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Problem: COMPARE THE THREE COMMON METHODS OF TESTING FOR WATER LEAKS: (1) VACUUM (2) FILLING MH FULL OF WATER (3) USING GROUND WATER.

USE GROUND WATER FOR TESTING

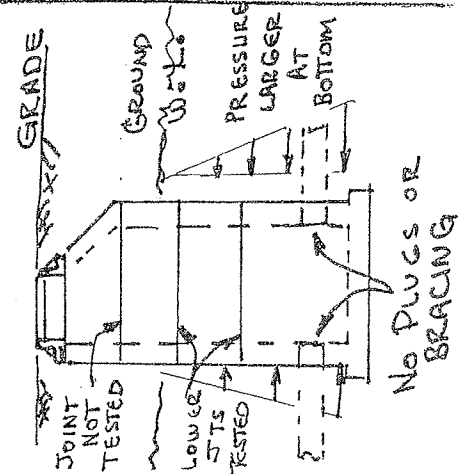
No equipment required

No blocking or pump required

No pressure on joints above w.l.

No pressure on joint at w.l.

Pressure increases by 62.4 psf for each foot below w.l.



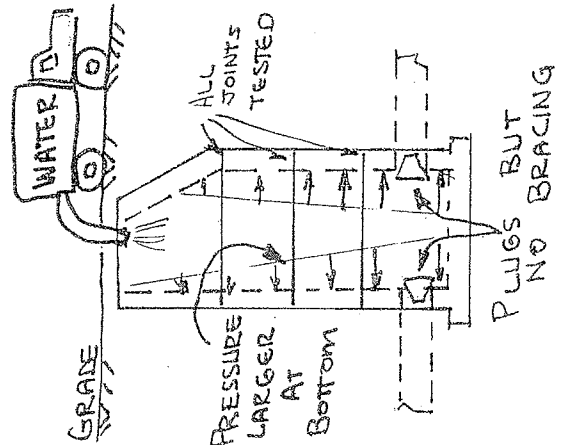
FILL WITH WATER TESTING

Need to get large volume of water to site and remove it from site.

Requires plugs at pipes

Low pressure at top joint

Pressure increases by 62.4 psf for each foot below water level.



VACUUM TESTING ASTM C1244-02

Need pump and cover

Requires blocking at pipes

Uniform pressure at all joints

