

---

## Test Report

### Purpose:

1. Determine the drain efficiency of PermaFlow compared to conventional Polypropylene P-Trap with melted grease at 1.5gpm

### Test set up:

1. A new PermaFlow and P-Trap were used.
2. Each was installed on a sink for each test run
3. Flow rate was established for 1.5 gpm
4. Prepared ¼ cup melted grease

### Procedure:

#### Test 1

1. The P-Trap was installed on the sink
2. Flow was established at 1.5 gpm
3. The melted grease was poured down the drain

#### Test 2

1. The above test was repeated with PermaFLOW

### Results and observations:

Test 1 – 1-1/2 gpm - Conventional P-trap –Grease



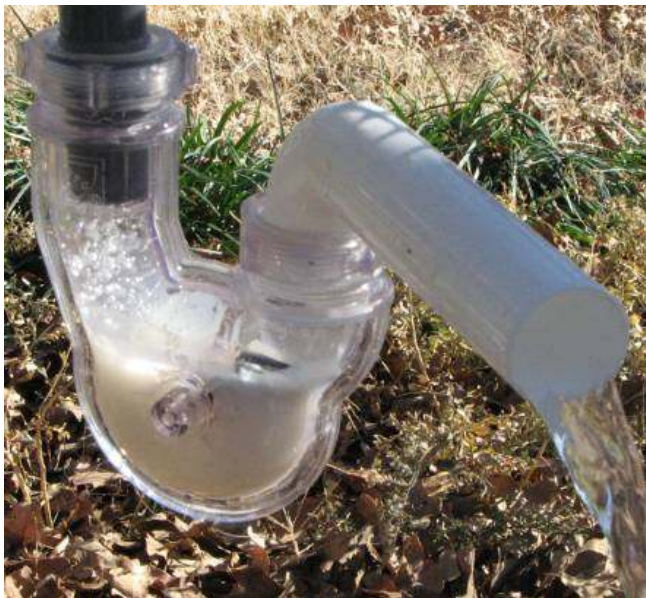
P-trap completely blocked with melted grease

Observations – The P-trap completely blocked with grease. No flow was established even with a full sink of water standing for 36 hours. The P-trap had to be removed for cleaning.

Test 2 – 1-1/2 gpm – PermaFLOW - Grease



PermaFLOW filled to above axle with grease. Flow still maintained via the bypass around the wiper.



PermaFLOW rotated to by-pass position. Full flow established.

Observations – Even though PermaFlow maintained flow and the by-pass position was effective, the best practice would be to remove the PermaFLOW for thorough cleaning when convenient. Since, PermaFLOW is clear – the blockage material can be seen easily and solution implemented appropriately.