

Louisiana Office of Public Health Laboratories	
Test Name	<b>Fluorogenic Substrate Method for the Detection and Quantitation of <i>Enterococci</i> in Marine Water</b>
PHL Location	Central Laboratory
CPT Code	N/A
Synonyms	Enterolert Test, Enterolert Most Probable Number Technique
Brief Description of Test	<p>Enterolert reagent is added to a 1:10 dilution of beach water sample. The sample with reagent added is mixed, then poured into a Quanti-Tray. The Quanti-Tray is sealed and incubated at 41°C for 24 hours. After incubation the number of fluorescent wells is counted. Fluorescence of any intensity indicates the presence of Enterococci. The Most Probable Number (MPN) of <i>Enterococci</i> is read from a table based on the number of fluorescent wells. The MPN value from the table is multiplied by 10 to account for the dilution factor. The reporting range is &lt;10 to &gt;2005 MPN/100ml. Salinity is also analyzed for beach water samples.</p>
Possible Results	Enterococci MPN / 100ml
Reference Range	Out of compliance if the 30 day geometric mean based on not less than 5 samples during any 30 day period exceeds 35 cfu/100mL OR if any single sample exceeds 104 cfu/100mL
Specimen Type	Beach water
Specimen Container(s):	Sterile, disposable 120 ml Idexx vessels
Minimum volume accepted:	100 ml
Collection Instructions	Samples should be collected by personnel trained in proper collection technique according to the Louisiana BEACH Program Sample Collection Standard Operating Procedures.
Storage and Transport Instructions	Place samples on ice in an insulated container to maintain a temperature from 1-4°C. Do not totally immerse sample bottles in water during transit or storage. Deliver to the testing laboratory within 6 hours of collection.
Causes for Rejection	<ul style="list-style-type: none"> <li>• Sample submitted more than 6 hours from collection time.</li> <li>• Sample totally immersed in water during transport.</li> <li>• Sample less than 0°C or greater than 10°C upon receipt.</li> <li>• Sample with no ID or missing collection date or time.</li> <li>• Sample leaking or insufficient volume.</li> <li>• Sample frozen.</li> <li>• Sample submitted in an inappropriate container.</li> </ul>

Limitations of the Procedure	Samples must be delivered to the lab within 6 hours of collection. The initiation of sample analysis must begin within 2 hours of receipt within the laboratory. The sample must be read within 24 to 28 hours. The lack of fluorescence after 28 hours is a valid negative test, but fluorescence after 28 hours is an invalid positive test result.
Interfering Substances	N/A
References	<ol style="list-style-type: none"> <li>1. Quanti-Tray Insert &amp; MPN Table, IDEXX Laboratories, One IDEXX Dr., Westbrook, Maine.</li> <li>2. Louisiana's BEACH Program Quality Assurance Project Plan, Louisiana LDH OPH, Version 3, 01/20/15.</li> <li>3. Fluorogenic Substrate Method for the Detection and Quantitation of Enterococci in Marine or Fresh Water, Enterolert Most Probable Number Technique, Standard Operating Procedures, LDH OPH Division of Laboratories, Version: May 2018. DOLSOPBWM-01</li> </ol>
Additional Information	Use the <b>Louisiana BEACH Program Water Sample Form</b>
Release Date	06/12/2019
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