

### **DIVISION OF LABORATORY SERVICES**

Nashville Central Laboratory Dr. Richard Steece-Director 630 Hart Lane Nashville, TN 37216 615-262-6300

Sent To: Emailed to craig.edwards@tn.gov

Lab ID: N2203166 Nashville Central Laboratory

Bill To Client:

TDOH

## 

\*TDOH.N2203166.M\*

This is to certify that the following results were determined using good laboratory practices and in accordance with federal or state approved methodologies.

Anthony Wilson Analytical Supervisor

## **Final Report**

Processing Date:

4/1/2022



Report Queue #: 46,497 Processing Date: 4/1/2022

# **Final Report**

| Lab-Sample Number:    | N2203166-01    |                |       | External Id #:   |        |        |             |           |
|-----------------------|----------------|----------------|-------|------------------|--------|--------|-------------|-----------|
| Project Name:         | SafeWatch      |                |       |                  |        |        |             |           |
| Sample Description:   | 61             |                |       |                  |        |        |             |           |
| Sampler Project Name: | SafeWatch      |                |       |                  |        |        |             |           |
| Project Site No.:     |                |                |       |                  |        |        |             |           |
| Station No.:          |                |                |       |                  |        |        |             |           |
| Date/Time Collected:  | 03/23/2022     | 12:30          |       |                  |        |        |             |           |
| Sampler's Name:       | Judy Manners   |                |       |                  |        |        |             |           |
| County:               | Lawrence - 50  |                |       |                  |        |        |             |           |
| Sample Matrix:        | Water          |                |       |                  |        |        |             |           |
| Sampling Agency:      | No Specified E | FO             |       |                  |        |        |             |           |
| Sampling Client:      | TDOH           |                |       |                  |        |        |             |           |
| Billing Code:         | HL00018480     |                |       | Agency Invoiced: | TDOF   | ł      |             |           |
| Send Report To:       |                |                |       |                  |        |        |             |           |
| Priority Date:        | 04/17/2022     |                |       |                  |        |        |             |           |
| Date/time Received:   | 03/23/2022     |                |       | Received By:     | Danie  | l Wade |             |           |
| TEST: ICP-OES         |                |                |       | METHOD:          | 200.7  |        |             |           |
| PERFORMING LAB:       | Nashville Cen  | tral Laborator | у     |                  |        |        |             |           |
| ANALYTE               |                | RESULT         | UNITS | Qualifier        | MDL    | MQL    | ANALYZED BY | DATE      |
| Calcium               |                | 15.6           | mg/L  |                  | 0.0897 | 0.100  | Holly Jones | 3/29/2022 |
| Iron                  |                | 203            | µg/L  |                  | 5.08   | 10.0   | Holly Jones | 3/29/2022 |
| Magnesium             |                | 2.17           | mg/L  |                  | 0.0290 | 0.100  | Holly Jones | 3/29/2022 |
| Potassium             |                | 0.492          | mg/L  |                  | 0.0510 | 0.100  | Holly Jones | 3/29/2022 |
| Sodium                |                | 0.823          | mg/L  |                  | 0.0250 | 0.100  | Holly Jones | 3/29/2022 |
| Hardness, Calcium     |                | 38.9           | mg/L  |                  | 0.152  | 0.25   | Holly Jones | 3/29/2022 |
| Hardness, Ca, Mg      |                | 47.8           | mg/L  |                  | 0.115  | 0.25   | Holly Jones | 3/29/2022 |
| Thardness, ea, Mg     |                |                |       |                  |        |        |             |           |
|                       |                |                |       |                  |        |        |             |           |

| PERFORMING LAB: | Nashville Celifial Laboratory |       |           |     |     |             |           |  |
|-----------------|-------------------------------|-------|-----------|-----|-----|-------------|-----------|--|
| ANALYTE         | RESULT                        | UNITS | Qualifier | MDL | MQL | ANALYZED BY | DATE      |  |
| Generic Prep    | Completed                     |       |           |     |     |             | 3/25/2022 |  |

| TEST: ICP-MS Nexion<br>PERFORMING LAB: | Nashville Central Laboratory |       | METHO     | D: 200.8 |      |             |           |
|--|------------------------------|-------|-----------|----------|------|-------------|-----------|
| ANALYTE                                | RESULT                       | UNITS | Qualifier | MDL      | MQL  | ANALYZED BY | DATE      |
| Arsenic                                | <0.388                       | µg/L  | U         | 0.388    | 1.00 | Holly Jones | 3/31/2022 |
| Barium                                 | 7.33                         | µg/L  |           | 0.107    | 1.00 | Daniel Wade | 3/31/2022 |
| Boron                                  | 4.44                         | µg/L  | J         | 3.01     | 10.0 | Daniel Wade | 3/31/2022 |
| Copper                                 | <0.170                       | µg/L  | U         | 0.170    | 1.00 | Daniel Wade | 3/31/2022 |
| Lead                                   | <0.288                       | µg/L  | U         | 0.288    | 1.00 | Holly Jones | 3/31/2022 |

| TEST: ICP-MS Nexion |                              |       | METHOD:   | 200.8 |      |             |           |
|---------------------|------------------------------|-------|-----------|-------|------|-------------|-----------|
| PERFORMING LAB:     | Nashville Central Laboratory | ,     |           |       |      |             |           |
| ANALYTE             | RESULT                       | UNITS | Qualifier | MDL   | MQL  | ANALYZED BY | DATE      |
| Manganese           | 7.21                         | µg/L  |           | 0.362 | 1.00 | Daniel Wade | 3/31/2022 |
| Zinc                | <2.25                        | µg/L  | U         | 2.25  | 5.00 | Holly Jones | 3/31/2022 |

Processing Date: 4/1/2022

**Final Report** 

| Lab-Sample Number:<br>Project Name:<br>Sample Description: | N2203166-01A<br>SafeWatch<br>61 |               |       | External Id #:   |       |        |             |           |
|--|---------------------------------|---------------|-------|------------------|-------|--------|-------------|-----------|
| Sampler Project Name:                                      | SafeWatch                       |               |       |                  |       |        |             |           |
| Project Site No.:  |                                 |               |       |                  |       |        |             |           |
| Station No.:   |                                 |               |       |                  |       |        |             |           |
| Date/Time Collected:                                       |                                 | 2:30          |       |                  |       |        |             |           |
| Sampler's Name:  | Judy Manners                    |               |       |                  |       |        |             |           |
| County:  | Lawrence - 50                   |               |       |                  |       |        |             |           |
| Sample Matrix:   | Water                           |               |       |                  |       |        |             |           |
| Sampling Agency:   | No Specified EF                 | -0            |       |                  |       |        |             |           |
| Sampling Client:   | TDOH                            |               |       |                  |       |        |             |           |
| Billing Code:  |                                 |               |       | Agency Invoiced: | TDOF  | ł      |             |           |
| Send Report To:  |                                 |               |       |                  |       |        |             |           |
| Priority Date:   |                                 |               |       |                  |       |        |             |           |
| Date/time Received:  | 03/23/2022                      |               |       | Received By:     | Danie | l Wade |             |           |
| TEST: ICP-MS Nexion  |                                 |               |       | METHOD:          | 200.8 |        |             |           |
| PERFORMING LAB:  | Nashville Centr                 | al Laboratory |       |                  | 20010 |        |             |           |
| ANALYTE  |                                 | RESULT        | UNITS | Qualifier        | MDL   | MQL    | ANALYZED BY | DATE      |
| Aluminum   |                                 | 211           | µg/L  |                  | 4.18  | 5.00   | Daniel Wade | 3/31/2022 |

|                  | Qualifiers Key  |
|------------------|---|
| <u>Qualifier</u> | Description   |
| MDL<br>MQL       | Method Detection Limit<br>Method Quantitation Limit   |
| J                | Result is less than the MQL but greater than or equal to the MDL and the concentration is an approximate value. |

U Result is less than the MDL

#### State of Tennessee – Environmental Laboratorics PLEASE PRINT LEGIBLY



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### N2203166-01

| PR  | OJECT NAME: SafeWA                | ATCH   | 1   |         |                         | *        | Metals   |   |   |
|-----|-----------------------------------|--------|---|---------|-------------------------|----------|--|---|---|
|     | ATION NUMBER:                     | C      | WATERBODY                                   | Y NAME: | : N/A                   | X        | aluminum, Al   |   |   |
| ST  | REAM MILE: N/A                    |        | COUNTY:                                     | a wren  | J.                      |          | antimony, Sb   |   |   |
|     | SCRIPTION: Sceles                 |        |   | 2.501   |                         | X        | arsenic, As  | Chain of Custody and S<br>Information                     |   |
| LA  | TITUDE:                           |        | LONGITUDE:                                  |         |                         | X        | barium, Ba   | Only one chain of custod<br>or point (if all collected of | ly form is required pe<br>at the same time) |
| Ma  | itrix: N/A                        |        | Depth                                       | 1       | N/A                     |          | beryllium, Be  |   | N.  |
| CO  | LLECTED DATE:                     | 3      | 2/23/2 TIME                                 |         | 12:30                   | X        | boron, B   | 1. Collected By   | Julyma                                      |
| SA  | MPLER'S FULL NAME (pri            | inted) | Liam O'Rourke Juck                          | ma      | incit                   |          | cadmium, Cd  | Date: X23/2h  |   |
|     | MPLING AGENCY:                    |        | TDH   |         |                         | X        | calcium, Ca  |   | ashult ,                                    |
|     | PRIORITY, DATE NEEDED             | ):     | BILLING                                     | CODE    | HL00018480              |          | chromium, Cr   | Date 3/23/22  | Time 2 - 20                                 |
|     | ND REPORT TO:                     |        | Judy.Manners@tn.gov                         |         |                         |          | cobalt, Co   | 2. Received by  |   |
| R   | Env. Microbiology                 | *      | Gen. Inorganics (con't)                     | Ot      | her General Inorganics: | X        | copper, Cu   | Date  | Time  |
|     | coliform, fecal*                  |        | ortho-phosphate                             |         |                         | X        | iron, Fe   | Delivered to  |   |
| _   | coliform, total*                  | -      | silica*                                     |         |                         |          | lithium, Li  | Date  | Time  |
| -   | strep, fecal*                     | X      | sulfate*                                    |         |                         | X        | lead, Pb   | 3. Received by  |   |
| F   | E. Coli*                          |        | turbidity*                                  |         |                         | X        | magnesium, Mg  | Date  | Time  |
| -   | Enterococcus*                     | -      | Preserved, Nutrient                         |         |                         | X        | manganese, Mn  | Delivered to  |   |
|     | ISATO COCCUS                      |        | COD*  |         |                         |          | mercury, Hg  | Date  | Time  |
|     | General Inorganics                |        | nitrogen, ammonia                           |         |                         | -        | nickel, Ni   | 4. Received in Lab by                                     |   |
| _   | Not Preserved                     |        | nitrogen, NO <sub>3</sub> & NO <sub>2</sub> |         |                         | X        | potassium, K   | Date  | Time  |
| -   | acidity as CaCO <sub>3</sub> *    |        | nitrogen, total Kjeldahl                    |         |                         |          | selenium, Se   | 5. Received in Lab by                                     | Selfone.                                    |
|     | alkalinity as CaCO <sub>3</sub> * |        |   |         |                         |          | silver, Ag   | Date  | Time  |
| -   |                                   |        | nitrogen, total organic                     |         |                         | v        | sodium, Na   | 6. Received in Lab by                                     |   |
| -   | BOD, 5-day*                       |        | phosphate, total                            |         |                         | X        |  |   |   |
|     | CBOD, 5-day*                      |        |   |         |                         | _        | strontium, Sr  | Date 3/23/22  | Time 1410                                   |
| K   | chloride*                         | -      | SPECIAL PRESERVATION                        |         |                         |          | thallium, Tl   | Logged in by  | 2   |
|     | chromium, hexavalent              |        | cyanide                                     |         |                         | _        | vanadium, V  | Date 3/24/22  | Time /10 7                                  |
|     | color                             |        | oil and grease                              |         |                         | X        | zinc, Zn   |   |   |
|     | conductivity*                     |        | phenols, total                              | Me      | tals Digestion type:    | X        | hardness, Ca as CaCO <sub>3</sub> *  |   |   |
| (   | fluoride*                         |        | sulfide, total*                             | Not     | nnal                    | X        | hardness, total as CaCO <sub>3</sub> *   |   |   |
|     | MBAS*                             |        | TOC*  | Dis     | solved                  | -        |  | Additional Informatio                                     | n   |
| <   | nitrogen, nitrate*                |        |   | TC      | LP                      | -        |  |   |   |
| <   | nitrogen, nitrite*                |        |   | Oth     |                         |          | Other Metals:  | 1. Others present at colle                                | ection                                      |
|     | pH                                |        |   |         |                         |          |  | • 2000  | W1  |
|     | residue, dissolved*               |        | Asbestos                                    |         |                         |          |  | 2. Other samples collected                                | ed  |
|     | residue, settleable*              |        | bulk asbestos                               |         |                         |          |  |   |   |
|     | residue, suspended*               |        | other microscopic                           |         |                         |          |  | 3. Mode of transportation                                 | n to lab                                    |
|     | residue, total*                   |        |   |         |                         | _        |  |   |   |
| d   | enotes analyses performed only    | y on H | vater                                       |         |                         |          |  | 4. Cooler sealed by                                       |   |
|     |                                   |        | FIELD DETERM                                | INATIC  | DNS                     |          |  |   |   |
| 1   | Conductivity, (uhmos)             |        | Chlorine, residual                          |         | Other F                 | ield Par | ameters  | 5. Date cooler sealed                                     |   |
|     | Dissolved Oxygen, (mg/L)          |        | Turbidity. (NTU)                            |         |                         |          |  |   |   |
|     | Temperature, (°C)                 |        | ORP, (mv)                                   | 1       |                         |          |  | 6. Remarks  |   |
|     | pH                                |        | Flow Rate                                   |         |                         |          |  |   |   |
| - 4 | r                                 |        |   |         |                         |          | and a second |   |   |