

Example:

1. Bilge separator is rated at  $2\text{m}^3/\text{hr}$ ;

2. Net volume needed for the test: Volume of test water:

$$2\text{m}^3 \times 3 \text{ hours} = 6\text{m}^3;$$

3. Volume of Test Fluid C: 6 percent of test water =  $0.06 \times$

$$6\text{m}^3 = 0.36\text{m}^3;$$

4. Actual volume to be prepared:

a. Volume of Test Fluid C to be prepared: 1.2 times of the

$$\text{Net Volume of Test Fluid C} = 1.2 \times 0.36 = 0.432\text{m}^3;$$

b. Volume of fresh water in Test Fluid C:  $(947.8\text{g}/1000\text{g})$

$$\text{of Test Fluid C} = 0.9478 \times 0.432 = 0.4094\text{m}^3;$$

c. Weight of Test Fluid A:  $(25\text{g}/1000\text{g})$  of Test Fluid C =

$$25/1000 \times 0.432 \times 1000 = 10.8\text{kg};$$

d. Weight of Test Fluid B:  $(25\text{g}/1000\text{g})$  of Test Fluid C =

$$25/1000 \times 0.432 \times 1000 = 10.8\text{kg};$$

e. Weight of surfactant:  $(0.5\text{g}/1000\text{g})$  of Test Fluid C =

$$0.5/1000 \times 0.432 \times 1000 = 0.216\text{kg}; \text{ and}$$

f. Weight of iron oxide:  $(1.7\text{g}/1000\text{g})$  of Test Fluid C) =

$$1.7/1000 \times 0.432 \times 1000 = 0.734\text{kg}.$$