2406	120
SDR 17	3408	96

Note: The test pressure must be at least 150% of the Maximum Operating Pressure or 50 psig; whichever is greater. The maximum test pressure may not be more than 2.5 times the pressure determined under CFR 192.121 at a temperature not less than the pipe temperature during the test.

Test Requirements for Plastic Service Lines

1. If feasible, the service line connection to the main must be included in the test. If this is not feasible, it must be given a leakage test at the operating pressure when placed in service.
2. If plastic service lines are to be tested at the same time as the distribution mainline, operating personnel completing the test must ensure that all EFV's included in the test are in the open position and not disrupting flow to the downstream side of the EFV. To do this, the operating personnel will need to either test the service for adequate flow or check the pressure at the riser valve once the mainline is brought up to the proper test pressure.



3. Pipeline pressure tests are not to exceed the following maximum pressures:

Grade	Type	Maximum Test Pressure (psig)
SDR 11	4710	150
SDR 11	3408	150
SDR 11	2406	120
SDR 17	3408	96

Note: The test pressure must be at least 150% of the Maximum Operating Pressure or 50 psig; whichever is greater. However, the maximum test pressure may not be more than 3 times the design pressure of the pipe.

Environmental Protection and Safety Requirements

1. Every reasonable precaution must be taken to protect employees and the general public during testing. All practical steps shall be taken to keep people not working on the testing operations outside of the testing area until the test is complete and pipeline segment pressure is return to normal operations.
2. The test medium shall be disposed of in a manner that will minimize damage to the environment.

Records

1. Each District/Division Manger shall make, and retain for the useful life of the pipeline, a record of each test performed under these requirements. The record must contain the following information:
 - a) Name of employee or Contractor Employee that conducted the test.
 - b) Test medium used.
 - c) Test pressure and temperature.
 - d) Test duration.
 - e) Elevation variations, if significant.
 - f) Leaks and failures and the root cause of such.