



COUNTY OF SAN LUIS OBISPO PUBLIC HEALTH LABORATORY

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LABORATORY TEST FACT SHEET

TESTING OF SHELLFISH AND SHELLFISH GROWING WATERS ORDER CODES: 8710, 8720, 8770, 8780

TEST DESCRIPTIONS

Total Coliforms MTF, Process water (Order code: 8720)

Method: Multiple Tube Fermentation Test (MTF)

NSSP-Modified

This test employs a NSSP-modified method using 10-tube Lauryl Tryptose broth (LTB) with production of gas from lactose. Enumeration is conducted by a Most Probable Number (MPN) table and is commonly used to determine the total coliform count. Samples of positive LTB tubes are transferred to Brilliant Green Bile Broth (BGBB) medium tubes incubated at 35 °C for 24–48 hours to obtain a total coliform MPN.

Reference range: Shellfish process waters have varying limits based on location.

Turnaround time: 4 days

Thermotolerant (Fecal) Coliforms MTF, A-1 (Order code: 8710)

Method: Multiple Tube Fermentation Test (MTF)

AOAC

This test employs the AOAC method using 15-tube A-1 medium with production of gas from lactose.

Enumeration is conducted by a Most Probable Number (MPN) table and is commonly used to determine the thermotolerant (fecal) coliform count. Sample tubes are incubated at 35 °C for 3 ± 0.5 hours then at 44.5 °C for 21 ± 2 hours incubation.

Reference range: Shellfish growing waters have varying limits based on location and protocol.

Turnaround time: 1–2 days

Thermotolerant (Fecal) Coliforms MTF, Ocean Shellfish (Order code: 8770)

Method: Multiple Tube Fermentation Test (MTF)

APHA

This test employs the APHA method using 20-tube Lauryl Tryptose broth (LTB) with production of gas from lactose. Enumeration is conducted by a Most Probable Number (MPN) table and is commonly used to determine the thermotolerant (fecal) coliform count. Samples of positive LTB tubes are transferred to EC medium tubes incubated at 44.5 °C for 24 hours to obtain thermotolerant (fecal) coliform MPN.

Reference range: Ocean shellfish meats have varying limits based on location.

Turnaround time: 3 days

Thermotolerant (Fecal) Coliforms MTF, Process Shellfish (Order code: 8780)

Method: Multiple Tube Fermentation Test (MTF)

NSSP-Modified

This test employs a NSSP-modified method using 12-tube Lauryl Tryptose broth (LTB) with production of gas from lactose. Enumeration is conducted by a Most Probable Number (MPN) table and is commonly used to determine the thermotolerant (fecal) coliform count. Samples of positive LTB tubes are transferred to EC medium tubes incubated at 44.5 °C for 24 hours to obtain a thermotolerant (fecal) coliform MPN.

Reference range: Process shellfish meats have varying limits based on location.

Turnaround time: 3 days