

Riverside, MO 64150 Telephone: 816.231.5580 Fax: 816.231.5641 www.occutec.com

March 5, 2019

Diane Czarnecki
Industrial Hygienist
Facilities Management Division
GSA Public Buildings Service - Heartland Region
2300 Main Street, Kansas City, MO 64108

RE: Goodfellow Federal Center – Drinking Fountain Unit Replacement - Water Sampling
Project # 918004

Dear Ms. Czarnecki:

Thank you for the opportunity to provide the General Services Administration (GSA) with the above referenced environmental sampling activities. The following is our report.

### **INTRODUCTION**

As requested, OCCU-TEC conducted drinking water sampling for the presence of lead and copper on newly installed drinking fountains at various locations throughout the Goodfellow Federal Center (GFC) in St. Louis, Missouri. Previous testing on older drinking fountains had indicated elevated levels of lead and/or copper. Based on these previous results, GSA initiated replacement of the older units with new "Oasis" brand fixtures that featured in-line water filtration.

Sampling was completed in response to the ongoing environmental condition assessment at the Goodfellow Federal Center complex which is documented at the Goodfellow Federal Center Reading Room located at https://www.gsa.gov/portal/content/212361.

Drinking water sampling of the new units occurred at Bldg. #104, 105, 105L, 103D, 102E 110 and 115 and was conducted on January 24, 2019 by Mr. Justin Arnold and on January 31, 2019 by Jeff Smith of OCCU-TEC.

#### **METHODOLOGY**

The sampling methodology used during this investigation was developed in general accordance with the United States Environmental Protection Agency's (EPA) "Quick Guide to Drinking Water Sample Collection – Second Edition" developed by the EPA Region 8 in September 2016.

Samples were collected as first draw samples in accordance with the Lead and Copper Rule (40 CFR Part 141 Subpart I). First draw samples represent 'worst case' conditions with water that has been stationary within the plumbing systems for a minimum of six hours. The samples were collected in individually labeled 1000 milliliter (mL) plastic bottles capped with Teflon septa lined screw caps. The bottles were filled to the shoulder with water from the sample source. The samples were then placed in a cooler for safe transport. Each sample was acidified at the laboratory as needed.

Drinking water sampling for the presence of lead and copper was conducted at ten (10) distinct locations within Buildings #104, 105, 105L, 103D, 102E, 110, and 115. A total of eight (11) samples were obtained including one (1) duplicate sample.

Drinking water samples were submitted to Eurofins-Eaton Analytical in South Bend, Indiana for analyses of lead and copper. Eurofins-Eaton Analytical is certified by the State of Missouri Department of Natural Resources (MDNR) as an approved drinking water laboratory. Eurofins-Eaton Analytical's Missouri Certification number is 880.

The drinking water samples were collected using media supplied by Eurofins-Eaton Analytical. Lead and Copper samples were collected and analyzed in accordance with EPA Method 200.8.

### RESULTS AND DISCUSSION

The results for the subject testing are summarized in the tables below.

### Water Sample Summary

| Analysis | Lowest Concentration | Highest Concentration | Action Level* |
|----------|----------------------|-----------------------|---------------|
| Lead     | <0.001 mg/L          | <0.001 mg/L           | 0.015 mg/L    |
| Copper   | <0.017 mg/L          | 0.11 mg/L             | 1.3 mg/L      |

Samples with a "<" sign indicate that the results were below the reportable limit.

<sup>\*</sup>As per EPA Lead and Copper Rule (40 CFR Part 141 Subpart I)

A summary table of all sampling results by location is included in Appendix A. The complete laboratory report for the drinking water sampling from Eurofins-Eaton Analytical is attached in Appendix B.

**LEAD** 

All samples were below the Action Level (AL) for lead.

**COPPER** 

All samples were below the AL for copper.

### **LIMITATIONS**

The scope of this assessment was limited in nature. OCCU-TEC collected samples from a select number of drinking water sources in an effort to minimize cost while providing a general overview of the drinking water quality at the site. Sample locations do not encompass every drinking water source at the Site. Additionally, samples were only analyzed for a select number of potential contaminants likely to affect the drinking water quality at the site. OCCU-TEC is not responsible for potential contaminants not identified in this report.

This report was prepared for the sole use of GSA. Reliance by any party other than GSA is expressly forbidden without OCCU-TEC's written permission. Any parties relying on the report, with OCCU-TEC's written permission, are bound by the terms and conditions outlined in the original proposal as if said proposal was prepared for them.

OCCU-TEC appreciates the opportunity to work with the General Services Administration on this project. Please contact us if you have any questions regarding this report or if we may be of any additional service.

Sincerely,
(b) (6)

Kevin Heriford Project Manager (b) (6)

Jeffrey T Smith Senior Project Manager (QA/QC)

### **ATTACHMENTS**

Appendix A - Results Summary by Location Appendix B - Water Sample Laboratory Report

# APPENDIX A RESULTS SUMMARY BY LOCATION



|           |               | Goodfellow Federal Center - New Dr         | inking Fountain | Sampling |        |       |             |       |
|-----------|---------------|--|-----------------|----------|--------|-------|-------------|-------|
| Date      | Sample Number | Location                                   | Water Source    | Analyte  | Result | Units | Above/Below | AL    |
| 1/24/2019 | 104-01        | Pldg #104 2nd Floor Column P44             | New Drinking    | Copper   | 0.11   | mg/L  | Below AL    | 1.3   |
| 1/24/2019 | 104-01        | Bldg. #104 - 2nd Floor Column B44          | Fountain        | Lead     | <0.001 | mg/L  | Below AL    | 0.015 |
| 1/24/2019 | 104-01 DUP    | Bldg. # 104 - 2nd Floor Column B44 -       | New Drinking    | Copper   | 0.11   | mg/L  | Below AL    | 1.3   |
| 1/24/2019 | 104-01 DOP    | Duplicate                                  | Fountain        | Lead     | <0.001 | mg/L  | Below AL    | 0.015 |
| 1/24/2019 | 105-01        | Bldg. #105 - 1st Floor Column B31          | New Drinking    | Copper   | 0.031  | mg/L  | Below AL    | 1.3   |
| 1/24/2019 | 103-01        | Blug. #103 - 15t Floor Colullii B31        | Fountain        | Lead     | <0.001 | mg/L  | Below AL    | 0.015 |
| 1/24/2019 | 105-02        | Bldg. #105 - 2nd Floor Column B31          | New Drinking    | Copper   | 0.062  | mg/L  | Below AL    | 1.3   |
| 1/24/2019 | 103-02        | Bidg. #103 - Zild Floor Coldilli BS1       | Fountain        | Lead     | <0.001 | mg/L  | Below AL    | 0.015 |
| 1/24/2019 | 105L-01       | Bldg. #105L - Classroom Hall               | New Drinking    | Copper   | 0.081  | mg/L  | Below AL    | 1.3   |
| 1/24/2019 | 1031-01       | Blug. #103L - Classicotti Hall             | Fountain        | Lead     | <0.001 | mg/L  | Below AL    | 0.015 |
| 1/24/2019 | 103D-01       | Bldg. #103D - 2nd Floor North End          | New Drinking    | Copper   | 0.039  | mg/L  | Below AL    | 1.3   |
| 1/24/2019 | 103D-01       | Blug. #103D - Zilu Floor Nortii Eilu       | Fountain        | Lead     | <0.001 | mg/L  | Below AL    | 0.015 |
| 1/24/2019 | 102E-01       | Bldg. #102E - 2nd Floor North end          | New Drinking    | Copper   | 0.028  | mg/L  | Below AL    | 1.3   |
| 1/24/2019 | 1021-01       | Blug. #102E - 2110 Floor North ella        | Fountain        | Lead     | <0.001 | mg/L  | Below AL    | 0.015 |
| 1/24/2019 | 115-01        | Bldg. #115 - Gym                           | New Drinking    | Copper   | <0.017 | mg/L  | Below AL    | 1.3   |
| 1/24/2019 | 115-01        | Blug. #115 - Gylli                         | Fountain        | Lead     | <0.001 | mg/L  | Below AL    | 0.015 |
| 1/31/2019 | 104-01        | Bldg. #104 - 1st Floor North Corridor      | New Drinking    | Copper   | 0.025  | mg/L  | Below AL    | 1.3   |
| 1/31/2019 | 104-01        | Blug. #104 - 1st Floor North Corridor      | Fountain        | Lead     | <0.001 | mg/L  | Below AL    | 0.015 |
| 1/31/2019 | 110-01        | Bldg. #110 - 1st Floor - Main Corridor, by | New Drinking    | Copper   | 0.016  | mg/L  | Below AL    | 1.3   |
| 1/31/2019 | 110-01        | elevator                                   | Fountain        | Lead     | <0.001 | mg/L  | Below AL    | 0.015 |
| 1/21/2010 | 110-02        | Bldg. #110 - 2nd Floor - Main Corridor, by | New Drinking    | Copper   | 0.022  | mg/L  | Below AL    | 1.3   |
| 1/31/2019 | 110-02        | elevator                                   | Fountain        | Lead     | <0.001 | mg/L  | Below AL    | 0.015 |

Highlight indicates results at or above the Action Level (AL)

### APPENDIX B LABORATORY ANALYTICAL RESULTS AND CHAIN OF CUSTODY DOCUMENTATION





# LABORATORY REPORT

If you have any questions concerning this report, please do not hesitate to call us at  $(800)\ 332-4345$  or  $(574)\ 233-4777$ .

This report may not be reproduced, except in full, without written approval from EEA.



### **STATE CERTIFICATION LIST**

| State                   | Certification | State                | Certification   |
|-------------------------|---------------|----------------------|-----------------|
| Alabama                 | 40700         | Missouri             | 880             |
| Alaska                  | IN00035       | Montana              | CERT0026        |
| Arizona                 | AZ0432        | Nebraska             | NE-OS-05-04     |
| Arkansas                | IN00035       | Nevada               | IN00035         |
| California              | 2920          | New Hampshire*       | 2124            |
| Colorado                | IN035         | New Jersey*          | IN598           |
| Colorado Radiochemistry | IN035         | New Mexico           | IN00035         |
| Connecticut             | PH-0132       | New York*            | 11398           |
| Delaware                | IN035         | North Carolina       | 18700           |
| Florida*                | E87775        | North Dakota         | R-035           |
| Georgia                 | 929           | Ohio                 | 87775           |
| Hawaii                  | IN035         | Oklahoma             | D9508           |
| Idaho                   | IN00035       | Oregon (Primary AB)* | 4074-001        |
| Illinois*               | 200001        | Pennsylvania*        | 68-00466        |
| Illinois Microbiology   | 17767         | Puerto Rico          | IN00035         |
| Illinois Radiochemistry | IN00035       | Rhode Island         | LAO00343        |
| Indiana Chemistry       | C-71-01       | South Carolina       | 95005           |
| Indiana Microbiology    | M-76-07       | South Dakota         | IN00035         |
| Iowa                    | 098           | Tennessee            | TN02973         |
| Kansas*                 | E-10233       | Texas*               | T104704187-15-8 |
| Kentucky                | 90056         | Texas/TCEQ           | TX207           |
| Louisiana*              | LA180008      | Utah*                | IN00035         |
| Maine                   | IN00035       | Vermont              | VT-8775         |
| Maryland                | 209           | Virginia*            | 460275          |
| Massachusetts           | M-IN035       | Washington           | C837            |
| Michigan                | 9926          | West Virginia        | 9927 C          |
| Minnesota*              | 018-999-338   | Wisconsin            | 999766900       |
| Mississippi             | IN035         | Wyoming              | IN035           |
| EPA                     | IN00035       |                      |                 |

\*NELAP/TNI Recognized Accreditation Bodies

Revision date: 01/02/2018



110 South Hill Street South Bend, IN 46617 Tel: (574) 233-4777 Fax: (574) 233-8207 1 800 332 4345

# Laboratory Report

Client: OCCU-TEC Inc. Report: 441868

Attn: Kevin Heriford Priority: Standard Written

100 NW Business Park Lane Status: Final

Riverside, MO 64150 PWS ID: Not Supplied

|            | Sample Information          |        |                          |                  |                         |  |  |  |  |  |  |
|------------|-----------------------------|--------|--------------------------|------------------|-------------------------|--|--|--|--|--|--|
| EEA<br>ID# | Client ID                   | Method | Collected<br>Date / Time | Collected<br>By: | Received<br>Date / Time |  |  |  |  |  |  |
| 4184437    | 104-01 2nd Floor Column B44 | 200.8  | 01/24/19 06:54           | Client           | 01/29/19 09:45          |  |  |  |  |  |  |
| 4184438    | 104-01Dup2ndFloorColumnB44  | 200.8  | 01/24/19 06:54           | Client           | 01/29/19 09:45          |  |  |  |  |  |  |
| 4184439    | 105-01 1st Floor Column B31 | 200.8  | 01/24/19 07:17           | Client           | 01/29/19 09:45          |  |  |  |  |  |  |
| 4184440    | 105-02 2nd Floor Column B31 | 200.8  | 01/24/19 07:22           | Client           | 01/29/19 09:45          |  |  |  |  |  |  |
| 4184441    | 105L-01 Classroom Hall      | 200.8  | 01/24/19 07:10           | Client           | 01/29/19 09:45          |  |  |  |  |  |  |
| 4184442    | 103D-01 2nd Floor N End     | 200.8  | 01/24/19 06:47           | Client           | 01/29/19 09:45          |  |  |  |  |  |  |
| 4184443    | 102E-01 2nd Floor N End     | 200.8  | 01/24/19 06:41           | Client           | 01/29/19 09:45          |  |  |  |  |  |  |
| 4184444    | 115-01 Gym                  | 200.8  | 01/24/19 07:29           | Client           | 01/29/19 09:45          |  |  |  |  |  |  |

### **Report Summary**

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Kelly Blackburn at (574) 233-4777.

Note: This report may not be reproduced, except in full, without written approval from EEA.

(b) (6)

ASM

02/04/2019

Date

Authorized Signature
Client Name: OCCU-TEC Inc.

Report #: 441868

Title

Sampling Point: 104-01 2nd Floor Column B44

| Lead and Copper |         |        |              |      |        |       |                     |                |            |  |
|-----------------|---------|--------|--------------|------|--------|-------|---------------------|----------------|------------|--|
| Analyte<br>ID # | Analyte | Method | Reg<br>Limit | MRL† | Result | Units | Preparation<br>Date | Analyzed       | EEA<br>ID# |  |
| 7440-50-8       | Copper  | 200.8  | 1300 !       | 1.0  | 110    | ug/L  |                     | 02/01/19 14:23 | 4184437    |  |
| 7439-92-1       | Lead    | 200.8  | 15 !         | 1.0  | < 1.0  | ug/L  |                     | 02/01/19 14:23 | 4184437    |  |

PWS ID: Not Supplied

Sampling Point: 104-01Dup2ndFloorColumnB44 PWS ID: Not Supplied

| Lead and Copper  |        |       |        |     |       |      |  |                |         |  |  |
|--|--------|-------|--------|-----|-------|------|--|----------------|---------|--|--|
| Analyte Analyte Method Reg MRL† Result Units Preparation Analyzed Date |        |       |        |     |       |      |  | EEA<br>ID#     |         |  |  |
| 7440-50-8  | Copper | 200.8 | 1300 ! | 1.0 | 110   | ug/L |  | 02/01/19 14:25 | 4184438 |  |  |
| 7439-92-1  | Lead   | 200.8 | 15 !   | 1.0 | < 1.0 | ug/L |  | 02/01/19 14:25 | 4184438 |  |  |

Sampling Point: 105-01 1st Floor Column B31 PWS ID: Not Supplied

|                 | Lead and Copper |        |              |      |        |       |                     |                |            |  |  |  |
|-----------------|-----------------|--------|--------------|------|--------|-------|---------------------|----------------|------------|--|--|--|
| Analyte<br>ID # | Analyte         | Method | Reg<br>Limit | MRL† | Result | Units | Preparation<br>Date | Analyzed       | EEA<br>ID# |  |  |  |
| 7440-50-8       | Copper          | 200.8  | 1300 !       | 1.0  | 31     | ug/L  |                     | 02/01/19 14:27 | 4184439    |  |  |  |
| 7439-92-1       | Lead            | 200.8  | 15 !         | 1.0  | < 1.0  | ug/L  |                     | 02/01/19 14:27 | 4184439    |  |  |  |

Sampling Point: 105-02 2nd Floor Column B31 PWS ID: Not Supplied

| Lead and Copper |        |       |        |     |       |      |  |                |         |  |  |
|-----------------|--------|-------|--------|-----|-------|------|--|----------------|---------|--|--|
|                 |        |       |        |     |       |      |  | EEA<br>ID#     |         |  |  |
| 7440-50-8       | Copper | 200.8 | 1300 ! | 1.0 | 62    | ug/L |  | 02/01/19 14:36 | 4184440 |  |  |
| 7439-92-1       | Lead   | 200.8 | 15 !   | 1.0 | < 1.0 | ug/L |  | 02/01/19 14:36 | 4184440 |  |  |

Sampling Point: 105L-01 Classroom Hall PWS ID: Not Supplied

|                 | Lead and Copper |        |              |      |        |       |                     |                |            |  |  |  |
|-----------------|-----------------|--------|--------------|------|--------|-------|---------------------|----------------|------------|--|--|--|
| Analyte<br>ID # | Analyte         | Method | Reg<br>Limit | MRL† | Result | Units | Preparation<br>Date | Analyzed       | EEA<br>ID# |  |  |  |
| 7440-50-8       | Copper          | 200.8  | 1300 !       | 1.0  | 81     | ug/L  |                     | 02/01/19 14:38 | 4184441    |  |  |  |
| 7439-92-1       | Lead            | 200.8  | 15 !         | 1.0  | < 1.0  | ug/L  |                     | 02/01/19 14:38 | 4184441    |  |  |  |

Sampling Point: 103D-01 2nd Floor N End PWS ID: Not Supplied

| Lead and Copper |         |        |              |      |        |       |                     |                |            |  |
|-----------------|---------|--------|--------------|------|--------|-------|---------------------|----------------|------------|--|
| Analyte<br>ID # | Analyte | Method | Reg<br>Limit | MRL† | Result | Units | Preparation<br>Date | Analyzed       | EEA<br>ID# |  |
| 7440-50-8       | Copper  | 200.8  | 1300 !       | 1.0  | 39     | ug/L  |                     | 02/01/19 14:40 | 4184442    |  |
| 7439-92-1       | Lead    | 200.8  | 15 !         | 1.0  | < 1.0  | ug/L  |                     | 02/01/19 14:40 | 4184442    |  |

Sampling Point: 102E-01 2nd Floor N End PWS ID: Not Supplied

| Lead and Copper |         |        |              |      |        |       |                     |                |            |  |
|-----------------|---------|--------|--------------|------|--------|-------|---------------------|----------------|------------|--|
| Analyte<br>ID # | Analyte | Method | Reg<br>Limit | MRL† | Result | Units | Preparation<br>Date | Analyzed       | EEA<br>ID# |  |
| 7440-50-8       | Copper  | 200.8  | 1300 !       | 1.0  | 28     | ug/L  |                     | 02/01/19 14:45 | 4184443    |  |
| 7439-92-1       | Lead    | 200.8  | 15 !         | 1.0  | < 1.0  | ug/L  |                     | 02/01/19 14:45 | 4184443    |  |

Sampling Point: 115-01 Gym PWS ID: Not Supplied

| Lead and Copper |        |       |        |     |       |      |  |                |            |  |  |
|-----------------|--------|-------|--------|-----|-------|------|--|----------------|------------|--|--|
|                 |        |       |        |     |       |      |  |                | EEA<br>ID# |  |  |
| 7440-50-8       | Copper | 200.8 | 1300 ! | 1.0 | 17    | ug/L |  | 02/01/19 14:47 | 4184444    |  |  |
| 7439-92-1       | Lead   | 200.8 | 15 !   | 1.0 | < 1.0 | ug/L |  | 02/01/19 14:47 | 4184444    |  |  |

 $\dagger$  EEA has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

| Reg Limit Type: | MCL | SMCL | AL |
|-----------------|-----|------|----|
| Symbol:         | *   | ۸    | !  |

#### **Lab Definitions**

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis. CCL, CCM, and CCH are the CCC standards at low, mid, and high concentration levels, respectively.

**Internal Standards (IS)** - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

**Laboratory Duplicate (LD)** - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control. FBL, FBM, and FBH are the LFB samples at low, mid, and high concentration levels, respectively.

**Laboratory Method Blank (LMB)** / **Laboratory Reagent Blank (LRB)** - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) / Field Reagent Blank (FRB) - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The FRB/LTB container follows the collection bottles to and from the collection site, but the FRB/LTB is not opened at any time during the trip. The FRB/LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Sample Matrix Duplicate (LFSMD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix. SDL, SDM, and SDH / LFSMDL, LFSMDM, and LFSMDH are the MSD or LFSMD at low, mid, and high concentration levels, respectively.

Matrix Spike Sample (MS) / Laboratory Fortified Sample Matrix (LFSM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results. MSL, MSM, and MSH / LFSML, LFSMM, and LFSMH are the MS or LFSM at low, mid, and high concentration levels, respectively.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

**Surrogate Standard (SS)** / **Surrogate Analyte (SUR)** - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.

341018

o

110 S. Hill Street South Bend, IN 46617 T: 1.800.332.4345 F: 1.574,233.8207

Batch # 441868 Page CHAIN OF CUSTODY RECORD Eaton Analytical

💸 eurofins

|                              |                       |                              |                           | =                 | IIATNO<br>IGOD X<br>NUOЯ/   | (ואד)         | AM C            | 0 M SW          | NW NW                         | - DW SW                        | NS NO                       | I DW SW                    | 1 DN SW                | 1 DW SW               | I DW SW                |            |     |    |    |    | -  | S TO CLIENT   |
|------------------------------|-----------------------|------------------------------|---------------------------|-------------------|-----------------------------|---------------|-----------------|-----------------|-------------------------------|--------------------------------|-----------------------------|----------------------------|------------------------|-----------------------|------------------------|------------|-----|----|----|----|----|---|
| 268                          | #Od                   |                              |                           |                   |                             | CHLORINATED   | YES NO          | ×               | X                             | X                              | X                           | ×                          | X                      | X                     | ×                      |            |     |    |    |    |    | IN-AQUEOUS SAMPLE   |
|                              | PROJECT NAME          |                              | 418004.602                |                   |                             | O DEMANDER    | SAMPLE NEWS WAS |                 |                               |                                |                             |                            |                        |                       |                        |            |     |    |    |    |    | UNUSED PORTIONS OF NO   |
| 9                            | STATE (sample origin) |                              | S                         | SOURCE WATER      | 0~                          |               | ИЕ              |                 |                               |                                |                             |                            |                        |                       |                        |            |     |    |    |    |    | LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT |
| CHAIN OF CUSTODY RECORD      |                       | PWS ID #                     | 30                        | POPULATION SERVED |                             |               | TEST NAME       | 10000) + (000   |                               |                                |                             |                            |                        |                       |                        |            |     |    |    |    |    | TIME LABRESE  |
| CHAIN OF                     |                       | SAMPI ER (Signature)         | (b) (                     | ON 59             | COMPLIANCE                  |               | SAMPLING SITE   | _               | 104-01 2" +100r column 10-h01 | 104-01040 2mg floor Column B44 | 105-01 1st floor Column B31 | 105-02 2" Goor Column 1531 | 1051-01 Classicom Hall | 1030-01 2" Ploor NEND | 102E-01 2nd Floor NEND | 115-01 Gym |     |    |    |    |    | TIME   DECENSED RY:(Signature)   DATE   |
|                              | Mac con REE           | Shaded area for EEA use only | Park lane                 | 05/150            | cieving<br>ess Park lane    | 0 G4150       | COLLECTION      | DATE TIME AM PM | 1-74-19 (6:54 X               | X 15.01 6.24 X                 | 1-24-19 7:17 X              | 1.12 × × 21.16             |                        | × 6:0) 61-62-1        | × 1/1: / 61-42-1       |            |     |    |    |    |    | I III   |
| many Filtofinel IS com/Faton |                       | Shaded area I                | 100 NW Business Park Lane | Riserside, Mo G   | BILL TO: Accounts Recieving | Rivers, de, M | LAB Number      |                 | 4184.437                      |                                |                             | 740                        |                        | 2477                  |                        | 444        | o o | 10 | 11 | 12 | 13 | 14  |

Sample analysis will be provided according to the standard EEA/Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material alterations and are rejected.



# LABORATORY REPORT

If you have any questions concerning this report, please do not hesitate to call us at (800) 332-4345 or (574) 233-4777.

This report may not be reproduced, except in full, without written approval from EEA.



### **STATE CERTIFICATION LIST**

| State                   | Certification | State                | Certification   |
|-------------------------|---------------|----------------------|-----------------|
| Alabama                 | 40700         | Missouri             | 880             |
| Alaska                  | IN00035       | Montana              | CERT0026        |
| Arizona                 | AZ0432        | Nebraska             | NE-OS-05-04     |
| Arkansas                | IN00035       | Nevada               | IN00035         |
| California              | 2920          | New Hampshire*       | 2124            |
| Colorado                | IN035         | New Jersey*          | IN598           |
| Colorado Radiochemistry | IN035         | New Mexico           | IN00035         |
| Connecticut             | PH-0132       | New York*            | 11398           |
| Delaware                | IN035         | North Carolina       | 18700           |
| Florida*                | E87775        | North Dakota         | R-035           |
| Georgia                 | 929           | Ohio                 | 87775           |
| Hawaii                  | IN035         | Oklahoma             | D9508           |
| Idaho                   | IN00035       | Oregon (Primary AB)* | 4074-001        |
| Illinois*               | 200001        | Pennsylvania*        | 68-00466        |
| Illinois Microbiology   | 17767         | Puerto Rico          | IN00035         |
| Illinois Radiochemistry | IN00035       | Rhode Island         | LAO00343        |
| Indiana Chemistry       | C-71-01       | South Carolina       | 95005           |
| Indiana Microbiology    | M-76-07       | South Dakota         | IN00035         |
| Iowa                    | 098           | Tennessee            | TN02973         |
| Kansas*                 | E-10233       | Texas*               | T104704187-15-8 |
| Kentucky                | 90056         | Texas/TCEQ           | TX207           |
| Louisiana*              | LA180008      | Utah*                | IN00035         |
| Maine                   | IN00035       | Vermont              | VT-8775         |
| Maryland                | 209           | Virginia*            | 460275          |
| Massachusetts           | M-IN035       | Washington           | C837            |
| Michigan                | 9926          | West Virginia        | 9927 C          |
| Minnesota*              | 018-999-338   | Wisconsin            | 999766900       |
| Mississippi             | IN035         | Wyoming              | IN035           |
| EPA                     | IN00035       |                      |                 |

\*NELAP/TNI Recognized Accreditation Bodies

Revision date: 01/02/2018



110 South Hill Street South Bend, IN 46617 Tel: (574) 233-4777 Fax: (574) 233-8207

1 800 332 4345

# Laboratory Report

Client: OCCU-TEC Inc. Report: 442330

Attn: Kevin Heriford Priority: Standard Written

100 NW Business Park Lane Status: Final

Riverside, MO 64150 PWS ID: Not Supplied

|            | Sample Information         |        |                          |                  |                         |  |  |  |  |  |  |
|------------|----------------------------|--------|--------------------------|------------------|-------------------------|--|--|--|--|--|--|
| EEA<br>ID# | Client ID                  | Method | Collected<br>Date / Time | Collected<br>By: | Received<br>Date / Time |  |  |  |  |  |  |
| 4188094    | 104-01-Bldg 104-N Corridor | 200.8  | 01/31/19 06:40           | Client           | 02/05/19 09:45          |  |  |  |  |  |  |
| 4188095    | 110-01-Bldg 110-1st Fl     | 200.8  | 01/31/19 06:20           | Client           | 02/05/19 09:45          |  |  |  |  |  |  |
| 4188096    | 110-02-Bldg 110-2nd Fl     | 200.8  | 01/31/19 06:24           | Client           | 02/05/19 09:45          |  |  |  |  |  |  |

### Report Summary

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Kelly Blackburn at (574) 233-4777.

Note: This report may not be reproduced, except in full, without written approval from EEA.

(b) (6)

Client Name:

ASM

02/13/2019

Date

Authorized Signature

OCCU-TEC Inc.

Report #: 442330

Title

Sampling Point: 104-01-Bldg 104-N Corridor PWS ID: Not Supplied

|                 | Lead and Copper |        |              |      |        |       |                     |                |            |  |  |
|-----------------|-----------------|--------|--------------|------|--------|-------|---------------------|----------------|------------|--|--|
| Analyte<br>ID # | Analyte         | Method | Reg<br>Limit | MRL† | Result | Units | Preparation<br>Date | Analyzed       | EEA<br>ID# |  |  |
| 7440-50-8       | Copper          | 200.8  | 1300 !       | 1.0  | 25     | ug/L  |                     | 02/12/19 19:02 | 4188094    |  |  |
| 7439-92-1       | Lead            | 200.8  | 15 !         | 1.0  | < 1.0  | ug/L  |                     | 02/12/19 19:02 | 4188094    |  |  |

Sampling Point: 110-01-Bldg 110-1st FI PWS ID: Not Supplied

|                 | Lead and Copper |        |              |      |        |       |                     |                |            |  |  |
|-----------------|-----------------|--------|--------------|------|--------|-------|---------------------|----------------|------------|--|--|
| Analyte<br>ID # | Analyte         | Method | Reg<br>Limit | MRL† | Result | Units | Preparation<br>Date | Analyzed       | EEA<br>ID# |  |  |
| 7440-50-8       | Copper          | 200.8  | 1300 !       | 1.0  | 16     | ug/L  |                     | 02/12/19 19:09 | 4188095    |  |  |
| 7439-92-1       | Lead            | 200.8  | 15 !         | 1.0  | < 1.0  | ug/L  |                     | 02/12/19 19:09 | 4188095    |  |  |

Sampling Point: 110-02-Bldg 110-2nd Fl PWS ID: Not Supplied

|                 | Lead and Copper |        |              |      |        |       |                     |                |            |  |  |  |
|-----------------|-----------------|--------|--------------|------|--------|-------|---------------------|----------------|------------|--|--|--|
| Analyte<br>ID # | Analyte         | Method | Reg<br>Limit | MRL† | Result | Units | Preparation<br>Date | Analyzed       | EEA<br>ID# |  |  |  |
| 7440-50-8       | Copper          | 200.8  | 1300 !       | 1.0  | 22     | ug/L  |                     | 02/12/19 19:11 | 4188096    |  |  |  |
| 7439-92-1       | Lead            | 200.8  | 15 !         | 1.0  | < 1.0  | ug/L  |                     | 02/12/19 19:11 | 4188096    |  |  |  |

† EEA has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

| Reg Limit Type: | MCL | SMCL | AL |
|-----------------|-----|------|----|
| Symbol:         | *   | ۸    | !  |

#### **Lab Definitions**

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis. CCL, CCM, and CCH are the CCC standards at low, mid, and high concentration levels, respectively.

**Internal Standards (IS)** - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

**Laboratory Duplicate (LD)** - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control. FBL, FBM, and FBH are the LFB samples at low, mid, and high concentration levels, respectively.

**Laboratory Method Blank (LMB)** / **Laboratory Reagent Blank (LRB)** - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) / Field Reagent Blank (FRB) - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The FRB/LTB container follows the collection bottles to and from the collection site, but the FRB/LTB is not opened at any time during the trip. The FRB/LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Sample Matrix Duplicate (LFSMD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix. SDL, SDM, and SDH / LFSMDL, LFSMDM, and LFSMDH are the MSD or LFSMD at low, mid, and high concentration levels, respectively.

Matrix Spike Sample (MS) / Laboratory Fortified Sample Matrix (LFSM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results. MSL, MSM, and MSH / LFSML, LFSMM, and LFSMH are the MS or LFSM at low, mid, and high concentration levels, respectively.

**Quality Control Standard (QCS)** / **Second Source Calibration Verification (SSCV)** - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

**Surrogate Standard (SS)** / **Surrogate Analyte (SUR)** - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.



www.EurofinsUS.com/Eaton

Eaton Analytical

South Bend, IN 46617 T: 1.800.332.4345 F: 1.574.233.8207

Order # 552 4PB Batch # 442330 110 S. Hill Street

TURNAROUND TIME 700 **ANTRIX CODE** LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT of N/A # OF CONTAINERS Samples received unannounced with less than 48 hours holding time remaining may CHLORINATED ON N C Upon Receipt #0d Page YES be subject to additional charges. 918004,002 SAMPLE REMARKS PROJECT NAME GFC Drinking Farmtain STATE (sample origin) Ambient SOURCE WATER 1944 SCONDITIONS UPON RECEIPT (check one). PO 2000 Iced: Wet/Blue CHAIN OF CUSTODY RECORD **TEST NAME** 11 CALL 125% 100% POPULATION SERVED LAB COMMENTS PWS ID# IW\* =Immediate Written: (3 working days) 20 IV\* = Immediate Verbal: (3 working days) 11 129 d AM PM TIME AM PM AM PM TIME SP\* = Weekend, Holiday Blda 104-N Comolor 1010 DATE DATE DATE No 2nd Fl L t 101 -011 SAMPLING SITE (b) (6) (b) (6) RECEIVED FOR LABORATORY BY -62-R RECEIVED BY:(Signature) RECEIVED BY:(Signature) 1 TURN-AROUND TIME (TAT) - SURCHARGES 1-0; SAMPLER (Signature) 01 COMPLIANCE %0 20% 75% SW = Standard Written: (15 working days) RW\* = Rush Written: (5 working days) RV\* = Rush Verbal: (5 working days) AM PM TIME AM PM AM PM PM TIME 000 BILL TO: Accounts Recieving Lane 0490 COLLECTION 0790 429U DATE TIME DATE Shaded area for EEA use only 05140 1-31-19 -31-19 61-18-1 DATE RELINQUISHED BY:(Signature) RELINQUISHED BY: (Signature) RELINQUISHED BY:(Signature) Rivers; de MO (b) (6) MATRIX CODES. DW-DRINKING WATER
WEREAGENT WATER
GW-GROUND WATER
EW-EXPOSURE WATER
SW-SURFACE WATER
PW-POOL WATER
WW-WASTE WATER 960 LAB Number REPORT TO: 9 ω 0 10 = 12 13

Sample analysis will be provided according to the standard EEA/Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material alterations and are rejected unless expressly agreed to in writing by EEA. 06-LO-F0435 Issue 6.0 Effective Date: 2016-09-20

' Please call, expedited service not available for all testing

CALL

STAT\* = Less than 48 hours