

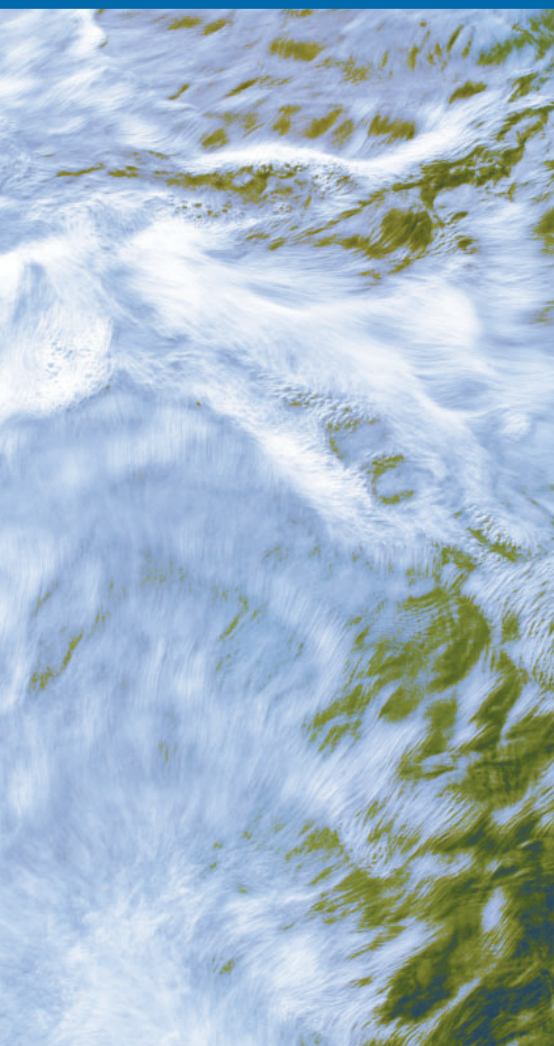
Combination Outfit

For General Water Analysis

Test Kit Instruction Manual

Code 4783-03

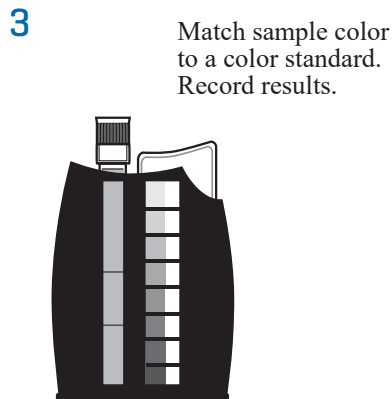
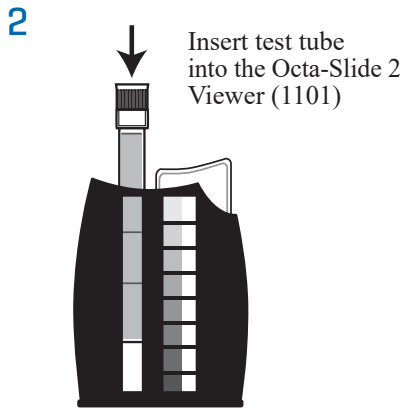
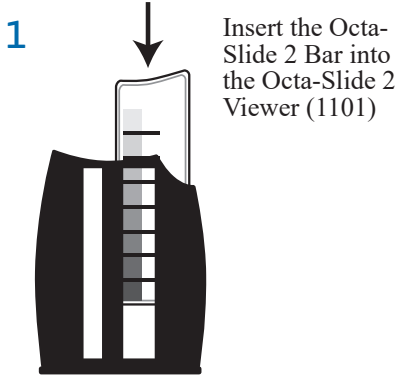
Code 3590-03



 **LaMotte**[®]

USE OF THE OCTA-SLIDE 2 VIEWER

The Octa-Slide 2 Viewer should be held so non-direct light enters through the back of the Viewer. Slide the Octa-Slide 2 Bar into the Viewer. Insert the reacted sample into the top of the Viewer. Match the color of the reaction to the color standards.



COMBINATION WATER OUTFIT

CODE 4783-03

CODE 3590-03

QUANTITY	CONTENTS	CODE
15 mL	*Hardness Reagent #5	*4483-E
50	Hardness Reagent #6 Tablets	4484A-H
60 mL	Hardness Reagent #7	4487WT-H
30 mL	*Iron Reagent #1	*4450-G
4.5 g	*Iron Reagent #2 Powder	*4451-S
30 mL	*Wide Range Indicator	*2218-G
30 mL†	*Sulfide Reagent A	*4458-G
15 mL†	*Sulfide Reagent B	*4459-E
60 mL†	Sulfide Reagent C	4460-H
1	Test Tube, w/cap	4488
1	Spoon, 0.05 g, plastic	0696
4 (6†)	Test Tubes, plastic, 2.5-5-10 mL, w/caps	0106
1†	Pipet, 1.0 mL, plastic	0354
1	Iron Octa-Slide 2 Bar, 0.5-10.0 ppm	4448-01
1	Wide Range pH Octa-Slide 2 Bar, 5.0-10.0 ppm	3483-01
1†	Sulfide Octa-Slide 2 Bar, 0.2-20 ppm	4457-01
1	Octa Slide 2 Viewer	1101

*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.

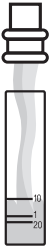
Emergency information for all LaMotte reagents is available from Chem-Tel (US, 1-800-255-3924) (International, call collect, 813-248-0585).

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

†Code 3590-03 Only

TOTAL HARDNESS TEST PROCEDURE

1



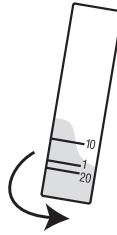
Fill the test tube (4488) to the desired line with the sample water,
upper line: 1 drop = 10 ppm CaCO_3
middle line: 1 drop = 1 gpg CaCO_3
lower line: 1 drop = 20 ppm CaCO_3

2



Add 5 drops of *Hardness Reagent #5 (4483).

3



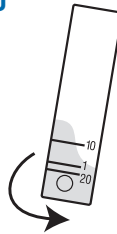
Swirl to mix.

4



Add 1 Hardness Reagent #6 Tablet (4484A).

5



Swirl until tablet has disintegrated. Solution will turn Red if hardness is present. Proceed to next step. If solution is Blue, there is no measurable amount of hardness.

6




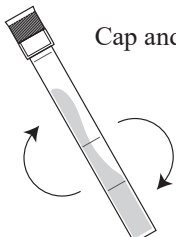
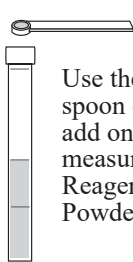
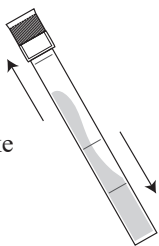





While gently swirling the tube, add Hardness Reagent #7 (4487WT) one drop at a time until the red color changes to blue. Count the number of drops added. Hold bottle vertically.

7

Multiply the number of drops used in Step 6 as follows:
upper line: each drop equals 10 ppm Hardness as CaCO_3
middle line: each drop equals 1 gpg Hardness as CaCO_3
lower line: each drop equals 20 ppm Hardness as CaCO_3

IRON TEST PROCEDURE

<p>1</p>  <p>Insert the Iron Octa-Slide 2 Bar (4448-01) into the Octa-Slide 2 Viewer (1101).</p>	<p>2</p>  <p>Rinse test tube (0106) with sample water. Fill to 5 mL line.</p>
<p>3</p>  <p>Add 5 drops of *Iron Reagent #1 (4450).</p>	<p>4</p>  <p>Cap and mix.</p>
<p>5</p>  <p>Use the 0.05g spoon (0690) to add one level measure of *Iron Reagent #2 Powder (4451).</p>	<p>6</p>  <p>Cap and shake until powder dissolves.</p>
<p>7</p>  <p>Wait 3 minutes.</p>	<p>8</p>  <p>Insert test tube into the Octa-Slide 2 Viewer (1101).</p>
<p>9</p>  <p>Match sample color to a standard. Record results as ppm iron.</p>	

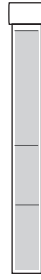
pH TEST PROCEDURE

1



Insert Wide Range pH Octa-Slide 2 Bar (3483-01) into the Octa-Slide 2 Viewer (1101)

2



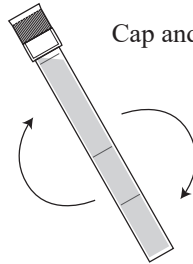
Fill a test tube (0106) to the 10 mL line with sample water.

3



Add 8 drops of *Wide Range pH Indicator (2218).

4



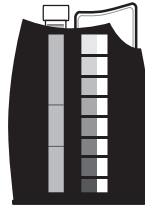
Cap and mix.

5



Insert test tube into the Octa-Slide 2 Viewer (1101).

6



Match sample color to a color standard. Record results as pH.

TOTAL SULFIDE TEST PROCEDURE

†Supplied only with Code 3590-03

Note: Collect sample with a minimum of aeration and analyze promptly.

1



Insert the Sulfide Octa-Slide 2 Bar (4457-01) into the Octa-Slide 2 Viewer (1101)

2



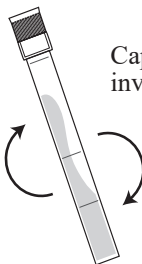
Fill a test tube (0106) to the 5 mL line with the sample water.

3



Add 15 drops of *Sulfide Reagent A (4458).

4



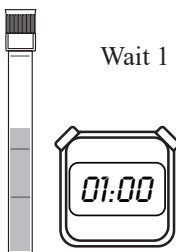
Cap and gently invert to mix.

5



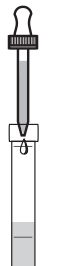
Add 3 drops of *Sulfide Reagent B (4459). Cap and mix.

6



Wait 1 minute.

7



Use the pipet (0354) to add 1.0 mL of Sulfide Reagent C (4460). Cap and mix.

8



Insert test tube into the Octa-Slide 2 Viewer (1101).

9



Match sample color to a color standard. Record results as ppm Sulfide.

EPA accepted procedure

A known concentration of sulfide in the range of 0.2-20.0 ppm S^{2-} may be prepared as a check standard by referring to APHA Standard Methods 4500-S2-D, 17th Ed., 1989. Run this test on the check standard. If the result is incorrect, discard the old reagents and order the reagent refill package.



LaMOTTE COMPANY

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