



Analysis Report For:					Copy To:		
Amanda Hines No Dirt Farms, LLC 2170 Dutch Rd Fairview PA 16415							
LAB ID	SAMPLE ID	REPORT DATE	DATE SAMPLED	TIME SAMPLED	SAMPLE TYPE	WATER SOURCE	COUNTY
W18615	June 2019 Test	6/28/2019	6/26/2019	10:30 AM	Farm Food Safety		Erie

FARM FOOD SAFETY WATER ANALYSIS

Analysis	Units	Your Test Results	Drinking Water Standard ¹	Recreational Water Standard ²	Method
Total Coliform Bacteria	MPN ³ per 100 mL	3	0	-	SM 9223B ⁴
<i>E. coli</i> Bacteria	MPN per 100 mL	None detected	0	235	SM 9223B ⁴

¹U.S. Environmental Protection Agency (USEPA) standard for drinking water.

²USEPA standard for recreational water.

³Most Probable Number of colonies per 100 mL of water; detection limit is 1 MPN per 100 mL

⁴Performed using IDEXX Quanti-Tray/2000 for quantification, an FDA approved method for testing bacteria in agricultural waters for the FSMA.

Understanding Your Results

TOTAL COLIFORM BACTERIA: Most coliform bacteria are harmless soil microbes, but their presence in water at high levels could indicate that there is a pathway for potentially harmful bacteria to enter and contaminate a water source. Coliform bacteria can get into water from surface runoff, insects or animals. The acceptable level of total coliform in water depends on how it is used.

E. COLI BACTERIA: *E. coli* is one of the bacteria included in the total coliform bacteria test result (see above). *E. coli* is commonly used as an indicator organism to evaluate the risk of microbial contamination of produce from irrigation or post-harvest process water. *E. coli* only occur in animal and human wastes and they are more likely to cause illness. Their presence in irrigation or post-harvest water is more serious than total coliform bacteria. The acceptable level of *E. coli* in water depends on how it is used and how much contact it has with the harvested portion of the crop.

FARM FOOD SAFETY WATER QUALITY STANDARDS: The most commonly used microbial standard for irrigation or other pre-harvest crop contact water is based on USEPA standards for recreational water. This standard states that no more than 235 *E. coli* bacteria can be in any single 100-milliliter sample and that the average level for the last five samples taken can be no more than 126 *E. coli* bacteria per 100 milliliters. This is the standard for USDA GAP audits and many other inspection programs. Water used for post-harvest cooling and washing are held to a more strict standard of no detectable level of *E. coli*. Some standards require post-harvest cooling and washing water to meet USEPA drinking water standards of no detectable level of Total Coliform as well. The column on the report titled "Your Test Results" should read "none detected" to meet this standard. Check with your GAP auditor to determine specific standards for the program you are enrolled in.

If you have any questions about your results, please contact Luke LaBorde, Professor of Food Science at 814-863-2298 or lfl5@psu.edu OR Bryan Swistock, Extension Associate Water Resources, at 814-863-0194 or brs@psu.edu

For more information about Good Agricultural Practices visit the Penn State Farm Food Safety website at <http://extension.psu.edu/food/safety/farm>.