eurofins | Eaton Analytical

15

# 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 | Montana | CERT0026 |
| Alaska | IN00035 | Nebraska | E87775 |
| Arizona | AZ0432 | Nevada | IN00035 |
| Arkansas | IN00035 | New Hampshire* | 2124 |
| California | 2920 | New Mexico | IN00035 |
| Colorado | IN035 | New Jersey* | IN598 |
| Colorado Radiochemistry | IN035 | New York* | 11398 |
| Connecticut | PH-0132 | North Carolina | 18700 |
| Delaware | IN035 | North Dakota | R-035 |
| Florida* | E87775 | Ohio | 87775 |
| Georgia | 929 | Oklahoma | D9508 |
| Hawaii | IN035 | Oregon (Primary AB)* | 4074-001 |
| Idaho | IN00035/E87775 | Pennsylvania* | 68-00466 |
| Illinois* | 200001 | Puerto Rico | IN00035 |
| Illinois Microbiology | 200001 | 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* | LA160002 | 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 |
| Missouri | 880 | | |

*NELAP/TNI Recognized Accreditation Bodies

Revision date: 04/14/2016

eurofins | Eaton Analytical

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

# Laboratory Report

Client: Environmental Monitoring Technologies

Attn: Eric Jensen
8100 North Austin Avenue
Morton Grove, IL 60053

Report: 386795
Priority: Weekend or Holiday
Status: Final
PWS ID: Not Supplied

**Sample Information**

| EEA ID # | Client ID | Method | Collected Date / Time | Collected By: | Received Date / Time |
|---|---|---|---|---|---|
| 3675686 | 1S Q2905 | 218.6 | 04/17/17 10:08 | Client | 04/17/17 18:30 |
| 3675687 | 1SD Q2906 | 218.6 | 04/17/17 10:10 | Client | 04/17/17 18:30 |
| 3675688 | 2S Q2907 | 218.6 | 04/17/17 10:40 | Client | 04/17/17 18:30 |
| 3675689 | 3S Q2908 | 218.6 | 04/17/17 11:08 | Client | 04/17/17 18:30 |
| 3675690 | 3SD Q2909 | 218.6 | 04/17/17 11:09 | Client | 04/17/17 18:30 |
| 3675691 | 26 Q2910 | 218.6 | 04/17/17 11:20 | Client | 04/17/17 18:30 |
| 3675692 | 27 Q2911 | 218.6 | 04/17/17 11:27 | Client | 04/17/17 18:30 |
| 3675693 | 28 Q2912 | 218.6 | 04/17/17 11:35 | Client | 04/17/17 18:30 |
| 3675694 | 28D Q2913 | 218.6 | 04/17/17 11:36 | Client | 04/17/17 18:30 |
| 3675695 | 29 Q2914 | 218.6 | 04/17/17 11:43 | Client | 04/17/17 18:30 |
| 3675696 | 30 Q2915 | 218.6 | 04/17/17 11:52 | Client | 04/17/17 18:30 |
| 3675697 | 31 Q2916 | 218.6 | 04/17/17 12:00 | Client | 04/17/17 18:30 |
| 3675698 | 32 Q2917 | 218.6 | 04/17/17 12:09 | Client | 04/17/17 18:30 |
| 3675699 | 33 Q2918 | 218.6 | 04/17/17 12:15 | Client | 04/17/17 18:30 |
| 3675700 | 33D Q2919 | 218.6 | 04/17/17 12:16 | Client | 04/17/17 18:30 |
| 3675701 | 34 Q2920 | 218.6 | 04/17/17 12:25 | Client | 04/17/17 18:30 |
| 3675702 | 35 Q2921 | 218.6 | 04/17/17 12:31 | Client | 04/17/17 18:30 |
| 3675703 | 36 Q2922 | 218.6 | 04/17/17 12:38 | Client | 04/17/17 18:30 |
| 3675704 | 36D Q2923 | 218.6 | 04/17/17 12:39 | Client | 04/17/17 18:30 |

**Report Summary**

Note: Sample containers were provided by the client.

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 Nathan Trowbridge at (574) 233-4777.

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

C.S. Manager 04/19/2017

Authorized Signature Title Date

Client Name: Environmental Monitoring Technologies

Report #: 386795

Sampling Point: 1S Q2905

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/18/17 12:19 | 3675686 |

Sampling Point: 1SD Q2906

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/18/17 12:32 | 3675687 |

Sampling Point: 2S Q2907

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.18** | ug/L | --- | 04/18/17 12:45 | 3675688 |

Sampling Point: 3S Q2908

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/18/17 12:58 | 3675689 |

Sampling Point: 3SD Q2909

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/18/17 13:11 | 3675690 |

Sampling Point: 26 Q2910

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.18** | ug/L | --- | 04/18/17 13:24 | 3675691 |

Client Name: Environmental Monitoring Technologies Report #: 386795

Sampling Point: 27 Q2911 PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/18/17 13:37 | 3675692 |

Sampling Point: 28 Q2912 PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/18/17 13:50 | 3675693 |

Sampling Point: 28D Q2913 PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/18/17 14:03 | 3675694 |

Sampling Point: 29 Q2914 PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/18/17 14:16 | 3675695 |

Sampling Point: 30 Q2915 PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/18/17 15:21 | 3675696 |

Sampling Point: 31 Q2916 PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/18/17 15:34 | 3675697 |

Client Name: Environmental Monitoring Technologies

Report #: 386795

Sampling Point: 32 Q2917

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/18/17 15:47 | 3675698 |

Sampling Point: 33 Q2918

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/18/17 16:00 | 3675699 |

Sampling Point: 33D Q2919

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/18/17 16:13 | 3675700 |

Sampling Point: 34 Q2920

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/18/17 16:26 | 3675701 |

Sampling Point: 35 Q2921

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/18/17 16:39 | 3675702 |

Sampling Point: 36 Q2922

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/18/17 16:52 | 3675703 |

Client Name: Environmental Monitoring Technologies

Report #: 386795

Sampling Point: 36D Q2923

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/18/17 17:05 | 3675704 |

† 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: | * | ^ | ! |

## 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 al6iquot 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.

386795

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

## Chain of Custody Record

TURNAROUND TIME:
☐ RUSH
_____ day turnaround
☐ ROUTINE

Due Date: ____-____-____ COC #: 21933

Company: City of Chicago Dept. of Water Management
Address: 1000 E Ohio St
Chicago, IL 60611

Phone #: (312) 744-7733 Fax #: (____) ____-____
P.O. #: _____ Proj. #: ____-____
Client Contact: Alan Stark (312) 617-4233
Project ID / Location: Cr 6+ Lake Michigan

**Sample Type:**
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Surface water

**Container Type:**
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag _____

**Preservative:**
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH buffer

**Analyses**

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Chromium | | | | | | EMT USE ONLY | | EMT WORKORDER # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1S Q2905 | 8 | | P | | VS | 4/17/17 | 1008 | | 12 | | | ✓ | | | | | | 3675686 | | |
| 1SD Q2906 | 8 | | P | | VS | 4/17/17 | 1010 | | 12 | | | ✓ | | | | | | 687 | | |
| 2S Q2907 | 8 | | P | | VS | 4/17/17 | 1040 | | 10 | | | ✓ | | | | | | 688 | | |
| 3S Q2908 | 8 | | P | | VS | 4/17/17 | 1108 | | 13 | | | ✓ | | | | | | 689 | | |
| 3SD Q2909 | 8 | | P | | VS | 4/17/17 | 1109 | | 13 | | | ✓ | | | | | | 690 | | |
| 26 Q2910 | 8 | | P | | VS | 4/17/17 | 1120 | | 13 | | | ✓ | | | | | | 691 | | |
| 27 Q2911 | 8 | | P | | VS | 4/17/17 | 1127 | | 12 | | | ✓ | | | | | | 692 | | |
| 28 Q2912 | 8 | | P | | VS | 4/17/17 | 1135 | | 13 | | | ✓ | | | | | | 693 | | |
| 28D Q2913 | 8 | | P | | VS | 4/17/17 | 1136 | | 13 | | | ✓ | | | | | | 694 | | |
| 29 Q2914 | 8 | | P | | VS | 4/17/17 | 1143 | | 12 | | | ✓ | | | | | | 695 | | |

| | | | | |
|---|---|---|---|---|
| Relinquished By: [signature] | Date: 4-17-17 Time: 18:30 | Received By: | Date: - - Time: : | EMT USE ONLY Client Code: |
| Relinquished By: | Date: - - Time: : | Received By: | Date: - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: [signature] | Date: 4-17-17 Time: 6:30 | Jar Lot No. |

☐ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)

EMT SAMPLE RETURN POLICY ON BACK

***SPECIAL INSTRUCTIONS:***

EMT-FORM-GEN-028

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

## Chain of Custody Record

TURNAROUND TIME:
☐ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ____-____-____ COC #: 21935

Company: City of Chicago Dept. of Water Mgmt.
Address: 1000 E Ohio St
Chicago, IL 60611

Phone #: (312) 744-7733 Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Alan Stark (312) 617-4233
Project ID / Location: Cr 6+ Lake Michigan

**Sample Type:**
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Surface water

**Container Type:**
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag ____

**Preservative:**
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH buffer

**Analyses**

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Chromium | | | | | | | | | EMT USE ONLY / EMT WORKORDER # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 Q2915 | 8 | | P | | VS | 4/17/17 | 1152 | | 13 | | | ✓ | | | | | | 3675696 | | | |
| 31 Q2916 | 8 | | P | | VS | 4/17/17 | 1200 | | 13 | | | ✓ | | | | | | | | 697 | |
| 32 Q2917 | 8 | | P | | VS | 4/17/17 | 1209 | | 12 | | | ✓ | | | | | | | | 698 | |
| 33 Q2918 | 8 | | P | | VS | 4/17/17 | 1215 | | 12 | | | ✓ | | | | | | | | 699 | |
| 33D Q2919 | 8 | | P | | VS | 4/17/17 | 1216 | | 12 | | | ✓ | | | | | | | | 700 | |
| 34 Q2920 | 8 | | P | | VS | 4/17/17 | 1225 | | 12 | | | ✓ | | | | | | | | 701 | |
| 35 Q2921 | 8 | | P | | VS | 4/17/17 | 1231 | | 12 | | | ✓ | | | | | | | | 702 | |
| 36 Q2922 | 8 | | P | | VS | 4/17/17 | 1238 | | 12 | | | ✓ | | | | | | | | 703 | |
| 36D Q2923 | 8 | | P | | VS | 4/17/17 | 1239 | | 12 | | | ✓ | | | | | | | | 704 | |
| | | | P | | VS | 4/17/17 | | | | | | | | | | | | | | | |

| Relinquished By: | Date: 4-17-17 Time: 18:30 | Received By: | Date: - - Time: : | EMT USE ONLY Client Code: | ☐ SAMPLE RECEIVED ON ICE |
|---|---|---|---|---|---|
| Relinquished By: | Date: - - Time: : | Received By: | Date: - - Time: : | EMT Project I.D. | ☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt) |
| Relinquished By: | Date: - - Time: : | Received For Lab By: | Date: 4-17-17 Time: 6:30 | Jar Lot No. | EMT SAMPLE RETURN POLICY ON BACK |

***SPECIAL INSTRUCTIONS:***

EMT-FORM-GEN-028

eurofins | Eaton Analytical

# Eurofins Eaton Analytical
## Run Log

Run ID: **228298** Method: **218.6**

| Type | Sample Id | Sample Site | Matrix | Instrument ID | Analysis Date | Calibration File |
|---|---|---|---|---|---|---|
| QCS | 3676427 | | RW | DP | 04/18/2017 11:14 | |
| IPC | 3676429 | | RW | DP | 04/18/2017 11:40 | |
| LRB | 3676430 | | RW | DP | 04/18/2017 11:53 | |
| LFB | 3676431 | | RW | DP | 04/18/2017 12:06 | |
| FS | 3675686 | 1S Q2905 | SW | DP | 04/18/2017 12:19 | |
| FS | 3675687 | 1SD Q2906 | SW | DP | 04/18/2017 12:32 | |
| FS | 3675688 | 2S Q2907 | SW | DP | 04/18/2017 12:45 | |
| FS | 3675689 | 3S Q2908 | SW | DP | 04/18/2017 12:58 | |
| FS | 3675690 | 3SD Q2909 | SW | DP | 04/18/2017 13:11 | |
| FS | 3675691 | 26 Q2910 | SW | DP | 04/18/2017 13:24 | |
| FS | 3675692 | 27 Q2911 | SW | DP | 04/18/2017 13:37 | |
| FS | 3675693 | 28 Q2912 | SW | DP | 04/18/2017 13:50 | |
| FS | 3675694 | 28D Q2913 | SW | DP | 04/18/2017 14:03 | |
| FS | 3675695 | 29 Q2914 | SW | DP | 04/18/2017 14:16 | |
| MS | 3676432 | 29 Q2914 | SW | DP | 04/18/2017 14:29 | |
| MSD | 3676433 | 29 Q2914 | SW | DP | 04/18/2017 14:42 | |
| IPC | 3676434 | | RW | DP | 04/18/2017 14:55 | |
| CCB | 3676435 | | RW | DP | 04/18/2017 15:08 | |
| FS | 3675696 | 30 Q2915 | SW | DP | 04/18/2017 15:21 | |
| FS | 3675697 | 31 Q2916 | SW | DP | 04/18/2017 15:34 | |
| FS | 3675698 | 32 Q2917 | SW | DP | 04/18/2017 15:47 | |
| FS | 3675699 | 33 Q2918 | SW | DP | 04/18/2017 16:00 | |
| FS | 3675700 | 33D Q2919 | SW | DP | 04/18/2017 16:13 | |
| FS | 3675701 | 34 Q2920 | SW | DP | 04/18/2017 16:26 | |
| FS | 3675702 | 35 Q2921 | SW | DP | 04/18/2017 16:39 | |
| FS | 3675703 | 36 Q2922 | SW | DP | 04/18/2017 16:52 | |
| FS | 3675704 | 36D Q2923 | SW | DP | 04/18/2017 17:05 | |
| MS | 3676436 | 36D Q2923 | SW | DP | 04/18/2017 17:18 | |
| MSD | 3676437 | 36D Q2923 | SW | DP | 04/18/2017 17:31 | |
| IPC | 3676438 | | RW | DP | 04/18/2017 17:44 | |
| CCB | 3676439 | | RW | DP | 04/18/2017 17:57 | |

# QC Summary Report

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QCS | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0522 | 1.0 | ug/L | 105 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 11:14 | 3676427 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0101 | 1.0 | ug/L | 101 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 11:40 | 3676429 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | --- | < | 0.02 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 11:53 | 3676430 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0187 | 1.0 | ug/L | 102 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 12:06 | 3676431 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1S Q2905 | | 0.17 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 12:19 | 3675686 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1SD Q2906 | | 0.16 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 12:32 | 3675687 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 2S Q2907 | | 0.18 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 12:45 | 3675688 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 3S Q2908 | | 0.17 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 12:58 | 3675689 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 3SD Q2909 | | 0.17 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 13:11 | 3675690 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 26 Q2910 | | 0.18 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 13:24 | 3675691 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 27 Q2911 | | 0.17 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 13:37 | 3675692 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 28 Q2912 | | 0.17 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 13:50 | 3675693 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 28D Q2913 | | 0.17 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 14:03 | 3675694 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 29 Q2914 | | 0.17 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 14:16 | 3675695 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | 29 Q2914 | | 1.1537 | 1.1703 | ug/L | 98 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 14:29 | 3676432 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | 29 Q2914 | | 1.1406 | 1.1703 | ug/L | 97 | 90 - 110 | 1.1 | 10 | 1.0 | --- | 04/18/2017 14:42 | 3676433 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0091 | 1.0 | ug/L | 101 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 14:55 | 3676434 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | --- | < | 0.02 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 15:08 | 3676435 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 30 Q2915 | | 0.17 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 15:21 | 3675696 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 31 Q2916 | | 0.17 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 15:34 | 3675697 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 32 Q2917 | | 0.17 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 15:47 | 3675698 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 33 Q2918 | | 0.17 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 16:00 | 3675699 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 33D Q2919 | | 0.16 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 16:13 | 3675700 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 34 Q2920 | | 0.16 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 16:26 | 3675701 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 35 Q2921 | | 0.17 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 16:39 | 3675702 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 36 Q2922 | | 0.17 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 16:52 | 3675703 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 36D Q2923 | | 0.16 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 17:05 | 3675704 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | 36D Q2923 | | 1.1554 | 1.160299 | ug/L | 100 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 17:18 | 3676436 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | 36D Q2923 | | 1.1548 | 1.160299 | ug/L | 99 | 90 - 110 | 0.1 | 10 | 1.0 | --- | 04/18/2017 17:31 | 3676437 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 0.9838 | 1.0 | ug/L | 98 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 17:44 | 3676438 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | --- | < | 0.02 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 17:57 | 3676439 |

## Sample Type Key

| Type (Abbr.) | Sample Type | Type (Abbr.) | Sample Type |
|---|---|---|---|
| CCB | Continuing Calibration Blank | | |
| FS | Field Sample | | |
| IPC | Instrument Performance Check | | |
| LFB | Laboratory Fortified Blank | | |
| LRB | Laboratory Reagent Blank | | |
| MS | Matrix Spike | | |
| MSD | Matrix Spike Duplicate | | |
| QCS | Quality Control Sample | | |

END OF REPORT

eurofins | Eaton Analytical

# 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 | Montana | CERT0026 |
| Alaska | IN00035 | Nebraska | E87775 |
| Arizona | AZ0432 | Nevada | IN00035 |
| Arkansas | IN00035 | New Hampshire* | 2124 |
| California | 2920 | New Mexico | IN00035 |
| Colorado | IN035 | New Jersey* | IN598 |
| Colorado Radiochemistry | IN035 | New York* | 11398 |
| Connecticut | PH-0132 | North Carolina | 18700 |
| Delaware | IN035 | North Dakota | R-035 |
| Florida* | E87775 | Ohio | 87775 |
| Georgia | 929 | Oklahoma | D9508 |
| Hawaii | IN035 | Oregon (Primary AB)* | 4074-001 |
| Idaho | IN00035/E87775 | Pennsylvania* | 68-00466 |
| Illinois* | 200001 | Puerto Rico | IN00035 |
| Illinois Microbiology | 200001 | 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* | LA160002 | 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 |
| Missouri | 880 | | |

*NELAP/TNI Recognized Accreditation Bodies

Revision date: 04/14/2016

eurofins | Eaton Analytical

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

# Laboratory Report

Client: Environmental Monitoring Technologies

Attn: Eric Jensen
8100 North Austin Avenue
Morton Grove, IL 60053

Report: 386851
Priority: Weekend or Holiday
Status: Final
PWS ID: Not Supplied

**Sample Information**

| EEA ID # | Client ID | Method | Collected Date / Time | Collected By: | Received Date / Time |
|---|---|---|---|---|---|
| 3676134 | Crib | 218.6 | 04/17/17 12:00 | Client | 04/18/17 13:30 |
| 3676135 | Crib | 218.6 | 04/17/17 18:00 | Client | 04/18/17 13:30 |
| 3676136 | Crib | 218.6 | 04/18/17 00:00 | Client | 04/18/17 13:30 |
| 3676137 | Crib | 218.6 | 04/18/17 06:00 | Client | 04/18/17 13:30 |

**Report Summary**

Note: Sample containers were provided by the client.

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 Jessie Brasch at (574) 233-4777.

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

Jessie Brasch — Analytical Services Manager — 04/19/2017

Authorized Signature — Title — Date

Client Name: Environmental Monitoring Technologies
Report #: 386851

Client Name: Environmental Monitoring Technologies

Report #: 386851

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/18/17 19:15 | 3676134 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/18/17 19:28 | 3676135 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/18/17 19:41 | 3676136 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/18/17 19:54 | 3676137 |

† 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: | * | ^ | ! |

## 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 al6iquot 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.

318104

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

## Chain of Custody Record

TURNAROUND TIME:
☑ RUSH
____ day turnaround
☐ ROUTINE

386851

Due Date: ___-___-___ COC #: 21910

Company: CHICAGO DEPARTMENT OF WATER MANAGEMENT
Address: 1000 E OHIO STREET
CHICAGO IL 60611

Phone #: (312) 744-7733 Fax #: (___) ___-___
P.O. #: ___ Proj. #: ___-___
Client Contact: ALAN STARK 312-617-4233
Project ID / Location: SWEP CRIB $Cr^{6+}$ SURVEY

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Surface water

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

Preservative:
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH BUFFER

Analyses

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | HEXAVALENT $Cr^{6+}$ | | | | | | | | | | EMT USE ONLY / EMT WORKORDER # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crib | 8 | 100mL | P | 1 | CK | 4-17-17 | 1200 | | | 8C | | ✓ | | pH 8.7-9.0 | | | | | | | | 3676 134 |
| Crib | 8 | 100mL | P | 1 | AB | 4-17-17 | 1800 | | | 8 | | ✓ | | | | | | | | | | 135 |
| Crib | 8 | 100mL | P | 1 | CMS | 4-18-17 | 0000 | | | 8 | | ✓ | | | | | | | | | | 136 |
| Crib | 8 | 100mL | P | 1 | CMS | 4-18-17 | 0600 | | | 8 | | ✓ | | | | | | | | | | 137 |

RUSH

Client Provided Sample Container

| Relinquished By: | Date: / Time: | Received By: | Date: / Time: | EMT USE ONLY |
|---|---|---|---|---|
| Chris Kunigetis | Date: 4-18-17 Time: 09:30 | Ted Zulinski | Date: 4-18-17 Time: 9:30 | Client Code: |
| Ted Zulinski | Date: 4-18-17 Time: 1 30 PM | Received By: | Date: - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: [signature] | Date: 4-18-17 Time: 13:30 | Jar Lot No. |

☒ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)
3.2
EMT SAMPLE RETURN POLICY ON BACK

**SPECIAL INSTRUCTIONS:** DRIVE SAMPLES TO EUROFINS LAB FOR ANALYSIS

EMT-FORM-GEN-028

eurofins | Eaton Analytical

# Eurofins Eaton Analytical
## Run Log

Run ID: **228311** Method: **218.6**

| Type | Sample Id | Sample Site | Matrix | Instrument ID | Analysis Date | Calibration File |
|---|---|---|---|---|---|---|
| QCS | 3676670 | | RW | DP | 04/18/2017 18:10 | |
| IPC | 3676672 | | RW | DP | 04/18/2017 18:36 | |
| LRB | 3676673 | | RW | DP | 04/18/2017 18:49 | |
| LFB | 3676674 | | RW | DP | 04/18/2017 19:02 | |
| FS | 3676134 | Crib | SW | DP | 04/18/2017 19:15 | |
| FS | 3676135 | Crib | SW | DP | 04/18/2017 19:28 | |
| FS | 3676136 | Crib | SW | DP | 04/18/2017 19:41 | |
| FS | 3676137 | Crib | SW | DP | 04/18/2017 19:54 | |
| MS | 3676647 | Crib | SW | DP | 04/18/2017 20:07 | |
| MSD | 3676648 | Crib | SW | DP | 04/18/2017 20:20 | |
| IPC | 3676675 | | RW | DP | 04/18/2017 20:33 | |
| CCB | 3676676 | | RW | DP | 04/18/2017 20:46 | |

# QC Summary Report

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QCS | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0239 | 1.0 | ug/L | 102 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 18:10 | 3676670 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 0.9978 | 1.0 | ug/L | 100 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 18:36 | 3676672 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | --- | < | 0.02 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 18:49 | 3676673 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0086 | 1.0 | ug/L | 101 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 19:02 | 3676674 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 19:15 | 3676134 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 19:28 | 3676135 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 19:41 | 3676136 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 19:54 | 3676137 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1320 | 1.162399 | ug/L | 97 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 20:07 | 3676647 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1196 | 1.162399 | ug/L | 96 | 90 - 110 | 1.1 | 10 | 1.0 | --- | 04/18/2017 20:20 | 3676648 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0088 | 1.0 | ug/L | 101 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 20:33 | 3676675 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | --- | < | 0.02 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 20:46 | 3676676 |

## Sample Type Key

| Type (Abbr.) | Sample Type | Type (Abbr.) | Sample Type |
|---|---|---|---|
| CCB | Continuing Calibration Blank | | |
| FS | Field Sample | | |
| IPC | Instrument Performance Check | | |
| LFB | Laboratory Fortified Blank | | |
| LRB | Laboratory Reagent Blank | | |
| MS | Matrix Spike | | |
| MSD | Matrix Spike Duplicate | | |
| QCS | Quality Control Sample | | |

END OF REPORT

eurofins | Eaton Analytical

# 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 | Montana | CERT0026 |
| Alaska | IN00035 | Nebraska | E87775 |
| Arizona | AZ0432 | Nevada | IN00035 |
| Arkansas | IN00035 | New Hampshire* | 2124 |
| California | 2920 | New Mexico | IN00035 |
| Colorado | IN035 | New Jersey* | IN598 |
| Colorado Radiochemistry | IN035 | New York* | 11398 |
| Connecticut | PH-0132 | North Carolina | 18700 |
| Delaware | IN035 | North Dakota | R-035 |
| Florida* | E87775 | Ohio | 87775 |
| Georgia | 929 | Oklahoma | D9508 |
| Hawaii | IN035 | Oregon (Primary AB)* | 4074-001 |
| Idaho | IN00035/E87775 | Pennsylvania* | 68-00466 |
| Illinois* | 200001 | Puerto Rico | IN00035 |
| Illinois Microbiology | 200001 | 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* | LA160002 | 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 |
| Missouri | 880 | | |

*NELAP/TNI Recognized Accreditation Bodies

Revision date: 04/14/2016

eurofins | Eaton Analytical

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

# Laboratory Report

Client: Environmental Monitoring Technologies

Attn: Eric Jensen
8100 North Austin Avenue
Morton Grove, IL 60053

Report: 386779
Priority: Weekend or Holiday
Status: Final
PWS ID: Not Supplied

**Sample Information**

| EEA ID # | Client ID | Method | Collected Date / Time | Collected By: | Received Date / Time |
|---|---|---|---|---|---|
| 3675348 | Crib | 218.6 | 04/14/17 10:00 | Client | 04/17/17 12:50 |
| 3675349 | Crib | 218.6 | 04/14/17 12:00 | Client | 04/17/17 12:50 |
| 3675350 | Crib | 218.6 | 04/14/17 14:00 | Client | 04/17/17 12:50 |
| 3675351 | Crib | 218.6 | 04/15/17 12:00 | Client | 04/17/17 12:50 |
| 3675352 | Crib | 218.6 | 04/15/17 14:00 | Client | 04/17/17 12:50 |
| 3675353 | Crib | 218.6 | 04/15/17 16:00 | Client | 04/17/17 12:50 |
| 3675354 | Crib | 218.6 | 04/15/17 18:00 | Client | 04/17/17 12:50 |
| 3675355 | Crib | 218.6 | 04/15/17 20:00 | Client | 04/17/17 12:50 |
| 3675356 | Crib | 218.6 | 04/15/17 22:00 | Client | 04/17/17 12:50 |
| 3675357 | Crib | 218.6 | 04/16/17 00:00 | Client | 04/17/17 12:50 |
| 3675358 | Crib | 218.6 | 04/14/17 16:00 | Client | 04/17/17 12:50 |
| 3675359 | Crib | 218.6 | 04/14/17 18:00 | Client | 04/17/17 12:50 |
| 3675360 | Crib | 218.6 | 04/14/17 20:00 | Client | 04/17/17 12:50 |
| 3675361 | Crib | 218.6 | 04/14/17 22:00 | Client | 04/17/17 12:50 |
| 3675362 | Crib | 218.6 | 04/15/17 00:00 | Client | 04/17/17 12:50 |
| 3675363 | Crib | 218.6 | 04/15/17 02:00 | Client | 04/17/17 12:50 |
| 3675364 | Crib | 218.6 | 04/15/17 04:00 | Client | 04/17/17 12:50 |
| 3675365 | Crib | 218.6 | 04/15/17 06:00 | Client | 04/17/17 12:50 |
| 3675366 | Crib | 218.6 | 04/15/17 08:00 | Client | 04/17/17 12:50 |
| 3675367 | Crib | 218.6 | 04/15/17 10:00 | Client | 04/17/17 12:50 |
| 3675368 | Crib | 218.6 | 04/16/17 02:00 | Client | 04/17/17 12:50 |
| 3675369 | Crib | 218.6 | 04/16/17 04:00 | Client | 04/17/17 12:50 |
| 3675370 | Crib | 218.6 | 04/16/17 06:00 | Client | 04/17/17 12:50 |
| 3675371 | Crib | 218.6 | 04/16/17 08:00 | Client | 04/17/17 12:50 |
| 3675372 | Crib | 218.6 | 04/16/17 10:00 | Client | 04/17/17 12:50 |
| 3675373 | Crib | 218.6 | 04/16/17 12:00 | Client | 04/17/17 12:50 |
| 3675374 | Crib | 218.6 | 04/16/17 18:00 | Client | 04/17/17 12:50 |
| 3675375 | Crib | 218.6 | 04/17/17 00:00 | Client | 04/17/17 12:50 |
| 3675376 | Crib | 218.6 | 04/17/17 06:00 | Client | 04/17/17 12:50 |

**Report Summary**

Note: Sample containers were provided by the client.

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 Jessie Brasch at (574) 233-4777.

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

Jessie Brasch Analytical Services Manager 04/19/2017

Authorized Signature Title Date

Client Name: Environmental Monitoring Technologies

Report #: 386779

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/17/17 17:09 | 3675348 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.13** | ug/L | --- | 04/17/17 17:22 | 3675349 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/17/17 17:35 | 3675350 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/17/17 17:48 | 3675351 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/17/17 18:01 | 3675352 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/17/17 18:14 | 3675353 |

Client Name: Environmental Monitoring Technologies

Report #: 386779

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/17/17 18:27 | 3675354 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.13** | ug/L | --- | 04/17/17 18:40 | 3675355 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/17/17 18:53 | 3675356 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/17/17 19:06 | 3675357 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/17/17 20:11 | 3675358 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/17/17 20:24 | 3675359 |

Client Name: Environmental Monitoring Technologies

Report #: 386779

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/17/17 20:37 | 3675360 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/17/17 20:50 | 3675361 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/17/17 21:03 | 3675362 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/17/17 21:16 | 3675363 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/17/17 21:29 | 3675364 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/17/17 21:42 | 3675365 |

Client Name: Environmental Monitoring Technologies Report #: 386779

Sampling Point: Crib PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/17/17 21:55 | 3675366 |

Sampling Point: Crib PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/17/17 22:08 | 3675367 |

Sampling Point: Crib PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/17/17 23:39 | 3675368 |

Sampling Point: Crib PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/17/17 23:52 | 3675369 |

Sampling Point: Crib PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/18/17 00:05 | 3675370 |

Sampling Point: Crib PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/18/17 00:18 | 3675371 |

Client Name: Environmental Monitoring Technologies

Report #: 386779

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/18/17 00:31 | 3675372 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/18/17 00:44 | 3675373 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/18/17 00:57 | 3675374 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/18/17 01:10 | 3675375 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/18/17 01:23 | 3675376 |

† 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: | * | ^ | ! |

## 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 al6iquot 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.

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

## Chain of Custody Record

TURNAROUND TIME:
☑ RUSH
____ day turnaround
☐ ROUTINE

318050
386779

Due Date: ___-___-___ COC #: 21908

Company: Chicago Department of Water Management
Address: 1000 E. Ohio Street
Chicago IL 60611

Phone #: (312) 744-7733 Fax #: (___) ___-___
P.O. #: ___ Proj. #: ___-___
Client Contact: Alan Stark 312-617-4233
Project ID / Location: SLUPP CRIB G.6t Survey

**Sample Type:**
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Surface Water

**Container Type:**
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

**Preservative:**
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH Buffer

**Analyses**

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Cr6t | | | | | | | | | | EMT USE ONLY / EMT WORKORDER # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crib 3675348 | 8 | 100mL | P | 1 | CK | 4-14-17 | 1000 | pH=9 | | 8 | | ✓ | | | | | | | | | | |
| Crib 349 | 8 | 100mL | P | 1 | CK | 4-14-17 | 1200 | | | 8 | | ✓ | | | | | | | | | | |
| Crib 350 | 8 | 100mL | P | 1 | CK | 4-14-17 | 1400 | | | 8 | | ✓ | | | | | | | | | | |
| Crib 351 | 8 | 100mL | P | 1 | CK | 4-15-17 | 1200 | | | 8 | | ✓ | | | | | | | | | | |
| Crib 352 | 8 | 100mL | P | 1 | CK | 4-15-17 | 1400 | | | 8 | | ✓ | | | | | | | | | | |
| Crib 353 | 8 | 100mL | P | 1 | CK | 4-15-17 | 1600 | | | 8 | | ✓ | | | | | | | | | | |
| Crib 354 | 8 | 100mL | P | 1 | CK | 4-15-17 | 1800 | | | 8 | | ✓ | | | | | | | | | | |
| Crib 355 | 8 | 100mL | P | 1 | CK | 4-15-17 | 2000 | | | 8 | | ✓ | | | | | | | | | | |
| Crib 356 | 8 | 100mL | P | 1 | CK | 4-15-17 | 2200 | | | 8 | | ✓ | | | | | | | | | | |
| Crib 357 | 8 | 100mL | P | 1 | DB | 4-16-17 | 0000 | | | 8 | | ✓ | | | | | | | | | | |

| | | | | |
|---|---|---|---|---|
| Relinquished By: Chris Kunzeta | Date: 4-17-17 Time: 08:30 | Received By: Ted Zielinski | Date: 4-17-17 Time: 8:30A | EMT USE ONLY Client Code: |
| Relinquished By: Ted Zielinski | Date: 4-17-17 Time: 12:50P | Received By: | Date: - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: [signature] | Date: 4-17-17 Time: 12:50 | Jar Lot No. |

☒ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)
0.6°C

EMT SAMPLE RETURN POLICY ON BACK

**SPECIAL INSTRUCTIONS:** Drive Samples to Eurofins Lab for Analysis

EMT-FORM-GEN-028

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

## Chain of Custody Record

TURNAROUND TIME:
☑ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ____-____-____ COC #: 21903

Company: Chicago Department of Water
Address: 1000 E. Ohio Street
Chicago IL 60611

Phone #: (312) 744-7233 Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Alan Stark 312-617-4233
Project ID / Location: Swpp Crib Cr-6 + Silver

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Surface Water (SW)

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

Preservative:
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH Buffer

Analyses: Hexavalent Cr-6

EMT USE ONLY

EMT WORKORDER #____

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Cr-6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crib 3675358 | S | 100ml | P | 1 | CMS | 4-4-17 | 1600 | pH=9 | | | | ✓ |
| Crib 359 | S | 100ml | P | 1 | CMS | 4-4-17 | 1800 | | | | | ✓ |
| Crib 360 | S | 100ml | P | 1 | CMS | 4-4-17 | 2000 | | | | | ✓ |
| Crib 361 | S | 100ml | P | 1 | CMS | 4-4-17 | 2200 | | | | | ✓ |
| Crib 362 | S | 100ml | P | 1 | CMS | 4-5-17 | 0000 | | | | | ✓ |
| Crib 363 | S | 100ml | P | 1 | CMS | 4-5-17 | 0200 | | | | | ✓ |
| Crib 364 | S | 100ml | P | 1 | CMS | 4-5-17 | 0400 | | | | | ✓ |
| Crib 365 | S | 100ml | P | 1 | CMS | 4-5-17 | 0600 | | | | | ✓ |
| Crib 366 | S | 100mL | P | 1 | CK | 4-15-17 | 0800 | | | | | ✓ |
| Crib 367 | S | 100mL | P | 1 | CK | 4-15-17 | 1000 | | | | | ✓ |

| Relinquished By: | Date: | Received By: | Date: | EMT USE ONLY |
|---|---|---|---|---|
| Chris Thompson | 4-17-17 Time: 08:30 | Ted Zielinski | 4-17-17 Time: 8:30A | Client Code: |
| Ted Zielinski | 4-17-17 Time: 12:50P | Received By: | - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: Sheila | Date: 4-17-17 Time: 12:50 | Jar Lot No. |

☑ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)
0.6°C

EMT SAMPLE RETURN POLICY ON BACK

**SPECIAL INSTRUCTIONS:** Drive Samples to Eurofins lab for Analysis



EMT-FORM-GEN-028

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

## Chain of Custody Record

TURNAROUND TIME:
☑ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ____-____-____ COC #: 21909

Company: Chicago Department of Water Management
Address: 1000 E. Ohio Street
Chicago IL 60611

Phone #: (312) 744-7733 Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Alan Stark 312-617-4233
Project ID / Location: SWPP Crib Crab Survey

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Surface Water

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag ____

Preservative:
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH Buffer

Analyses: Hexavalent Cr 6+

EMT USE ONLY
EMT WORKORDER #____

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Cr 6+ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crib3675368 | 8 | 100mL | P | 1 | DB | 4-16-17 | 0200 | PH-9 | | 8 | | ✓ |
| Crib 369 | 8 | 100mL | P | 1 | DB | 4-16-17 | 0400 | | | 8 | | ✓ |
| Crib 370 | 8 | 100mL | P | 1 | DB | 4-16-17 | 0600 | | | 8 | | ✓ |
| Crib 371 | 8 | 100mL | P | 1 | CK | 4-16-17 | 0800 | | | 8 | | ✓ |
| Crib 372 | 8 | 100mL | P | 1 | CK | 4-16-17 | 1000 | | | 8 | | ✓ |
| Crib 373 | 8 | 100mL | P | 1 | CK | 4-16-17 | 1200 | | | 8 | | ✓ |
| Crib 374 | 8 | 100mL | P | 1 | AB | 4-16-17 | 1800 | 1800 | | 8 Borax | | ✓ KD |
| Crib 375 | 8 | 100mL | P | 1 | DB | 4-17-17 | 0000 | | | 8 | | ✓ |
| Crib 376 | 8 | 100mL | P | 1 | DB | 4-17-17 | 0600 | ✓ | | 8 | | ✓ |
| ~~Crib~~ | ~~8~~ | | | | | ~~4-17-17~~ | ~~0500~~ | | 4-17-2017 | KD | | |

| Relinquished By: | Date/Time | Received By: | Date/Time | EMT USE ONLY |
|---|---|---|---|---|
| Chris Kwiatkowski | Date: 4-17-17 Time: 08:30 | Ted Zielinski | Date: 4-17-17 Time: 8:30A | Client Code: |
| Ted Zielinski | Date: 4-17-17 Time: 12:50p | Received By: | Date: - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: SLyon | Date: 4-17-17 Time: 12:50 | Jar Lot No. |

☒ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)
0.6°C

EMT SAMPLE RETURN POLICY ON BACK

**SPECIAL INSTRUCTIONS:** Drive Samples to Eurofins Lab for Analysis

EMT-FORM-GEN-028

eurofins | Eaton Analytical

# Eurofins Eaton Analytical
## Run Log

Run ID: **228266** Method: **218.6**

| Type | Sample Id | Sample Site | Matrix | Instrument ID | Analysis Date | Calibration File |
|---|---|---|---|---|---|---|
| QCS | 3675721 | | RW | DP | 04/17/2017 16:01 | |
| IPC | 3675723 | | RW | DP | 04/17/2017 16:27 | |
| LRB | 3675724 | | RW | DP | 04/17/2017 16:40 | |
| LFB | 3675725 | | RW | DP | 04/17/2017 16:53 | |
| FS | 3675348 | Crib | SW | DP | 04/17/2017 17:09 | |
| FS | 3675349 | Crib | SW | DP | 04/17/2017 17:22 | |
| FS | 3675350 | Crib | SW | DP | 04/17/2017 17:35 | |
| FS | 3675351 | Crib | SW | DP | 04/17/2017 17:48 | |
| FS | 3675352 | Crib | SW | DP | 04/17/2017 18:01 | |
| FS | 3675353 | Crib | SW | DP | 04/17/2017 18:14 | |
| FS | 3675354 | Crib | SW | DP | 04/17/2017 18:27 | |
| FS | 3675355 | Crib | SW | DP | 04/17/2017 18:40 | |
| FS | 3675356 | Crib | SW | DP | 04/17/2017 18:53 | |
| FS | 3675357 | Crib | SW | DP | 04/17/2017 19:06 | |
| MS | 3675726 | Crib | SW | DP | 04/17/2017 19:19 | |
| MSD | 3675727 | Crib | SW | DP | 04/17/2017 19:32 | |
| IPC | 3675728 | | RW | DP | 04/17/2017 19:45 | |
| CCB | 3675729 | | RW | DP | 04/17/2017 19:58 | |
| FS | 3675358 | Crib | SW | DP | 04/17/2017 20:11 | |
| FS | 3675359 | Crib | SW | DP | 04/17/2017 20:24 | |
| FS | 3675360 | Crib | SW | DP | 04/17/2017 20:37 | |
| FS | 3675361 | Crib | SW | DP | 04/17/2017 20:50 | |
| FS | 3675362 | Crib | SW | DP | 04/17/2017 21:03 | |
| FS | 3675363 | Crib | SW | DP | 04/17/2017 21:16 | |
| FS | 3675364 | Crib | SW | DP | 04/17/2017 21:29 | |
| FS | 3675365 | Crib | SW | DP | 04/17/2017 21:42 | |
| FS | 3675366 | Crib | SW | DP | 04/17/2017 21:55 | |
| FS | 3675367 | Crib | SW | DP | 04/17/2017 22:08 | |
| MS | 3675730 | Crib | SW | DP | 04/17/2017 22:21 | |
| MSD | 3675731 | Crib | SW | DP | 04/17/2017 22:34 | |
| IPC | 3675732 | | RW | DP | 04/17/2017 22:47 | |
| CCB | 3675733 | | RW | DP | 04/17/2017 23:00 | |
| LRB | 3675734 | | RW | DP | 04/17/2017 23:13 | |

| | | | | | |
|---|---|---|---|---|---|
| LFB | 3675735 | | RW | DP | 04/17/2017 23:26 |
| FS | 3675368 | Crib | SW | DP | 04/17/2017 23:39 |
| FS | 3675369 | Crib | SW | DP | 04/17/2017 23:52 |
| FS | 3675370 | Crib | SW | DP | 04/18/2017 00:05 |
| FS | 3675371 | Crib | SW | DP | 04/18/2017 00:18 |
| FS | 3675372 | Crib | SW | DP | 04/18/2017 00:31 |
| FS | 3675373 | Crib | SW | DP | 04/18/2017 00:44 |
| FS | 3675374 | Crib | SW | DP | 04/18/2017 00:57 |
| FS | 3675375 | Crib | SW | DP | 04/18/2017 01:10 |
| FS | 3675376 | Crib | SW | DP | 04/18/2017 01:23 |
| MS | 3675736 | Crib | SW | DP | 04/18/2017 01:36 |
| MSD | 3675737 | Crib | SW | DP | 04/18/2017 01:49 |
| IPC | 3675738 | | RW | DP | 04/18/2017 02:02 |
| CCB | 3675739 | | RW | DP | 04/18/2017 02:15 |

# QC Summary Report

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QCS | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0460 | 1.0 | ug/L | 105 | 90 - 110 | --- | --- | 1.0 | --- | 04/17/2017 16:01 | 3675721 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0227 | 1.0 | ug/L | 102 | 90 - 110 | --- | --- | 1.0 | --- | 04/17/2017 16:27 | 3675723 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | --- | < | 0.02 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 16:40 | 3675724 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0023 | 1.0 | ug/L | 100 | 90 - 110 | --- | --- | 1.0 | --- | 04/17/2017 16:53 | 3675725 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 17:09 | 3675348 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.13 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 17:22 | 3675349 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 17:35 | 3675350 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 17:48 | 3675351 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 18:01 | 3675352 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 18:14 | 3675353 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 18:27 | 3675354 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.13 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 18:40 | 3675355 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 18:53 | 3675356 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 19:06 | 3675357 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1405 | 1.142699 | ug/L | 100 | 90 - 110 | --- | --- | 1.0 | --- | 04/17/2017 19:19 | 3675726 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1485 | 1.142699 | ug/L | 101 | 90 - 110 | 0.7 | 10 | 1.0 | --- | 04/17/2017 19:32 | 3675727 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0064 | 1.0 | ug/L | 101 | 90 - 110 | --- | --- | 1.0 | --- | 04/17/2017 19:45 | 3675728 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | --- | < | 0.02 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 19:58 | 3675729 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 20:11 | 3675358 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 20:24 | 3675359 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 20:37 | 3675360 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 20:50 | 3675361 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 21:03 | 3675362 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 21:16 | 3675363 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 21:29 | 3675364 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 21:42 | 3675365 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 21:55 | 3675366 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 22:08 | 3675367 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1649 | 1.141899 | ug/L | 102 | 90 - 110 | --- | --- | 1.0 | --- | 04/17/2017 22:21 | 3675730 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1453 | 1.141899 | ug/L | 100 | 90 - 110 | 1.7 | 10 | 1.0 | --- | 04/17/2017 22:34 | 3675731 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0277 | 1.0 | ug/L | 103 | 90 - 110 | --- | --- | 1.0 | --- | 04/17/2017 22:47 | 3675732 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | --- | < | 0.02 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 23:00 | 3675733 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | --- | < | 0.02 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 23:13 | 3675734 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0185 | 1.0 | ug/L | 102 | 90 - 110 | --- | --- | 1.0 | --- | 04/17/2017 23:26 | 3675735 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 23:39 | 3675368 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/17/2017 23:52 | 3675369 |

## QC Summary Report (cont.)

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 00:05 | 3675370 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 00:18 | 3675371 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 00:31 | 3675372 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 00:44 | 3675373 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 00:57 | 3675374 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 01:10 | 3675375 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 01:23 | 3675376 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.0986 | 1.145999 | ug/L | 95 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 01:36 | 3675736 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.0893 | 1.145999 | ug/L | 94 | 90 - 110 | 0.9 | 10 | 1.0 | --- | 04/18/2017 01:49 | 3675737 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | --- | | 1.0315 | 1.0 | ug/L | 103 | 90 - 110 | --- | --- | 1.0 | --- | 04/18/2017 02:02 | 3675738 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | --- | < | 0.02 | | ug/L | --- | --- | --- | --- | 1.0 | --- | 04/18/2017 02:15 | 3675739 |

## Sample Type Key

| Type (Abbr.) | Sample Type | Type (Abbr.) | Sample Type |
|---|---|---|---|
| CCB | Continuing Calibration Blank | | |
| FS | Field Sample | | |
| IPC | Instrument Performance Check | | |
| LFB | Laboratory Fortified Blank | | |
| LRB | Laboratory Reagent Blank | | |
| MS | Matrix Spike | | |
| MSD | Matrix Spike Duplicate | | |
| QCS | Quality Control Sample | | |

END OF REPORT

eurofins | Eaton Analytical

# 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 | Montana | CERT0026 |
| Alaska | IN00035 | Nebraska | E87775 |
| Arizona | AZ0432 | Nevada | IN00035 |
| Arkansas | IN00035 | New Hampshire* | 2124 |
| California | 2920 | New Mexico | IN00035 |
| Colorado | IN035 | New Jersey* | IN598 |
| Colorado Radiochemistry | IN035 | New York* | 11398 |
| Connecticut | PH-0132 | North Carolina | 18700 |
| Delaware | IN035 | North Dakota | R-035 |
| Florida* | E87775 | Ohio | 87775 |
| Georgia | 929 | Oklahoma | D9508 |
| Hawaii | IN035 | Oregon (Primary AB)* | 4074-001 |
| Idaho | IN00035/E87775 | Pennsylvania* | 68-00466 |
| Illinois* | 200001 | Puerto Rico | IN00035 |
| Illinois Microbiology | 200001 | 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* | LA160002 | 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 |
| Missouri | 880 | | |

*NELAP/TNI Recognized Accreditation Bodies

eurofins | Eaton Analytical

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

# Laboratory Report

Client: Environmental Monitoring Technologies

Attn: Eric Jensen
8100 North Austin Avenue
Morton Grove, IL 60053

Report: 386402
Priority: Emergency Response
Status: Final
PWS ID: Not Supplied

**Sample Information**

| EEA ID # | Client ID | Method | Collected Date / Time | Collected By: | Received Date / Time |
|---|---|---|---|---|---|
| 3672004 | Crib | 218.6 | 04/11/17 19:00 | Client | 04/12/17 12:30 |
| 3672005 | Crib | 218.6 | 04/11/17 20:00 | Client | 04/12/17 12:30 |
| 3672006 | Crib | 218.6 | 04/11/17 21:00 | Client | 04/12/17 12:30 |
| 3672007 | Crib | 218.6 | 04/11/17 22:00 | Client | 04/12/17 12:30 |
| 3672008 | Crib | 218.6 | 04/11/17 22:00 | Client | 04/12/17 12:30 |
| 3672009 | Crib | 218.6 | 04/11/17 23:00 | Client | 04/12/17 12:30 |
| 3672010 | Crib | 218.6 | 04/12/17 00:00 | Client | 04/12/17 12:30 |
| 3672011 | Crib | 218.6 | 04/12/17 01:00 | Client | 04/12/17 12:30 |
| 3672012 | Crib | 218.6 | 04/12/17 02:00 | Client | 04/12/17 12:30 |
| 3672013 | Crib | 218.6 | 04/12/17 03:00 | Client | 04/12/17 12:30 |
| 3672014 | Crib | 218.6 | 04/12/17 04:00 | Client | 04/12/17 12:30 |
| 3672015 | Crib | 218.6 | 04/12/17 05:00 | Client | 04/12/17 12:30 |
| 3672016 | Crib | 218.6 | 04/12/17 06:00 | Client | 04/12/17 12:30 |
| 3672017 | Crib | 218.6 | 04/12/17 07:00 | Client | 04/12/17 12:30 |
| 3672018 | Crib | 218.6 | 04/12/17 08:00 | Client | 04/12/17 12:30 |

**Report Summary**

Note: Sample containers were provided by the client.

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 Nathan Trowbridge at (574) 233-4777.

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

Authorized Signature | Title | 04/13/2017 Date

Client Name: Environmental Monitoring Technologies
Report #: 386402

Client Name: Environmental Monitoring Technologies

Report #: 386402

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/12/17 14:03 | 3672004 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/12/17 14:42 | 3672005 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/12/17 14:55 | 3672006 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/12/17 15:08 | 3672007 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/12/17 15:21 | 3672008 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/12/17 15:34 | 3672009 |

Client Name: Environmental Monitoring Technologies

Report #: 386402

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/12/17 15:47 | 3672010 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/12/17 16:00 | 3672011 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/12/17 16:13 | 3672012 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/12/17 16:26 | 3672013 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/12/17 19:40 | 3672014 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/12/17 19:53 | 3672015 |

Client Name: Environmental Monitoring Technologies

Report #: 386402

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.16 | ug/L | --- | 04/12/17 20:06 | 3672016 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.15 | ug/L | --- | 04/12/17 20:19 | 3672017 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.16 | ug/L | --- | 04/12/17 20:32 | 3672018 |

† 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: | * | ^ | ! |

## 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 al6iquot 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.

386402

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

## Chain of Custody Record

TURNAROUND TIME:
☐ RUSH
____ day turnaround
☐ ROUTINE

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

317756

Due Date: ____-____-____ COC #: 21904

Company: RUSH
Address:

Phone #: (____) ____-____ Fax #: (____) ____-____
P.O. #: Proj. #: ____-____
Client Contact:
Project ID / Location:

**Sample Type:**
1. Waste Water 4 Sludge 7. Groundwater (filtered)
2 Drinking Water 5 Oil 8 Other
3. Soil 6. Groundwater

**Container Type:**
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

**Preservative:**
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5 HCl 8. Other
3. $HNO_3$ 6. MeOH

Analyses: Client Provided Sample Container

EMT USE ONLY
EMT WORKORDER #

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | EMT WORKORDER # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Comb | | 100mL | P | 1 | CK | 4/11/17 | 1900 | >8 | | | | 3672004 |
| Comb | | 100mL | P | 1 | CK | 4/11/17 | 2000 | | | | | 005 |
| Comb | | 100mL | P | 1 | CK | 4/11/17 | 2100 | | | | | 006 |
| Comb | | 100mL | P | 12 | CK | 4/11/17 | 2200 | | | | | 007 |
| Comb (Dup) | | 100mL | P | 1 | CK | 4/11/17 | 2200 | | | | | 008 |
| Comb | | 100mL | P | 1 | CK | 4/11/17 | 2300 | | | | | 009 |
| Comb | | 100mL | P | 1 | AB | 4/12/17 | 0000 | | | | | 010 |
| Comb | | 100mL | P | 1 | AB | 4/12/17 | 0100 | | | | | 011 |
| Comb | | 100mL | P | 1 | AB | 4/12/17 | 0200 | | | | | 012 |
| Comb | | 100mL | P | 1 | AB | 4/12/17 | 0300 | | | | | 013 |

RUSH

| Relinquished By: | Date: 4-12-17 Time: 07:00 | Received By: | Date: 4-12-17 Time: 9:00A | EMT USE ONLY Client Code: | ☐ SAMPLE RECEIVED ON ICE |
|---|---|---|---|---|---|
| Relinquished By: | Date: 4-12-17 Time: 12:30P | Received By: | Date: - - Time: : | EMT Project I.D. | ☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt) |
| Relinquished By: | Date: - - Time: : | Received For Lab By: | Date: 4-12-17 Time: 12:30 | Jar Lot No. | EMT SAMPLE RETURN POLICY ON BACK |

***SPECIAL INSTRUCTIONS:***

Blue 5.4°C

EMT-FORM-GEN-028

**ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.**

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

# Chain of Custody Record

TURNAROUND TIME:
☐ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ____-____-____ COC #: 21905

Company:
Address:

Phone #: (____) ____-____ Fax #: (____) ____-____
P.O. #: Proj. #: ____-____
Client Contact:
Project ID / Location:

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

Preservative:
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH

Analyses

Client Provided Sample Container

EMT USE ONLY

EMT WORKORDER #

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | EMT WORKORDER # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crab | | 100mL | P | 1 | AB | 4/12/17 | 0400 | 7.8 | | | | 3672014 |
| Crab | | 100mL | P | 1 | AB | 4/12/17 | 0500 | | | | | 015 |
| Crab | | 100mL | P | 1 | AB | 4/12/17 | 0600 | | | | | 016 |
| Crab | | 100mL | P | 1 | AB | 4/12/17 | 0700 | | | | | 017 |
| Crab | | 100mL | P | 1 | DB | 4/12/17 | 0800 | | | | | 018 |

| Relinquished By: | Date: 4-12-17 Time: [illegible] | Received By: Ted Zielinski | Date: 4-12-17 Time: 9:00A | EMT USE ONLY Client Code: | ☐ SAMPLE RECEIVED ON ICE |
|---|---|---|---|---|---|
| Relinquished By: Ted Zielinski | Date: 4-12-17 Time: 12 30p | Received By: | Date: - - Time: : | EMT Project I.D. | ☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt) |
| Relinquished By: | Date: - - Time: : | Received For Lab By: KDun | Date: 4-12-17 Time: 12 :30 | Jar Lot No. | EMT SAMPLE RETURN POLICY ON BACK |

**SPECIAL INSTRUCTIONS:**

Blue 5.4°C

EMT-FORM-GEN-028

eurofins | Eaton Analytical

# Eurofins Eaton Analytical
## Run Log
Run ID: **228069** Method: **218.6**

| Type | Sample Id | Sample Site | Matrix | Instrument ID | Analysis Date | Calibration File |
|---|---|---|---|---|---|---|
| QCS | 3672621 | | RW | DP | 04/12/2017 12:58 | |
| IPC | 3672623 | | RW | DP | 04/12/2017 13:24 | |
| LRB | 3672624 | | RW | DP | 04/12/2017 13:37 | |
| LFB | 3672625 | | RW | DP | 04/12/2017 13:50 | |
| FS | 3672004 | Crib | SW | DP | 04/12/2017 14:03 | |
| MS | 3672611 | Crib | SW | DP | 04/12/2017 14:16 | |
| MSD | 3672612 | Crib | SW | DP | 04/12/2017 14:29 | |
| FS | 3672005 | Crib | SW | DP | 04/12/2017 14:42 | |
| FS | 3672006 | Crib | SW | DP | 04/12/2017 14:55 | |
| FS | 3672007 | Crib | SW | DP | 04/12/2017 15:08 | |
| FD | 3672008 | Crib | SW | DP | 04/12/2017 15:21 | |
| FS | 3672009 | Crib | SW | DP | 04/12/2017 15:34 | |
| FS | 3672010 | Crib | SW | DP | 04/12/2017 15:47 | |
| FS | 3672011 | Crib | SW | DP | 04/12/2017 16:00 | |
| FS | 3672012 | Crib | SW | DP | 04/12/2017 16:13 | |
| FS | 3672013 | Crib | SW | DP | 04/12/2017 16:26 | |
| IPC | 3672626 | | RW | DP | 04/12/2017 16:39 | |
| CCB | 3672627 | | RW | DP | 04/12/2017 16:52 | |

# QC Summary Report

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QCS | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0472 | 1.0 | ug/L | 105 | 90 - 110 | — | — | 1.0 | — | 04/12/2017 12:58 | 3672621 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9973 | 1.0 | ug/L | 100 | 90 - 110 | — | — | 1.0 | — | 04/12/2017 13:24 | 3672623 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 13:37 | 3672624 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0008 | 1.0 | ug/L | 100 | 90 - 110 | — | — | 1.0 | — | 04/12/2017 13:50 | 3672625 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 14:03 | 3672004 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1496 | 1.1401 | ug/L | 101 | 90 - 110 | — | — | 1.0 | — | 04/12/2017 14:16 | 3672611 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1445 | 1.1401 | ug/L | 100 | 90 - 110 | 0.4 | 10 | 1.0 | — | 04/12/2017 14:29 | 3672612 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 14:42 | 3672005 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 14:55 | 3672006 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 15:08 | 3672007 |
| FD | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | 1.4 | 10 | 1.0 | — | 04/12/2017 15:21 | 3672008 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 15:34 | 3672009 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 15:47 | 3672010 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.14 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 16:00 | 3672011 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 16:13 | 3672012 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 16:26 | 3672013 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0019 | 1.0 | ug/L | 100 | 90 - 110 | — | — | 1.0 | — | 04/12/2017 16:39 | 3672626 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 16:52 | 3672627 |

eurofins | Eaton Analytical

# Eurofins Eaton Analytical
## Run Log

Run ID: **228087** Method: **218.6**

| Type | Sample Id | Sample Site | Matrix | Instrument ID | Analysis Date | Calibration File |
|---|---|---|---|---|---|---|
| QCS | 3672606 | | RW | DP | 04/12/2017 18:35 | |
| IPC | 3672608 | | RW | DP | 04/12/2017 19:01 | |
| LRB | 3672609 | | RW | DP | 04/12/2017 19:14 | |
| LFB | 3672610 | | RW | DP | 04/12/2017 19:27 | |
| FS | 3672014 | Crib | SW | DP | 04/12/2017 19:40 | |
| FS | 3672015 | Crib | SW | DP | 04/12/2017 19:53 | |
| FS | 3672016 | Crib | SW | DP | 04/12/2017 20:06 | |
| FS | 3672017 | Crib | SW | DP | 04/12/2017 20:19 | |
| FS | 3672018 | Crib | SW | DP | 04/12/2017 20:32 | |
| IPC | 3672613 | | RW | DP | 04/12/2017 22:21 | |
| CCB | 3672614 | | RW | DP | 04/12/2017 22:34 | |
| CCB | 3672719 | | RW | DP | 04/13/2017 01:37 | |
| LRB | 3672720 | | RW | DP | 04/13/2017 01:50 | |
| LFB | 3672721 | | RW | DP | 04/13/2017 02:03 | |
| CCB | 3672725 | | RW | DP | 04/13/2017 04:51 | |

# QC Summary Report

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QCS | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0596 | 1.0 | ug/L | 106 | 90 - 110 | — | — | 1.0 | — | 04/12/2017 18:35 | 3672606 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9657 | 1.0 | ug/L | 97 | 90 - 110 | — | — | 1.0 | — | 04/12/2017 19:01 | 3672608 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 19:14 | 3672609 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9982 | 1.0 | ug/L | 100 | 90 - 110 | — | — | 1.0 | — | 04/12/2017 19:27 | 3672610 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 19:40 | 3672014 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 19:53 | 3672015 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 20:06 | 3672016 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 20:19 | 3672017 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 20:32 | 3672018 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0090 | 1.0 | ug/L | 101 | 90 - 110 | — | — | 1.0 | — | 04/12/2017 22:21 | 3672613 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 22:34 | 3672614 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 01:37 | 3672719 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 01:50 | 3672720 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0593 | 1.0 | ug/L | 106 | 90 - 110 | — | — | 1.0 | — | 04/13/2017 02:03 | 3672721 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 04:51 | 3672725 |

## Sample Type Key

| Type (Abbr.) | Sample Type | Type (Abbr.) | Sample Type |
|---|---|---|---|
| CCB | Continuing Calibration Blank | | |
| FD | Field Duplicate | | |
| FS | Field Sample | | |
| IPC | Instrument Performance Check | | |
| LFB | Laboratory Fortified Blank | | |
| LRB | Laboratory Reagent Blank | | |
| MS | Matrix Spike | | |
| MSD | Matrix Spike Duplicate | | |
| QCS | Quality Control Sample | | |

END OF REPORT

eurofins | Eaton Analytical

# 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.*

eurofins | Eaton Analytical

## STATE CERTIFICATION LIST

| State | Certification | State | Certification |
|---|---|---|---|
| Alabama | 40700 | Montana | CERT0026 |
| Alaska | IN00035 | Nebraska | E87775 |
| Arizona | AZ0432 | Nevada | IN00035 |
| Arkansas | IN00035 | New Hampshire* | 2124 |
| California | 2920 | New Mexico | IN00035 |
| Colorado | IN035 | New Jersey* | IN598 |
| Colorado Radiochemistry | IN035 | New York* | 11398 |
| Connecticut | PH-0132 | North Carolina | 18700 |
| Delaware | IN035 | North Dakota | R-035 |
| Florida* | E87775 | Ohio | 87775 |
| Georgia | 929 | Oklahoma | D9508 |
| Hawaii | IN035 | Oregon (Primary AB)* | 4074-001 |
| Idaho | IN00035/E87775 | Pennsylvania* | 68-00466 |
| Illinois* | 200001 | Puerto Rico | IN00035 |
| Illinois Microbiology | 200001 | 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* | LA160002 | 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 |
| Missouri | 880 | | |

*NELAP/TNI Recognized Accreditation Bodies

Revision date: 04/14/2016

eurofins | Eaton Analytical

## LABORATORY CASE NARRATIVE

Client: Environmental Monitoring Technologies Report #: 386622CN

All method QC was within acceptance limits.

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

| | | |
|---|---|---|
| [illegible] | C.S. Manager | 04/14/2017 |
| Authorized Signature | Title | Date |

eurofins | Eaton Analytical

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

# Laboratory Report

Client: Environmental Monitoring Technologies

Attn: Eric Jensen
8100 North Austin Avenue
Morton Grove, IL 60053

Report: 386622
Priority: Weekend or Holiday
Status: Final
PWS ID: Not Supplied

**Sample Information**

| EEA ID # | Client ID | Method | Collected Date / Time | Collected By: | Received Date / Time |
|---|---|---|---|---|---|
| 3673602 | Crib | 218.6 | 04/12/17 09:00 | Client | 04/13/17 15:35 |
| 3673603 | Crib | 218.6 | 04/12/17 10:00 | Client | 04/13/17 15:35 |
| 3673604 | Crib | 218.6 | 04/12/17 12:00 | Client | 04/13/17 15:35 |
| 3673605 | Crib | 218.6 | 04/12/17 14:00 | Client | 04/13/17 15:35 |
| 3673606 | Crib | 218.6 | 04/12/17 16:00 | Client | 04/13/17 15:35 |
| 3673607 | Crib | 218.6 | 04/12/17 18:00 | Client | 04/13/17 15:35 |
| 3673608 | Crib | 218.6 | 04/12/17 20:00 | Client | 04/13/17 15:35 |
| 3673609 | Crib | 218.6 | 04/12/17 22:00 | Client | 04/13/17 15:35 |
| 3673610 | Crib | 218.6 | 04/13/17 00:00 | Client | 04/13/17 15:35 |
| 3673611 | Crib | 218.6 | 04/13/17 02:00 | Client | 04/13/17 15:35 |

**Report Summary**

Note: Sample container was provided by the client.

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 Nathan Trowbridge at (574) 233-4777.

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

Authorized Signature | Title | 04/14/2017 Date

Client Name: Environmental Monitoring Technologies
Report #: 386622

Client Name: Environmental Monitoring Technologies

Report #: 386622

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/13/17 18:07 | 3673602 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/13/17 18:20 | 3673603 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/13/17 18:33 | 3673604 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/13/17 18:46 | 3673605 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/13/17 18:59 | 3673606 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/13/17 19:12 | 3673607 |

Client Name: Environmental Monitoring Technologies

Report #: 386622

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/13/17 19:25 | 3673608 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/13/17 19:38 | 3673609 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/13/17 19:51 | 3673610 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/13/17 20:04 | 3673611 |

† 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: | * | ^ | \| |

## 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 al6iquot 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.

317954 ~~317848~~ SS 4-13-17

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

## Chain of Custody Record

TURNAROUND TIME:
☒ RUSH
____ day turnaround
☐ ROUTINE

386622

Due Date: ___-___-___ COC #: 21911

Company: Chicago Department of Water Management
Address: 1000 E. Ohio Street
Chicago IL 60611

Phone #: (312) 744-7733 Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Alan Stark 312-617-4233
Project ID / Location: SWPP Crib Cr-6r Survey

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other Surface Water
3. Soil 6. Groundwater

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

Preservative:
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other Buffer
3. $HNO_3$ 6. MeOH

Analyses: Hexavalent Cr-6r

EMT USE ONLY
EMT WORKORDER #____

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Cr-6r | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crib 3673, 602 | 8 | 100mL | P | 1 | DB | 4-12-17 | 0900 | | | 8 | | ✓ | pH 8.7-9.0 SS |
| Crib 603 | 8 | 100mL | P | 1 | DB | 4-12-17 | 1000 | | | 8 | | ✓ | |
| Crib 604 | 8 | 100mL | P | 1 | DB | 4-12-17 | 1200 | | | 8 | | ✓ | |
| Crib 605 | 8 | 100mL | P | 1 | DB | 4-12-17 | 1400 | | | 8 | | ✓ | |
| Crib 606 | 8 | 100mL | P | 1 | CK | 4-12-17 | 1600 | | | 8 | | ✓ | |
| Crib 607 | 8 | 100mL | P | 1 | CK | 4-12-17 | 1800 | | | 8 | | ✓ | |
| Crib 608 | 8 | 100mL | P | 1 | CK | 4-12-17 | 2000 | | | 8 | | ✓ | |
| Crib 609 | 8 | 100mL | P | 1 | CK | 4-12-17 | 2200 | | | 8 | | ✓ | |
| Crib 610 | 8 | 100mL | P | 1 | AB | 4-13-17 | 0000 | | | 8 | | ✓ | |
| Crib 611 | 8 | 100mL | P | 1 | AB | 4-13-17 | 0200 | | | 8 | | ✓ | |

RUSH

| Relinquished By: | Date: 4-13-17 Time: 11:25 | Received By: | Date: 4-13-17 Time: 11:25A | EMT USE ONLY Client Code: |
|---|---|---|---|---|
| Relinquished By: | Date: 4-13-17 Time: 3:35P | Received By: | Date: - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: | Date: 4-13-17 Time: 15:35 | Jar Lot No. |

☒ SAMPLE RECEIVED ON ICE
☒ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)
3.6°C

EMT SAMPLE RETURN POLICY ON BACK

**SPECIAL INSTRUCTIONS:** Drive Samples to Eurofins Lab for Analysis

EMT-FORM-GEN-028

Client Provided Sample Container

eurofins | Eaton Analytical

# Eurofins Eaton Analytical
## Run Log

Run ID: **228131** Method: **218.6**

| Type | Sample Id | Sample Site | Matrix | Instrument ID | Analysis Date | Calibration File |
|---|---|---|---|---|---|---|
| QCS | 3673897 | | RW | DP | 04/13/2017 17:02 | |
| IPC | 3673899 | | RW | DP | 04/13/2017 17:28 | |
| LRB | 3673900 | | RW | DP | 04/13/2017 17:41 | |
| LFB | 3673901 | | RW | DP | 04/13/2017 17:54 | |
| FS | 3673602 | Crib | SW | DP | 04/13/2017 18:07 | |
| FS | 3673603 | Crib | SW | DP | 04/13/2017 18:20 | |
| FS | 3673604 | Crib | SW | DP | 04/13/2017 18:33 | |
| FS | 3673605 | Crib | SW | DP | 04/13/2017 18:46 | |
| FS | 3673606 | Crib | SW | DP | 04/13/2017 18:59 | |
| FS | 3673607 | Crib | SW | DP | 04/13/2017 19:12 | |
| FS | 3673608 | Crib | SW | DP | 04/13/2017 19:25 | |
| FS | 3673609 | Crib | SW | DP | 04/13/2017 19:38 | |
| FS | 3673610 | Crib | SW | DP | 04/13/2017 19:51 | |
| FS | 3673611 | Crib | SW | DP | 04/13/2017 20:04 | |
| MS | 3673902 | Crib | SW | DP | 04/13/2017 20:17 | |
| MSD | 3673903 | Crib | SW | DP | 04/13/2017 20:30 | |
| IPC | 3673904 | | RW | DP | 04/13/2017 20:43 | |
| CCB | 3673905 | | RW | DP | 04/13/2017 20:56 | |

# QC Summary Report

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QCS | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0178 | 1.0 | ug/L | 102 | 90 - 110 | — | — | 1.0 | — | 04/13/2017 17:02 | 3673897 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9659 | 1.0 | ug/L | 97 | 90 - 110 | — | — | 1.0 | — | 04/13/2017 17:28 | 3673899 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 17:41 | 3673900 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9915 | 1.0 | ug/L | 99 | 90 - 110 | — | — | 1.0 | — | 04/13/2017 17:54 | 3673901 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 18:07 | 3673602 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 18:20 | 3673603 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 18:33 | 3673604 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 18:46 | 3673605 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 18:59 | 3673606 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 19:12 | 3673607 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 19:25 | 3673608 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 19:38 | 3673609 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 19:51 | 3673610 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 20:04 | 3673611 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1207 | 1.148699 | ug/L | 97 | 90 - 110 | — | — | 1.0 | — | 04/13/2017 20:17 | 3673902 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1215 | 1.148699 | ug/L | 97 | 90 - 110 | 0.1 | 10 | 1.0 | — | 04/13/2017 20:30 | 3673903 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9861 | 1.0 | ug/L | 99 | 90 - 110 | — | — | 1.0 | — | 04/13/2017 20:43 | 3673904 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 20:56 | 3673905 |

## Sample Type Key

| Type (Abbr.) | Sample Type | Type (Abbr.) | Sample Type |
|---|---|---|---|
| CCB | Continuing Calibration Blank | | |
| FS | Field Sample | | |
| IPC | Instrument Performance Check | | |
| LFB | Laboratory Fortified Blank | | |
| LRB | Laboratory Reagent Blank | | |
| MS | Matrix Spike | | |
| MSD | Matrix Spike Duplicate | | |
| QCS | Quality Control Sample | | |

END OF REPORT

eurofins | Eaton Analytical

# 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 | Montana | CERT0026 |
| Alaska | IN00035 | Nebraska | E87775 |
| Arizona | AZ0432 | Nevada | IN00035 |
| Arkansas | IN00035 | New Hampshire* | 2124 |
| California | 2920 | New Mexico | IN00035 |
| Colorado | IN035 | New Jersey* | IN598 |
| Colorado Radiochemistry | IN035 | New York* | 11398 |
| Connecticut | PH-0132 | North Carolina | 18700 |
| Delaware | IN035 | North Dakota | R-035 |
| Florida* | E87775 | Ohio | 87775 |
| Georgia | 929 | Oklahoma | D9508 |
| Hawaii | IN035 | Oregon (Primary AB)* | 4074-001 |
| Idaho | IN00035/E87775 | Pennsylvania* | 68-00466 |
| Illinois* | 200001 | Puerto Rico | IN00035 |
| Illinois Microbiology | 200001 | 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* | LA160002 | 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 |
| Missouri | 880 | | |

*NELAP/TNI Recognized Accreditation Bodies

Revision date: 04/14/2016

eurofins | Eaton Analytical

## LABORATORY CASE NARRATIVE

Client: Environmental Monitoring Technologies Report #: 386504CN

All method QC was within acceptance limits.

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

04/14/2017

Authorized Signature Title Date

Page 1 of 1

eurofins | Eaton Analytical

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

# Laboratory Report

| | | | |
|---|---|---|---|
| Client: | Environmental Monitoring Technologies | Report: | 386504 |
| | | Priority: | Weekend or Holiday |
| Attn: | Eric Jensen<br>8100 North Austin Avenue<br>Morton Grove, IL 60053 | Status: | Final |
| | | PWS ID: | Not Supplied |

**Sample Information**

| EEA ID # | Client ID | Method | Collected Date / Time | Collected By: | Received Date / Time |
|---|---|---|---|---|---|
| 3672674 | 1S Q#2745 | 218.6 | 04/12/17 09:54 | Client | 04/12/17 19:45 |
| 3672675 | 1SD (DIP) Q#2746 | 218.6 | 04/12/17 09:56 | Client | 04/12/17 19:45 |
| 3672676 | 2S Q#2747 | 218.6 | 04/12/17 10:28 | Client | 04/12/17 19:45 |
| 3672677 | 3S Q#2748 | 218.6 | 04/12/17 10:51 | Client | 04/12/17 19:45 |
| 3672678 | 4S Q#2749 | 218.6 | 04/12/17 11:14 | Client | 04/12/17 19:45 |
| 3672679 | 1GD Q#2750 | 218.6 | 04/12/17 11:41 | Client | 04/12/17 19:45 |
| 3672680 | 1G Q#2751 | 218.6 | 04/12/17 11:42 | Client | 04/12/17 19:45 |
| 3672681 | 2G Q#2752 | 218.6 | 04/12/17 11:56 | Client | 04/12/17 19:45 |
| 3672682 | 3G Q#2753 | 218.6 | 04/12/17 12:04 | Client | 04/12/17 19:45 |
| 3672683 | 4G Q#2754 | 218.6 | 04/12/17 12:13 | Client | 04/12/17 19:45 |
| 3672684 | 5G Q#2755 | 218.6 | 04/12/17 12:23 | Client | 04/12/17 19:45 |
| 3672685 | 6G Q#2756 | 218.6 | 04/12/17 12:35 | Client | 04/12/17 19:45 |
| 3672686 | 7G Q#2757 | 218.6 | 04/12/17 12:43 | Client | 04/12/17 19:45 |
| 3672687 | 8G Q#2758 | 218.6 | 04/12/17 12:52 | Client | 04/12/17 19:45 |
| 3672688 | 9G Q#2759 | 218.6 | 04/12/17 12:59 | Client | 04/12/17 19:45 |
| 3672689 | 10G Q#2760 | 218.6 | 04/12/17 13:07 | Client | 04/12/17 19:45 |
| 3672690 | 11G Q#2761 | 218.6 | 04/12/17 13:12 | Client | 04/12/17 19:45 |
| 3672691 | 12G Q#2762 | 218.6 | 04/12/17 13:18 | Client | 04/12/17 19:45 |
| 3672692 | 12GD Q#2763 | 218.6 | 04/12/17 13:19 | Client | 04/12/17 19:45 |

**Report Summary**

Note: Sample containers were provided by the client.

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 Nathan Trowbridge at (574) 233-4777.

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

Authorized Signature Title Date 04/14/2017

Client Name: Environmental Monitoring Technologies

Report #: 386504

Sampling Point: 1S Q#2745

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.18** | ug/L | --- | 04/12/17 22:47 | 3672674 |

Sampling Point: 1SD (DIP) Q#2746

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/12/17 23:26 | 3672675 |

Sampling Point: 2S Q#2747

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.19** | ug/L | --- | 04/12/17 23:39 | 3672676 |

Sampling Point: 3S Q#2748

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.18** | ug/L | --- | 04/12/17 23:52 | 3672677 |

Sampling Point: 4S Q#2749

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/13/17 00:06 | 3672678 |

Sampling Point: 1GD Q#2750

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **2.0** | ug/L | --- | 04/13/17 00:19 | 3672679 |

Client Name: Environmental Monitoring Technologies

Report #: 386504

Sampling Point: 1G Q#2751

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **1.6** | ug/L | --- | 04/13/17 00:32 | 3672680 |

Sampling Point: 2G Q#2752

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/13/17 00:45 | 3672681 |

Sampling Point: 3G Q#2753

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/13/17 00:58 | 3672682 |

Sampling Point: 4G Q#2754

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/13/17 01:11 | 3672683 |

Sampling Point: 5G Q#2755

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/13/17 02:16 | 3672684 |

Sampling Point: 6G Q#2756

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/13/17 02:55 | 3672685 |

Client Name: Environmental Monitoring Technologies

Report #: 386504

Sampling Point: 7G Q#2757

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/13/17 03:08 | 3672686 |

Sampling Point: 8G Q#2758

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/13/17 03:20 | 3672687 |

Sampling Point: 9G Q#2759

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.21** | ug/L | --- | 04/13/17 03:33 | 3672688 |

Sampling Point: 10G Q#2760

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/13/17 03:46 | 3672689 |

Sampling Point: 11G Q#2761

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/13/17 03:59 | 3672690 |

Sampling Point: 12G Q#2762

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/13/17 04:12 | 3672691 |

Client Name: Environmental Monitoring Technologies

Report #: 386504

Sampling Point: 12GD Q#2763

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/13/17 04:25 | 3672692 |

† 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: | * | ^ | ! |

## 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 al6iquot 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.

317848 386504

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

## Chain of Custody Record

TURNAROUND TIME:
☐ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ___-___-___ COC #: 21900

Company: Chicago Department of Water Management
Address: 1000 E Ohio St
Chicago, IL 60611

Phone #: (312) 744-7733 Fax #: (___) ___-___
P.O. #: ___ Proj. #: ___-___
Client Contact: Alan Stark (312) 617 4733
Project ID / Location: Crib Lake Michigan

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Surface Water

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

Preservative:
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH Buffer

Analyses: Hexavalent Chromium

EMT USE ONLY
EMT WORKORDER #

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Chromium | EMT USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1S Q#2745 | 8 | | P | | VS | 4/12/17 | 954 | | 9 | 8 | | ✓ | 3672674 |
| 1SD (DIP) Q#2746 | 8 | | P | | VS | 4/12/17 | 956 | | 9 | 8 | | ✓ | 675 |
| 2S Q#2747 | 8 | | P | | VS | 4/12/17 | 1028 | | 8 | 8 | | ✓ | 676 |
| 3S Q#2748 | 8 | | P | | VS | 4/12/17 | 1051 | | 8 | 8 | | ✓ | 677 |
| 4S Q#2749 | 8 | | P | | VS | 4/12/17 | 1114 | | 8 | 8 | | ✓ | 678 |
| ~~1G~~ 1GD Q#2750 | 8 | | P | | VS | 4/12/17 | 1141 | | 10 | 8 | | ✓ | 679 |
| 1G Q#2751 | 8 | | P | | VS | 4/12/17 | 1142 | | 10 | 8 | | ✓ | 680 |
| 2G Q#2752 | 8 | | P | | VS | 4/12/17 | 1156 | | 10 | 8 | | ✓ | 681 |
| 3G Q#2753 | 8 | | P | | VS | 4/12/17 | 1204 | | 10 | 8 | | ✓ | 682 |
| 4G Q#2754 | 8 | | P | | VS | 4/12/17 | 1213 | | 10 | 8 | | ✓ | 683 |

| Relinquished By: | Date: 4-12-17 Time: 7:45 | Received By: | Date: - - Time: : | EMT USE ONLY Client Code: | ☐ SAMPLE RECEIVED ON ICE |
|---|---|---|---|---|---|
| Relinquished By: | Date: - - Time: : | Received By: | Date: - - Time: : | EMT Project I.D. | ☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt) |
| Relinquished By: | Date: - - Time: : | Received For Lab By: | Date: 4-12-17 Time: 7:45 | Jar Lot No. | EMT SAMPLE RETURN POLICY ON BACK |

**SPECIAL INSTRUCTIONS:**

Fresh Draw

Client Provided Sample Container

EMT-FORM-GEN-028

**ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.**

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

# Chain of Custody Record

TURNAROUND TIME:
☐ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ___-___-___ COC #: 21901

Company: Chicago Department of Water Management
Address: 1000 E Ohio
Chicago, IL 60611

Phone #: (____) _____-_____ Fax #: (____) _____-_____
P.O. #: _____ Proj. #: _____-_____
Client Contact: Alan Stark 312 617 4233
Project ID / Location: Cr6 + Lake Michigan

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Surface water

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag _____

Preservative:
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH Buffer

Analyses: Hexavalent chromium

EMT USE ONLY

EMT WORKORDER #_____

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent chromium | EMT WORKORDER # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5G Q#2755 | 8 | | 8 P | | VS | 4/12/17 | 1223 | | 10 | 8 | | ✓ | 36723684 |
| 6G Q#2756 | 8 | | 8 P | | VS | 4/12/17 | 1235 | | 10 | 8 | | ✓ | 685 |
| 7G Q#2757 | 8 | | 8 P | | VS | 4/12/17 | 1243 | | 9 | 8 | | ✓ | 686 |
| 8G Q#2758 | 8 | | 8 P | | VS | 4/12/17 | 1252 | | 9 | 8 | | ✓ | 687 |
| 9G Q#2759 | 8 | | 8 P | | VS | 4/12/17 | 1259 | | 9 | 8 | | ✓ | 688 |
| 10G Q#2760 | 8 | | 8 P | | VS | 4/12/17 | 1307 | | 9 | 8 | | ✓ | 689 |
| 11G Q#2761 | 8 | | 8 P | | VS | 4/12/17 | 1312 | | 8 | 8 | | ✓ | 690 |
| 12G Q#2762 | 8 | | 8 P | | VS | 4/12/17 | 1318 | | 8 | 8 | | ✓ | 691 |
| 12GD Q#2763 | 8 | | 8 P | | VS | 4/12/17 | 1319 | | 8 | 8 | | ✓ | 692 |

| | | | | |
|---|---|---|---|---|
| Relinquished By: | Date: 4-12-17 Time: 7:45 | Received By: | Date: - - Time: : | EMT USE ONLY Client Code: |
| Relinquished By: | Date: - - Time: : | Received By: | Date: - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: | Date: 4-12-17 Time: 7:45 | Jar Lot No. |

☐ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)

EMT SAMPLE RETURN POLICY ON BACK

**SPECIAL INSTRUCTIONS:** Fresh Draw

Client Provided Sample Container

EMT-FORM-GEN-028

eurofins | Eaton Analytical

# Eurofins Eaton Analytical
## Run Log
Run ID: **228087** Method: **218.6**

| Type | Sample Id | Sample Site | Matrix | Instrument ID | Analysis Date | Calibration File |
|---|---|---|---|---|---|---|
| QCS | 3672606 | | RW | DP | 04/12/2017 18:35 | |
| LRB | 3672609 | | RW | DP | 04/12/2017 19:14 | |
| LFB | 3672610 | | RW | DP | 04/12/2017 19:27 | |
| IPC | 3672613 | | RW | DP | 04/12/2017 22:21 | |
| CCB | 3672614 | | RW | DP | 04/12/2017 22:34 | |
| FS | 3672674 | 1S Q#2745 | SW | DP | 04/12/2017 22:47 | |
| MS | 3672716 | 1S Q#2745 | SW | DP | 04/12/2017 23:00 | |
| MSD | 3672717 | 1S Q#2745 | SW | DP | 04/12/2017 23:13 | |
| FS | 3672675 | 1SD (DIP) Q#2746 | SW | DP | 04/12/2017 23:26 | |
| FS | 3672676 | 2S Q#2747 | SW | DP | 04/12/2017 23:39 | |
| FS | 3672677 | 3S Q#2748 | SW | DP | 04/12/2017 23:52 | |
| FS | 3672678 | 4S Q#2749 | SW | DP | 04/13/2017 00:06 | |
| FS | 3672679 | 1GD Q#2750 | SW | DP | 04/13/2017 00:19 | |
| FS | 3672680 | 1G Q#2751 | SW | DP | 04/13/2017 00:32 | |
| FS | 3672681 | 2G Q#2752 | SW | DP | 04/13/2017 00:45 | |
| FS | 3672682 | 3G Q#2753 | SW | DP | 04/13/2017 00:58 | |
| FS | 3672683 | 4G Q#2754 | SW | DP | 04/13/2017 01:11 | |
| IPC | 3672718 | | RW | DP | 04/13/2017 01:24 | |
| CCB | 3672719 | | RW | DP | 04/13/2017 01:37 | |
| LRB | 3672720 | | RW | DP | 04/13/2017 01:50 | |
| LFB | 3672721 | | RW | DP | 04/13/2017 02:03 | |
| FS | 3672684 | 5G Q#2755 | SW | DP | 04/13/2017 02:16 | |
| MS | 3672722 | 5G Q#2755 | SW | DP | 04/13/2017 02:29 | |
| MSD | 3672723 | 5G Q#2755 | SW | DP | 04/13/2017 02:42 | |
| FS | 3672685 | 6G Q#2756 | SW | DP | 04/13/2017 02:55 | |
| FS | 3672686 | 7G Q#2757 | SW | DP | 04/13/2017 03:08 | |
| FS | 3672687 | 8G Q#2758 | SW | DP | 04/13/2017 03:20 | |
| FS | 3672688 | 9G Q#2759 | SW | DP | 04/13/2017 03:33 | |
| FS | 3672689 | 10G Q#2760 | SW | DP | 04/13/2017 03:46 | |
| FS | 3672690 | 11G Q#2761 | SW | DP | 04/13/2017 03:59 | |
| FS | 3672691 | 12G Q#2762 | SW | DP | 04/13/2017 04:12 | |
| FS | 3672692 | 12GD Q#2763 | SW | DP | 04/13/2017 04:25 | |
| IPC | 3672724 | | RW | DP | 04/13/2017 04:38 | |

| | | | | |
|---|---|---|---|---|
| CCB | 3672725 | RW | DP | 04/13/2017 04:51 |

# QC Summary Report

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QCS | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0596 | 1.0 | ug/L | 106 | 90 - 110 | — | — | 1.0 | — | 04/12/2017 18:35 | 3672606 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 19:14 | 3672609 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9982 | 1.0 | ug/L | 100 | 90 - 110 | — | — | 1.0 | — | 04/12/2017 19:27 | 3672610 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0090 | 1.0 | ug/L | 101 | 90 - 110 | — | — | 1.0 | — | 04/12/2017 22:21 | 3672613 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 22:34 | 3672614 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1S Q#2745 | | 0.18 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 22:47 | 3672674 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | 1S Q#2745 | | 1.1716 | 1.179799 | ug/L | 99 | 90 - 110 | — | — | 1.0 | — | 04/12/2017 23:00 | 3672716 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | 1S Q#2745 | | 1.1681 | 1.179799 | ug/L | 99 | 90 - 110 | 0.3 | 10 | 1.0 | — | 04/12/2017 23:13 | 3672717 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1SD (DIP) Q#2746 | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 23:26 | 3672675 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 2S Q#2747 | | 0.19 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 23:39 | 3672676 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 3S Q#2748 | | 0.18 | | ug/L | — | — | — | — | 1.0 | — | 04/12/2017 23:52 | 3672677 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 4S Q#2749 | | 0.17 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 00:06 | 3672678 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1GD Q#2750 | | 2.0 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 00:19 | 3672679 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1G Q#2751 | | 1.6 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 00:32 | 3672680 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 2G Q#2752 | | 0.17 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 00:45 | 3672681 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 3G Q#2753 | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 00:58 | 3672682 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 4G Q#2754 | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 01:11 | 3672683 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0572 | 1.0 | ug/L | 106 | 90 - 110 | — | — | 1.0 | — | 04/13/2017 01:24 | 3672718 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 01:37 | 3672719 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 01:50 | 3672720 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0593 | 1.0 | ug/L | 106 | 90 - 110 | — | — | 1.0 | — | 04/13/2017 02:03 | 3672721 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 5G Q#2755 | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 02:16 | 3672684 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | 5G Q#2755 | | 1.1900 | 1.1607 | ug/L | 103 | 90 - 110 | — | — | 1.0 | — | 04/13/2017 02:29 | 3672722 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | 5G Q#2755 | | 1.1882 | 1.1607 | ug/L | 103 | 90 - 110 | 0.2 | 10 | 1.0 | — | 04/13/2017 02:42 | 3672723 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 6G Q#2756 | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 02:55 | 3672685 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 7G Q#2757 | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 03:08 | 3672686 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 8G Q#2758 | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 03:20 | 3672687 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 9G Q#2759 | | 0.21 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 03:33 | 3672688 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 10G Q#2760 | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 03:46 | 3672689 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 11G Q#2761 | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 03:59 | 3672690 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 12G Q#2762 | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 04:12 | 3672691 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 12GD Q#2763 | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 04:25 | 3672692 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0518 | 1.0 | ug/L | 105 | 90 - 110 | — | — | 1.0 | — | 04/13/2017 04:38 | 3672724 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 04:51 | 3672725 |

## Sample Type Key

| Type (Abbr.) | Sample Type | Type (Abbr.) | Sample Type |
|---|---|---|---|
| CCB | Continuing Calibration Blank | | |
| FS | Field Sample | | |
| IPC | Instrument Performance Check | | |
| LFB | Laboratory Fortified Blank | | |
| LRB | Laboratory Reagent Blank | | |
| MS | Matrix Spike | | |
| MSD | Matrix Spike Duplicate | | |
| QCS | Quality Control Sample | | |

END OF REPORT

eurofins | Eaton Analytical

# 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.*

eurofins | Eaton Analytical

# STATE CERTIFICATION LIST

| State | Certification | State | Certification |
|---|---|---|---|
| Alabama | 40700 | Montana | CERT0026 |
| Alaska | IN00035 | Nebraska | E87775 |
| Arizona | AZ0432 | Nevada | IN00035 |
| Arkansas | IN00035 | New Hampshire* | 2124 |
| California | 2920 | New Mexico | IN00035 |
| Colorado | IN035 | New Jersey* | IN598 |
| Colorado Radiochemistry | IN035 | New York* | 11398 |
| Connecticut | PH-0132 | North Carolina | 18700 |
| Delaware | IN035 | North Dakota | R-035 |
| Florida* | E87775 | Ohio | 87775 |
| Georgia | 929 | Oklahoma | D9508 |
| Hawaii | IN035 | Oregon (Primary AB)* | 4074-001 |
| Idaho | IN00035/E87775 | Pennsylvania* | 68-00466 |
| Illinois* | 200001 | Puerto Rico | IN00035 |
| Illinois Microbiology | 200001 | 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* | LA160002 | 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 |
| Missouri | 880 | | |

*NELAP/TNI Recognized Accreditation Bodies

Revision date: 04/14/2016

eurofins | Eaton Analytical

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

# Laboratory Report

Client: Environmental Monitoring Technologies

Attn: Eric Jensen
8100 North Austin Avenue
Morton Grove, IL 60053

Report: 386740
Priority: Weekend or Holiday
Status: Final
PWS ID: Not Supplied

**Sample Information**

| EEA ID # | Client ID | Method | Collected Date / Time | Collected By: | Received Date / Time |
|---|---|---|---|---|---|
| 3674524 | Crib | 218.6 | 04/13/17 04:00 | Client | 04/14/17 12:50 |
| 3674525 | Crib | 218.6 | 04/13/17 06:00 | Client | 04/14/17 12:50 |
| 3674526 | Crib | 218.6 | 04/13/17 08:00 | Client | 04/14/17 12:50 |
| 3674527 | Crib | 218.6 | 04/13/17 10:00 | Client | 04/14/17 12:50 |
| 3674528 | Crib | 218.6 | 04/13/17 12:00 | Client | 04/14/17 12:50 |
| 3674529 | Crib | 218.6 | 04/13/17 14:00 | Client | 04/14/17 12:50 |
| 3674530 | Crib | 218.6 | 04/13/17 16:00 | Client | 04/14/17 12:50 |
| 3674531 | Crib | 218.6 | 04/13/17 18:00 | Client | 04/14/17 12:50 |
| 3674532 | Crib | 218.6 | 04/13/17 20:00 | Client | 04/14/17 12:50 |
| 3674533 | Crib | 218.6 | 04/13/17 22:00 | Client | 04/14/17 12:50 |
| 3674534 | Crib | 218.6 | 04/14/17 00:00 | Client | 04/14/17 12:50 |
| 3674535 | Crib | 218.6 | 04/14/17 02:00 | Client | 04/14/17 12:50 |
| 3674536 | Crib | 218.6 | 04/14/17 04:00 | Client | 04/14/17 12:50 |
| 3674537 | Crib | 218.6 | 04/14/17 06:00 | Client | 04/14/17 12:50 |
| 3674538 | Crib | 218.6 | 04/14/17 08:00 | Client | 04/14/17 12:50 |

**Report Summary**

Note: Sample containers were provided by the client.

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 Nathan Trowbridge at (574) 233-4777.

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

Authorized Signature | Title | 04/17/2017 Date

Client Name: Environmental Monitoring Technologies
Report #: 386740

Client Name: Environmental Monitoring Technologies

Report #: 386740

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/14/17 18:34 | 3674524 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/14/17 18:47 | 3674525 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/14/17 19:00 | 3674526 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/14/17 19:13 | 3674527 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 19:26 | 3674528 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 19:39 | 3674529 |

Client Name: Environmental Monitoring Technologies

Report #: 386740

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/14/17 19:52 | 3674530 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 20:05 | 3674531 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 20:18 | 3674532 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 20:31 | 3674533 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 21:36 | 3674534 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 21:49 | 3674535 |

Client Name: Environmental Monitoring Technologies

Report #: 386740

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/14/17 22:02 | 3674536 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 22:15 | 3674537 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 22:28 | 3674538 |

† 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: | * | ^ | ! |

## 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 al6iquot 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.

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

RUSH

## Chain of Custody Record

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

TURNAROUND TIME:
☑ RUSH
____ day turnaround
☐ ROUTINE

318024
386740

Due Date: ___-___-___ COC #: 21906

Company: CHICAGO DEPARTMENT OF WATER
Address: 1000 E OHIO STREET
CHICAGO IL 60611

Phone #: (312) 744 - 7733 Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____
Client Contact: ALAN STARK 312-617-4233
Project ID / Location: SWPP CRIB CR 6+ SUPPLY

**Sample Type:**
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other Surface water
3. Soil 6. Groundwater

**Container Type:**
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

**Preservative:**
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other BUFFER
3. $HNO_3$ 6. MeOH

**Analyses**

Client Provided Sample Container

EMT USE ONLY

EMT WORKORDER #____

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Cr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crib 3674524 | 8 | 100mL | P | 1 | AB | 4-13-17 | 0400 | pH=9 | | 8 | | ✓ |
| Crib 525 | 8 | 100mL | P | 1 | AB | 4-13-17 | 0600 | | | 8 | | ✓ |
| Crib 526 | 8 | 100mL | P | 1 | CK | 4-13-17 | 0800 | | | 8 | | ✓ |
| Crib 527 | 8 | 100mL | P | 1 | CK | 4-13-17 | 1000 | | | 8 | | ✓ |
| Crib 528 | 8 | 100mL | P | 1 | CK | 4-13-17 | 1200 | | | 8 | | ✓ |
| Crib 529 | 8 | 100mL | P | 1 | CK | 4-13-17 | 1400 | | | 8 | | ✓ |
| Crib 530 | 8 | 100mL | P | 1 | LS | 4-13-17 | 1600 | | | 8 | | ✓ |
| Crib 531 | 8 | 100mL | P | 1 | LS | 4-13-17 | 1800 | | | 8 | | ✓ |
| Crib 532 | 8 | 100mL | P | 1 | LS | 4-13-17 | 2000 | | | 8 | | ✓ |
| Crib 533 | 8 | 100mL | P | 1 | LS | 4-13-17 | 2200 | | | 8 | | ✓ |

| Relinquished By: | Date: | Received By: | Date: | EMT USE ONLY |
|---|---|---|---|---|
| Chris Humphrey | 4-14-17 Time: 9:00A | Ted Zielinski | 4-14-17 Time: 9:00A | Client Code: |
| Relinquished By: Ted Zielinski | Date: 4-14-17 Time: 12:45P | Received By: | Date: - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: KDW | Date: 4-14-17 Time: ~~12:45~~ 12:50 4-14-2017 | Jar Lot No. KD |

☐ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)

EMT SAMPLE RETURN POLICY ON BACK

**SPECIAL INSTRUCTIONS:** DRIVE SAMPLES TO EUROFINS LAB FOR ANALYSIS

Blue 5.4°C

EMT-FORM-GEN-028

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

## Chain of Custody Record

TURNAROUND TIME:
☑ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ____-____-____ COC #: 21907

Company: CHICAGO DEPARTMENT OF WATER
Address: 1000 E OHIO STREET
CHICAGO IL 60611

Phone #: (312) 744-7733 Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: ALAN STARK 312-617-4233
Project ID / Location: SWDP CRIB Cr 6+ SURVEY

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Surface water

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

Preservative:
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH BUFFER

Analyses: Hexavalent Cr 6+ | Client Provided Sample Container

EMT USE ONLY

EMT WORKORDER #____

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Crib 3674534 | 8 | 100mL | P | 1 | DB | 4-14-17 | 0000 | pH=9 | | 8 | |
| Crib 535 | 8 | 100mL | P | 1 | DB | 4-14-17 | 0200 | | | 8 | |
| Crib 536 | 8 | 100mL | P | 1 | DB | 4-14-17 | 0400 | | | 8 | |
| Crib 537 | 8 | 100mL | P | 1 | DB | 4-14-17 | 0600 | | | 8 | |
| Crib 538 | 8 | 100mL | P | 1 | CK | 4-14-17 | 0800 | | | 8 | |

| Relinquished By: | Date: | Received By: | Date: | EMT USE ONLY |
|---|---|---|---|---|
| [signature] | 4-14-17 Time: 9:00A | [signature] | 4-14-17 Time: 9:00A | Client Code: |
| Relinquished By: [signature] | Date: 4-14-17 Time: 12:50P | Received By: | Date: - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: KDuw | Date: 4-14-17 Time: 12:50 | Jar Lot No. |

☐ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)

EMT SAMPLE RETURN POLICY ON BACK

**SPECIAL INSTRUCTIONS:** Drive Samples to Eurofins Lab for Analysis

Blue 5.4°C

EMT-FORM-GEN-028

eurofins | Eaton Analytical

# Eurofins Eaton Analytical
## Run Log
Run ID: **228162** Method: **218.6**

| Type | Sample Id | Sample Site | Matrix | Instrument ID | Analysis Date | Calibration File |
|---|---|---|---|---|---|---|
| QCS | 3674841 | | RW | DP | 04/14/2017 17:29 | |
| IPC | 3674843 | | RW | DP | 04/14/2017 17:55 | |
| LRB | 3674844 | | RW | DP | 04/14/2017 18:08 | |
| LFB | 3674845 | | RW | DP | 04/14/2017 18:21 | |
| FS | 3674524 | Crib | SW | DP | 04/14/2017 18:34 | |
| FS | 3674525 | Crib | SW | DP | 04/14/2017 18:47 | |
| FS | 3674526 | Crib | SW | DP | 04/14/2017 19:00 | |
| FS | 3674527 | Crib | SW | DP | 04/14/2017 19:13 | |
| FS | 3674528 | Crib | SW | DP | 04/14/2017 19:26 | |
| FS | 3674529 | Crib | SW | DP | 04/14/2017 19:39 | |
| FS | 3674530 | Crib | SW | DP | 04/14/2017 19:52 | |
| FS | 3674531 | Crib | SW | DP | 04/14/2017 20:05 | |
| FS | 3674532 | Crib | SW | DP | 04/14/2017 20:18 | |
| FS | 3674533 | Crib | SW | DP | 04/14/2017 20:31 | |
| MS | 3674846 | Crib | SW | DP | 04/14/2017 20:44 | |
| MSD | 3674847 | Crib | SW | DP | 04/14/2017 20:57 | |
| IPC | 3674848 | | RW | DP | 04/14/2017 21:10 | |
| CCB | 3674849 | | RW | DP | 04/14/2017 21:23 | |
| FS | 3674534 | Crib | SW | DP | 04/14/2017 21:36 | |
| FS | 3674535 | Crib | SW | DP | 04/14/2017 21:49 | |
| FS | 3674536 | Crib | SW | DP | 04/14/2017 22:02 | |
| FS | 3674537 | Crib | SW | DP | 04/14/2017 22:15 | |
| FS | 3674538 | Crib | SW | DP | 04/14/2017 22:28 | |
| MS | 3674850 | Crib | SW | DP | 04/14/2017 22:41 | |
| MSD | 3674851 | Crib | SW | DP | 04/14/2017 23:01 | |
| IPC | 3674852 | | RW | DP | 04/15/2017 00:18 | |
| CCB | 3674853 | | RW | DP | 04/15/2017 00:31 | |

# QC Summary Report

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QCS | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0192 | 1.0 | ug/L | 102 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 17:29 | 3674841 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0001 | 1.0 | ug/L | 100 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 17:55 | 3674843 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 18:08 | 3674844 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0078 | 1.0 | ug/L | 101 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 18:21 | 3674845 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 18:34 | 3674524 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 18:47 | 3674525 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 19:00 | 3674526 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 19:13 | 3674527 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 19:26 | 3674528 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 19:39 | 3674529 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 19:52 | 3674530 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 20:05 | 3674531 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 20:18 | 3674532 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 20:31 | 3674533 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1246 | 1.1511 | ug/L | 97 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 20:44 | 3674846 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1213 | 1.1511 | ug/L | 97 | 90 - 110 | 0.3 | 10 | 1.0 | — | 04/14/2017 20:57 | 3674847 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0084 | 1.0 | ug/L | 101 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 21:10 | 3674848 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 21:23 | 3674849 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 21:36 | 3674534 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 21:49 | 3674535 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 22:02 | 3674536 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 22:15 | 3674537 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 22:28 | 3674538 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1504 | 1.151999 | ug/L | 100 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 22:41 | 3674850 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1439 | 1.151999 | ug/L | 99 | 90 - 110 | 0.6 | 10 | 1.0 | — | 04/14/2017 23:01 | 3674851 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0167 | 1.0 | ug/L | 102 | 90 - 110 | — | — | 1.0 | — | 04/15/2017 00:18 | 3674852 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 00:31 | 3674853 |

## Sample Type Key

| Type (Abbr.) | Sample Type | Type (Abbr.) | Sample Type |
|---|---|---|---|
| CCB | Continuing Calibration Blank | | |
| FS | Field Sample | | |
| IPC | Instrument Performance Check | | |
| LFB | Laboratory Fortified Blank | | |
| LRB | Laboratory Reagent Blank | | |
| MS | Matrix Spike | | |
| MSD | Matrix Spike Duplicate | | |
| QCS | Quality Control Sample | | |

END OF REPORT

eurofins | Eaton Analytical

# 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.*

eurofins | Eaton Analytical

## STATE CERTIFICATION LIST

| State | Certification | State | Certification |
|---|---|---|---|
| Alabama | 40700 | Montana | CERT0026 |
| Alaska | IN00035 | Nebraska | E87775 |
| Arizona | AZ0432 | Nevada | IN00035 |
| Arkansas | IN00035 | New Hampshire* | 2124 |
| California | 2920 | New Mexico | IN00035 |
| Colorado | IN035 | New Jersey* | IN598 |
| Colorado Radiochemistry | IN035 | New York* | 11398 |
| Connecticut | PH-0132 | North Carolina | 18700 |
| Delaware | IN035 | North Dakota | R-035 |
| Florida* | E87775 | Ohio | 87775 |
| Georgia | 929 | Oklahoma | D9508 |
| Hawaii | IN035 | Oregon (Primary AB)* | 4074-001 |
| Idaho | IN00035/E87775 | Pennsylvania* | 68-00466 |
| Illinois* | 200001 | Puerto Rico | IN00035 |
| Illinois Microbiology | 200001 | 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* | LA160002 | 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 |
| Missouri | 880 | | |

*NELAP/TNI Recognized Accreditation Bodies

Revision date: 04/14/2016

eurofins | Eaton Analytical

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

# Laboratory Report

Client: Environmental Monitoring Technologies

Attn: Eric Jensen
8100 North Austin Avenue
Morton Grove, IL 60053

Report: 386663
Priority: Weekend or Holiday
Status: Final
PWS ID: Not Supplied

**Sample Information**

| EEA ID # | Client ID | Method | Collected Date / Time | Collected By: | Received Date / Time |
|---|---|---|---|---|---|
| 3673906 | 1S Q2785 | 218.6 | 04/13/17 12:38 | Client | 04/13/17 22:40 |
| 3673907 | 1SD Q2786 | 218.6 | 04/13/17 12:41 | Client | 04/13/17 22:40 |
| 3673908 | 2S Q2787 | 218.6 | 04/13/17 13:11 | Client | 04/13/17 22:40 |
| 3673909 | 3S Q2788 | 218.6 | 04/13/17 13:44 | Client | 04/13/17 22:40 |
| 3673910 | 4S Q2789 | 218.6 | 04/13/17 13:57 | Client | 04/13/17 22:40 |
| 3673911 | 4G Q2790 | 218.6 | 04/13/17 14:13 | Client | 04/13/17 22:40 |
| 3673912 | 3G Q2791 | 218.6 | 04/13/17 14:22 | Client | 04/13/17 22:40 |
| 3673913 | 2G Q2792 | 218.6 | 04/13/17 14:30 | Client | 04/13/17 22:40 |
| 3673914 | 1G Q2793 | 218.6 | 04/13/17 14:39 | Client | 04/13/17 22:40 |
| 3673915 | 1GD Q2794 | 218.6 | 04/13/17 14:40 | Client | 04/13/17 22:40 |
| 3673916 | 13GE Q2795 | 218.6 | 04/13/17 14:52 | Client | 04/13/17 22:40 |
| 3673917 | 14GE Q2796 | 218.6 | 04/13/17 15:05 | Client | 04/13/17 22:40 |
| 3673918 | 14GED Q2797 | 218.6 | 04/13/17 15:06 | Client | 04/13/17 22:40 |
| 3673919 | 15GE Q2798 | 218.6 | 04/13/17 15:11 | Client | 04/13/17 22:40 |
| 3673920 | 16GE Q2799 | 218.6 | 04/13/17 15:21 | Client | 04/13/17 22:40 |
| 3673921 | 8G Q2800 | 218.6 | 04/13/17 15:29 | Client | 04/13/17 22:40 |
| 3673922 | 7G Q2801 | 218.6 | 04/13/17 15:36 | Client | 04/13/17 22:40 |
| 3673923 | 6G Q2802 | 218.6 | 04/13/17 15:44 | Client | 04/13/17 22:40 |
| 3673924 | 5G Q2803 | 218.6 | 04/13/17 15:52 | Client | 04/13/17 22:40 |
| 3673925 | 12G Q2804 | 218.6 | 04/13/17 15:58 | Client | 04/13/17 22:40 |
| 3673926 | 12GD Q2805 | 218.6 | 04/13/17 15:59 | Client | 04/13/17 22:40 |
| 3673927 | 11G Q2806 | 218.6 | 04/13/17 16:09 | Client | 04/13/17 22:40 |
| 3673928 | 10G Q2807 | 218.6 | 04/13/17 16:17 | Client | 04/13/17 22:40 |
| 3673929 | 9G Q2808 | 218.6 | 04/13/17 16:25 | Client | 04/13/17 22:40 |
| 3673930 | 17GE Q2809 | 218.6 | 04/13/17 16:33 | Client | 04/13/17 22:40 |
| 3673931 | 18GE Q2810 | 218.6 | 04/13/17 16:42 | Client | 04/13/17 22:40 |
| 3673932 | 18GED Q2811 | 218.6 | 04/13/17 16:44 | Client | 04/13/17 22:40 |

**Report Summary**

Note: Sample containers were provided by the client.

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 Nathan Trowbridge at (574) 233-4777.

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

Authorized Signature Title 04/17/2017 Date

Client Name: Environmental Monitoring Technologies
Report #: 386663

Client Name: Environmental Monitoring Technologies

Report #: 386663

Sampling Point: 1S Q2785

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 00:01 | 3673906 |

Sampling Point: 1SD Q2786

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.14** | ug/L | --- | 04/14/17 00:14 | 3673907 |

Sampling Point: 2S Q2787

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.18** | ug/L | --- | 04/14/17 00:27 | 3673908 |

Sampling Point: 3S Q2788

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/14/17 00:40 | 3673909 |

Sampling Point: 4S Q2789

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/14/17 00:53 | 3673910 |

Sampling Point: 4G Q2790

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.22** | ug/L | --- | 04/14/17 01:06 | 3673911 |

Client Name: Environmental Monitoring Technologies

Report #: 386663

Sampling Point: 3G Q2791

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.52** | ug/L | --- | 04/14/17 01:19 | 3673912 |

Sampling Point: 2G Q2792

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.56** | ug/L | --- | 04/14/17 01:32 | 3673913 |

Sampling Point: 1G Q2793

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.60** | ug/L | --- | 04/14/17 01:45 | 3673914 |

Sampling Point: 1GD Q2794

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.62** | ug/L | --- | 04/14/17 01:58 | 3673915 |

Sampling Point: 13GE Q2795

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.64** | ug/L | --- | 04/14/17 03:03 | 3673916 |

Sampling Point: 14GE Q2796

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/14/17 03:16 | 3673917 |

Client Name: Environmental Monitoring Technologies

Report #: 386663

Sampling Point: 14GED Q2797

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.18 | ug/L | --- | 04/14/17 03:29 | 3673918 |

Sampling Point: 15GE Q2798

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.19 | ug/L | --- | 04/14/17 03:42 | 3673919 |

Sampling Point: 16GE Q2799

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.26 | ug/L | --- | 04/14/17 03:55 | 3673920 |

Sampling Point: 8G Q2800

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.69 | ug/L | --- | 04/14/17 04:08 | 3673921 |

Sampling Point: 7G Q2801

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.56 | ug/L | --- | 04/14/17 04:21 | 3673922 |

Sampling Point: 6G Q2802

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.49 | ug/L | --- | 04/14/17 04:34 | 3673923 |

Client Name: Environmental Monitoring Technologies

Report #: 386663

Sampling Point: 5G Q2803

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.42 | ug/L | --- | 04/14/17 04:47 | 3673924 |

Sampling Point: 12G Q2804

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.22 | ug/L | --- | 04/14/17 05:00 | 3673925 |

Sampling Point: 12GD Q2805

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.26 | ug/L | --- | 04/14/17 05:31 | 3673926 |

Sampling Point: 11G Q2806

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.50 | ug/L | --- | 04/14/17 06:44 | 3673927 |

Sampling Point: 10G Q2807

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.45 | ug/L | --- | 04/14/17 06:57 | 3673928 |

Sampling Point: 9G Q2808

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.43 | ug/L | --- | 04/14/17 07:10 | 3673929 |

Client Name: Environmental Monitoring Technologies

Report #: 386663

Sampling Point: 17GE Q2809

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.27** | ug/L | --- | 04/14/17 07:23 | 3673930 |

Sampling Point: 18GE Q2810

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.18** | ug/L | --- | 04/14/17 07:36 | 3673931 |

Sampling Point: 18GED Q2811

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.17** | ug/L | --- | 04/14/17 07:49 | 3673932 |

† 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: | * | ^ | \| |

## 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 al6iquot 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.

317965

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

## Chain of Custody Record

TURNAROUND TIME:
☐ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ____-____-____ COC #: 21915

Company: Chicago Department of Water Management
Address: 1000 E Ohio St
Chicago, IL 60611

Phone #: (312) 744-7733 Fax #: (____) ____-____
P.O. #: _____ Proj. #: _____
Client Contact: Alan Stack (312) 617-4233
Project ID / Location: CR Cut Lake Michigan

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Surface water

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

Preservative:
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other Buffer
3. $HNO_3$ 6. MeOH

Analyses: Hexavalent Chromium

EMT USE ONLY

EMT WORKORDER #

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Chromium | | | | | | EMT USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IS Q2785 | 8 | | P | | VS | 4-13-17 | 1238 | | 10 | 8 | | ✓ | | | | | | 36739 06 |
| ISD Q2786 | 8 | | P | | VS | 4-13-17 | 1241 | | 10 | 8 | | ✓ | | | | | | 907 |
| 2S Q2787 | 8 | | P | | VS | 4-13-17 | 1311 | | 8 | 8 | | ✓ | | | | | | 908 |
| 3S Q2788 | 8 | | P | | VS | 4-13-17 | 1314 | | 8 | 8 | | ✓ | | | | | | 909 |
| 4S Q2789 | 8 | | P | | VS | 4-13-17 | 1357 | | 8 | 8 | | ✓ | | | | | | 910 |
| 4G Q2790 | 8 | | P | | VS | 4-13-17 | 1413 | | 9 | 8 | | ✓ | | | | | | 911 |
| 3G Q2791 | 8 | | P | | VS | 4-13-17 | 1422 | | 9 | 8 | | ✓ | | | | | | 912 |
| 2G Q2792 | 8 | | P | | VS | 4-13-17 | 1430 | | 9 | 8 | | ✓ | | | | | | 913 |
| 1G Q2793 | 8 | | P | | VS | 4-13-17 | 1439 | | 9 | 8 | | ✓ | | | | | | 914 |
| 1GD Q2794 | 8 | | P | | VS | 4-13-17 | 1440 | | 9 | 8 | | ✓ | | | | | | 915 |

| Relinquished By: | Date: 4-13-17 Time: 10:40 | Received By: | Date: - - Time: : | EMT USE ONLY Client Code: | ☐ SAMPLE RECEIVED ON ICE |
|---|---|---|---|---|---|
| Relinquished By: | Date: - - Time: : | Received By: | Date: - - Time: : | EMT Project I.D. | ☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt) |
| Relinquished By: | Date: - - Time: : | Received For Lab By: | Date: 4-13-17 Time: 10:40 | Jar Lot No. | EMT SAMPLE RETURN POLICY ON BACK |

**SPECIAL INSTRUCTIONS:**

Client Provided Sample Container

EMT-FORM-GEN-028

**ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.**

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

# Chain of Custody Record

TURNAROUND TIME:
☐ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ____-____-____ COC #: 21929

Company: Chicago Department of Water Management
Address: 1000 E Ohio St
Chicago, IL 60611

Phone #: (312) 744-7733 Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Alan Stark (312) 617-4233
Project ID / Location: CC Gt Lake Michigan

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other Surface water
3. Soil 6. Groundwater

Container Type:
P - Plastic V - VOC Vial O - Other Buffer
G - Glass B - Tedlar Bag

Preservative:
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH

Analyses: Hexavalent Chromium

EMT USE ONLY

EMT WORKORDER #____

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Chromium | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13GE Q2795 | 8 | | P | | VS | 4-13-17 | 1452 | | 10 | 8 | | ✓ | | | | | | | 367 | 3916 | |
| 14GE Q2796 | 8 | | P | | VS | 4-13-17 | 1505 | | 9 | 8 | | ✓ | | | | | | | | 917 | |
| 14GED Q2797 | 8 | | P | | VS | 4-13-17 | 1506 | | 9 | 8 | | ✓ | | | | | | | | 918 | |
| 15GE Q2798 | 8 | | P | | VS | 4-13-17 | 1511 | | 9 | 8 | | ✓ | | | | | | | | 919 | |
| 16GE Q2799 | 8 | | P | | VS | 4-13-17 | 1521 | | 9 | 8 | | ✓ | | | | | | | | 920 | |
| 8G Q2800 | 8 | | P | | VS | 4-13-17 | 1529 | | 9 | 8 | | ✓ | | | | | | | | 921 | |
| 7G Q2801 | 8 | | P | | VS | 4-13-17 | 1536 | | 9 | 8 | | ✓ | | | | | | | | 922 | |
| 6G Q2802 | 8 | | P | | VS | 4-13-17 | 1544 | | 9 | 8 | | ✓ | | | | | | | | 923 | |
| 5G Q2803 | 8 | | P | | VS | 4-13-17 | 1552 | | 9 | 8 | | ✓ | | | | | | | | 924 | |
| 12G Q2804 | 8 | | P | | VS | 4-13-17 | 1558 | | 9 | 8 | | ✓ | | | | | | | | 925 | |

| Relinquished By: | Date: 4-13-17 Time: 10:40 | Received By: | Date: - - Time: : | EMT USE ONLY Client Code: | ☐ SAMPLE RECEIVED ON ICE |
|---|---|---|---|---|---|
| Relinquished By: | Date: - - Time: : | Received By: | Date: - - Time: : | EMT Project I.D. | ☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt) |
| Relinquished By: | Date: - - Time: : | Received For Lab By: | Date: 4-13-17 Time: 10:40 pm | Jar Lot No. | EMT SAMPLE RETURN POLICY ON BACK |

**SPECIAL INSTRUCTIONS:**

Client Provided Sample Container

EMT-FORM-GEN-028

**ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.**

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

# Chain of Custody Record

TURNAROUND TIME:
☐ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ____-____-____ COC #: 21928

Company: Chicago Department of Water Management
Address: 1000 E Ohio St
Chicago, IL 60611

Phone #: (312) 744-7733 Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Alan Stark (312) 617-4233
Project ID / Location: Cr Gt Lake Michigan

**Sample Type:**
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other Surface Water
3. Soil 6. Groundwater

**Container Type:**
P - Plastic V - VOC Vial O - Other Buffer
G - Glass B - Tedlar Bag

**Preservative:**
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH

**Analyses**

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Chromium | | | | | | | | | EMT USE ONLY / EMT WORKORDER # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12GD Q2805 | 8 | | P | | VS | 4-13-17 | 1559 | | 9 | 8 | | ✓ | | | | | | 3673926 | | | |
| 11G Q2806 | 8 | | P | | VS | 4-13-17 | 1609 | | 9 | 8 | | ✓ | | | | | | | | 927 | |
| 10G Q2807 | 8 | | P | | VS | 4-13-17 | 1617 | | 9 | 8 | | ✓ | | | | | | | | 928 | |
| 9G Q2808 | 8 | | P | | VS | 4-13-17 | 1625 | | 9 | 8 | | ✓ | | | | | | | | 929 | |
| 17GE Q2809 | 8 | | P | | VS | 4-13-17 | 1633 | | 9 | 8 | | ✓ | | | | | | | | 930 | |
| 18GE Q2810 | 8 | | P | | VS | 4-13-17 | 1642 | | 9 | 8 | | ✓ | | | | | | | | 931 | |
| 18GED Q2811 | 8 | | P | | VS | 4-13-17 | 1644 | | 9 | 8 | | ✓ | | | | | | | | 932 | |
| | | | | | | | | | | | | ✓ | | | | | | | | | |
| | | | | | | | | | | | | ✓ | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |

| Relinquished By: | Date: 4-13-17 Time: 10:40 | Received By: | Date: - - Time: : | EMT USE ONLY Client Code: | ☐ SAMPLE RECEIVED ON ICE |
|---|---|---|---|---|---|
| Relinquished By: | Date: - - Time: : | Received By: | Date: - - Time: : | EMT Project I.D. | ☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt) |
| Relinquished By: | Date: - - Time: : | Received For Lab By: | Date: 4-13-17 Time: 10:40 am | Jar Lot No. | EMT SAMPLE RETURN POLICY ON BACK |

***SPECIAL INSTRUCTIONS:***

Client Provided Sample Container

EMT-FORM-GEN-028

eurofins | Eaton Analytical

# Eurofins Eaton Analytical
## Run Log

Run ID: **228136** Method: **218.6**

| Type | Sample Id | Sample Site | Matrix | Instrument ID | Analysis Date | Calibration File |
|---|---|---|---|---|---|---|
| QCS | 3673786 | | RW | DP | 04/13/2017 22:56 | |
| IPC | 3673788 | | RW | DP | 04/13/2017 23:22 | |
| LRB | 3673789 | | RW | DP | 04/13/2017 23:35 | |
| LFB | 3673790 | | RW | DP | 04/13/2017 23:48 | |
| FS | 3673906 | 1S Q2785 | SW | DP | 04/14/2017 00:01 | |
| FS | 3673907 | 1SD Q2786 | SW | DP | 04/14/2017 00:14 | |
| FS | 3673908 | 2S Q2787 | SW | DP | 04/14/2017 00:27 | |
| FS | 3673909 | 3S Q2788 | SW | DP | 04/14/2017 00:40 | |
| FS | 3673910 | 4S Q2789 | SW | DP | 04/14/2017 00:53 | |
| FS | 3673911 | 4G Q2790 | SW | DP | 04/14/2017 01:06 | |
| FS | 3673912 | 3G Q2791 | SW | DP | 04/14/2017 01:19 | |
| FS | 3673913 | 2G Q2792 | SW | DP | 04/14/2017 01:32 | |
| FS | 3673914 | 1G Q2793 | SW | DP | 04/14/2017 01:45 | |
| FS | 3673915 | 1GD Q2794 | SW | DP | 04/14/2017 01:58 | |
| MS | 3673958 | 1GD Q2794 | SW | DP | 04/14/2017 02:11 | |
| MSD | 3673959 | 1GD Q2794 | SW | DP | 04/14/2017 02:24 | |
| IPC | 3673791 | | RW | DP | 04/14/2017 02:37 | |
| CCB | 3673792 | | RW | DP | 04/14/2017 02:50 | |
| FS | 3673916 | 13GE Q2795 | SW | DP | 04/14/2017 03:03 | |
| FS | 3673917 | 14GE Q2796 | SW | DP | 04/14/2017 03:16 | |
| FS | 3673918 | 14GED Q2797 | SW | DP | 04/14/2017 03:29 | |
| FS | 3673919 | 15GE Q2798 | SW | DP | 04/14/2017 03:42 | |
| FS | 3673920 | 16GE Q2799 | SW | DP | 04/14/2017 03:55 | |
| FS | 3673921 | 8G Q2800 | SW | DP | 04/14/2017 04:08 | |
| FS | 3673922 | 7G Q2801 | SW | DP | 04/14/2017 04:21 | |
| FS | 3673923 | 6G Q2802 | SW | DP | 04/14/2017 04:34 | |
| FS | 3673924 | 5G Q2803 | SW | DP | 04/14/2017 04:47 | |
| FS | 3673925 | 12G Q2804 | SW | DP | 04/14/2017 05:00 | |
| MS | 3673960 | 12G Q2804 | SW | DP | 04/14/2017 05:13 | |
| MSD | 3673961 | 12G Q2804 | SW | DP | 04/14/2017 05:26 | |
| IPC | 3673962 | | RW | DP | 04/14/2017 05:39 | |
| CCB | 3673963 | | RW | DP | 04/14/2017 05:52 | |
| LRB | 3673964 | | RW | DP | 04/14/2017 06:05 | |

| | | | | | |
|---|---|---|---|---|---|
| LFB | 3673965 | | RW | DP | 04/14/2017 06:18 |
| FS | 3673926 | 12GD Q2805 | SW | DP | 04/14/2017 06:31 |
| FS | 3673927 | 11G Q2806 | SW | DP | 04/14/2017 06:44 |
| FS | 3673928 | 10G Q2807 | SW | DP | 04/14/2017 06:57 |
| FS | 3673929 | 9G Q2808 | SW | DP | 04/14/2017 07:10 |
| FS | 3673930 | 17GE Q2809 | SW | DP | 04/14/2017 07:23 |
| FS | 3673931 | 18GE Q2810 | SW | DP | 04/14/2017 07:36 |
| FS | 3673932 | 18GED Q2811 | SW | DP | 04/14/2017 07:49 |
| MS | 3673966 | 18GED Q2811 | SW | DP | 04/14/2017 08:02 |
| MSD | 3673967 | 18GED Q2811 | SW | DP | 04/14/2017 08:15 |
| IPC | 3673968 | | RW | DP | 04/14/2017 08:28 |
| CCB | 3673969 | | RW | DP | 04/14/2017 08:41 |

# QC Summary Report

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QCS | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0246 | 1.0 | ug/L | 102 | 90 - 110 | — | — | 1.0 | — | 04/13/2017 22:56 | 3673786 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9876 | 1.0 | ug/L | 99 | 90 - 110 | — | — | 1.0 | — | 04/13/2017 23:22 | 3673788 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/13/2017 23:35 | 3673789 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9938 | 1.0 | ug/L | 99 | 90 - 110 | — | — | 1.0 | — | 04/13/2017 23:48 | 3673790 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1S Q2785 | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 00:01 | 3673906 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1SD Q2786 | | 0.14 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 00:14 | 3673907 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 2S Q2787 | | 0.18 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 00:27 | 3673908 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 3S Q2788 | | 0.17 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 00:40 | 3673909 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 4S Q2789 | | 0.17 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 00:53 | 3673910 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 4G Q2790 | | 0.22 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 01:06 | 3673911 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 3G Q2791 | | 0.52 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 01:19 | 3673912 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 2G Q2792 | | 0.56 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 01:32 | 3673913 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1G Q2793 | | 0.60 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 01:45 | 3673914 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1GD Q2794 | | 0.62 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 01:58 | 3673915 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | 1GD Q2794 | | 1.5951 | 1.623299 | ug/L | 97 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 02:11 | 3673958 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | 1GD Q2794 | | 1.5981 | 1.623299 | ug/L | 97 | 90 - 110 | 0.2 | 10 | 1.0 | — | 04/14/2017 02:24 | 3673959 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9884 | 1.0 | ug/L | 99 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 02:37 | 3673791 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 02:50 | 3673792 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 13GE Q2795 | | 0.64 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 03:03 | 3673916 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 14GE Q2796 | | 0.17 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 03:16 | 3673917 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 14GED Q2797 | | 0.18 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 03:29 | 3673918 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 15GE Q2798 | | 0.19 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 03:42 | 3673919 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 16GE Q2799 | | 0.26 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 03:55 | 3673920 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 8G Q2800 | | 0.69 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 04:08 | 3673921 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 7G Q2801 | | 0.56 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 04:21 | 3673922 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 6G Q2802 | | 0.49 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 04:34 | 3673923 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 5G Q2803 | | 0.42 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 04:47 | 3673924 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 12G Q2804 | | 0.22 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 05:00 | 3673925 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | 12G Q2804 | | 1.2200 | 1.2156 | ug/L | 100 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 05:13 | 3673960 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | 12G Q2804 | | 1.2125 | 1.2156 | ug/L | 100 | 90 - 110 | 0.6 | 10 | 1.0 | — | 04/14/2017 05:26 | 3673961 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9940 | 1.0 | ug/L | 99 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 05:39 | 3673962 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 05:52 | 3673963 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 06:05 | 3673964 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9890 | 1.0 | ug/L | 99 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 06:18 | 3673965 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 12GD Q2805 | | 0.26 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 06:31 | 3673926 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 11G Q2806 | | 0.50 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 06:44 | 3673927 |

QC Summary Report (cont.)

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 10G Q2807 | | 0.45 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 06:57 | 3673928 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 9G Q2808 | | 0.43 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 07:10 | 3673929 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 17GE Q2809 | | 0.27 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 07:23 | 3673930 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 18GE Q2810 | | 0.18 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 07:36 | 3673931 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 18GED Q2811 | | 0.17 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 07:49 | 3673932 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | 18GED Q2811 | | 1.1881 | 1.1746 | ug/L | 101 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 08:02 | 3673966 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | 18GED Q2811 | | 1.1975 | 1.1746 | ug/L | 102 | 90 - 110 | 0.8 | 10 | 1.0 | — | 04/14/2017 08:15 | 3673967 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9871 | 1.0 | ug/L | 99 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 08:28 | 3673968 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 08:41 | 3673969 |

## Sample Type Key

| Type (Abbr.) | Sample Type | Type (Abbr.) | Sample Type |
|---|---|---|---|
| CCB | Continuing Calibration Blank | | |
| FS | Field Sample | | |
| IPC | Instrument Performance Check | | |
| LFB | Laboratory Fortified Blank | | |
| LRB | Laboratory Reagent Blank | | |
| MS | Matrix Spike | | |
| MSD | Matrix Spike Duplicate | | |
| QCS | Quality Control Sample | | |

END OF REPORT

eurofins | Eaton Analytical

# 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 | Montana | CERT0026 |
| Alaska | IN00035 | Nebraska | E87775 |
| Arizona | AZ0432 | Nevada | IN00035 |
| Arkansas | IN00035 | New Hampshire* | 2124 |
| California | 2920 | New Mexico | IN00035 |
| Colorado | IN035 | New Jersey* | IN598 |
| Colorado Radiochemistry | IN035 | New York* | 11398 |
| Connecticut | PH-0132 | North Carolina | 18700 |
| Delaware | IN035 | North Dakota | R-035 |
| Florida* | E87775 | Ohio | 87775 |
| Georgia | 929 | Oklahoma | D9508 |
| Hawaii | IN035 | Oregon (Primary AB)* | 4074-001 |
| Idaho | IN00035/E87775 | Pennsylvania* | 68-00466 |
| Illinois* | 200001 | Puerto Rico | IN00035 |
| Illinois Microbiology | 200001 | 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* | LA160002 | 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 |
| Missouri | 880 | | |

*NELAP/TNI Recognized Accreditation Bodies

Revision date: 04/14/2016

eurofins | Eaton Analytical

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

# Laboratory Report

Client: Environmental Monitoring Technologies

Attn: Eric Jensen
8100 North Austin Avenue
Morton Grove, IL 60053

Report: 386740
Priority: Weekend or Holiday
Status: Final
PWS ID: Not Supplied

**Sample Information**

| EEA ID # | Client ID | Method | Collected Date / Time | Collected By: | Received Date / Time |
|---|---|---|---|---|---|
| 3674524 | Crib | 218.6 | 04/13/17 04:00 | Client | 04/14/17 12:50 |
| 3674525 | Crib | 218.6 | 04/13/17 06:00 | Client | 04/14/17 12:50 |
| 3674526 | Crib | 218.6 | 04/13/17 08:00 | Client | 04/14/17 12:50 |
| 3674527 | Crib | 218.6 | 04/13/17 10:00 | Client | 04/14/17 12:50 |
| 3674528 | Crib | 218.6 | 04/13/17 12:00 | Client | 04/14/17 12:50 |
| 3674529 | Crib | 218.6 | 04/13/17 14:00 | Client | 04/14/17 12:50 |
| 3674530 | Crib | 218.6 | 04/13/17 16:00 | Client | 04/14/17 12:50 |
| 3674531 | Crib | 218.6 | 04/13/17 18:00 | Client | 04/14/17 12:50 |
| 3674532 | Crib | 218.6 | 04/13/17 20:00 | Client | 04/14/17 12:50 |
| 3674533 | Crib | 218.6 | 04/13/17 22:00 | Client | 04/14/17 12:50 |
| 3674534 | Crib | 218.6 | 04/14/17 00:00 | Client | 04/14/17 12:50 |
| 3674535 | Crib | 218.6 | 04/14/17 02:00 | Client | 04/14/17 12:50 |
| 3674536 | Crib | 218.6 | 04/14/17 04:00 | Client | 04/14/17 12:50 |
| 3674537 | Crib | 218.6 | 04/14/17 06:00 | Client | 04/14/17 12:50 |
| 3674538 | Crib | 218.6 | 04/14/17 08:00 | Client | 04/14/17 12:50 |

**Report Summary**

Note: Sample containers were provided by the client.

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 Nathan Trowbridge at (574) 233-4777.

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

Authorized Signature | Title | 04/17/2017 Date

Client Name: Environmental Monitoring Technologies
Report #: 386740

Client Name: Environmental Monitoring Technologies

Report #: 386740

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/14/17 18:34 | 3674524 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/14/17 18:47 | 3674525 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/14/17 19:00 | 3674526 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/14/17 19:13 | 3674527 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 19:26 | 3674528 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 19:39 | 3674529 |

Client Name: Environmental Monitoring Technologies

Report #: 386740

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/14/17 19:52 | 3674530 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 20:05 | 3674531 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 20:18 | 3674532 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 20:31 | 3674533 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 21:36 | 3674534 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 21:49 | 3674535 |

Client Name: Environmental Monitoring Technologies

Report #: 386740

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/14/17 22:02 | 3674536 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 22:15 | 3674537 |

Sampling Point: Crib

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 22:28 | 3674538 |

† 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: | * | ^ | ! |

## 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 al6iquot 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.

# ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

RUSH

## Chain of Custody Record

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

318024
386740

TURNAROUND TIME:
☑ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ____-____-____ COC #: 21906

Company: CHICAGO DEPARTMENT OF WATER
Address: 1000 E OHIO STREET
CHICAGO IL 60611

Phone #: (312) 744-7733 Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: ALAN STARK 312-617-4233
Project ID / Location: SLOPP CRIB Cr 6+ SURVEY

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other Surface water
3. Soil 6. Groundwater

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

Preservative:
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other BUFFER
3. $HNO_3$ 6. MeOH

Analyses

Client Provided Sample Container

EMT USE ONLY

EMT WORKORDER #____

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Cr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crib 3674524 | 8 | 100mL | P | 1 | AB | 4-13-17 | 0400 | pH=9 | | 8 | | ✓ |
| Crib 525 | 8 | 100mL | P | 1 | AB | 4-13-17 | 0600 | | | 8 | | ✓ |
| Crib 526 | 8 | 100mL | P | 1 | CK | 4-13-17 | 0800 | | | 8 | | ✓ |
| Crib 527 | 8 | 100mL | P | 1 | CK | 4-13-17 | 1000 | | | 8 | | ✓ |
| Crib 528 | 8 | 100mL | P | 1 | CK | 4-13-17 | 1200 | | | 8 | | ✓ |
| Crib 529 | 8 | 100mL | P | 1 | CK | 4-13-17 | 1400 | | | 8 | | ✓ |
| Crib 530 | 8 | 100mL | P | 1 | LS | 4-13-17 | 1600 | | | 8 | | ✓ |
| Crib 531 | 8 | 100mL | P | 1 | LS | 4-13-17 | 1800 | | | 8 | | ✓ |
| Crib 532 | 8 | 100mL | P | 1 | LS | 4-13-17 | 2000 | | | 8 | | ✓ |
| Crib 533 | 8 | 100mL | P | 1 | LS | 4-13-17 | 2200 | | | 8 | | ✓ |

| Relinquished By: | Date/Time | Received By: | Date/Time | EMT USE ONLY |
|---|---|---|---|---|
| Chris Kwiatkowski | Date: 4-14-17 Time: 9:00A | Ted Zielinski | Date: 4-14-17 Time: 9:00A | Client Code: |
| Ted Zielinski | Date: 4-14-17 Time: 12:45P | Received By: | Date: - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: KDm | Date: 4-14-17 Time: ~~12:45~~ 12:50 4-14-2017 | Jar Lot No. KD |

☐ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)

EMT SAMPLE RETURN POLICY ON BACK

**SPECIAL INSTRUCTIONS:** DRIVE SAMPLES TO EUROFINS LAB FOR ANALYSIS

Blue 54°C

EMT-FORM-GEN-028

**ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.**

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

# Chain of Custody Record

TURNAROUND TIME:
☑ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ___-___-___ COC #: 21907

Company: CHICAGO DEPARTMENT OF WATER
Address: 1000 E OHIO STREET
CHICAGO IL 60611

Phone #: (312) 744 - 7733 Fax #: (___) ___-___
P.O. #: Proj. #: ___-___
Client Contact: ALAN STARK 312-617-4233
Project ID / Location: SWPP CRIB Cr 6+ Survey

**Sample Type:**
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Surface water

**Container Type:**
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

**Preservative:**
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH BUFFER

**Analyses**

Client Provided Sample Container

Hexavalent Cr 6+

EMT USE ONLY

EMT WORKORDER #

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Crib 3674534 | 8 | 100mL | P | 1 | DB | 4-14-17 | 0000 | pH=9 | | 8 | |
| Crib 535 | 8 | 100mL | P | 1 | DB | 4-14-17 | 0200 | | | 8 | |
| Crib 536 | 8 | 100mL | P | 1 | DB | 4-14-17 | 0400 | | | 8 | |
| Crib 537 | 8 | 100mL | P | 1 | DB | 4-14-17 | 0600 | | | 8 | |
| Crib 538 | 8 | 100mL | P | 1 | CK | 4-14-17 | 0800 | | | 8 | |

RUSH

| Relinquished By: | Date: / Time: | Received By: | Date: / Time: | EMT USE ONLY |
|---|---|---|---|---|
| [signature] | Date: 4-14-17 Time: 9:00A | [signature] | Date: 4-14-17 Time: 9:00A | Client Code: |
| [signature] | Date: 4-14-17 Time: 12:50P | Received By: | Date: - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: KDuvo | Date: 4-14-17 Time: 12:50 | Jar Lot No. |

☐ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)

EMT SAMPLE RETURN POLICY ON BACK

**SPECIAL INSTRUCTIONS:** Drive Samples to Eurofins Lab for Analysis

Blue 5.4°C

EMT-FORM-GEN-028

eurofins | Eaton Analytical

# Eurofins Eaton Analytical
## Run Log
Run ID: **228162** Method: **218.6**

| Type | Sample Id | Sample Site | Matrix | Instrument ID | Analysis Date | Calibration File |
|---|---|---|---|---|---|---|
| QCS | 3674841 | | RW | DP | 04/14/2017 17:29 | |
| IPC | 3674843 | | RW | DP | 04/14/2017 17:55 | |
| LRB | 3674844 | | RW | DP | 04/14/2017 18:08 | |
| LFB | 3674845 | | RW | DP | 04/14/2017 18:21 | |
| FS | 3674524 | Crib | SW | DP | 04/14/2017 18:34 | |
| FS | 3674525 | Crib | SW | DP | 04/14/2017 18:47 | |
| FS | 3674526 | Crib | SW | DP | 04/14/2017 19:00 | |
| FS | 3674527 | Crib | SW | DP | 04/14/2017 19:13 | |
| FS | 3674528 | Crib | SW | DP | 04/14/2017 19:26 | |
| FS | 3674529 | Crib | SW | DP | 04/14/2017 19:39 | |
| FS | 3674530 | Crib | SW | DP | 04/14/2017 19:52 | |
| FS | 3674531 | Crib | SW | DP | 04/14/2017 20:05 | |
| FS | 3674532 | Crib | SW | DP | 04/14/2017 20:18 | |
| FS | 3674533 | Crib | SW | DP | 04/14/2017 20:31 | |
| MS | 3674846 | Crib | SW | DP | 04/14/2017 20:44 | |
| MSD | 3674847 | Crib | SW | DP | 04/14/2017 20:57 | |
| IPC | 3674848 | | RW | DP | 04/14/2017 21:10 | |
| CCB | 3674849 | | RW | DP | 04/14/2017 21:23 | |
| FS | 3674534 | Crib | SW | DP | 04/14/2017 21:36 | |
| FS | 3674535 | Crib | SW | DP | 04/14/2017 21:49 | |
| FS | 3674536 | Crib | SW | DP | 04/14/2017 22:02 | |
| FS | 3674537 | Crib | SW | DP | 04/14/2017 22:15 | |
| FS | 3674538 | Crib | SW | DP | 04/14/2017 22:28 | |
| MS | 3674850 | Crib | SW | DP | 04/14/2017 22:41 | |
| MSD | 3674851 | Crib | SW | DP | 04/14/2017 23:01 | |
| IPC | 3674852 | | RW | DP | 04/15/2017 00:18 | |
| CCB | 3674853 | | RW | DP | 04/15/2017 00:31 | |

# QC Summary Report

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QCS | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0192 | 1.0 | ug/L | 102 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 17:29 | 3674841 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0001 | 1.0 | ug/L | 100 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 17:55 | 3674843 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 18:08 | 3674844 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0078 | 1.0 | ug/L | 101 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 18:21 | 3674845 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 18:34 | 3674524 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 18:47 | 3674525 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 19:00 | 3674526 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 19:13 | 3674527 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 19:26 | 3674528 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 19:39 | 3674529 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 19:52 | 3674530 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 20:05 | 3674531 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 20:18 | 3674532 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 20:31 | 3674533 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1246 | 1.1511 | ug/L | 97 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 20:44 | 3674846 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1213 | 1.1511 | ug/L | 97 | 90 - 110 | 0.3 | 10 | 1.0 | — | 04/14/2017 20:57 | 3674847 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0084 | 1.0 | ug/L | 101 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 21:10 | 3674848 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 21:23 | 3674849 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 21:36 | 3674534 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 21:49 | 3674535 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 22:02 | 3674536 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 22:15 | 3674537 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 22:28 | 3674538 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1504 | 1.151999 | ug/L | 100 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 22:41 | 3674850 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | Crib | | 1.1439 | 1.151999 | ug/L | 99 | 90 - 110 | 0.6 | 10 | 1.0 | — | 04/14/2017 23:01 | 3674851 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0167 | 1.0 | ug/L | 102 | 90 - 110 | — | — | 1.0 | — | 04/15/2017 00:18 | 3674852 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 00:31 | 3674853 |

## Sample Type Key

| Type (Abbr.) | Sample Type | Type (Abbr.) | Sample Type |
|---|---|---|---|
| CCB | Continuing Calibration Blank | | |
| FS | Field Sample | | |
| IPC | Instrument Performance Check | | |
| LFB | Laboratory Fortified Blank | | |
| LRB | Laboratory Reagent Blank | | |
| MS | Matrix Spike | | |
| MSD | Matrix Spike Duplicate | | |
| QCS | Quality Control Sample | | |

END OF REPORT

eurofins | Eaton Analytical

# 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.*

eurofins | Eaton Analytical

## STATE CERTIFICATION LIST

| State | Certification | State | Certification |
|---|---|---|---|
| Alabama | 40700 | Montana | CERT0026 |
| Alaska | IN00035 | Nebraska | E87775 |
| Arizona | AZ0432 | Nevada | IN00035 |
| Arkansas | IN00035 | New Hampshire* | 2124 |
| California | 2920 | New Mexico | IN00035 |
| Colorado | IN035 | New Jersey* | IN598 |
| Colorado Radiochemistry | IN035 | New York* | 11398 |
| Connecticut | PH-0132 | North Carolina | 18700 |
| Delaware | IN035 | North Dakota | R-035 |
| Florida* | E87775 | Ohio | 87775 |
| Georgia | 929 | Oklahoma | D9508 |
| Hawaii | IN035 | Oregon (Primary AB)* | 4074-001 |
| Idaho | IN00035/E87775 | Pennsylvania* | 68-00466 |
| Illinois* | 200001 | Puerto Rico | IN00035 |
| Illinois Microbiology | 200001 | 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* | LA160002 | 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 |
| Missouri | 880 | | |

*NELAP/TNI Recognized Accreditation Bodies

Revision date: 04/14/2016

eurofins | Eaton Analytical

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

# Laboratory Report

Client: Environmental Monitoring Technologies

Attn: Eric Jensen
8100 North Austin Avenue
Morton Grove, IL 60053

Report: 386753
Priority: Weekend or Holiday
Status: Final
PWS ID: Not Supplied

| Sample Information | | | | | |
|---|---|---|---|---|---|
| EEA ID # | Client ID | Method | Collected Date / Time | Collected By: | Received Date / Time |
| 3674777 | 1S Q2830 | 218.6 | 04/14/17 10:48 | Client | 04/14/17 21:52 |
| 3674778 | 1SD Q2831 | 218.6 | 04/14/17 10:49 | Client | 04/14/17 21:52 |
| 3674779 | 2S Q2832 | 218.6 | 04/14/17 11:18 | Client | 04/14/17 21:52 |
| 3674780 | 3S Q2833 | 218.6 | 04/14/17 11:41 | Client | 04/14/17 21:52 |
| 3674781 | 4S Q2834 | 218.6 | 04/14/17 12:04 | Client | 04/14/17 21:52 |
| 3674782 | 19GE Q2835 | 218.6 | 04/14/17 12:28 | Client | 04/14/17 21:52 |
| 3674783 | 19GED Q2836 | 218.6 | 04/14/17 12:30 | Client | 04/14/17 21:52 |
| 3674784 | 4G Q2837 | 218.6 | 04/14/17 12:38 | Client | 04/14/17 21:52 |
| 3674785 | 3G Q2838 | 218.6 | 04/14/17 12:45 | Client | 04/14/17 21:52 |
| 3674786 | 2G Q2839 | 218.6 | 04/14/17 12:51 | Client | 04/14/17 21:52 |
| 3674787 | 1G Q#2840 | 218.6 | 04/14/17 12:59 | Client | 04/14/17 21:52 |
| 3674788 | 1GD Q#2841 | 218.6 | 04/14/17 13:00 | Client | 04/14/17 21:52 |
| 3674789 | 13GE Q#2842 | 218.6 | 04/14/17 13:09 | Client | 04/14/17 21:52 |
| 3674790 | 14GE Q#2843 | 218.6 | 04/14/17 13:19 | Client | 04/14/17 21:52 |
| 3674791 | 14GED Q#2844 | 218.6 | 04/14/17 13:20 | Client | 04/14/17 21:52 |
| 3674792 | 15GE Q#2845 | 218.6 | 04/14/17 13:25 | Client | 04/14/17 21:52 |
| 3674793 | 16GE Q#2846 | 218.6 | 04/14/17 13:34 | Client | 04/14/17 21:52 |
| 3674794 | 8G Q#2847 | 218.6 | 04/14/17 13:41 | Client | 04/14/17 21:52 |
| 3674795 | 7G Q#2848 | 218.6 | 04/14/17 13:47 | Client | 04/14/17 21:52 |
| 3674796 | 6G Q#2849 | 218.6 | 04/14/17 13:54 | Client | 04/14/17 21:52 |
| 3674797 | 5G Q2850 | 218.6 | 04/14/17 14:01 | Client | 04/14/17 21:52 |
| 3674798 | 20GE Q2851 | 218.6 | 04/14/17 14:07 | Client | 04/14/17 21:52 |
| 3674799 | 21GE Q2852 | 218.6 | 04/14/17 14:14 | Client | 04/14/17 21:52 |
| 3674800 | 12G Q2853 | 218.6 | 04/14/17 14:24 | Client | 04/14/17 21:52 |
| 3674801 | 12GD Q2854 | 218.6 | 04/14/17 14:25 | Client | 04/14/17 21:52 |
| 3674802 | 11G Q2855 | 218.6 | 04/14/17 14:33 | Client | 04/14/17 21:52 |
| 3674803 | 10G Q2856 | 218.6 | 04/14/17 14:40 | Client | 04/14/17 21:52 |
| 3674804 | 9G Q2857 | 218.6 | 04/14/17 14:48 | Client | 04/14/17 21:52 |
| 3674805 | 17GE Q2858 | 218.6 | 04/14/17 14:56 | Client | 04/14/17 21:52 |
| 3674806 | 18GE Q2859 | 218.6 | 04/14/17 15:04 | Client | 04/14/17 21:52 |
| 3674807 | 18GED Q#2860 | 218.6 | 04/14/17 15:05 | Client | 04/14/17 21:52 |

| | | | | | |
|---|---|---|---|---|---|
| 3674808 | 22GE Q#2861 | 218.6 | 04/14/17 15:24 | Client | 04/14/17 21:52 |
| 3674809 | 23GE Q#2862 | 218.6 | 04/14/17 15:29 | Client | 04/14/17 21:52 |
| 3674810 | 24GE Q#2863 | 218.6 | 04/14/17 15:34 | Client | 04/14/17 21:52 |
| 3674811 | 25GE Q#2864 | 218.6 | 04/14/17 15:38 | Client | 04/14/17 21:52 |
| 3674812 | 25GED Q#2865 | 218.6 | 04/14/17 15:39 | Client | 04/14/17 21:52 |

## Report Summary

Note: Sample containers were provided by the client.

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 Nathan Trowbridge at (574) 233-4777.

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

Authorized Signature Title 04/17/2017 Date

Client Name: Environmental Monitoring Technologies

Report #: 386753

Sampling Point: 1S Q2830

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/14/17 23:13 | 3674777 |

Sampling Point: 1SD Q2831

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/14/17 23:26 | 3674778 |

Sampling Point: 2S Q2832

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.19** | ug/L | --- | 04/14/17 23:39 | 3674779 |

Sampling Point: 3S Q2833

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.19** | ug/L | --- | 04/14/17 23:52 | 3674780 |

Sampling Point: 4S Q2834

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.20** | ug/L | --- | 04/15/17 00:05 | 3674781 |

Sampling Point: 19GE Q2835

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.62** | ug/L | --- | 04/15/17 16:54 | 3674782 |

Client Name: Environmental Monitoring Technologies

Report #: 386753

Sampling Point: 19GED Q2836

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.60** | ug/L | --- | 04/15/17 17:06 | 3674783 |

Sampling Point: 4G Q2837

PWS ID: Not Supplied.

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.45** | ug/L | --- | 04/15/17 17:19 | 3674784 |

Sampling Point: 3G Q2838

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.59** | ug/L | --- | 04/15/17 17:32 | 3674785 |

Sampling Point: 2G Q2839

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.31** | ug/L | --- | 04/15/17 17:45 | 3674786 |

Sampling Point: 1G Q#2840

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.28** | ug/L | --- | 04/15/17 17:58 | 3674787 |

Sampling Point: 1GD Q#2841

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.29** | ug/L | --- | 04/15/17 18:11 | 3674788 |

Client Name: Environmental Monitoring Technologies

Report #: 386753

Sampling Point: 13GE Q#2842

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.18** | ug/L | --- | 04/15/17 18:24 | 3674789 |

Sampling Point: 14GE Q#2843

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/15/17 18:37 | 3674790 |

Sampling Point: 14GED Q#2844

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/15/17 18:50 | 3674791 |

Sampling Point: 15GE Q#2845

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/15/17 19:55 | 3674792 |

Sampling Point: 16GE Q#2846

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.30** | ug/L | --- | 04/15/17 20:08 | 3674793 |

Sampling Point: 8G Q#2847

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.18** | ug/L | --- | 04/15/17 20:21 | 3674794 |

Client Name: Environmental Monitoring Technologies

Report #: 386753

Sampling Point: 7G Q#2848

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.23 | ug/L | --- | 04/15/17 20:34 | 3674795 |

Sampling Point: 6G Q#2849

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.53 | ug/L | --- | 04/15/17 20:47 | 3674796 |

Sampling Point: 5G Q2850

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.53 | ug/L | --- | 04/15/17 21:00 | 3674797 |

Sampling Point: 20GE Q2851

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.55 | ug/L | --- | 04/15/17 21:13 | 3674798 |

Sampling Point: 21GE Q2852

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.55 | ug/L | --- | 04/15/17 21:26 | 3674799 |

Sampling Point: 12G Q2853

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | 0.50 | ug/L | --- | 04/15/17 21:39 | 3674800 |

Client Name: Environmental Monitoring Technologies

Report #: 386753

Sampling Point: 12GD Q2854

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.52** | ug/L | --- | 04/15/17 21:52 | 3674801 |

Sampling Point: 11G Q2855

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.57** | ug/L | --- | 04/15/17 23:23 | 3674802 |

Sampling Point: 10G Q2856

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.30** | ug/L | --- | 04/15/17 23:36 | 3674803 |

Sampling Point: 9G Q2857

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.20** | ug/L | --- | 04/15/17 23:49 | 3674804 |

Sampling Point: 17GE Q2858

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.20** | ug/L | --- | 04/16/17 00:02 | 3674805 |

Sampling Point: 18GE Q2859

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.16** | ug/L | --- | 04/16/17 00:15 | 3674806 |

Client Name: Environmental Monitoring Technologies

Report #: 386753

Sampling Point: 18GED Q#2860

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.15** | ug/L | --- | 04/16/17 00:28 | 3674807 |

Sampling Point: 22GE Q#2861

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.39** | ug/L | --- | 04/16/17 00:41 | 3674808 |

Sampling Point: 23GE Q#2862

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.59** | ug/L | --- | 04/16/17 00:54 | 3674809 |

Sampling Point: 24GE Q#2863

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.51** | ug/L | --- | 04/16/17 01:07 | 3674810 |

Sampling Point: 25GE Q#2864

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.49** | ug/L | --- | 04/16/17 01:20 | 3674811 |

Sampling Point: 25GED Q#2865

PWS ID: Not Supplied

| General Chemistry | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte ID # | Analyte | Method | Reg Limit | MRL† | Result | Units | Preparation Date | Analyzed Date | EEA ID # |
| 18540-29-9 | Chromium, Hexavalent | 218.6 | --- | 0.02 | **0.45** | ug/L | --- | 04/16/17 02:25 | 3674812 |

† 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: | * | ^ | ! |

## 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 al6iquot 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.

**ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.**

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

Client Provided Sample Container

# Chain of Custody Record

TURNAROUND TIME:
☐ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ____-____-____ COC #: 21927

Company: CHICAGO DEPARTMENT OF WATER
Address: 1600 EAST OHIO STREET
CHICAGO, IL 60611

Phone #: (312) 744 - 7733 Fax #: (____) ____-____
P.O. #: ____ Proj.#: ____-____
Client Contact: ALAN STARK 312-612-4233
Project ID / Location: ~~SLIP CREEK~~ C.C.C. + SURVEY CHICAGO MICHIGAN

**Sample Type:**
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater SURFACE WATER

**Container Type:**
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

**Preservative:**
1. None 4 NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH BUFFER

**Analyses**

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Chromium | | | | | | | EMT USE ONLY / EMT WORKORDER # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1S Q2830 | 8 | | P | | VS | 4.14.17 | 10:48 | | 10 | | | ✓ | | | | | | | 3674777 |
| 1SD Q2831 | 8 | | P | | VS | 4.14.17 | 10:49 | | 10 | | | ✓ | | | | | | | 778 |
| 2S Q2832 | 8 | | P | | VS | 4.14.17 | 11:18 | | 8 | | | ✓ | | | | | | | 779 |
| 3S Q2833 | 8 | | P | | VS | 4.14.17 | 11:41 | | 7 | | | ✓ | | | | | | | 780 |
| 4S Q2834 | 8 | | P | | VS | 4.14.17 | 12:04 | | 8 | | | ✓ | | | | | | | 781 |
| 1GE Q2835 | 8 | | P | | VS | 4.14.17 | 12:28 | | 9 | | | ✓ | | | | | | | 782 |
| 1GED Q2836 | 8 | | P | | VS | 4.14.17 | 12:30 | | 9 | | | ✓ | | | | | | | 783 |
| 4G Q2837 | 8 | | P | | VS | 4.14.17 | 12:38 | | 10 | | | ✓ | | | | | | | 784 |
| 3G Q2838 | 8 | | P | | VS | 4.14.17 | 12:45 | | 10 | | | ✓ | | | | | | | 785 |
| 2G Q2839 | 8 | | P | | VS | 4.14.17 | 12:51 | | 10 | | | ✓ | | | | | | | 786 |

| | | | | |
|---|---|---|---|---|
| Relinquished By: | Date: 4-14-17 Time: 21:52 | Received By: | Date: - - Time: : | EMT USE ONLY Client Code: |
| Relinquished By: | Date: - - Time: : | Received By: | Date: - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: | Date: 4-14-17 Time: 9:52 | Jar Lot No. |

☐ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)

EMT SAMPLE RETURN POLICY ON BACK

***SPECIAL INSTRUCTIONS:***

EMT-FORM-GEN-028

**ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.**

Client Provided Sample Container

# Chain of Custody Record

318030
386753

TURNAROUND TIME:
☐ RUSH
____ day turnaround
☐ ROUTINE

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

Due Date: ___-___-___ COC #: 21930

Company: Illinois Department of Water Management
Address: 1000 E Ohio St
Chicago IL 60611

Phone #: (312) 744-7733 Fax #: (___) ___-___
P.O. #: ___ Proj. #: ___
Client Contact: Alan Stark (312) 817-4233
Project ID / Location: Lr Lr Lake Michigan

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Surface water

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

Preservative:
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other Butter
3. $HNO_3$ 6. MeOH

Analyses: Hexavalent Chromium

EMT USE ONLY

EMT WORKORDER #

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Chromium | EMT Workorder # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1G Q#2840 | 8 | | P | | VS | 4/14/17 | 1259 | | 10 | | | ✓ | 3074787 |
| 1GD Q#2841 | 8 | | P | | VS | 4/14/17 | 1300 | | 10 | | | ✓ | 788 |
| 1GE Q#2842 | 8 | | P | | VS | 4/14/17 | 1309 | | 10 | | | ✓ | 789 |
| 14GE Q#2843 | 8 | | P | | VS | 4/14/17 | 1319 | | 10 | | | ✓ | 790 |
| 14GED Q#2844 | 8 | | P | | VS | 4/14/17 | 1330 | | 10 | | | ✓ | 791 |
| 15GE Q#2845 | 8 | | P | | VS | 4/14/17 | 1325 | | 10 | | | ✓ | 792 |
| 16GE Q#2846 | 8 | | P | | VS | 4/14/17 | 1334 | | 10 | | | ✓ | 793 |
| 8G Q#2847 | 8 | | P | | VS | 4/14/17 | 1341 | | 10 | | | ✓ | 794 |
| 7G Q#2848 | 8 | | P | | VS | 4/14/17 | 1347 | | 10 | | | ✓ | 795 |
| 6G Q#2849 | 8 | | P | | VS | 4/17/17 | 1354 | | 10 | | | ✓ | 796 |

| | | | | |
|---|---|---|---|---|
| Relinquished By: | Date: 4-14-17 Time: 21:52 | Received By: | Date: - - Time: : | EMT USE ONLY Client Code: |
| Relinquished By: | Date: - - Time: : | Received By: | Date: - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: | Date: 4-14-17 Time: 9:52 | Jar Lot No. |

☐ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)

EMT SAMPLE RETURN POLICY ON BACK

***SPECIAL INSTRUCTIONS:***

EMT-FORM-GEN-028

**ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.**

Client Provided Sample Container

# Chain of Custody Record

TURNAROUND TIME:
☐ RUSH
____ day turnaround
☐ ROUTINE

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

Due Date: ____-____-____ COC #: 21934

Company: CHICAGO DEPARTMENT OF WATER
Address: 1000 EAST OHIO STREET
CHICAGO IL 60611

Phone #: (312) 744-7733 Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: ALAN STARK 312-617-4233
Project ID / Location: CRG LAKE MICHIGAN

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater ____

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag ____

Preservative:
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH ____

Analyses

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Chromium | | | | | | | EMT USE ONLY / EMT WORKORDER # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5G G2850 | 8 | | P | | VS | 4.14.17 | 1401 | | 10 | | | ✓ | | | | | | | 3674497 |
| 20GE G2851 | 8 | | P | | VS | 4.14.17 | 1407 | | 10 | | | ✓ | | | | | | | 798 |
| 21GE G2852 | 8 | | P | | VS | 4.14.17 | 1414 | | 10 | | | ✓ | | | | | | | 799 |
| 12G G2853 | 8 | | P | | VS | 4.14.17 | 1424 | | 10 | | | ✓ | | | | | | | 800 |
| 11GD G2854 | 8 | | P | | VS | 4.14.17 | 1425 | | 10 | | | ✓ | | | | | | | 801 |
| 11G G2855 | 8 | | P | | VS | 4.14.17 | 1433 | | 10 | | | ✓ | | | | | | | 802 |
| 11G G2856 | 8 | | P | | VS | 4.14.17 | 1440 | | 10 | | | ✓ | | | | | | | 803 |
| 9G G2857 | 8 | | P | | VS | 4.14.17 | 1448 | | 10 | | | ✓ | | | | | | | 804 |
| 17GE G2858 | 8 | | P | | VS | 4.14.17 | 1456 | | 10 | | | ✓ | | | | | | | 805 |
| 18GE G2859 | 8 | | P | | VS | 4.14.17 | 1504 | | 10 | | | ✓ | | | | | | | 806 |

| | | | | | |
|---|---|---|---|---|---|
| Relinquished By: | Date: 4-14-17 Time: 21:52 | Received By: | Date: - - Time: : | EMT USE ONLY Client Code: | ☐ SAMPLE RECEIVED ON ICE |
| Relinquished By: | Date: - - Time: : | Received By: | Date: - - Time: : | EMT Project I.D. | ☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt) |
| Relinquished By: | Date: - - Time: : | Received For Lab By: | Date: 4-14-17 Time: 9:52 | Jar Lot No. | EMT SAMPLE RETURN POLICY ON BACK |

***SPECIAL INSTRUCTIONS:***

EMT-FORM-GEN-028

**ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.**

Client Provided Sample Container

# Chain of Custody Record

TURNAROUND TIME:
☐ RUSH
____ day turnaround
☐ ROUTINE

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

Due Date: ___-___-___ COC #: 21932

Company: Chicago Department of Water Management
Address: 1000 E Ohio St.
Chicago IL 60611

Phone #: (312) 744-7733 Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Alan Stark (312) 617-4233
Project ID / Location: Cyber Lake Michigan

**Sample Type:**
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater Surface water

**Container Type:**
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag

**Preservative:**
1. None 4. NaOH 7. Zn Ace
2. $H_2SO_4$ 5. HCl 8. Other
3. $HNO_3$ 6. MeOH buffer

**Analyses**

| Sample I.D. | Sample Type | Container Size | Container Type | Container No. | Sampling By | Sampling Date | Sampling Time | pH | Temp. | Preservation Field | Preservation Lab | Hexavalent Chromium | | | | | | | | | | EMT USE ONLY / EMT WORKORDER # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18GED Q#2860 | 8 | | P | | VS | 4/14/17 | 1505 | | 10 | | | ✓ | | | | | | 3674 | 807 | | | |
| 22GE Q#2861 | 8 | | P | | VS | 4/14/17 | 1524 | | 10 | | | ✓ | | | | | | | 808 | | | |
| 23GE Q#2862 | 8 | | P | | VS | 4/14/17 | 1529 | | 10 | | | ✓ | | | | | | | 809 | | | |
| 24GE Q#2863 | 8 | | P | | VS | 4/14/17 | 1534 | | 10 | | | ✓ | | | | | | | 810 | | | |
| 25GE Q#2864 | 8 | | P | | VS | 4/14/17 | 1538 | | 10 | | | ✓ | | | | | | | 811 | | | |
| 25GED Q#2865 | 8 | | P | | VS | 4/14/17 | 1539 | | 10 | | | ✓ | | | | | | | 812 | | | |

| | | | | |
|---|---|---|---|---|
| Relinquished By: [signature] | Date: 4-14-17 Time: 21:52 | Received By: | Date: - - Time: : | EMT USE ONLY Client Code: |
| Relinquished By: | Date: - - Time: : | Received By: | Date: - - Time: : | EMT Project I.D. |
| Relinquished By: | Date: - - Time: : | Received For Lab By: [signature] | Date: 4-14-17 Time: 9:52 | Jar Lot No. |

☐ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE (Must be recorded if sampling was greater than 6 hrs. prior to sample receipt)

EMT SAMPLE RETURN POLICY ON BACK

***SPECIAL INSTRUCTIONS:***

EMT-FORM-GEN-028

eurofins | Eaton Analytical

# Eurofins Eaton Analytical
## Run Log
Run ID: **228162** Method: **218.6**

| Type | Sample Id | Sample Site | Matrix | Instrument ID | Analysis Date | Calibration File |
|---|---|---|---|---|---|---|
| QCS | 3674841 | | RW | DP | 04/14/2017 17:29 | |
| LRB | 3674844 | | RW | DP | 04/14/2017 18:08 | |
| LFB | 3674845 | | RW | DP | 04/14/2017 18:21 | |
| IPC | 3674848 | | RW | DP | 04/14/2017 21:10 | |
| CCB | 3674849 | | RW | DP | 04/14/2017 21:23 | |
| FS | 3674777 | 1S Q2830 | SW | DP | 04/14/2017 23:13 | |
| FS | 3674778 | 1SD Q2831 | SW | DP | 04/14/2017 23:26 | |
| FS | 3674779 | 2S Q2832 | SW | DP | 04/14/2017 23:39 | |
| FS | 3674780 | 3S Q2833 | SW | DP | 04/14/2017 23:52 | |
| FS | 3674781 | 4S Q2834 | SW | DP | 04/15/2017 00:05 | |
| IPC | 3674852 | | RW | DP | 04/15/2017 00:18 | |
| CCB | 3674853 | | RW | DP | 04/15/2017 00:31 | |

# QC Summary Report

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QCS | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0192 | 1.0 | ug/L | 102 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 17:29 | 3674841 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 18:08 | 3674844 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0078 | 1.0 | ug/L | 101 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 18:21 | 3674845 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0084 | 1.0 | ug/L | 101 | 90 - 110 | — | — | 1.0 | — | 04/14/2017 21:10 | 3674848 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 21:23 | 3674849 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1S Q2830 | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 23:13 | 3674777 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1SD Q2831 | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 23:26 | 3674778 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 2S Q2832 | | 0.19 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 23:39 | 3674779 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 3S Q2833 | | 0.19 | | ug/L | — | — | — | — | 1.0 | — | 04/14/2017 23:52 | 3674780 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 4S Q2834 | | 0.20 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 00:05 | 3674781 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0167 | 1.0 | ug/L | 102 | 90 - 110 | — | — | 1.0 | — | 04/15/2017 00:18 | 3674852 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 00:31 | 3674853 |

eurofins | Eaton Analytical

# Eurofins Eaton Analytical
## Run Log
Run ID: **228166** Method: **218.6**

| Type | Sample Id | Sample Site | Matrix | Instrument ID | Analysis Date | Calibration File |
|---|---|---|---|---|---|---|
| QCS | 3674886 | | RW | DP | 04/15/2017 15:49 | |
| IPC | 3674888 | | RW | DP | 04/15/2017 16:15 | |
| LRB | 3674889 | | RW | DP | 04/15/2017 16:28 | |
| LFB | 3674890 | | RW | DP | 04/15/2017 16:41 | |
| FS | 3674782 | 19GE Q2835 | SW | DP | 04/15/2017 16:54 | |
| FS | 3674783 | 19GED Q2836 | SW | DP | 04/15/2017 17:06 | |
| FS | 3674784 | 4G Q2837 | SW | DP | 04/15/2017 17:19 | |
| FS | 3674785 | 3G Q2838 | SW | DP | 04/15/2017 17:32 | |
| FS | 3674786 | 2G Q2839 | SW | DP | 04/15/2017 17:45 | |
| FS | 3674787 | 1G Q#2840 | SW | DP | 04/15/2017 17:58 | |
| FS | 3674788 | 1GD Q#2841 | SW | DP | 04/15/2017 18:11 | |
| FS | 3674789 | 13GE Q#2842 | SW | DP | 04/15/2017 18:24 | |
| FS | 3674790 | 14GE Q#2843 | SW | DP | 04/15/2017 18:37 | |
| FS | 3674791 | 14GED Q#2844 | SW | DP | 04/15/2017 18:50 | |
| MS | 3674891 | 14GED Q#2844 | SW | DP | 04/15/2017 19:03 | |
| MSD | 3674892 | 14GED Q#2844 | SW | DP | 04/15/2017 19:16 | |
| IPC | 3674893 | | RW | DP | 04/15/2017 19:29 | |
| CCB | 3674894 | | RW | DP | 04/15/2017 19:42 | |
| FS | 3674792 | 15GE Q#2845 | SW | DP | 04/15/2017 19:55 | |
| FS | 3674793 | 16GE Q#2846 | SW | DP | 04/15/2017 20:08 | |
| FS | 3674794 | 8G Q#2847 | SW | DP | 04/15/2017 20:21 | |
| FS | 3674795 | 7G Q#2848 | SW | DP | 04/15/2017 20:34 | |
| FS | 3674796 | 6G Q#2849 | SW | DP | 04/15/2017 20:47 | |
| FS | 3674797 | 5G Q2850 | SW | DP | 04/15/2017 21:00 | |
| FS | 3674798 | 20GE Q2851 | SW | DP | 04/15/2017 21:13 | |
| FS | 3674799 | 21GE Q2852 | SW | DP | 04/15/2017 21:26 | |
| FS | 3674800 | 12G Q2853 | SW | DP | 04/15/2017 21:39 | |
| FS | 3674801 | 12GD Q2854 | SW | DP | 04/15/2017 21:52 | |
| MS | 3674895 | 12GD Q2854 | SW | DP | 04/15/2017 22:05 | |
| MSD | 3674896 | 12GD Q2854 | SW | DP | 04/15/2017 22:18 | |
| IPC | 3674897 | | RW | DP | 04/15/2017 22:31 | |
| CCB | 3674898 | | RW | DP | 04/15/2017 22:44 | |
| LRB | 3674899 | | RW | DP | 04/15/2017 22:57 | |

| | | | | | |
|---|---|---|---|---|---|
| LFB | 3674900 | | RW | DP | 04/15/2017 23:10 |
| FS | 3674802 | 11G Q2855 | SW | DP | 04/15/2017 23:23 |
| FS | 3674803 | 10G Q2856 | SW | DP | 04/15/2017 23:36 |
| FS | 3674804 | 9G Q2857 | SW | DP | 04/15/2017 23:49 |
| FS | 3674805 | 17GE Q2858 | SW | DP | 04/16/2017 00:02 |
| FS | 3674806 | 18GE Q2859 | SW | DP | 04/16/2017 00:15 |
| FS | 3674807 | 18GED Q#2860 | SW | DP | 04/16/2017 00:28 |
| FS | 3674808 | 22GE Q#2861 | SW | DP | 04/16/2017 00:41 |
| FS | 3674809 | 23GE Q#2862 | SW | DP | 04/16/2017 00:54 |
| FS | 3674810 | 24GE Q#2863 | SW | DP | 04/16/2017 01:07 |
| FS | 3674811 | 25GE Q#2864 | SW | DP | 04/16/2017 01:20 |
| MS | 3674901 | 25GE Q#2864 | SW | DP | 04/16/2017 01:33 |
| MSD | 3674902 | 25GE Q#2864 | SW | DP | 04/16/2017 01:46 |
| IPC | 3674903 | | RW | DP | 04/16/2017 01:59 |
| CCB | 3674904 | | RW | DP | 04/16/2017 02:12 |
| FS | 3674812 | 25GED Q#2865 | SW | DP | 04/16/2017 02:25 |
| MS | 3674905 | 25GED Q#2865 | SW | DP | 04/16/2017 02:38 |
| MSD | 3674906 | 25GED Q#2865 | SW | DP | 04/16/2017 02:51 |
| IPC | 3674907 | | RW | DP | 04/16/2017 03:04 |
| CCB | 3674908 | | RW | DP | 04/16/2017 03:18 |

# QC Summary Report

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QCS | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0583 | 1.0 | ug/L | 106 | 90 - 110 | — | — | 1.0 | — | 04/15/2017 15:49 | 3674886 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0149 | 1.0 | ug/L | 101 | 90 - 110 | — | — | 1.0 | — | 04/15/2017 16:15 | 3674888 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 16:28 | 3674889 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9955 | 1.0 | ug/L | 100 | 90 - 110 | — | — | 1.0 | — | 04/15/2017 16:41 | 3674890 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 19GE Q2835 | | 0.62 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 16:54 | 3674782 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 19GED Q2836 | | 0.60 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 17:06 | 3674783 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 4G Q2837 | | 0.45 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 17:19 | 3674784 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 3G Q2838 | | 0.59 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 17:32 | 3674785 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 2G Q2839 | | 0.31 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 17:45 | 3674786 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1G Q#2840 | | 0.28 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 17:58 | 3674787 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 1GD Q#2841 | | 0.29 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 18:11 | 3674788 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 13GE Q#2842 | | 0.18 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 18:24 | 3674789 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 14GE Q#2843 | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 18:37 | 3674790 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 14GED Q#2844 | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 18:50 | 3674791 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | 14GED Q#2844 | | 1.0907 | 1.1612 | ug/L | 93 | 90 - 110 | — | — | 1.0 | — | 04/15/2017 19:03 | 3674891 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | 14GED Q#2844 | | 1.1098 | 1.1612 | ug/L | 95 | 90 - 110 | 1.7 | 10 | 1.0 | — | 04/15/2017 19:16 | 3674892 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0126 | 1.0 | ug/L | 101 | 90 - 110 | — | — | 1.0 | — | 04/15/2017 19:29 | 3674893 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 19:42 | 3674894 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 15GE Q#2845 | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 19:55 | 3674792 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 16GE Q#2846 | | 0.30 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 20:08 | 3674793 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 8G Q#2847 | | 0.18 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 20:21 | 3674794 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 7G Q#2848 | | 0.23 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 20:34 | 3674795 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 6G Q#2849 | | 0.53 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 20:47 | 3674796 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 5G Q2850 | | 0.53 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 21:00 | 3674797 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 20GE Q2851 | | 0.55 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 21:13 | 3674798 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 21GE Q2852 | | 0.55 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 21:26 | 3674799 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 12G Q2853 | | 0.50 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 21:39 | 3674800 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 12GD Q2854 | | 0.52 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 21:52 | 3674801 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | 12GD Q2854 | | 1.4528 | 1.5168 | ug/L | 94 | 90 - 110 | — | — | 1.0 | — | 04/15/2017 22:05 | 3674895 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | 12GD Q2854 | | 1.4429 | 1.5168 | ug/L | 93 | 90 - 110 | 0.7 | 10 | 1.0 | — | 04/15/2017 22:18 | 3674896 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0143 | 1.0 | ug/L | 101 | 90 - 110 | — | — | 1.0 | — | 04/15/2017 22:31 | 3674897 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 22:44 | 3674898 |
| LRB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 22:57 | 3674899 |
| LFB | Chromium, Hexavalent | 218.6 | 0.02 | — | | 1.0043 | 1.0 | ug/L | 100 | 90 - 110 | — | — | 1.0 | — | 04/15/2017 23:10 | 3674900 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 11G Q2855 | | 0.57 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 23:23 | 3674802 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 10G Q2856 | | 0.30 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 23:36 | 3674803 |

QC Summary Report (cont.)

| Sample Type | Analyte | Method | MRL | Client ID | Result Flag | Amount | Target | Units | % Recovery | Recovery Limits | RPD | RPD Limit | Dil Factor | Extracted | Analyzed | EEA ID # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 9G Q2857 | | 0.20 | | ug/L | — | — | — | — | 1.0 | — | 04/15/2017 23:49 | 3674804 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 17GE Q2858 | | 0.20 | | ug/L | — | — | — | — | 1.0 | — | 04/16/2017 00:02 | 3674805 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 18GE Q2859 | | 0.16 | | ug/L | — | — | — | — | 1.0 | — | 04/16/2017 00:15 | 3674806 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 18GED Q#2860 | | 0.15 | | ug/L | — | — | — | — | 1.0 | — | 04/16/2017 00:28 | 3674807 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 22GE Q#2861 | | 0.39 | | ug/L | — | — | — | — | 1.0 | — | 04/16/2017 00:41 | 3674808 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 23GE Q#2862 | | 0.59 | | ug/L | — | — | — | — | 1.0 | — | 04/16/2017 00:54 | 3674809 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 24GE Q#2863 | | 0.51 | | ug/L | — | — | — | — | 1.0 | — | 04/16/2017 01:07 | 3674810 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 25GE Q#2864 | | 0.49 | | ug/L | — | — | — | — | 1.0 | — | 04/16/2017 01:20 | 3674811 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | 25GE Q#2864 | | 1.4967 | 1.4943 | ug/L | 100 | 90 - 110 | — | — | 1.0 | — | 04/16/2017 01:33 | 3674901 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | 25GE Q#2864 | | 1.4883 | 1.4943 | ug/L | 99 | 90 - 110 | 0.6 | 10 | 1.0 | — | 04/16/2017 01:46 | 3674902 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9850 | 1.0 | ug/L | 98 | 90 - 110 | — | — | 1.0 | — | 04/16/2017 01:59 | 3674903 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/16/2017 02:12 | 3674904 |
| FS | Chromium, Hexavalent | 218.6 | 0.02 | 25GED Q#2865 | | 0.45 | | ug/L | — | — | — | — | 1.0 | — | 04/16/2017 02:25 | 3674812 |
| MS | Chromium, Hexavalent | 218.6 | 0.02 | 25GED Q#2865 | | 1.4820 | 1.448299 | ug/L | 103 | 90 - 110 | — | — | 1.0 | — | 04/16/2017 02:38 | 3674905 |
| MSD | Chromium, Hexavalent | 218.6 | 0.02 | 25GED Q#2865 | | 1.4878 | 1.448299 | ug/L | 104 | 90 - 110 | 0.4 | 10 | 1.0 | — | 04/16/2017 02:51 | 3674906 |
| IPC | Chromium, Hexavalent | 218.6 | 0.02 | — | | 0.9837 | 1.0 | ug/L | 98 | 90 - 110 | — | — | 1.0 | — | 04/16/2017 03:04 | 3674907 |
| CCB | Chromium, Hexavalent | 218.6 | 0.02 | — | < | 0.02 | | ug/L | — | — | — | — | 1.0 | — | 04/16/2017 03:18 | 3674908 |

## Sample Type Key

| Type (Abbr.) | Sample Type | Type (Abbr.) | Sample Type |
|---|---|---|---|
| CCB | Continuing Calibration Blank | | |
| FS | Field Sample | | |
| IPC | Instrument Performance Check | | |
| LFB | Laboratory Fortified Blank | | |
| LRB | Laboratory Reagent Blank | | |
| MS | Matrix Spike | | |
| MSD | Matrix Spike Duplicate | | |
| QCS | Quality Control Sample | | |

END OF REPORT