

- C. Apply test pressure to the entire pipeline or section being tested to 1.5 times working pressure or 1.5 times the surge pressure whichever is greater. Immediately prior to commissioning, complete the pipeline and test the entire pipeline.
- i. Fill each pipeline or section with water and displace all free air from the pipeline.
  - ii. Raise the pressure in the pipeline by pumping water until the highest of the working pressure/surge pressure is attained in the lowest part of the section.
  - iii. Maintain at this level by further pumping until it is steady for a period of not less than 24 hours.
  - iv. Monitor the pipeline over a period of 24 hours without further pressurization.
  - v. At the end of this period, measure the reduced pressure in the pipeline, the original test pressure restored by pumping and the loss measured by drawing off water or air from the pipeline until the pressure has fallen to match the reduced pressure previously noted.
  - vi. Ensure that the loss does not exceed 0.02 liter per millimeter of pipe diameter per kilometer of pipe per day for each bar of head applied.
  - vii. If the pipeline fails the test, locate the faults, repair the repairable or replace with equivalent and retest the pipeline until it passes.
  - viii. Visually inspect all exposed pipe, fittings, valves and joints during the tests.
  - ix. After satisfactory completion of the 24 hour period test, bring the pipeline to test pressure and maintain it at this pressure, by pumping if necessary, for one hour. Disconnect the pumping and no water is allowed to enter the pipeline for a further period of two hours.
  - x. At the end of the two hours period, restore the original test pressure by pumping water into the pipeline. Determine the volume of makeup water required to achieve the test pressure specified and deemed to represent the cumulative loss during the two hour period of test.