



**Cranmer Engineering, Inc.**  
*Integrated Engineering Services*

# Sample Results

Paradise Irrigation District  
ATTN Jason Bell  
6332 Clark Road  
Paradise, CA 95969

**Work Order:** GBC0363  
**Received:** 03/08/19 11:44  
**Reported:** 03/19/19 10:06

Camp Fire

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## Term and Qualifier Definitions

| Item | Definition                                    |
|------|-----------------------------------------------|
| ND   | None detected at or above the reporting limit |

*Integrating people, land and water.*

1188 East Main Street, Grass Valley, CA 95945

Phone: (530) 273-7284 | Fax: (530) 273-9507 | [www.cranmerengineeringinc.com](http://www.cranmerengineeringinc.com) | E.L.A.P. Certification No. 1936

Sampling • Analytical Testing • Courier Service • System Operators • Engineering • Surveying • Technical Reporting • Planning • Construction Mgmt.

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**Subcontracted Analyses**

**Sample Site:** HYD 83 Grinding Rock Rd 1  
**Sample Number** GBC0363-01  
Source Type: Surface

**Date Collected:** 3/7/2019 8:15:00AM  
**Collected by:** Laura Capra  
Title 22 Designation:

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**Analyzing Laboratory:** North Coast Laboratories LTD  
**Analysis** Volatile Organic Compounds (VOCs)

Report with Method References attached.

**Sample Site:** HYD 83 Grinding Rock Rd 2  
**Sample Number** GBC0363-02  
Source Type: Surface

**Date Collected:** 3/7/2019 8:20:00AM  
**Collected by:** Laura Capra  
Title 22 Designation:

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**Analyzing Laboratory:** North Coast Laboratories LTD  
**Analysis** Volatile Organic Compounds (VOCs)

Report with Method References attached.

**Sample Site:** 79 Grinding Rock Rd  
**Sample Number** GBC0363-03  
Source Type: Surface

**Date Collected:** 3/7/2019 8:30:00AM  
**Collected by:** Laura Capra  
Title 22 Designation:

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**Analyzing Laboratory:** North Coast Laboratories LTD  
**Analysis** Volatile Organic Compounds (VOCs)

Report with Method References attached.

**Sample Site:** 78 Grinding Rock Rd  
**Sample Number** GBC0363-04  
Source Type: Surface

**Date Collected:** 3/7/2019 8:40:00AM  
**Collected by:** Laura Capra  
Title 22 Designation:

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**Analyzing Laboratory:** North Coast Laboratories LTD  
**Analysis** Volatile Organic Compounds (VOCs)

Report with Method References attached.

**Sample Site:** 76 Grinding Rock Rd  
**Sample Number** GBC0363-05  
Source Type: Surface

**Date Collected:** 3/7/2019 9:15:00AM  
**Collected by:** Laura Capra  
Title 22 Designation:

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**Analyzing Laboratory:** North Coast Laboratories LTD  
**Analysis** Volatile Organic Compounds (VOCs)

Report with Method References attached.

**Sample Site:** Blow Off End Grinding Rock  
**Sample Number** GBC0363-06  
Source Type: Surface

**Date Collected:** 3/7/2019 9:25:00AM  
**Collected by:** Laura Capra  
Title 22 Designation:

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**Analyzing Laboratory:** North Coast Laboratories LTD  
**Analysis** Volatile Organic Compounds (VOCs)

Report with Method References attached.

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Justin Smith

Director

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Cranmer Engineering, Inc.  
Integrated Engineering Services

1188 East Main Street Grass Valley, CA 95945  
Phone: (530) 273-7284  
Email: lab@cranmerengineering.com

Turn Around Time Request  
☐ Standard - 10 Business days  
☒ Rush (Surcharge may apply)  
Date needed:

ANALYTICA  
CHAIN OF CUSTODY



GB C0363

Required Fields\* Temp:

|                                                                                                           |  |                                                 |  |                                                                                                                                                                                      |  |                                                                                                                                                                                      |  |
|-----------------------------------------------------------------------------------------------------------|--|-------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Company/Client Name*: Paradise Irrigation District<br>6332 Clark Road<br>Paradise, CA 95969-4146          |  | Report Attention*: Additional cc's:             |  | Invoice To*: PO#:                                                                                                                                                                    |  | Phone*: Fax:                                                                                                                                                                         |  |
| Address*: Project #:                                                                                      |  | City*: State*: Zip*:                            |  | Matrix Types:<br>A= Cold<br>B= HNO <sub>3</sub><br>C= HCL<br>D= H <sub>2</sub> SO <sub>4</sub><br>E= NaOH<br>F= NaThio<br>G= H <sub>2</sub> PO <sub>4</sub><br>H= NH <sub>4</sub> CL |  | Analysis Required                                                                                                                                                                    |  |
| Reporting Options:<br><input type="checkbox"/> EDD Type:<br>Sampler Name (Printed/Signature): LAURA CAPRA |  | Regulatory Carbon Copies<br>Yes / No<br>Agency: |  | Regulatory Compliance<br><input type="checkbox"/> EDT to California SWRCB<br>System Number*:<br>Geotracker #:                                                                        |  | Matrix Types:<br>A= Cold<br>B= HNO <sub>3</sub><br>C= HCL<br>D= H <sub>2</sub> SO <sub>4</sub><br>E= NaOH<br>F= NaThio<br>G= H <sub>2</sub> PO <sub>4</sub><br>H= NH <sub>4</sub> CL |  |
| Matrix Types: SW=Surface Water GW=Ground Water WW=Waste Water STW=Storm Water DW=Drinking Water SO=Solid  |  | Sampled*<br>Date Time                           |  | Matrix* Comments/Station Code/WTRAX                                                                                                                                                  |  | Preservation                                                                                                                                                                         |  |
| # Sample Descriptions                                                                                     |  | Date Time                                       |  | Matrix* Comments/Station Code/WTRAX                                                                                                                                                  |  | Preservation                                                                                                                                                                         |  |
| TRAVEL BLANK                                                                                              |  | 8/15                                            |  | DW                                                                                                                                                                                   |  | AC                                                                                                                                                                                   |  |
| 86 HYD 83 GRINDING ROCK RD 1ST DR                                                                         |  | 3-7-19                                          |  | 815                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 87 HYD 83 GRINDING ROCK RD 2ND DR                                                                         |  | 3-7-19                                          |  | 820                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 88 79 GRINDING ROCK RD                                                                                    |  | 3-7-19                                          |  | 830                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 89 78 GRINDING ROCK RD                                                                                    |  | 3-7-19                                          |  | 840                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 77 GRINDING ROCK RD                                                                                       |  | 3-7-19                                          |  | 915                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 76 GRINDING ROCK RD                                                                                       |  | 3-7-19                                          |  | 925                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 101 BLOW OFF END GRINDING ROCK RD                                                                         |  | 3-7-19                                          |  | 945                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 462 NEVER NEVER LN                                                                                        |  | 3-7-19                                          |  | 945                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 463 NEVER NEVER LN                                                                                        |  | 3-7-19                                          |  | 945                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 449 NEVER NEVER LN                                                                                        |  | 3-7-19                                          |  | 945                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 448 NEVER NEVER LN                                                                                        |  | 3-7-19                                          |  | 945                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 432 NEVER NEVER 1ST DR                                                                                    |  | 3-7-19                                          |  | 945                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 432 NEVER NEVER 2ND DR                                                                                    |  | 3-7-19                                          |  | 945                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 431 NEVER NEVER 1ST DR                                                                                    |  | 3-7-19                                          |  | 945                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 431 NEVER NEVER 2ND DR                                                                                    |  | 3-7-19                                          |  | 945                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| 431 NEVER NEVER 3RD DR                                                                                    |  | 3-7-19                                          |  | 945                                                                                                                                                                                  |  | DW                                                                                                                                                                                   |  |
| Relinquished By: (Signature and Printed Name)<br>LAURA CAPRA                                              |  | Company<br>PED                                  |  | Date<br>3-7-19                                                                                                                                                                       |  | Time<br>3:45                                                                                                                                                                         |  |
| Relinquished By: (Signature and Printed Name)                                                             |  | Company                                         |  | Date                                                                                                                                                                                 |  | Time                                                                                                                                                                                 |  |
| Received for Lab by: (Signature and Printed Name)                                                         |  | Company                                         |  | Date                                                                                                                                                                                 |  | Time                                                                                                                                                                                 |  |
| Shipping Method:                                                                                          |  | ONTRAC                                          |  | UPS                                                                                                                                                                                  |  | GSO                                                                                                                                                                                  |  |
| Cooling Method                                                                                            |  | Wet                                             |  | Blue                                                                                                                                                                                 |  | None                                                                                                                                                                                 |  |
| Amount:                                                                                                   |  | PIA#:                                           |  | Custody Seal: Y / N                                                                                                                                                                  |  | Chilling Begun: Y / N                                                                                                                                                                |  |
| Check                                                                                                     |  | Init                                            |  | Cash                                                                                                                                                                                 |  | Init                                                                                                                                                                                 |  |



**NORTH COAST  
LABORATORIES LTD.**

March 15, 2019

Cranmer Analytical Laboratory  
1188 E. Main St  
Grass Valley, CA 95945

Attn: Michelle Harlin

Order No.: 1903180  
Invoice No.: 145318  
PO No.:  
ELAP No.1247-Expires July 2020

RE: GBC0363

**SAMPLE IDENTIFICATION**

| Fraction | Client Sample Description                 |
|----------|-------------------------------------------|
| 01A      | GBC0363-01 HYD 83 Grinding Rock Rd 1st Dr |
| 02A      | GBC0363-02 HYD 83 Grinding Rock Rd 2nd Dr |
| 03A      | GBC0363-03 79 Grinding Rock Rd            |
| 04A      | GBC0363-04 78 Grinding Rock Rd            |
| 05A      | GBC0363-05 76 Grinding Rock Rd            |
| 06A      | GBC0363-06 Blow Off End Grinding Rock Rd  |

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

Flag = Explanation in Case Narrative

All solid results are expressed on a wet-weight basis unless otherwise noted.

**Approved for release by:**

Roxanne Moore, Project Manager

**Date:** 15-Mar-2019  
**WorkOrder:** 1903180

## CASE NARRATIVE

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### EPA 524.2:

The laboratory control sample (LCS) recoveries were above the upper acceptance limits for chloromethane, bromomethane and chloroethane. The elevated recoveries equate to a high bias. There were no detectable levels of these analytes in the sample; therefore, the data were accepted.

The laboratory control sample (LCS) recoveries were below the lower acceptance limits for tert-butyl alcohol, 1,1,2,2,-tetrachloroethane, 1,2,3-trichloropropane and naphthalene. The response of the reporting limit standard was such that the analytes would have been detected even with the low recoveries; therefore, the data were accepted.

Date: 15-Mar-2019

WorkOrder: 1903180

## ANALYTICAL REPORT

Client Sample ID: GBC0363-01 HYD 83 Grinding Rock Rd 1st Dr

Received: 3/9/2019

Lab ID: 1903180-01A

Collected: 3/7/2019 8:15

Test Name: EPA 524.2

Reference: EPA 524.2

| <u>Parameter</u>               | <u>Result</u> | <u>Flag</u> | <u>Limit</u> | <u>Units</u> | <u>DF</u> | <u>Extracted</u> | <u>Analyzed</u> |
|--------------------------------|---------------|-------------|--------------|--------------|-----------|------------------|-----------------|
| Dichlorodifluoromethane        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Chloromethane                  | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Vinyl Chloride                 | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Bromomethane                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Chloroethane                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Trichlorofluoromethane         | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1-Dichloroethene             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1,2-Trichlorotrifluoroethane | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Methylene Chloride             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| trans-1,2-Dichloroethene       | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Methyl tert-butyl ether (MTBE) | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/13/2019       |
| Tert-butyl alcohol (TBA)       | ND            |             | 15           | µg/L         | 1.0       |                  | 3/13/2019       |
| Di-isopropyl ether (DIPE)      | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1-Dichloroethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Ethyl tert-butyl ether (ETBE)  | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/13/2019       |
| cis-1,2-Dichloroethene         | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 2,2-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Bromochloromethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| <b>Chloroform</b>              | <b>34</b>     |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Carbon tetrachloride           | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1,1-Trichloroethane          | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1-Dichloropropene            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Benzene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,2-Dichloroethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Tert-amyl methyl ether (TAME)  | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/13/2019       |
| Trichloroethene                | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Dibromomethane                 | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,2-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| <b>Bromodichloromethane</b>    | <b>2.5</b>    |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| cis-1,3-Dichloropropene        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Toluene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Tetrachloroethene              | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| trans-1,3-Dichloropropene      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1,2-Trichloroethane          | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Dibromochloromethane           | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,3-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Chlorobenzene                  | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Ethylbenzene                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1,1,2-Tetrachloroethane      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| m,p-Xylene                     | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| o-Xylene                       | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Bromoform                      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Styrene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Isopropylbenzene               | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Bromobenzene                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| n-Propylbenzene                | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1,2,2-Tetrachloroethane      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |

Date: 15-Mar-2019

WorkOrder: 1903180

## ANALYTICAL REPORT

Client Sample ID: GBC0363-01 HYD 83 Grinding Rock Rd 1st Dr

Received: 3/9/2019

Lab ID: 1903180-01A

Collected: 3/7/2019 8:15

|                                   |     |        |       |     |           |
|-----------------------------------|-----|--------|-------|-----|-----------|
| 2-Chlorotoluene                   | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,2,3-Trichloropropane            | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,3,5-Trimethylbenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 4-Chlorotoluene                   | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| tert-Butylbenzene                 | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,2,4-Trimethylbenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| sec-Butylbenzene                  | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| p-Isopropyltoluene                | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,3-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,4-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| n-Butylbenzene                    | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,2-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| Hexachlorobutadiene               | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,2,4-Trichlorobenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| Naphthalene                       | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,2,3-Trichlorobenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 106 | 70-130 | % Rec | 1.0 | 3/13/2019 |
| Surrogate: Dibromofluoromethane   | 105 | 70-130 | % Rec | 1.0 | 3/13/2019 |



Date: 15-Mar-2019

WorkOrder: 1903180

## ANALYTICAL REPORT

Client Sample ID: GBC0363-02 HYD 83 Grinding Rock Rd 2nd Dr

Received: 3/9/2019

Lab ID: 1903180-02A

Collected: 3/7/2019 8:20

Test Name: EPA 524.2

Reference: EPA 524.2

| <u>Parameter</u>               | <u>Result</u> | <u>Flag</u> | <u>Limit</u> | <u>Units</u> | <u>DF</u> | <u>Extracted</u> | <u>Analyzed</u> |
|--------------------------------|---------------|-------------|--------------|--------------|-----------|------------------|-----------------|
| Dichlorodifluoromethane        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Chloromethane                  | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Vinyl Chloride                 | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Bromomethane                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Chloroethane                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Trichlorofluoromethane         | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1-Dichloroethene             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,2-Trichlorotrifluoroethane | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Methylene Chloride             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| trans-1,2-Dichloroethene       | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Methyl tert-butyl ether (MTBE) | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/12/2019       |
| Tert-butyl alcohol (TBA)       | ND            |             | 15           | µg/L         | 1.0       |                  | 3/12/2019       |
| Di-isopropyl ether (DIPE)      | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1-Dichloroethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Ethyl tert-butyl ether (ETBE)  | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/12/2019       |
| cis-1,2-Dichloroethene         | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 2,2-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Bromochloromethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| <b>Chloroform</b>              | <b>37</b>     |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Carbon tetrachloride           | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,1-Trichloroethane          | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1-Dichloropropene            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Benzene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,2-Dichloroethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Tert-amyl methyl ether (TAME)  | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/12/2019       |
| Trichloroethene                | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Dibromomethane                 | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,2-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| <b>Bromodichloromethane</b>    | <b>2.7</b>    |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| cis-1,3-Dichloropropene        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Toluene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Tetrachloroethene              | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| trans-1,3-Dichloropropene      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,2-Trichloroethane          | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Dibromochloromethane           | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,3-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Chlorobenzene                  | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Ethylbenzene                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,1,2-Tetrachloroethane      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| m,p-Xylene                     | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| o-Xylene                       | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Bromoform                      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Styrene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Isopropylbenzene               | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Bromobenzene                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| n-Propylbenzene                | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,2,2-Tetrachloroethane      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |

Date: 15-Mar-2019

WorkOrder: 1903180

## ANALYTICAL REPORT

Client Sample ID: GBC0363-02 HYD 83 Grinding Rock Rd 2nd Dr

Received: 3/9/2019

Lab ID: 1903180-02A

Collected: 3/7/2019 8:20

|                                   |     |        |       |     |           |
|-----------------------------------|-----|--------|-------|-----|-----------|
| 2-Chlorotoluene                   | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2,3-Trichloropropane            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,3,5-Trimethylbenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 4-Chlorotoluene                   | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| tert-Butylbenzene                 | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2,4-Trimethylbenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| sec-Butylbenzene                  | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| p-Isopropyltoluene                | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,3-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,4-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| n-Butylbenzene                    | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| Hexachlorobutadiene               | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2,4-Trichlorobenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| Naphthalene                       | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2,3-Trichlorobenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 103 | 70-130 | % Rec | 1.0 | 3/12/2019 |
| Surrogate: Dibromofluoromethane   | 104 | 70-130 | % Rec | 1.0 | 3/12/2019 |

Date: 15-Mar-2019

WorkOrder: 1903180

## ANALYTICAL REPORT

Client Sample ID: GBC0363-03 79 Grinding Rock Rd

Received: 3/9/2019

Lab ID: 1903180-03A

Collected: 3/7/2019 8:30

Test Name: EPA 524.2

Reference: EPA 524.2

| <u>Parameter</u>               | <u>Result</u> | <u>Flag</u> | <u>Limit</u> | <u>Units</u> | <u>DF</u> | <u>Extracted</u> | <u>Analyzed</u> |
|--------------------------------|---------------|-------------|--------------|--------------|-----------|------------------|-----------------|
| Dichlorodifluoromethane        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Chloromethane                  | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Vinyl Chloride                 | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Bromomethane                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Chloroethane                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Trichlorofluoromethane         | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1-Dichloroethene             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,2-Trichlorotrifluoroethane | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Methylene Chloride             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| trans-1,2-Dichloroethene       | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Methyl tert-butyl ether (MTBE) | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/12/2019       |
| Tert-butyl alcohol (TBA)       | ND            |             | 15           | µg/L         | 1.0       |                  | 3/12/2019       |
| Di-isopropyl ether (DIPE)      | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1-Dichloroethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Ethyl tert-butyl ether (ETBE)  | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/12/2019       |
| cis-1,2-Dichloroethene         | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 2,2-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Bromochloromethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| <b>Chloroform</b>              | <b>58</b>     |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Carbon tetrachloride           | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,1-Trichloroethane          | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1-Dichloropropene            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Benzene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,2-Dichloroethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Tert-amyl methyl ether (TAME)  | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/12/2019       |
| Trichloroethene                | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Dibromomethane                 | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,2-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| <b>Bromodichloromethane</b>    | <b>3.8</b>    |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| cis-1,3-Dichloropropene        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Toluene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Tetrachloroethene              | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| trans-1,3-Dichloropropene      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,2-Trichloroethane          | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Dibromochloromethane           | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,3-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Chlorobenzene                  | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Ethylbenzene                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,1,2-Tetrachloroethane      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| m,p-Xylene                     | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| o-Xylene                       | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Bromoform                      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Styrene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Isopropylbenzene               | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Bromobenzene                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| n-Propylbenzene                | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,2,2-Tetrachloroethane      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |

Date: 15-Mar-2019

WorkOrder: 1903180

## ANALYTICAL REPORT

Client Sample ID: GBC0363-03 79 Grinding Rock Rd

Received: 3/9/2019

Lab ID: 1903180-03A

Collected: 3/7/2019 8:30

|                                   |     |        |       |     |           |
|-----------------------------------|-----|--------|-------|-----|-----------|
| 2-Chlorotoluene                   | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2,3-Trichloropropane            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,3,5-Trimethylbenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 4-Chlorotoluene                   | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| tert-Butylbenzene                 | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2,4-Trimethylbenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| sec-Butylbenzene                  | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| p-Isopropyltoluene                | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,3-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,4-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| n-Butylbenzene                    | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| Hexachlorobutadiene               | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2,4-Trichlorobenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| Naphthalene                       | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2,3-Trichlorobenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 102 | 70-130 | % Rec | 1.0 | 3/12/2019 |
| Surrogate: Dibromofluoromethane   | 100 | 70-130 | % Rec | 1.0 | 3/12/2019 |

Date: 15-Mar-2019

WorkOrder: 1903180

## ANALYTICAL REPORT

Client Sample ID: GBC0363-04 78 Grinding Rock Rd

Received: 3/9/2019

Lab ID: 1903180-04A

Collected: 3/7/2019 8:40

Test Name: EPA 524.2

Reference: EPA 524.2

| <u>Parameter</u>               | <u>Result</u> | <u>Flag</u> | <u>Limit</u> | <u>Units</u> | <u>DF</u> | <u>Extracted</u> | <u>Analyzed</u> |
|--------------------------------|---------------|-------------|--------------|--------------|-----------|------------------|-----------------|
| Dichlorodifluoromethane        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Chloromethane                  | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Vinyl Chloride                 | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Bromomethane                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Chloroethane                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Trichlorofluoromethane         | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| 1,1-Dichloroethene             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| 1,1,2-Trichlorotrifluoroethane | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Methylene Chloride             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| trans-1,2-Dichloroethene       | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Methyl tert-butyl ether (MTBE) | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/11/2019       |
| Tert-butyl alcohol (TBA)       | ND            |             | 15           | µg/L         | 1.0       |                  | 3/11/2019       |
| Di-isopropyl ether (DIPE)      | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/11/2019       |
| 1,1-Dichloroethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Ethyl tert-butyl ether (ETBE)  | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/11/2019       |
| cis-1,2-Dichloroethene         | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| 2,2-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Bromochloromethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| <b>Chloroform</b>              | <b>51</b>     |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Carbon tetrachloride           | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| 1,1,1-Trichloroethane          | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| 1,1-Dichloropropene            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Benzene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| 1,2-Dichloroethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Tert-amyl methyl ether (TAME)  | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/11/2019       |
| Trichloroethene                | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Dibromomethane                 | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| 1,2-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| <b>Bromodichloromethane</b>    | <b>3.6</b>    |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| cis-1,3-Dichloropropene        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Toluene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Tetrachloroethene              | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| trans-1,3-Dichloropropene      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| 1,1,2-Trichloroethane          | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Dibromochloromethane           | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| 1,3-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Chlorobenzene                  | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Ethylbenzene                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| 1,1,1,2-Tetrachloroethane      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| m,p-Xylene                     | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| o-Xylene                       | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Bromoform                      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Styrene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Isopropylbenzene               | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| Bromobenzene                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| n-Propylbenzene                | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |
| 1,1,2,2-Tetrachloroethane      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/11/2019       |

Date: 15-Mar-2019

WorkOrder: 1903180

## ANALYTICAL REPORT

Client Sample ID: GBC0363-04 78 Grinding Rock Rd

Received: 3/9/2019

Lab ID: 1903180-04A

Collected: 3/7/2019 8:40

|                                   |      |        |       |     |           |
|-----------------------------------|------|--------|-------|-----|-----------|
| 2-Chlorotoluene                   | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| 1,2,3-Trichloropropane            | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| 1,3,5-Trimethylbenzene            | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| 4-Chlorotoluene                   | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| tert-Butylbenzene                 | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| 1,2,4-Trimethylbenzene            | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| sec-Butylbenzene                  | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| p-Isopropyltoluene                | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| 1,3-Dichlorobenzene               | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| 1,4-Dichlorobenzene               | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| n-Butylbenzene                    | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| 1,2-Dichlorobenzene               | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| Hexachlorobutadiene               | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| 1,2,4-Trichlorobenzene            | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| Naphthalene                       | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| 1,2,3-Trichlorobenzene            | ND   | 0.50   | µg/L  | 1.0 | 3/11/2019 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 104  | 70-130 | % Rec | 1.0 | 3/11/2019 |
| Surrogate: Dibromofluoromethane   | 99.0 | 70-130 | % Rec | 1.0 | 3/11/2019 |

Date: 15-Mar-2019

WorkOrder: 1903180

## ANALYTICAL REPORT

Client Sample ID: GBC0363-05 76 Grinding Rock Rd

Received: 3/9/2019

Lab ID: 1903180-05A

Collected: 3/7/2019 9:15

Test Name: EPA 524.2

Reference: EPA 524.2

| <u>Parameter</u>               | <u>Result</u> | <u>Flag</u> | <u>Limit</u> | <u>Units</u> | <u>DF</u> | <u>Extracted</u> | <u>Analyzed</u> |
|--------------------------------|---------------|-------------|--------------|--------------|-----------|------------------|-----------------|
| Dichlorodifluoromethane        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Chloromethane                  | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Vinyl Chloride                 | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Bromomethane                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Chloroethane                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Trichlorofluoromethane         | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1-Dichloroethene             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1,2-Trichlorotrifluoroethane | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Methylene Chloride             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| trans-1,2-Dichloroethene       | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Methyl tert-butyl ether (MTBE) | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/13/2019       |
| Tert-butyl alcohol (TBA)       | ND            |             | 15           | µg/L         | 1.0       |                  | 3/13/2019       |
| Di-isopropyl ether (DIPE)      | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1-Dichloroethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Ethyl tert-butyl ether (ETBE)  | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/13/2019       |
| cis-1,2-Dichloroethene         | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 2,2-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Bromochloromethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| <b>Chloroform</b>              | <b>62</b>     |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Carbon tetrachloride           | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1,1-Trichloroethane          | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1-Dichloropropene            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Benzene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,2-Dichloroethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Tert-amyl methyl ether (TAME)  | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/13/2019       |
| Trichloroethene                | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Dibromomethane                 | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,2-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| <b>Bromodichloromethane</b>    | <b>4.3</b>    |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| cis-1,3-Dichloropropene        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Toluene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Tetrachloroethene              | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| trans-1,3-Dichloropropene      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1,2-Trichloroethane          | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Dibromochloromethane           | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,3-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Chlorobenzene                  | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Ethylbenzene                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1,1,2-Tetrachloroethane      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| m,p-Xylene                     | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| o-Xylene                       | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Bromoform                      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Styrene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Isopropylbenzene               | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| Bromobenzene                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| n-Propylbenzene                | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |
| 1,1,2,2-Tetrachloroethane      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/13/2019       |

Date: 15-Mar-2019

WorkOrder: 1903180

## ANALYTICAL REPORT

Client Sample ID: GBC0363-05 76 Grinding Rock Rd

Received: 3/9/2019

Lab ID: 1903180-05A

Collected: 3/7/2019 9:15

|                                   |     |        |       |     |           |
|-----------------------------------|-----|--------|-------|-----|-----------|
| 2-Chlorotoluene                   | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,2,3-Trichloropropane            | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,3,5-Trimethylbenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 4-Chlorotoluene                   | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| tert-Butylbenzene                 | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,2,4-Trimethylbenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| sec-Butylbenzene                  | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| p-Isopropyltoluene                | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,3-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,4-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| n-Butylbenzene                    | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,2-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| Hexachlorobutadiene               | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,2,4-Trichlorobenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| Naphthalene                       | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| 1,2,3-Trichlorobenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/13/2019 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 102 | 70-130 | % Rec | 1.0 | 3/13/2019 |
| Surrogate: Dibromofluoromethane   | 106 | 70-130 | % Rec | 1.0 | 3/13/2019 |



Date: 15-Mar-2019

WorkOrder: 1903180

## ANALYTICAL REPORT

Client Sample ID: GBC0363-06 Blow Off End Grinding Rock Rd

Received: 3/9/2019

Lab ID: 1903180-06A

Collected: 3/7/2019 9:25

Test Name: EPA 524.2

Reference: EPA 524.2

| <u>Parameter</u>               | <u>Result</u> | <u>Flag</u> | <u>Limit</u> | <u>Units</u> | <u>DF</u> | <u>Extracted</u> | <u>Analyzed</u> |
|--------------------------------|---------------|-------------|--------------|--------------|-----------|------------------|-----------------|
| Dichlorodifluoromethane        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Chloromethane                  | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Vinyl Chloride                 | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Bromomethane                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Chloroethane                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Trichlorofluoromethane         | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1-Dichloroethene             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,2-Trichlorotrifluoroethane | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Methylene Chloride             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| trans-1,2-Dichloroethene       | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Methyl tert-butyl ether (MTBE) | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/12/2019       |
| Tert-butyl alcohol (TBA)       | ND            |             | 15           | µg/L         | 1.0       |                  | 3/12/2019       |
| Di-isopropyl ether (DIPE)      | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1-Dichloroethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Ethyl tert-butyl ether (ETBE)  | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/12/2019       |
| cis-1,2-Dichloroethene         | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 2,2-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Bromochloromethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| <b>Chloroform</b>              | <b>52</b>     |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Carbon tetrachloride           | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,1-Trichloroethane          | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1-Dichloropropene            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Benzene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,2-Dichloroethane             | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Tert-amyl methyl ether (TAME)  | ND            |             | 3.0          | µg/L         | 1.0       |                  | 3/12/2019       |
| Trichloroethene                | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Dibromomethane                 | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,2-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| <b>Bromodichloromethane</b>    | <b>3.6</b>    |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| cis-1,3-Dichloropropene        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Toluene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Tetrachloroethene              | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| trans-1,3-Dichloropropene      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,2-Trichloroethane          | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Dibromochloromethane           | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,3-Dichloropropane            | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Chlorobenzene                  | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Ethylbenzene                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,1,2-Tetrachloroethane      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| m,p-Xylene                     | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| o-Xylene                       | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Bromoform                      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Styrene                        | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Isopropylbenzene               | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| Bromobenzene                   | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| n-Propylbenzene                | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |
| 1,1,2,2-Tetrachloroethane      | ND            |             | 0.50         | µg/L         | 1.0       |                  | 3/12/2019       |

Date: 15-Mar-2019

WorkOrder: 1903180

## ANALYTICAL REPORT

Client Sample ID: GBC0363-06 Blow Off End Grinding Rock Rd

Received: 3/9/2019

Lab ID: 1903180-06A

Collected: 3/7/2019 9:25

|                                   |     |        |       |     |           |
|-----------------------------------|-----|--------|-------|-----|-----------|
| 2-Chlorotoluene                   | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2,3-Trichloropropane            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,3,5-Trimethylbenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 4-Chlorotoluene                   | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| tert-Butylbenzene                 | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2,4-Trimethylbenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| sec-Butylbenzene                  | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| p-Isopropyltoluene                | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,3-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,4-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| n-Butylbenzene                    | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2-Dichlorobenzene               | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| Hexachlorobutadiene               | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2,4-Trichlorobenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| Naphthalene                       | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| 1,2,3-Trichlorobenzene            | ND  | 0.50   | µg/L  | 1.0 | 3/12/2019 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 102 | 70-130 | % Rec | 1.0 | 3/12/2019 |
| Surrogate: Dibromofluoromethane   | 101 | 70-130 | % Rec | 1.0 | 3/12/2019 |

North Coast Laboratories, Ltd.

Date: 3/15/2019

**CLIENT:** Cranmer Analytical Laboratory**Work Order:** 1903180**Project:** GBC0363**QC SUMMARY REPORT**

Method Blank

| Sample ID                      | <b>MB 031119</b> | Batch ID: | <b>R98676</b>          | Test Code:  | <b>524W</b>    | Units:   | <b>µg/L</b> | Analysis Date | <b>3/11/2019 9:49:00 AM</b> | Prep Date |      |
|--------------------------------|------------------|-----------|------------------------|-------------|----------------|----------|-------------|---------------|-----------------------------|-----------|------|
| Client ID:                     |                  | Run ID:   | <b>ORGCMS3_190311A</b> | SeqNo:      | <b>1403337</b> |          |             |               |                             |           |      |
| Analyte                        | Result           | Limit     | SPK value              | SPK Ref Val | % Rec          | LowLimit | HighLimit   | RPD Ref Val   | %RPD                        | RPDLimit  | Qual |
| Dichlorodifluoromethane        | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Chloromethane                  | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Vinyl Chloride                 | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Bromomethane                   | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Chloroethane                   | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Trichlorofluoromethane         | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| 1,1-Dichloroethene             | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| 1,1,2-Trichlorotrifluoroethane | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Methylene Chloride             | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| trans-1,2-Dichloroethene       | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Methyl tert-butyl ether (MTBE) | ND               | 3.0       |                        |             |                |          |             |               |                             |           |      |
| Tert-butyl alcohol (TBA)       | ND               | 15        |                        |             |                |          |             |               |                             |           |      |
| Di-isopropyl ether (DIPE)      | ND               | 3.0       |                        |             |                |          |             |               |                             |           |      |
| 1,1-Dichloroethane             | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Ethyl tert-butyl ether (ETBE)  | ND               | 3.0       |                        |             |                |          |             |               |                             |           |      |
| cis-1,2-Dichloroethene         | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| 2,2-Dichloropropane            | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Bromochloromethane             | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Chloroform                     | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Carbon tetrachloride           | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| 1,1,1-Trichloroethane          | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| 1,1-Dichloropropene            | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Benzene                        | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| 1,2-Dichloroethane             | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Tert-amyl methyl ether (TAME)  | ND               | 3.0       |                        |             |                |          |             |               |                             |           |      |
| Trichloroethene                | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| Dibromomethane                 | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |
| 1,2-Dichloropropane            | ND               | 0.50      |                        |             |                |          |             |               |                             |           |      |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Method Blank

|                           |    |      |
|---------------------------|----|------|
| Bromodichloromethane      | ND | 0.50 |
| cis-1,3-Dichloropropene   | ND | 0.50 |
| Toluene                   | ND | 0.50 |
| Tetrachloroethene         | ND | 0.50 |
| trans-1,3-Dichloropropene | ND | 0.50 |
| 1,1,2-Trichloroethane     | ND | 0.50 |
| Dibromochloromethane      | ND | 0.50 |
| 1,3-Dichloropropane       | ND | 0.50 |
| Chlorobenzene             | ND | 0.50 |
| Ethylbenzene              | ND | 0.50 |
| 1,1,1,2-Tetrachloroethane | ND | 0.50 |
| m,p-Xylene                | ND | 0.50 |
| o-Xylene                  | ND | 0.50 |
| Bromoform                 | ND | 0.50 |
| Styrene                   | ND | 0.50 |
| Isopropylbenzene          | ND | 0.50 |
| Bromobenzene              | ND | 0.50 |
| n-Propylbenzene           | ND | 0.50 |
| 1,1,2,2-Tetrachloroethane | ND | 0.50 |
| 2-Chlorotoluene           | ND | 0.50 |
| 1,2,3-Trichloropropane    | ND | 0.50 |
| 1,3,5-Trimethylbenzene    | ND | 0.50 |
| 4-Chlorotoluene           | ND | 0.50 |
| tert-Butylbenzene         | ND | 0.50 |
| 1,2,4-Trimethylbenzene    | ND | 0.50 |
| sec-Butylbenzene          | ND | 0.50 |
| p-Isopropyltoluene        | ND | 0.50 |
| 1,3-Dichlorobenzene       | ND | 0.50 |
| 1,4-Dichlorobenzene       | ND | 0.50 |
| n-Butylbenzene            | ND | 0.50 |
| 1,2-Dichlorobenzene       | ND | 0.50 |
| Hexachlorobutadiene       | ND | 0.50 |
| 1,2,4-Trichlorobenzene    | ND | 0.50 |
| Naphthalene               | ND | 0.50 |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory**Work Order:** 1903180**Project:** GBC0363**QC SUMMARY REPORT**

Method Blank

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|                                   |       |      |      |   |       |    |     |   |
|-----------------------------------|-------|------|------|---|-------|----|-----|---|
| 1,2,3-Trichlorobenzene            | ND    | 0.50 |      |   |       |    |     |   |
| Surrogate: Dibromofluoromethane   | 0.980 | 0.10 | 1.00 | 0 | 98.0% | 70 | 130 | 0 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 0.990 | 0.10 | 1.00 | 0 | 99.0% | 70 | 130 | 0 |

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**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Method Blank

| Sample ID                      | <b>MB 031219</b> | Batch ID: | <b>R98687</b>          | Test Code:  | <b>524W</b>    | Units:   | <b>µg/L</b> | Analysis Date | <b>3/12/2019 10:50:00 AM</b> | Prep Date |      |
|--------------------------------|------------------|-----------|------------------------|-------------|----------------|----------|-------------|---------------|------------------------------|-----------|------|
| Client ID:                     |                  | Run ID:   | <b>ORGCMS2_190311A</b> | SeqNo:      | <b>1403514</b> |          |             |               |                              |           |      |
| Analyte                        | Result           | Limit     | SPK value              | SPK Ref Val | % Rec          | LowLimit | HighLimit   | RPD Ref Val   | %RPD                         | RPDLimit  | Qual |
| Dichlorodifluoromethane        | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Chloromethane                  | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Vinyl Chloride                 | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Bromomethane                   | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Chloroethane                   | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Trichlorofluoromethane         | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,1-Dichloroethene             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,1,2-Trichlorotrifluoroethane | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Methylene Chloride             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| trans-1,2-Dichloroethene       | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Methyl tert-butyl ether (MTBE) | ND               | 3.0       |                        |             |                |          |             |               |                              |           |      |
| Tert-butyl alcohol (TBA)       | ND               | 15        |                        |             |                |          |             |               |                              |           |      |
| Di-isopropyl ether (DIPE)      | ND               | 3.0       |                        |             |                |          |             |               |                              |           |      |
| 1,1-Dichloroethane             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Ethyl tert-butyl ether (ETBE)  | ND               | 3.0       |                        |             |                |          |             |               |                              |           |      |
| cis-1,2-Dichloroethene         | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 2,2-Dichloropropane            | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Bromochloromethane             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Chloroform                     | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Carbon tetrachloride           | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,1,1-Trichloroethane          | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,1-Dichloropropene            | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Benzene                        | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,2-Dichloroethane             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Tert-amyl methyl ether (TAME)  | ND               | 3.0       |                        |             |                |          |             |               |                              |           |      |
| Trichloroethene                | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Dibromomethane                 | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,2-Dichloropropane            | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Bromodichloromethane           | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Method Blank

|                           |    |      |
|---------------------------|----|------|
| cis-1,3-Dichloropropene   | ND | 0.50 |
| Toluene                   | ND | 0.50 |
| Tetrachloroethene         | ND | 0.50 |
| trans-1,3-Dichloropropene | ND | 0.50 |
| 1,1,2-Trichloroethane     | ND | 0.50 |
| Dibromochloromethane      | ND | 0.50 |
| 1,3-Dichloropropane       | ND | 0.50 |
| Chlorobenzene             | ND | 0.50 |
| Ethylbenzene              | ND | 0.50 |
| 1,1,1,2-Tetrachloroethane | ND | 0.50 |
| m,p-Xylene                | ND | 0.50 |
| o-Xylene                  | ND | 0.50 |
| Bromoform                 | ND | 0.50 |
| Styrene                   | ND | 0.50 |
| Isopropylbenzene          | ND | 0.50 |
| Bromobenzene              | ND | 0.50 |
| n-Propylbenzene           | ND | 0.50 |
| 1,1,2,2-Tetrachloroethane | ND | 0.50 |
| 2-Chlorotoluene           | ND | 0.50 |
| 1,2,3-Trichloropropane    | ND | 0.50 |
| 1,3,5-Trimethylbenzene    | ND | 0.50 |
| 4-Chlorotoluene           | ND | 0.50 |
| tert-Butylbenzene         | ND | 0.50 |
| 1,2,4-Trimethylbenzene    | ND | 0.50 |
| sec-Butylbenzene          | ND | 0.50 |
| p-Isopropyltoluene        | ND | 0.50 |
| 1,3-Dichlorobenzene       | ND | 0.50 |
| 1,4-Dichlorobenzene       | ND | 0.50 |
| n-Butylbenzene            | ND | 0.50 |
| 1,2-Dichlorobenzene       | ND | 0.50 |
| Hexachlorobutadiene       | ND | 0.50 |
| 1,2,4-Trichlorobenzene    | ND | 0.50 |
| Naphthalene               | ND | 0.50 |
| 1,2,3-Trichlorobenzene    | ND | 0.50 |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory

**Work Order:** 1903180

**Project:** GBC0363

## QC SUMMARY REPORT

Method Blank

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|                                   |       |      |      |   |       |    |     |   |
|-----------------------------------|-------|------|------|---|-------|----|-----|---|
| Surrogate: Dibromofluoromethane   | 1.05  | 0.10 | 1.00 | 0 | 105%  | 70 | 130 | 0 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 0.999 | 0.10 | 1.00 | 0 | 99.9% | 70 | 130 | 0 |

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**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Method Blank

| Sample ID                      | <b>MB 031219</b> | Batch ID: | <b>R98698</b>          | Test Code:  | <b>524W</b>    | Units:   | <b>µg/L</b> | Analysis Date | <b>3/12/2019 12:25:00 PM</b> | Prep Date |      |
|--------------------------------|------------------|-----------|------------------------|-------------|----------------|----------|-------------|---------------|------------------------------|-----------|------|
| Client ID:                     |                  | Run ID:   | <b>ORGCMS3_190312B</b> | SeqNo:      | <b>1403718</b> |          |             |               |                              |           |      |
| Analyte                        | Result           | Limit     | SPK value              | SPK Ref Val | % Rec          | LowLimit | HighLimit   | RPD Ref Val   | %RPD                         | RPDLimit  | Qual |
| Dichlorodifluoromethane        | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Chloromethane                  | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Vinyl Chloride                 | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Bromomethane                   | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Chloroethane                   | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Trichlorofluoromethane         | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,1-Dichloroethene             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,1,2-Trichlorotrifluoroethane | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Methylene Chloride             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| trans-1,2-Dichloroethene       | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Methyl tert-butyl ether (MTBE) | ND               | 3.0       |                        |             |                |          |             |               |                              |           |      |
| Tert-butyl alcohol (TBA)       | ND               | 15        |                        |             |                |          |             |               |                              |           |      |
| Di-isopropyl ether (DIPE)      | ND               | 3.0       |                        |             |                |          |             |               |                              |           |      |
| 1,1-Dichloroethane             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Ethyl tert-butyl ether (ETBE)  | ND               | 3.0       |                        |             |                |          |             |               |                              |           |      |
| cis-1,2-Dichloroethene         | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 2,2-Dichloropropane            | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Bromochloromethane             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Chloroform                     | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Carbon tetrachloride           | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,1,1-Trichloroethane          | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,1-Dichloropropene            | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Benzene                        | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,2-Dichloroethane             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Tert-amyl methyl ether (TAME)  | ND               | 3.0       |                        |             |                |          |             |               |                              |           |      |
| Trichloroethene                | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Dibromomethane                 | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,2-Dichloropropane            | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Bromodichloromethane           | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Method Blank

|                           |    |      |
|---------------------------|----|------|
| cis-1,3-Dichloropropene   | ND | 0.50 |
| Toluene                   | ND | 0.50 |
| Tetrachloroethene         | ND | 0.50 |
| trans-1,3-Dichloropropene | ND | 0.50 |
| 1,1,2-Trichloroethane     | ND | 0.50 |
| Dibromochloromethane      | ND | 0.50 |
| 1,3-Dichloropropane       | ND | 0.50 |
| Chlorobenzene             | ND | 0.50 |
| Ethylbenzene              | ND | 0.50 |
| 1,1,1,2-Tetrachloroethane | ND | 0.50 |
| m,p-Xylene                | ND | 0.50 |
| o-Xylene                  | ND | 0.50 |
| Bromoform                 | ND | 0.50 |
| Styrene                   | ND | 0.50 |
| Isopropylbenzene          | ND | 0.50 |
| Bromobenzene              | ND | 0.50 |
| n-Propylbenzene           | ND | 0.50 |
| 1,1,2,2-Tetrachloroethane | ND | 0.50 |
| 2-Chlorotoluene           | ND | 0.50 |
| 1,2,3-Trichloropropane    | ND | 0.50 |
| 1,3,5-Trimethylbenzene    | ND | 0.50 |
| 4-Chlorotoluene           | ND | 0.50 |
| tert-Butylbenzene         | ND | 0.50 |
| 1,2,4-Trimethylbenzene    | ND | 0.50 |
| sec-Butylbenzene          | ND | 0.50 |
| p-Isopropyltoluene        | ND | 0.50 |
| 1,3-Dichlorobenzene       | ND | 0.50 |
| 1,4-Dichlorobenzene       | ND | 0.50 |
| n-Butylbenzene            | ND | 0.50 |
| 1,2-Dichlorobenzene       | ND | 0.50 |
| Hexachlorobutadiene       | ND | 0.50 |
| 1,2,4-Trichlorobenzene    | ND | 0.50 |
| Naphthalene               | ND | 0.50 |
| 1,2,3-Trichlorobenzene    | ND | 0.50 |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory

**Work Order:** 1903180

**Project:** GBC0363

## QC SUMMARY REPORT

Method Blank

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|                                   |      |      |      |   |      |    |     |   |
|-----------------------------------|------|------|------|---|------|----|-----|---|
| Surrogate: Dibromofluoromethane   | 1.00 | 0.10 | 1.00 | 0 | 100% | 70 | 130 | 0 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 1.01 | 0.10 | 1.00 | 0 | 101% | 70 | 130 | 0 |

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**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Method Blank

| Sample ID                      | <b>MB 031319</b> | Batch ID: | <b>R98701</b>          | Test Code:  | <b>524W</b>    | Units:   | <b>µg/L</b> | Analysis Date | <b>3/13/2019 11:12:00 AM</b> | Prep Date |      |
|--------------------------------|------------------|-----------|------------------------|-------------|----------------|----------|-------------|---------------|------------------------------|-----------|------|
| Client ID:                     |                  | Run ID:   | <b>ORGCMS2_190313A</b> | SeqNo:      | <b>1403779</b> |          |             |               |                              |           |      |
| Analyte                        | Result           | Limit     | SPK value              | SPK Ref Val | % Rec          | LowLimit | HighLimit   | RPD Ref Val   | %RPD                         | RPDLimit  | Qual |
| Dichlorodifluoromethane        | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Chloromethane                  | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Vinyl Chloride                 | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Bromomethane                   | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Chloroethane                   | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Trichlorofluoromethane         | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,1-Dichloroethene             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,1,2-Trichlorotrifluoroethane | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Methylene Chloride             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| trans-1,2-Dichloroethene       | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Methyl tert-butyl ether (MTBE) | ND               | 3.0       |                        |             |                |          |             |               |                              |           |      |
| Tert-butyl alcohol (TBA)       | ND               | 15        |                        |             |                |          |             |               |                              |           |      |
| Di-isopropyl ether (DIPE)      | ND               | 3.0       |                        |             |                |          |             |               |                              |           |      |
| 1,1-Dichloroethane             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Ethyl tert-butyl ether (ETBE)  | ND               | 3.0       |                        |             |                |          |             |               |                              |           |      |
| cis-1,2-Dichloroethene         | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 2,2-Dichloropropane            | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Bromochloromethane             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Chloroform                     | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Carbon tetrachloride           | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,1,1-Trichloroethane          | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,1-Dichloropropene            | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Benzene                        | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,2-Dichloroethane             | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Tert-amyl methyl ether (TAME)  | ND               | 3.0       |                        |             |                |          |             |               |                              |           |      |
| Trichloroethene                | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Dibromomethane                 | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| 1,2-Dichloropropane            | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |
| Bromodichloromethane           | ND               | 0.50      |                        |             |                |          |             |               |                              |           |      |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Method Blank

|                           |    |      |
|---------------------------|----|------|
| cis-1,3-Dichloropropene   | ND | 0.50 |
| Toluene                   | ND | 0.50 |
| Tetrachloroethene         | ND | 0.50 |
| trans-1,3-Dichloropropene | ND | 0.50 |
| 1,1,2-Trichloroethane     | ND | 0.50 |
| Dibromochloromethane      | ND | 0.50 |
| 1,3-Dichloropropane       | ND | 0.50 |
| Chlorobenzene             | ND | 0.50 |
| Ethylbenzene              | ND | 0.50 |
| 1,1,1,2-Tetrachloroethane | ND | 0.50 |
| m,p-Xylene                | ND | 0.50 |
| o-Xylene                  | ND | 0.50 |
| Bromoform                 | ND | 0.50 |
| Styrene                   | ND | 0.50 |
| Isopropylbenzene          | ND | 0.50 |
| Bromobenzene              | ND | 0.50 |
| n-Propylbenzene           | ND | 0.50 |
| 1,1,2,2-Tetrachloroethane | ND | 0.50 |
| 2-Chlorotoluene           | ND | 0.50 |
| 1,2,3-Trichloropropane    | ND | 0.50 |
| 1,3,5-Trimethylbenzene    | ND | 0.50 |
| 4-Chlorotoluene           | ND | 0.50 |
| tert-Butylbenzene         | ND | 0.50 |
| 1,2,4-Trimethylbenzene    | ND | 0.50 |
| sec-Butylbenzene          | ND | 0.50 |
| p-Isopropyltoluene        | ND | 0.50 |
| 1,3-Dichlorobenzene       | ND | 0.50 |
| 1,4-Dichlorobenzene       | ND | 0.50 |
| n-Butylbenzene            | ND | 0.50 |
| 1,2-Dichlorobenzene       | ND | 0.50 |
| Hexachlorobutadiene       | ND | 0.50 |
| 1,2,4-Trichlorobenzene    | ND | 0.50 |
| Naphthalene               | ND | 0.50 |
| 1,2,3-Trichlorobenzene    | ND | 0.50 |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory

**Work Order:** 1903180

**Project:** GBC0363

## QC SUMMARY REPORT

Method Blank

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|                                   |      |      |      |   |      |    |     |   |
|-----------------------------------|------|------|------|---|------|----|-----|---|
| Surrogate: Dibromofluoromethane   | 1.10 | 0.10 | 1.00 | 0 | 110% | 70 | 130 | 0 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 1.02 | 0.10 | 1.00 | 0 | 102% | 70 | 130 | 0 |

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**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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North Coast Laboratories, Ltd.

Date: 3/15/2019

**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

**QC SUMMARY REPORT**

Laboratory Control Spike

| Sample ID                      | <b>LCS-19049</b> | Batch ID: | <b>R98676</b>          | Test Code:  | <b>524W</b>    | Units:   | <b>µg/L</b> | Analysis Date | <b>3/11/2019 9:15:00 AM</b> | Prep Date |      |
|--------------------------------|------------------|-----------|------------------------|-------------|----------------|----------|-------------|---------------|-----------------------------|-----------|------|
| Client ID:                     |                  | Run ID:   | <b>ORGCMS3_190311A</b> | SeqNo:      | <b>1403336</b> |          |             |               |                             |           |      |
| Analyte                        | Result           | Limit     | SPK value              | SPK Ref Val | % Rec          | LowLimit | HighLimit   | RPD Ref Val   | %RPD                        | RPDLimit  | Qual |
| Dichlorodifluoromethane        | 3.758            | 0.50      | 5.00                   | 0           | 75.2%          | 70       | 130         | 0             |                             |           |      |
| Chloromethane                  | 4.510            | 0.50      | 5.00                   | 0           | 90.2%          | 70       | 130         | 0             |                             |           |      |
| Vinyl Chloride                 | 4.350            | 0.50      | 5.00                   | 0           | 87.0%          | 70       | 130         | 0             |                             |           |      |
| Bromomethane                   | 5.042            | 0.50      | 5.00                   | 0           | 101%           | 70       | 130         | 0             |                             |           |      |
| Chloroethane                   | 4.528            | 0.50      | 5.00                   | 0           | 90.6%          | 70       | 130         | 0             |                             |           |      |
| Trichlorofluoromethane         | 4.473            | 0.50      | 5.00                   | 0           | 89.5%          | 70       | 130         | 0             |                             |           |      |
| 1,1-Dichloroethene             | 4.704            | 0.50      | 5.00                   | 0           | 94.1%          | 70       | 130         | 0             |                             |           |      |
| 1,1,2-Trichlorotrifluoroethane | 4.514            | 0.50      | 5.00                   | 0           | 90.3%          | 70       | 130         | 0             |                             |           |      |
| Methylene Chloride             | 4.608            | 0.50      | 5.00                   | 0           | 92.2%          | 70       | 130         | 0             |                             |           |      |
| trans-1,2-Dichloroethene       | 4.671            | 0.50      | 5.00                   | 0           | 93.4%          | 70       | 130         | 0             |                             |           |      |
| Methyl tert-butyl ether (MTBE) | 4.287            | 3.0       | 5.00                   | 0           | 85.7%          | 70       | 130         | 0             |                             |           |      |
| Tert-butyl alcohol (TBA)       | 66.72            | 15        | 100                    | 0           | 66.7%          | 70       | 130         | 0             |                             |           | S    |
| Di-isopropyl ether (DIPE)      | 4.596            | 3.0       | 5.00                   | 0           | 91.9%          | 70       | 130         | 0             |                             |           |      |
| 1,1-Dichloroethane             | 4.823            | 0.50      | 5.00                   | 0           | 96.5%          | 70       | 130         | 0             |                             |           |      |
| Ethyl tert-butyl ether (ETBE)  | 4.640            | 3.0       | 5.00                   | 0           | 92.8%          | 70       | 130         | 0             |                             |           |      |
| cis-1,2-Dichloroethene         | 4.715            | 0.50      | 5.00                   | 0           | 94.3%          | 70       | 130         | 0             |                             |           |      |
| 2,2-Dichloropropane            | 5.242            | 0.50      | 5.00                   | 0           | 105%           | 70       | 130         | 0             |                             |           |      |
| Bromochloromethane             | 4.220            | 0.50      | 5.00                   | 0           | 84.4%          | 70       | 130         | 0             |                             |           |      |
| Chloroform                     | 4.688            | 0.50      | 5.00                   | 0           | 93.8%          | 70       | 130         | 0             |                             |           |      |
| Carbon tetrachloride           | 4.659            | 0.50      | 5.00                   | 0           | 93.2%          | 70       | 130         | 0             |                             |           |      |
| 1,1,1-Trichloroethane          | 4.826            | 0.50      | 5.00                   | 0           | 96.5%          | 70       | 130         | 0             |                             |           |      |
| 1,1-Dichloropropene            | 4.602            | 0.50      | 5.00                   | 0           | 92.0%          | 70       | 130         | 0             |                             |           |      |
| Benzene                        | 4.613            | 0.50      | 5.00                   | 0           | 92.3%          | 70       | 130         | 0             |                             |           |      |
| 1,2-Dichloroethane             | 4.480            | 0.50      | 5.00                   | 0           | 89.6%          | 70       | 130         | 0             |                             |           |      |
| Tert-amyl methyl ether (TAME)  | 4.392            | 3.0       | 5.00                   | 0           | 87.8%          | 70       | 130         | 0             |                             |           |      |
| Trichloroethene                | 4.565            | 0.50      | 5.00                   | 0           | 91.3%          | 70       | 130         | 0             |                             |           |      |
| Dibromomethane                 | 4.266            | 0.50      | 5.00                   | 0           | 85.3%          | 70       | 130         | 0             |                             |           |      |
| 1,2-Dichloropropane            | 4.705            | 0.50      | 5.00                   | 0           | 94.1%          | 70       | 130         | 0             |                             |           |      |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Laboratory Control Spike

|                           |       |      |      |   |       |    |     |   |
|---------------------------|-------|------|------|---|-------|----|-----|---|
| Bromodichloromethane      | 4.673 | 0.50 | 5.00 | 0 | 93.5% | 70 | 130 | 0 |
| cis-1,3-Dichloropropene   | 4.526 | 0.50 | 5.00 | 0 | 90.5% | 70 | 130 | 0 |
| Toluene                   | 4.666 | 0.50 | 5.00 | 0 | 93.3% | 70 | 130 | 0 |
| Tetrachloroethene         | 4.508 | 0.50 | 5.00 | 0 | 90.2% | 70 | 130 | 0 |
| trans-1,3-Dichloropropene | 3.707 | 0.50 | 5.00 | 0 | 74.1% | 70 | 130 | 0 |
| 1,1,2-Trichloroethane     | 4.013 | 0.50 | 5.00 | 0 | 80.3% | 70 | 130 | 0 |
| Dibromochloromethane      | 4.636 | 0.50 | 5.00 | 0 | 92.7% | 70 | 130 | 0 |
| 1,3-Dichloropropane       | 4.449 | 0.50 | 5.00 | 0 | 89.0% | 70 | 130 | 0 |
| Chlorobenzene             | 4.861 | 0.50 | 5.00 | 0 | 97.2% | 70 | 130 | 0 |
| Ethylbenzene              | 4.768 | 0.50 | 5.00 | 0 | 95.4% | 70 | 130 | 0 |
| 1,1,1,2-Tetrachloroethane | 4.918 | 0.50 | 5.00 | 0 | 98.4% | 70 | 130 | 0 |
| m,p-Xylene                | 9.786 | 0.50 | 10.0 | 0 | 97.9% | 70 | 130 | 0 |
| o-Xylene                  | 4.853 | 0.50 | 5.00 | 0 | 97.1% | 70 | 130 | 0 |
| Bromoform                 | 4.358 | 0.50 | 5.00 | 0 | 87.2% | 70 | 130 | 0 |
| Styrene                   | 5.041 | 0.50 | 5.00 | 0 | 101%  | 70 | 130 | 0 |
| Isopropylbenzene          | 4.717 | 0.50 | 5.00 | 0 | 94.3% | 70 | 130 | 0 |
| Bromobenzene              | 4.760 | 0.50 | 5.00 | 0 | 95.2% | 70 | 130 | 0 |
| n-Propylbenzene           | 4.928 | 0.50 | 5.00 | 0 | 98.6% | 70 | 130 | 0 |
| 1,1,2,2-Tetrachloroethane | 3.918 | 0.50 | 5.00 | 0 | 78.4% | 70 | 130 | 0 |
| 2-Chlorotoluene           | 4.859 | 0.50 | 5.00 | 0 | 97.2% | 70 | 130 | 0 |
| 1,2,3-Trichloropropane    | 3.888 | 0.50 | 5.00 | 0 | 77.8% | 70 | 130 | 0 |
| 1,3,5-Trimethylbenzene    | 5.100 | 0.50 | 5.00 | 0 | 102%  | 70 | 130 | 0 |
| 4-Chlorotoluene           | 4.874 | 0.50 | 5.00 | 0 | 97.5% | 70 | 130 | 0 |
| tert-Butylbenzene         | 4.897 | 0.50 | 5.00 | 0 | 97.9% | 70 | 130 | 0 |
| 1,2,4-Trimethylbenzene    | 5.054 | 0.50 | 5.00 | 0 | 101%  | 70 | 130 | 0 |
| sec-Butylbenzene          | 4.887 | 0.50 | 5.00 | 0 | 97.7% | 70 | 130 | 0 |
| p-Isopropyltoluene        | 4.934 | 0.50 | 5.00 | 0 | 98.7% | 70 | 130 | 0 |
| 1,3-Dichlorobenzene       | 4.894 | 0.50 | 5.00 | 0 | 97.9% | 70 | 130 | 0 |
| 1,4-Dichlorobenzene       | 4.701 | 0.50 | 5.00 | 0 | 94.0% | 70 | 130 | 0 |
| n-Butylbenzene            | 4.731 | 0.50 | 5.00 | 0 | 94.6% | 70 | 130 | 0 |
| 1,2-Dichlorobenzene       | 4.603 | 0.50 | 5.00 | 0 | 92.1% | 70 | 130 | 0 |
| Hexachlorobutadiene       | 4.500 | 0.50 | 5.00 | 0 | 90.0% | 70 | 130 | 0 |
| 1,2,4-Trichlorobenzene    | 4.380 | 0.50 | 5.00 | 0 | 87.6% | 70 | 130 | 0 |
| Naphthalene               | 3.262 | 0.50 | 5.00 | 0 | 65.3% | 70 | 130 | 0 |

S

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

**QC SUMMARY REPORT**  
Laboratory Control Spike

|                                   |       |      |      |   |       |    |     |   |
|-----------------------------------|-------|------|------|---|-------|----|-----|---|
| 1,2,3-Trichlorobenzene            | 4.158 | 0.50 | 5.00 | 0 | 83.2% | 70 | 130 | 0 |
| Surrogate: Dibromofluoromethane   | 1.00  | 0.10 | 1.00 | 0 | 100%  | 70 | 130 | 0 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 0.940 | 0.10 | 1.00 | 0 | 94.0% | 70 | 130 | 0 |

**Qualifiers:** ND - Not Detected at the Reporting Limit      S - Spike Recovery outside accepted recovery limits      B - Analyte detected in the associated Method Blank  
J - Analyte detected below quantitation limits      R - RPD outside accepted recovery limits

**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Laboratory Control Spike

| Sample ID                      | <b>LCS-19050</b> | Batch ID: | <b>R98687</b>          | Test Code:  | <b>524W</b>    | Units:   | <b>µg/L</b> | Analysis Date | <b>3/12/2019 10:15:00 AM</b> | Prep Date |      |
|--------------------------------|------------------|-----------|------------------------|-------------|----------------|----------|-------------|---------------|------------------------------|-----------|------|
| Client ID:                     |                  | Run ID:   | <b>ORGCMS2_190311A</b> | SeqNo:      | <b>1403513</b> |          |             |               |                              |           |      |
| Analyte                        | Result           | Limit     | SPK value              | SPK Ref Val | % Rec          | LowLimit | HighLimit   | RPD Ref Val   | %RPD                         | RPDLimit  | Qual |
| Dichlorodifluoromethane        | 6.475            | 0.50      | 5.00                   | 0           | 130%           | 70       | 130         | 0             |                              |           |      |
| Chloromethane                  | 6.713            | 0.50      | 5.00                   | 0           | 134%           | 70       | 130         | 0             |                              |           | S    |
| Vinyl Chloride                 | 5.070            | 0.50      | 5.00                   | 0           | 101%           | 70       | 130         | 0             |                              |           |      |
| Bromomethane                   | 6.620            | 0.50      | 5.00                   | 0           | 132%           | 70       | 130         | 0             |                              |           | S    |
| Chloroethane                   | 6.402            | 0.50      | 5.00                   | 0           | 128%           | 70       | 130         | 0             |                              |           |      |
| Trichlorofluoromethane         | 6.217            | 0.50      | 5.00                   | 0           | 124%           | 70       | 130         | 0             |                              |           |      |
| 1,1-Dichloroethene             | 4.810            | 0.50      | 5.00                   | 0           | 96.2%          | 70       | 130         | 0             |                              |           |      |
| 1,1,2-Trichlorotrifluoroethane | 3.897            | 0.50      | 5.00                   | 0           | 77.9%          | 70       | 130         | 0             |                              |           |      |
| Methylene Chloride             | 4.859            | 0.50      | 5.00                   | 0           | 97.2%          | 70       | 130         | 0             |                              |           |      |
| trans-1,2-Dichloroethene       | 5.262            | 0.50      | 5.00                   | 0           | 105%           | 70       | 130         | 0             |                              |           |      |
| Methyl tert-butyl ether (MTBE) | 3.746            | 3.0       | 5.00                   | 0           | 74.9%          | 70       | 130         | 0             |                              |           |      |
| Tert-butyl alcohol (TBA)       | 51.47            | 15        | 100                    | 0           | 51.5%          | 70       | 130         | 0             |                              |           | S    |
| Di-isopropyl ether (DIPE)      | 4.678            | 3.0       | 5.00                   | 0           | 93.6%          | 70       | 130         | 0             |                              |           |      |
| 1,1-Dichloroethane             | 5.319            | 0.50      | 5.00                   | 0           | 106%           | 70       | 130         | 0             |                              |           |      |
| Ethyl tert-butyl ether (ETBE)  | 4.120            | 3.0       | 5.00                   | 0           | 82.4%          | 70       | 130         | 0             |                              |           |      |
| cis-1,2-Dichloroethene         | 5.390            | 0.50      | 5.00                   | 0           | 108%           | 70       | 130         | 0             |                              |           |      |
| 2,2-Dichloropropane            | 4.438            | 0.50      | 5.00                   | 0           | 88.8%          | 70       | 130         | 0             |                              |           |      |
| Bromochloromethane             | 5.192            | 0.50      | 5.00                   | 0           | 104%           | 70       | 130         | 0             |                              |           |      |
| Chloroform                     | 5.371            | 0.50      | 5.00                   | 0           | 107%           | 70       | 130         | 0             |                              |           |      |
| Carbon tetrachloride           | 4.442            | 0.50      | 5.00                   | 0           | 88.8%          | 70       | 130         | 0             |                              |           |      |
| 1,1,1-Trichloroethane          | 4.869            | 0.50      | 5.00                   | 0           | 97.4%          | 70       | 130         | 0             |                              |           |      |
| 1,1-Dichloropropene            | 4.779            | 0.50      | 5.00                   | 0           | 95.6%          | 70       | 130         | 0             |                              |           |      |
| Benzene                        | 5.194            | 0.50      | 5.00                   | 0           | 104%           | 70       | 130         | 0             |                              |           |      |
| 1,2-Dichloroethane             | 4.576            | 0.50      | 5.00                   | 0           | 91.5%          | 70       | 130         | 0             |                              |           |      |
| Tert-amyl methyl ether (TAME)  | 3.711            | 3.0       | 5.00                   | 0           | 74.2%          | 70       | 130         | 0             |                              |           |      |
| Trichloroethene                | 5.038            | 0.50      | 5.00                   | 0           | 101%           | 70       | 130         | 0             |                              |           |      |
| Dibromomethane                 | 4.260            | 0.50      | 5.00                   | 0           | 85.2%          | 70       | 130         | 0             |                              |           |      |
| 1,2-Dichloropropane            | 4.914            | 0.50      | 5.00                   | 0           | 98.3%          | 70       | 130         | 0             |                              |           |      |
| Bromodichloromethane           | 4.924            | 0.50      | 5.00                   | 0           | 98.5%          | 70       | 130         | 0             |                              |           |      |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Laboratory Control Spike

|                           |       |      |      |   |       |    |     |   |
|---------------------------|-------|------|------|---|-------|----|-----|---|
| cis-1,3-Dichloropropene   | 4.606 | 0.50 | 5.00 | 0 | 92.1% | 70 | 130 | 0 |
| Toluene                   | 5.077 | 0.50 | 5.00 | 0 | 102%  | 70 | 130 | 0 |
| Tetrachloroethene         | 4.858 | 0.50 | 5.00 | 0 | 97.2% | 70 | 130 | 0 |
| trans-1,3-Dichloropropene | 4.004 | 0.50 | 5.00 | 0 | 80.1% | 70 | 130 | 0 |
| 1,1,2-Trichloroethane     | 3.951 | 0.50 | 5.00 | 0 | 79.0% | 70 | 130 | 0 |
| Dibromochloromethane      | 4.125 | 0.50 | 5.00 | 0 | 82.5% | 70 | 130 | 0 |
| 1,3-Dichloropropane       | 4.082 | 0.50 | 5.00 | 0 | 81.6% | 70 | 130 | 0 |
| Chlorobenzene             | 5.065 | 0.50 | 5.00 | 0 | 101%  | 70 | 130 | 0 |
| Ethylbenzene              | 4.970 | 0.50 | 5.00 | 0 | 99.4% | 70 | 130 | 0 |
| 1,1,1,2-Tetrachloroethane | 4.600 | 0.50 | 5.00 | 0 | 92.0% | 70 | 130 | 0 |
| m,p-Xylene                | 10.47 | 0.50 | 10.0 | 0 | 105%  | 70 | 130 | 0 |
| o-Xylene                  | 5.047 | 0.50 | 5.00 | 0 | 101%  | 70 | 130 | 0 |
| Bromoform                 | 3.640 | 0.50 | 5.00 | 0 | 72.8% | 70 | 130 | 0 |
| Styrene                   | 5.104 | 0.50 | 5.00 | 0 | 102%  | 70 | 130 | 0 |
| Isopropylbenzene          | 4.969 | 0.50 | 5.00 | 0 | 99.4% | 70 | 130 | 0 |
| Bromobenzene              | 4.958 | 0.50 | 5.00 | 0 | 99.2% | 70 | 130 | 0 |
| n-Propylbenzene           | 5.171 | 0.50 | 5.00 | 0 | 103%  | 70 | 130 | 0 |
| 1,1,2,2-Tetrachloroethane | 3.538 | 0.50 | 5.00 | 0 | 70.8% | 70 | 130 | 0 |
| 2-Chlorotoluene           | 5.332 | 0.50 | 5.00 | 0 | 107%  | 70 | 130 | 0 |
| 1,2,3-Trichloropropane    | 3.507 | 0.50 | 5.00 | 0 | 70.1% | 70 | 130 | 0 |
| 1,3,5-Trimethylbenzene    | 5.244 | 0.50 | 5.00 | 0 | 105%  | 70 | 130 | 0 |
| 4-Chlorotoluene           | 5.319 | 0.50 | 5.00 | 0 | 106%  | 70 | 130 | 0 |
| tert-Butylbenzene         | 5.022 | 0.50 | 5.00 | 0 | 100%  | 70 | 130 | 0 |
| 1,2,4-Trimethylbenzene    | 5.344 | 0.50 | 5.00 | 0 | 107%  | 70 | 130 | 0 |
| sec-Butylbenzene          | 5.132 | 0.50 | 5.00 | 0 | 103%  | 70 | 130 | 0 |
| p-Isopropyltoluene        | 5.175 | 0.50 | 5.00 | 0 | 103%  | 70 | 130 | 0 |
| 1,3-Dichlorobenzene       | 5.285 | 0.50 | 5.00 | 0 | 106%  | 70 | 130 | 0 |
| 1,4-Dichlorobenzene       | 5.203 | 0.50 | 5.00 | 0 | 104%  | 70 | 130 | 0 |
| n-Butylbenzene            | 5.160 | 0.50 | 5.00 | 0 | 103%  | 70 | 130 | 0 |
| 1,2-Dichlorobenzene       | 5.005 | 0.50 | 5.00 | 0 | 100%  | 70 | 130 | 0 |
| Hexachlorobutadiene       | 5.007 | 0.50 | 5.00 | 0 | 100%  | 70 | 130 | 0 |
| 1,2,4-Trichlorobenzene    | 4.580 | 0.50 | 5.00 | 0 | 91.6% | 70 | 130 | 0 |
| Naphthalene               | 3.410 | 0.50 | 5.00 | 0 | 68.2% | 70 | 130 | 0 |
| 1,2,3-Trichlorobenzene    | 4.187 | 0.50 | 5.00 | 0 | 83.7% | 70 | 130 | 0 |

S

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory**Work Order:** 1903180**Project:** GBC0363**QC SUMMARY REPORT**

Laboratory Control Spike

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|                                   |       |      |      |   |       |    |     |   |
|-----------------------------------|-------|------|------|---|-------|----|-----|---|
| Surrogate: Dibromofluoromethane   | 1.03  | 0.10 | 1.00 | 0 | 103%  | 70 | 130 | 0 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 0.976 | 0.10 | 1.00 | 0 | 97.6% | 70 | 130 | 0 |

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**Qualifiers:** ND - Not Detected at the Reporting Limit  
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S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Laboratory Control Spike

| Sample ID                      | <b>LCS-19050</b> | Batch ID: | <b>R98698</b>          | Test Code:  | <b>524W</b>    | Units:   | <b>µg/L</b> | Analysis Date | <b>3/12/2019 11:50:00 AM</b> | Prep Date |      |
|--------------------------------|------------------|-----------|------------------------|-------------|----------------|----------|-------------|---------------|------------------------------|-----------|------|
| Client ID:                     |                  | Run ID:   | <b>ORGCMS3_190312B</b> | SeqNo:      | <b>1403717</b> |          |             |               |                              |           |      |
| Analyte                        | Result           | Limit     | SPK value              | SPK Ref Val | % Rec          | LowLimit | HighLimit   | RPD Ref Val   | %RPD                         | RPDLimit  | Qual |
| Dichlorodifluoromethane        | 4.408            | 0.50      | 5.00                   | 0           | 88.2%          | 70       | 130         | 0             |                              |           |      |
| Chloromethane                  | 6.019            | 0.50      | 5.00                   | 0           | 120%           | 70       | 130         | 0             |                              |           |      |
| Vinyl Chloride                 | 5.743            | 0.50      | 5.00                   | 0           | 115%           | 70       | 130         | 0             |                              |           |      |
| Bromomethane                   | 5.881            | 0.50      | 5.00                   | 0           | 118%           | 70       | 130         | 0             |                              |           |      |
| Chloroethane                   | 5.930            | 0.50      | 5.00                   | 0           | 119%           | 70       | 130         | 0             |                              |           |      |
| Trichlorofluoromethane         | 5.832            | 0.50      | 5.00                   | 0           | 117%           | 70       | 130         | 0             |                              |           |      |
| 1,1-Dichloroethene             | 4.453            | 0.50      | 5.00                   | 0           | 89.1%          | 70       | 130         | 0             |                              |           |      |
| 1,1,2-Trichlorotrifluoroethane | 3.578            | 0.50      | 5.00                   | 0           | 71.6%          | 70       | 130         | 0             |                              |           |      |
| Methylene Chloride             | 4.947            | 0.50      | 5.00                   | 0           | 98.9%          | 70       | 130         | 0             |                              |           |      |
| trans-1,2-Dichloroethene       | 4.898            | 0.50      | 5.00                   | 0           | 98.0%          | 70       | 130         | 0             |                              |           |      |
| Methyl tert-butyl ether (MTBE) | 4.434            | 3.0       | 5.00                   | 0           | 88.7%          | 70       | 130         | 0             |                              |           |      |
| Tert-butyl alcohol (TBA)       | 85.64            | 15        | 100                    | 0           | 85.6%          | 70       | 130         | 0             |                              |           |      |
| Di-isopropyl ether (DIPE)      | 4.697            | 3.0       | 5.00                   | 0           | 93.9%          | 70       | 130         | 0             |                              |           |      |
| 1,1-Dichloroethane             | 4.792            | 0.50      | 5.00                   | 0           | 95.8%          | 70       | 130         | 0             |                              |           |      |
| Ethyl tert-butyl ether (ETBE)  | 4.406            | 3.0       | 5.00                   | 0           | 88.1%          | 70       | 130         | 0             |                              |           |      |
| cis-1,2-Dichloroethene         | 4.883            | 0.50      | 5.00                   | 0           | 97.7%          | 70       | 130         | 0             |                              |           |      |
| 2,2-Dichloropropane            | 4.874            | 0.50      | 5.00                   | 0           | 97.5%          | 70       | 130         | 0             |                              |           |      |
| Bromochloromethane             | 4.610            | 0.50      | 5.00                   | 0           | 92.2%          | 70       | 130         | 0             |                              |           |      |
| Chloroform                     | 4.867            | 0.50      | 5.00                   | 0           | 97.3%          | 70       | 130         | 0             |                              |           |      |
| Carbon tetrachloride           | 4.119            | 0.50      | 5.00                   | 0           | 82.4%          | 70       | 130         | 0             |                              |           |      |
| 1,1,1-Trichloroethane          | 4.497            | 0.50      | 5.00                   | 0           | 89.9%          | 70       | 130         | 0             |                              |           |      |
| 1,1-Dichloropropene            | 4.363            | 0.50      | 5.00                   | 0           | 87.3%          | 70       | 130         | 0             |                              |           |      |
| Benzene                        | 4.796            | 0.50      | 5.00                   | 0           | 95.9%          | 70       | 130         | 0             |                              |           |      |
| 1,2-Dichloroethane             | 4.773            | 0.50      | 5.00                   | 0           | 95.5%          | 70       | 130         | 0             |                              |           |      |
| Tert-amyl methyl ether (TAME)  | 4.452            | 3.0       | 5.00                   | 0           | 89.0%          | 70       | 130         | 0             |                              |           |      |
| Trichloroethene                | 4.657            | 0.50      | 5.00                   | 0           | 93.1%          | 70       | 130         | 0             |                              |           |      |
| Dibromomethane                 | 4.757            | 0.50      | 5.00                   | 0           | 95.1%          | 70       | 130         | 0             |                              |           |      |
| 1,2-Dichloropropane            | 4.712            | 0.50      | 5.00                   | 0           | 94.2%          | 70       | 130         | 0             |                              |           |      |
| Bromodichloromethane           | 4.800            | 0.50      | 5.00                   | 0           | 96.0%          | 70       | 130         | 0             |                              |           |      |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Laboratory Control Spike

|                           |       |      |      |   |       |    |     |   |
|---------------------------|-------|------|------|---|-------|----|-----|---|
| cis-1,3-Dichloropropene   | 4.718 | 0.50 | 5.00 | 0 | 94.4% | 70 | 130 | 0 |
| Toluene                   | 4.743 | 0.50 | 5.00 | 0 | 94.9% | 70 | 130 | 0 |
| Tetrachloroethene         | 4.488 | 0.50 | 5.00 | 0 | 89.8% | 70 | 130 | 0 |
| trans-1,3-Dichloropropene | 3.892 | 0.50 | 5.00 | 0 | 77.8% | 70 | 130 | 0 |
| 1,1,2-Trichloroethane     | 4.612 | 0.50 | 5.00 | 0 | 92.2% | 70 | 130 | 0 |
| Dibromochloromethane      | 4.616 | 0.50 | 5.00 | 0 | 92.3% | 70 | 130 | 0 |
| 1,3-Dichloropropane       | 4.698 | 0.50 | 5.00 | 0 | 94.0% | 70 | 130 | 0 |
| Chlorobenzene             | 4.758 | 0.50 | 5.00 | 0 | 95.2% | 70 | 130 | 0 |
| Ethylbenzene              | 4.578 | 0.50 | 5.00 | 0 | 91.6% | 70 | 130 | 0 |
| 1,1,1,2-Tetrachloroethane | 4.738 | 0.50 | 5.00 | 0 | 94.8% | 70 | 130 | 0 |
| m,p-Xylene                | 9.400 | 0.50 | 10.0 | 0 | 94.0% | 70 | 130 | 0 |
| o-Xylene                  | 4.473 | 0.50 | 5.00 | 0 | 89.5% | 70 | 130 | 0 |
| Bromoform                 | 4.688 | 0.50 | 5.00 | 0 | 93.8% | 70 | 130 | 0 |
| Styrene                   | 4.798 | 0.50 | 5.00 | 0 | 96.0% | 70 | 130 | 0 |
| Isopropylbenzene          | 4.548 | 0.50 | 5.00 | 0 | 91.0% | 70 | 130 | 0 |
| Bromobenzene              | 4.698 | 0.50 | 5.00 | 0 | 94.0% | 70 | 130 | 0 |
| n-Propylbenzene           | 4.671 | 0.50 | 5.00 | 0 | 93.4% | 70 | 130 | 0 |
| 1,1,2,2-Tetrachloroethane | 4.494 | 0.50 | 5.00 | 0 | 89.9% | 70 | 130 | 0 |
| 2-Chlorotoluene           | 4.694 | 0.50 | 5.00 | 0 | 93.9% | 70 | 130 | 0 |
| 1,2,3-Trichloropropane    | 4.380 | 0.50 | 5.00 | 0 | 87.6% | 70 | 130 | 0 |
| 1,3,5-Trimethylbenzene    | 4.646 | 0.50 | 5.00 | 0 | 92.9% | 70 | 130 | 0 |
| 4-Chlorotoluene           | 4.894 | 0.50 | 5.00 | 0 | 97.9% | 70 | 130 | 0 |
| tert-Butylbenzene         | 4.563 | 0.50 | 5.00 | 0 | 91.3% | 70 | 130 | 0 |
| 1,2,4-Trimethylbenzene    | 4.685 | 0.50 | 5.00 | 0 | 93.7% | 70 | 130 | 0 |
| sec-Butylbenzene          | 4.651 | 0.50 | 5.00 | 0 | 93.0% | 70 | 130 | 0 |
| p-Isopropyltoluene        | 4.524 | 0.50 | 5.00 | 0 | 90.5% | 70 | 130 | 0 |
| 1,3-Dichlorobenzene       | 4.924 | 0.50 | 5.00 | 0 | 98.5% | 70 | 130 | 0 |
| 1,4-Dichlorobenzene       | 4.761 | 0.50 | 5.00 | 0 | 95.2% | 70 | 130 | 0 |
| n-Butylbenzene            | 4.553 | 0.50 | 5.00 | 0 | 91.1% | 70 | 130 | 0 |
| 1,2-Dichlorobenzene       | 4.713 | 0.50 | 5.00 | 0 | 94.3% | 70 | 130 | 0 |
| Hexachlorobutadiene       | 4.267 | 0.50 | 5.00 | 0 | 85.3% | 70 | 130 | 0 |
| 1,2,4-Trichlorobenzene    | 4.445 | 0.50 | 5.00 | 0 | 88.9% | 70 | 130 | 0 |
| Naphthalene               | 3.594 | 0.50 | 5.00 | 0 | 71.9% | 70 | 130 | 0 |
| 1,2,3-Trichlorobenzene    | 4.648 | 0.50 | 5.00 | 0 | 93.0% | 70 | 130 | 0 |

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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**CLIENT:** Cranmer Analytical Laboratory**Work Order:** 1903180**Project:** GBC0363**QC SUMMARY REPORT**

Laboratory Control Spike

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|                                   |       |      |      |   |       |    |     |   |
|-----------------------------------|-------|------|------|---|-------|----|-----|---|
| Surrogate: Dibromofluoromethane   | 1.01  | 0.10 | 1.00 | 0 | 101%  | 70 | 130 | 0 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 0.980 | 0.10 | 1.00 | 0 | 98.0% | 70 | 130 | 0 |

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**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Laboratory Control Spike

| Sample ID                      | <b>LCS-19052</b> | Batch ID: | <b>R98701</b>          | Test Code:  | <b>524W</b>    | Units:   | <b>µg/L</b> | Analysis Date | <b>3/13/2019 10:26:00 AM</b> | Prep Date |      |
|--------------------------------|------------------|-----------|------------------------|-------------|----------------|----------|-------------|---------------|------------------------------|-----------|------|
| Client ID:                     |                  | Run ID:   | <b>ORGCMS2_190313A</b> | SeqNo:      | <b>1403778</b> |          |             |               |                              |           |      |
| Analyte                        | Result           | Limit     | SPK value              | SPK Ref Val | % Rec          | LowLimit | HighLimit   | RPD Ref Val   | %RPD                         | RPDLimit  | Qual |
| Dichlorodifluoromethane        | 6.403            | 0.50      | 5.00                   | 0           | 128%           | 70       | 130         | 0             |                              |           |      |
| Chloromethane                  | 7.966            | 0.50      | 5.00                   | 0           | 159%           | 70       | 130         | 0             |                              |           | S    |
| Vinyl Chloride                 | 5.000            | 0.50      | 5.00                   | 0           | 100%           | 70       | 130         | 0             |                              |           |      |
| Bromomethane                   | 6.473            | 0.50      | 5.00                   | 0           | 129%           | 70       | 130         | 0             |                              |           |      |
| Chloroethane                   | 6.676            | 0.50      | 5.00                   | 0           | 134%           | 70       | 130         | 0             |                              |           | S    |
| Trichlorofluoromethane         | 6.395            | 0.50      | 5.00                   | 0           | 128%           | 70       | 130         | 0             |                              |           |      |
| 1,1-Dichloroethene             | 4.932            | 0.50      | 5.00                   | 0           | 98.6%          | 70       | 130         | 0             |                              |           |      |
| 1,1,2-Trichlorotrifluoroethane | 4.936            | 0.50      | 5.00                   | 0           | 98.7%          | 70       | 130         | 0             |                              |           |      |
| Methylene Chloride             | 4.811            | 0.50      | 5.00                   | 0           | 96.2%          | 70       | 130         | 0             |                              |           |      |
| trans-1,2-Dichloroethene       | 5.172            | 0.50      | 5.00                   | 0           | 103%           | 70       | 130         | 0             |                              |           |      |
| Methyl tert-butyl ether (MTBE) | 3.729            | 3.0       | 5.00                   | 0           | 74.6%          | 70       | 130         | 0             |                              |           |      |
| Tert-butyl alcohol (TBA)       | 51.34            | 15        | 100                    | 0           | 51.3%          | 70       | 130         | 0             |                              |           | S    |
| Di-isopropyl ether (DIPE)      | 4.512            | 3.0       | 5.00                   | 0           | 90.2%          | 70       | 130         | 0             |                              |           |      |
| 1,1-Dichloroethane             | 5.081            | 0.50      | 5.00                   | 0           | 102%           | 70       | 130         | 0             |                              |           |      |
| Ethyl tert-butyl ether (ETBE)  | 4.106            | 3.0       | 5.00                   | 0           | 82.1%          | 70       | 130         | 0             |                              |           |      |
| cis-1,2-Dichloroethene         | 4.949            | 0.50      | 5.00                   | 0           | 99.0%          | 70       | 130         | 0             |                              |           |      |
| 2,2-Dichloropropane            | 4.905            | 0.50      | 5.00                   | 0           | 98.1%          | 70       | 130         | 0             |                              |           |      |
| Bromochloromethane             | 5.083            | 0.50      | 5.00                   | 0           | 102%           | 70       | 130         | 0             |                              |           |      |
| Chloroform                     | 5.192            | 0.50      | 5.00                   | 0           | 104%           | 70       | 130         | 0             |                              |           |      |
| Carbon tetrachloride           | 5.139            | 0.50      | 5.00                   | 0           | 103%           | 70       | 130         | 0             |                              |           |      |
| 1,1,1-Trichloroethane          | 5.214            | 0.50      | 5.00                   | 0           | 104%           | 70       | 130         | 0             |                              |           |      |
| 1,1-Dichloropropene            | 4.990            | 0.50      | 5.00                   | 0           | 99.8%          | 70       | 130         | 0             |                              |           |      |
| Benzene                        | 4.921            | 0.50      | 5.00                   | 0           | 98.4%          | 70       | 130         | 0             |                              |           |      |
| 1,2-Dichloroethane             | 4.505            | 0.50      | 5.00                   | 0           | 90.1%          | 70       | 130         | 0             |                              |           |      |
| Tert-amyl methyl ether (TAME)  | 3.730            | 3.0       | 5.00                   | 0           | 74.6%          | 70       | 130         | 0             |                              |           |      |
| Trichloroethene                | 5.030            | 0.50      | 5.00                   | 0           | 101%           | 70       | 130         | 0             |                              |           |      |
| Dibromomethane                 | 4.300            | 0.50      | 5.00                   | 0           | 86.0%          | 70       | 130         | 0             |                              |           |      |
| 1,2-Dichloropropane            | 4.822            | 0.50      | 5.00                   | 0           | 96.4%          | 70       | 130         | 0             |                              |           |      |
| Bromodichloromethane           | 5.019            | 0.50      | 5.00                   | 0           | 100%           | 70       | 130         | 0             |                              |           |      |

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**CLIENT:** Cranmer Analytical Laboratory  
**Work Order:** 1903180  
**Project:** GBC0363

## QC SUMMARY REPORT

Laboratory Control Spike

|                           |       |      |      |   |       |    |     |   |   |
|---------------------------|-------|------|------|---|-------|----|-----|---|---|
| cis-1,3-Dichloropropene   | 4.700 | 0.50 | 5.00 | 0 | 94.0% | 70 | 130 | 0 |   |
| Toluene                   | 4.718 | 0.50 | 5.00 | 0 | 94.4% | 70 | 130 | 0 |   |
| Tetrachloroethene         | 4.853 | 0.50 | 5.00 | 0 | 97.1% | 70 | 130 | 0 |   |
| trans-1,3-Dichloropropene | 4.298 | 0.50 | 5.00 | 0 | 86.0% | 70 | 130 | 0 |   |
| 1,1,2-Trichloroethane     | 4.001 | 0.50 | 5.00 | 0 | 80.0% | 70 | 130 | 0 |   |
| Dibromochloromethane      | 4.399 | 0.50 | 5.00 | 0 | 88.0% | 70 | 130 | 0 |   |
| 1,3-Dichloropropane       | 3.900 | 0.50 | 5.00 | 0 | 78.0% | 70 | 130 | 0 |   |
| Chlorobenzene             | 4.694 | 0.50 | 5.00 | 0 | 93.9% | 70 | 130 | 0 |   |
| Ethylbenzene              | 4.586 | 0.50 | 5.00 | 0 | 91.7% | 70 | 130 | 0 |   |
| 1,1,1,2-Tetrachloroethane | 4.406 | 0.50 | 5.00 | 0 | 88.1% | 70 | 130 | 0 |   |
| m,p-Xylene                | 9.596 | 0.50 | 10.0 | 0 | 96.0% | 70 | 130 | 0 |   |
| o-Xylene                  | 4.627 | 0.50 | 5.00 | 0 | 92.5% | 70 | 130 | 0 |   |
| Bromoform                 | 4.099 | 0.50 | 5.00 | 0 | 82.0% | 70 | 130 | 0 |   |
| Styrene                   | 4.823 | 0.50 | 5.00 | 0 | 96.5% | 70 | 130 | 0 |   |
| Isopropylbenzene          | 4.817 | 0.50 | 5.00 | 0 | 96.3% | 70 | 130 | 0 |   |
| Bromobenzene              | 4.745 | 0.50 | 5.00 | 0 | 94.9% | 70 | 130 | 0 |   |
| n-Propylbenzene           | 4.940 | 0.50 | 5.00 | 0 | 98.8% | 70 | 130 | 0 |   |
| 1,1,2,2-Tetrachloroethane | 3.445 | 0.50 | 5.00 | 0 | 68.9% | 70 | 130 | 0 | S |
| 2-Chlorotoluene           | 5.009 | 0.50 | 5.00 | 0 | 100%  | 70 | 130 | 0 |   |
| 1,2,3-Trichloropropane    | 3.445 | 0.50 | 5.00 | 0 | 68.9% | 70 | 130 | 0 | S |
| 1,3,5-Trimethylbenzene    | 4.927 | 0.50 | 5.00 | 0 | 98.5% | 70 | 130 | 0 |   |
| 4-Chlorotoluene           | 5.055 | 0.50 | 5.00 | 0 | 101%  | 70 | 130 | 0 |   |
| tert-Butylbenzene         | 4.882 | 0.50 | 5.00 | 0 | 97.6% | 70 | 130 | 0 |   |
| 1,2,4-Trimethylbenzene    | 5.023 | 0.50 | 5.00 | 0 | 100%  | 70 | 130 | 0 |   |
| sec-Butylbenzene          | 4.978 | 0.50 | 5.00 | 0 | 99.6% | 70 | 130 | 0 |   |
| p-Isopropyltoluene        | 5.080 | 0.50 | 5.00 | 0 | 102%  | 70 | 130 | 0 |   |
| 1,3-Dichlorobenzene       | 5.169 | 0.50 | 5.00 | 0 | 103%  | 70 | 130 | 0 |   |
| 1,4-Dichlorobenzene       | 4.994 | 0.50 | 5.00 | 0 | 99.9% | 70 | 130 | 0 |   |
| n-Butylbenzene            | 5.050 | 0.50 | 5.00 | 0 | 101%  | 70 | 130 | 0 |   |
| 1,2-Dichlorobenzene       | 4.873 | 0.50 | 5.00 | 0 | 97.5% | 70 | 130 | 0 |   |
| Hexachlorobutadiene       | 5.178 | 0.50 | 5.00 | 0 | 104%  | 70 | 130 | 0 |   |
| 1,2,4-Trichlorobenzene    | 4.565 | 0.50 | 5.00 | 0 | 91.3% | 70 | 130 | 0 |   |
| Naphthalene               | 3.383 | 0.50 | 5.00 | 0 | 67.7% | 70 | 130 | 0 | S |
| 1,2,3-Trichlorobenzene    | 4.333 | 0.50 | 5.00 | 0 | 86.7% | 70 | 130 | 0 |   |

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**CLIENT:** Cranmer Analytical Laboratory**Work Order:** 1903180**Project:** GBC0363**QC SUMMARY REPORT**

Laboratory Control Spike

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|                                   |       |      |      |   |       |    |     |   |
|-----------------------------------|-------|------|------|---|-------|----|-----|---|
| Surrogate: Dibromofluoromethane   | 1.05  | 0.10 | 1.00 | 0 | 105%  | 70 | 130 | 0 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 0.995 | 0.10 | 1.00 | 0 | 99.5% | 70 | 130 | 0 |

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# SUBCONTRACT ORDER



**Cranmer Engineering, Inc.**  
Integrated Engineering Services

## Sending Laboratory:

CEI  
1188 East Main Street  
Grass Valley, CA 98021  
Phone: 530-273-7284  
Fax: -

Project Manager: Justin Smith

## Subcontracted Laboratory:

North Coast Laboratories LTD  
5680 West End Road  
Arcata, CA 955219202  
Phone: (707) 822-4649  
Fax:

## Work Order: GBC0363

### Analysis

### Comments

#### Sample ID: GBC0363-01 HYD 83 Grinding Rock Rd 1st Dr

Drinking Water Sampled: 03/07/2019 08:15

Volatile Organic Compounds (VOCs)

Containers Supplied:

VOA w/HCl (A) VOA w/HCl (B) VOA w/HCl (C)

#### Sample ID: GBC0363-02 HYD 83 Grinding Rock Rd 2nd Dr

Drinking Water Sampled: 03/07/2019 08:20

Volatile Organic Compounds (VOCs)

Containers Supplied:

VOA w/HCl (A) VOA w/HCl (B) VOA w/HCl (C)

#### Sample ID: GBC0363-03 79 Grinding Rock Rd

Drinking Water Sampled: 03/07/2019 08:30

Volatile Organic Compounds (VOCs)

Containers Supplied:

VOA w/HCl (A) VOA w/HCl (B) VOA w/HCl (C)

#### Sample ID: GBC0363-04 78 Grinding Rock Rd

Drinking Water Sampled: 03/07/2019 08:40

Volatile Organic Compounds (VOCs)

Containers Supplied:

VOA w/HCl (A) VOA w/HCl (B) VOA w/HCl (C)

#### Sample ID: GBC0363-05 76 Grinding Rock Rd

Drinking Water Sampled: 03/07/2019 09:15

Volatile Organic Compounds (VOCs)

Containers Supplied:

VOA w/HCl (A) VOA w/HCl (B) VOA w/HCl (C)

EDT Upload

YES

☐

NO

☒

*R. W. Murphy*  
Released By

3.08.19  
Date

*[Signature]*  
Received By

1.2°C

3/19/19  
Date



# SUBCONTRACT ORDER (Continued)

## Comments

VOA w/HCl (C)

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