

SOP#BIO-001 Colilert-24hr

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4. Verb Base Form
5. Noun
6. Noun
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8. Noun
9. Number
10. Adjective
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24. Verb Base Form
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26. Noun
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29. Number
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SOP#BIO-001 Colilert-24hr

Categories: Biology

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. Definitions:

a. CD-Coliform Duplicate-One Distribution sample that is replicated during collection.

b. Blank-(Noun) collected to be run with samples collected on the same day.

c. Total coliform

d. E. coli-Escheria coli,

e. CFU-Colony Forming Unit

f. PPE-Personal Protection Noun

4. Health and Safety Warning:

a. Utilize all Microbiological Safety procedures:

b. Wear proper PPE-(Noun), safety glasses, lab coat and close toe, upper leather shoes, face coverings

c. Disinfect (Noun) counter tops

d. No Verb Present ends in ING, Verb Present ends in ING, or Verb Present ends in ING in the lab working area

e. Autoclave all bacterial waste

f. (Verb Base Form) hands with germicidal soap

g. (Verb Base Form) lab coats and gloves when exiting lab

5. Cautions

. Do not (_____
Verb Base Form_____) open (_____
Noun_____) pack to sample bottle when planting

B. Do not place (_____
Noun_____) to sample on countertop

C. Samples should be held at (>_____
Number_____) and (<_____
Number_____) no longer than _____
Number_____ hours
from time of collection to analysis.

D. Samples are (_____
Adjective_____), if held longer than _____
Number_____ hours.

E. Frozen (_____
Noun_____) are invalid.

F. Coliform (_____
Adjective_____) should be collected with each set of Distribution samples per Investigator.

G. HPC must be performed on samples with a chlorine residual less than (_____
Number_____) mg/L.

H. Raw water samples must be refrigerated no longer than (_____
Number_____) hours and analyzed within

Number_____ hours.

I. (_____
Adverb_____) check for fluorescence of positive samples, using the manufacturer comparator.

J. Samples should be mixed uniformly

K. Positive, distribution samples should be resampled within (_____
Number_____) hrs. of discovery.

6. Interferences:

A. Excessive _____
Noun_____ produces a blue flash when Colilert snap pack is introduced, (_____
Adjective_____) sample.

7. Personnel Qualifications:

Minimum

of three months training in microbiological analysis of drinking _____ Noun acceptable to the State (or EPA) and 30 _____ Noun on the job training under an experienced analyst.

8. _____ Noun and Supplies

A. Incubator

B. Chromogenic snap packs

C. Sample collection _____ Noun

D. UV lamp-Longwave (_____ Number)nm

9. Procedural Steps

A. Disinfect work _____ Noun

B. Wash hands before and after handling Colilert reagent and samples

C. Open snap pack, pour into sample _____ Noun, avoid touching snap pack to rim of the vessel, do not put _____ Noun on counter, hold cap down

D. (_____ Verb Base Form) sample and (_____ Verb Base Form) sample (_____ Number) times for proper mixing

.

E. Place _____ Noun in (_____ Adjective) (noun).

F. Incubate samples at 35.0°C (_____ Adverb) 0.5°C for _____ Number hours.

10.

DATA and Records Management

- A. Chain of custody should contain test method, incubation date and time, Initials of _____ Noun performing test
- B. Enter distribution sample data into the reporting program.
- C. Print out report and place in the Distribution and Bracketing _____ Noun.
- D. Distribution files should be archived at the end of the month.

11. Quality Assurance and Quality Control

- A. Positive and Negative Control: Run a positive and negative control every three months on the lot of Colilert and new lots opened.
- B. Autofluorescence Check: Check each lot to see if the snap pack contents fluorescence or changes color. Inform Manager, discontinue use of the lot.
- C. PE Study: Once per year from an EPA certified laboratory.

12. References:

Standard Methods for the Examination of Water Wastewater 24th Ed., 2021 (_____ Number)

IDEXX Laboratories, Inc.

