



## TURBIDITY KIT

TURBIDITY COLUMN, 0-200 JTU

CODE 7519-01

| QUANTITY | CONTENTS                      | CODE   |
|----------|-------------------------------|--------|
| 60 mL    | Standard Turbidity Reagent    | 7520-H |
| 2        | Turbidity Columns             | 0835   |
| 1        | Brush, Test Tube              | 0513   |
| 1        | Pipet, 0.5 mL, plastic, w/cap | 0369   |
| 1        | Rod, plastic, stirring        | 1114   |

\*WARNING: Reagents marked with an \* are considered to be potential health hazards. To view or print a Safety Data Sheet (SDS) for these reagents go to [www.lamotte.com](#). Search for the four digit reagent code number listed on the reagent label, in the contents list or in the test procedures. Omit any letter that follows or precedes the four digit code number. For example, if the code is 4450WT-H, search 4450. To obtain a printed copy, contact LaMotte by email, phone or fax.

WARNING! This set contains chemicals that may be harmful if misused. Read cautions on individual containers carefully. Not to be used by children except under adult supervision.

To order refill reagents or test kit components, use the specified code number.

### PROCEDURE

This test is performed by comparing the turbidity of a measured amount of the sample with an identical amount of turbidity-free water containing a measured amount of standardized turbidity reagent. The readings are made by looking down through the column of liquid at a black dot. If turbidity is present, it will interfere with the passage of light through the column of liquid. Small amounts of turbidity will cause a “blurring” of the black dot in the bottom of the tube. Large amounts of turbidity may provide sufficient “cloudiness” so that it is not possible to see the black dot when looking down through the column. Any color that may be present in the sample should be disregarded. This determination is concerned only with the haziness or cloudy nature of the sample.

1. Fill one Turbidity Column (0835) to the 50 mL line with the sample water. If the black dot on the bottom of the tube is not visible when looking down through the column of liquid, pour out a sufficient amount of the test sample so that the tube is filled to the 25 mL line.
2. Fill the second Turbidity Column (0835) with an amount of turbidity-free water that is equal to the amount of sample being measured. Distilled water is preferred; however, clear tap water may be used. This is the “clear water” tube.
3. Place the two tubes side by side and note the difference in clarity. If the black dot is equally clear in both tubes, the turbidity is zero. If the black dot in the sample tube is less clear, proceed to Step 4.

4. Shake the Standard Turbidity Reagent (7520) vigorously. Add 0.5 mL to the “clear water” tube. Use the stirring rod (1114) to stir contents of both tubes to equally distribute turbid particles. Check for amount of turbidity by looking down through the solution at the black dot. If the turbidity of the sample water is greater than that of the “clear water”, continue to add Standard Turbidity Reagent in 0.5 mL increments to the “clear water” tube, mixing after each addition until the turbidity equals that of the sample. Record total amount of Standard Turbidity Reagent added.
5. Each 0.5 mL addition to the 50 mL size sample is equal to 5 Jackson Turbidity Units (JTUs). If a 25 mL sample size is used, each 0.5 mL addition of the Standard Turbidity Reagent is equal to 10 Jackson Turbidity Units (JTUs). See the table below. Rinse both tubes carefully after each determination.

#### TURBIDITY TEST RESULTS

| <b>Number of Measured Additions</b> | <b>Amount in mL</b> | <b>50 mL Graduation</b> | <b>25 mL Graduation</b> |
|-------------------------------------|---------------------|-------------------------|-------------------------|
| 1                                   | 0.5                 | 5 JTU                   | 10 JTU                  |
| 2                                   | 1.0                 | 10 JTU                  | 20 JTU                  |
| 3                                   | 1.5                 | 15 JTU                  | 30 JTU                  |
| 4                                   | 2.0                 | 20 JTU                  | 40 JTU                  |
| 5                                   | 2.5                 | 25 JTU                  | 50 JTU                  |
| 6                                   | 3.0                 | 30 JTU                  | 60 JTU                  |
| 7                                   | 3.5                 | 35 JTU                  | 70 JTU                  |
| 8                                   | 4.0                 | 40 JTU                  | 80 JTU                  |
| 9                                   | 4.5                 | 45 JTU                  | 90 JTU                  |
| 10                                  | 5.0                 | 50 JTU                  | 100 JTU                 |
| 15                                  | 7.5                 | 75 JTU                  | 150 JTU                 |
| 20                                  | 10.0                | 100 JTU                 | 200 JTU                 |