100 ml
200 ml

**ACETONE**

WHEN SAMPLING FOR Pm

0.1N HNO3

300 ml

WATER USED IN SAMPLE RECOVERY

5% NITRIC ACID / 10% HYDROGEN PEROXIDE

ACIDIFIED KMnO4

WHEN SAMPLING FOR Hg

8 N HCl

WHEN SAMPLING FOR Hg

Sample Recovery

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**BLANKS**

CONTAINER NO.7

ACETONE

(WHEN SAMPLING FOR Pm)

100 ml

CONTAINER NO.8A

0.1N HNO3

300 ml

CONTAINER NO.8B

WATER USED IN SAMPLE RECOVERY

100 ml

CONTAINER NO.9

5% NITRIC ACID / 10% HYDROGEN PEROXIDE

200 ml

CONTAINER NO.10

ACIDIFIED KMnO4

(WHEN SAMPLING FOR Hg)

100 ml

CONTAINER NO.11

8 N HCl

(WHEN SAMPLING FOR Hg)

ADD 25 ml to 200 ml WATER

CONTAINER NO.12

FILTER

(3) UNUSED FILTERS FROM SAME LOT

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**REAGENTS**

**FOR CHARGING:**

5% HNO3 / 10% H2O2 ABSORBING SOLUTION

- PLACE 500 ml water in 1000 ml jar
- ADD 50ml of concentrated HNO3
- ADD 333 ml of 30% H2O2
- DILUTE to volume (1000ml) with water

CHARGING & SAMPLE COLLECTION RINSE:

4% KMnO4 / 10% H2SO4 ACIDIC KMnO4 ABSORBING SOLUTION

- PLACE 800 ml water in 1000 ml jar
- ADD100 ml concentrated H2SO4 with stirring
- DISSOLVE 40 g KMnO4 into 10% H2SO4
- ADD 10% H2SO4 with stirring to make a volume of 1000 ml

SAMPLE COLLECTION RINSE FOR ALL GLASSWARE EXCLUDING 4th, 5th & 6th IMPINGERS

0.1 N HNO3 - NITRIC ACID SOLUTION

- PLACE 900 ml DI H2O in 1000 ml jar
- ADD 6.3 ml of concentrated HNO3 (70%)
- DILUTE to volume (1000 ml) with water

SAMPLE COLLECTION/RESIDUAL RINSE:

8 N HCl

- PLACE 250 ml water in 1000 ml jar
- ADD 690 ml concentrated HCl with stirring
- DILUTE to volume (1000 ml) with water

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**SAMPLE RECOVERY**

CONTAINER NO.1

FILTER

USE POLYPROPYLENE OR TEFLONE COATED TWEEVERS

NOZZLE, PROBE, & FR. 1/2 FILTER HOLDER

RINSE 3 TIMES W/ACETONE (100 ml TOTAL)
ADD RINSE TO CONTAINER

CONTAINER NO.2

NOZZLE, PROBE, & FR. 1/2 FILTER HOLDER

RINSE 3 TIMES W/0.1 N HNO3 (100 ml TOTAL)
ADD RINSE TO CONTAINER

CONTAINER NO.3

BACK 1/2 FILTER HOLDER, CONNECTING GLASSWARE, MOISTURE TRAP, 2ND & 3RD IMPS

MEASURE LIQUID, ADD TO CONTAINER. THEN RINSE 3 TIMES W/0.1N HNO3 (100 ml TOTAL)
ADD RINSE TO CONTAINER

CONTAINER NO.4

4TH IMPINGER

MEASURE LIQUID, ADD TO CONTAINER. THEN RINSE 3 TIMES W/0.1N HNO3 (100 ml TOTAL)
ADD RINSE TO CONTAINER

CONTAINER NO.5A

5TH & 6TH IMPINGERS

MEASURE LIQUID, ADD TO CONTAINER. RINSE 3 TIMES W/Acidic KMnO4 (100 ml TOTAL) THEN RINSE W/WATER (100 ml TOTAL) ADD RINSES TO CONTAINER

CONTAINER NO.5B

5TH & 6TH IMPINGERS RESIDUE

IF VISIBLE DEPOSITS REMAIN: RINSE W/8 N HCl (25ml) PLACE IN 200 ml WATER

CONTAINER NO.6

SILICA GEL

WEIGH & DISCARD

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