July 29, 2019

**Mr. Michael Belveg**
Regional Enforcement Coordinator – Region 7
New York State Department of Environmental Conservation
615 Erie Blvd. West
Syracuse, NY 13204

RE: Former Accurate Die Casting Site (Site No. 734052), Fayetteville, NY
FILE: 3902.45845 Corres

Dear Mr. Belveg:

This letter presents the status of groundwater treatment plant operations for the former Accurate Die Casting site (Site No. 734052) in Fayetteville, New York for the second quarter of 2019 (April 1 through June 30). This information is provided as required by the Order on Consent (#A7-0318-94-10). Included are the results of the monitoring activities associated with the SPDES Fact Sheet for the groundwater treatment system.

## OPERATION STATUS AND ACTIVITIES COMPLETED

As of June 30, 2019, a total of 119,261,336 gallons of groundwater have been treated since startup on February 5, 1996. From April 1 to June 30, 2019, 1,120,486 gallons of groundwater were treated: 182,401 gallons from recovery well RW-1; 937,695 gallons from recovery well RW-2; 275 gallons from the collection trench constructed in the former VOC/PAH/PCB Soils Area; and 115 gallons from the overburden groundwater collection sump located in the former soil excavation area along the northwest side of the former manufacturing building (Area 2).

OBG performed the sampling activities associated with the SPDES Fact Sheet. The analytical results associated with the SPDES Fact Sheet monitoring activities performed during April, May, and June 2019 are summarized in **Table 1**. The effluent quality during the period complied with the SPDES discharge limits. The laboratory analytical data sheets are provided as **Attachment A**.

The diffuser in the lead granular activated carbon (GAC) unit was cleaned on May 30, 2019, and the bag filters were changed-out.

## ACTIVITIES SCHEDULED

The groundwater recovery and treatment system will continue to be operated and the SPDES monitoring will continue to be conducted.

If you have any questions regarding this report, please do not hesitate to call David Carnevale at (315) 956-6571.

Very truly yours,
O'BRIEN & GERE ENGINEERS, INC.

**Douglas M. Crawford, P.E.**
Vice President

cc: H. Warner – New York State Department of Environmental Conservation
E. O'Neil - New York State Department of Health
M. Schuck - New York State Department of Health
T. Slutzky – The Anderson Company
J. Stanek – ITT Corporation
L. Hall – ITT Corporation
E. Gernant – O'Brien & Gere, Office of General Counsel

**Table 1**
**Former Accurate Die Casting Site**
**Fayetteville, New York**
**Monitoring Requirements and Effluent Data**

| Analyte (units) | Monitoring Requirements: Discharge Limitation Daily Average | Discharge Limitation Daily Maximum | Minimum Measurement Frequency (1) | Sample Type | Effluent 4/1/2019 | Effluent 4/5/2019 | Effluent 4/8/2019 | Effluent 4/10/2019 | Effluent 4/12/2019 | Effluent 4/15/2019 | Effluent 4/16/2019 | Effluent 4/17/2019 | Effluent 4/19/2019 | Effluent 4/23/2019 | Effluent 4/25/2019 | Effluent 4/26/2019 | Effluent 4/29/2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow (GPD) | Monitor | 150000 | Continuous | Meter | 12421 | 12392 | 12366 | 9980 | 12363 | 12376 | 12381 | 12393 | 12385 | 12367 | 12399 | 12461 | 12401 |
| pH (SU) | 6.5-8.5 | | 2/Week | Grab | 7.4 | 7.4 | 7.3 | 7.3 | 7.3 | 7.3 | 7.4 | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 | 7.4 |
| Residue, non-filterable (mg/L) | Monitor | 20 | Weekly | 3-hr comp. | < 4 U | | | < 4 U | | < 8.5 H | | | | < 4 U | | | < 4 U |
| Total dissolved solids (TDS) (mg/L) | Monitor | Monitor | Weekly | 3-hr comp. | 624 | | | 613 | | 612 B | | | | 646 B | | | 640 B |
| | | | | | | | | | | | | | | | | | |
| Mercury, total (mg/L) | Monitor | 0.0008 | Quarterly | 3-hr comp. | | | | | | | | | | | | | |
| Zinc, total (mg/L) | Monitor | 0.3 | Quarterly | 3-hr comp. | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| cis-1,2-Dichloroethene (ug/L) | Monitor | 10 | 2/Month | Grab | 1 U | | | | | 1 U | | | | | | | |
| trans-1,2-Dichloroethene (ug/L) | Monitor | 10 | 2/Month | Grab | 1 U | | | | | 1 U | | | | | | | |
| Methylene chloride (ug/L) | Monitor | 20 | 2/Month | Grab | 1 U | | | | | 1 U | | | | | | | |
| 1,1,2,2-Tetrachloroethane (ug/L) | Monitor | 10 | 2/Month | Grab | 1 U | | | | | 1 U | | | | | | | |
| Tetrachloroethene (ug/L) | Monitor | 10 | 2/Month | Grab | 1 U | | | | | 1 U | | | | | | | |
| Toluene (ug/L) | Monitor | 20 | 2/Month | Grab | 1 U | | | | | 1 U | | | | | | | |
| Trichloroethene (ug/L) | Monitor | 10 | 2/Month | Grab | 1 U | | | | | 1 U | | | | | | | |

Notes:

--- - Not analyzed, NA - Data Not available

U - Not Detected, J - Estimated, H - Holding times for preparation or analyses exceeded, B - Compound found in the blank and sample

(1) Minimum monitoring requirements based on SPEDES permit modified November, 21, 1997.

**Table 1**
**Former Accurate Die Casting Site**
**Fayetteville, New York**
**Monitoring Requirements and Effluent Data**

| | Monitoring Requirements | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte (units) | Discharge Limitation Daily Average | Discharge Limitation Daily Maximum | Minimum Measurement Frequency (1) | Sample Type | Effluent 5/1/2019 | Effluent 5/3/2019 | Effluent 5/6/2019 | Effluent 5/9/2019 | Effluent 5/10/201/9 | Effluent 5/13/2019 | Effluent 5/15/2019 | Effluent 5/17/2019 | Effluent 5/20/2019 | Effluent 5/21/2109 | Effluent 5/24/2019 | Effluent 5/28/2109 | Effluent 5/30/2019 |
| Flow (GPD) | Monitor | 150000 | Continuous | Meter | 12397 | 12426 | 12416 | | 12390 | 12412 | 12499 | 12453 | 12493 | 12561 | 12533 | 12533 | 12538 |
| pH (SU) | 6.5-8.5 | | 2/Week | Grab | 7.4 | 7.4 | 7.4 | | 7.4 | 7.4 | 7.4 | 7.4 | 7.4 | 7.4 | 7.4 | 7.5 | 7.5 |
| Residue, non-filterable (mg/L) | Monitor | 20 | Weekly | 3-hr comp. | | | | < 4 U | | | < 4 U | | < 4 U | | | < 4 U | |
| Total dissolved solids (TDS) (mg/L) | Monitor | Monitor | Weekly | 3-hr comp. | | | | 636 B | | | 931 | | 599 | | | 635 | |
| | | | | | | | | | | | | | | | | | |
| Mercury, total (mg/L) | Monitor | 0.0008 | Quarterly | 3-hr comp. | | | | | | | | | | | | | |
| Zinc, total (mg/L) | Monitor | 0.3 | Quarterly | 3-hr comp. | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| cis-1,2-Dichloroethene (ug/L) | Monitor | 10 | 2/Month | Grab | | | | 1 U | | | | | 1 U | | | | |
| trans-1,2-Dichloroethene (ug/L) | Monitor | 10 | 2/Month | Grab | | | | 1 U | | | | | 1 U | | | | |
| Methylene chloride (ug/L) | Monitor | 20 | 2/Month | Grab | | | | 1 U | | | | | 1 U | | | | |
| 1,1,2,2-Tetrachloroethane (ug/L) | Monitor | 10 | 2/Month | Grab | | | | 1 U | | | | | 1 U | | | | |
| Tetrachloroethene (ug/L) | Monitor | 10 | 2/Month | Grab | | | | 1 U | | | | | 1 U | | | | |
| Toluene (ug/L) | Monitor | 20 | 2/Month | Grab | | | | 1 U | | | | | 1U | | | | |
| Trichloroethene (ug/L) | Monitor | 10 | 2/Month | Grab | | | | 1 U | | | | | 1 U | | | | |
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**Table 1**
**Former Accurate Die Casting Site**
**Fayetteville, New York**
**Monitoring Requirements and Effluent Data**

| | Monitoring Requirements | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte (units) | Discharge Limitation Daily Average | Discharge Limitation Daily Maximum | Minimum Measurement Frequency (1) | Sample Type | Effluent 5/31/2019 | Effluent 6/3/2019 | Effluent 6/5/2019 | Effluent 6/6/2019 | Effluent 6/7/2019 | Effluent 6/11/2019 | Effluent 6/13/2019 | Effluent 6/17/2019 | Effluent 6/24/2019 | Effluent 6/25/2019 | Effluent 6/27/2019 |
| Flow (GPD) | Monitor | 150000 | Continuous | Meter | 11770 | 12571 | 12561 | 12544 | 12515 | 12522 | 12508 | 12478 | 12514 | 12602 | 12540 |
| pH (SU) | 6.5-8.5 | | 2/Week | Grab | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.6 | 7.5 | 7.5 |
| Residue, non-filterable (mg/L) | Monitor | 20 | Weekly | 3-hr comp. | | | < 4 U | | | < 4 U | | < 4 U | < 4 U | | |
| Total dissolved solids (TDS) (mg/L) | Monitor | Monitor | Weekly | 3-hr comp. | | | 622 | | | 617 | | 647 | 617 | | |
| | | | | | | | | | | | | | | | |
| Mercury, total (mg/L) | Monitor | 0.0008 | Quarterly | 3-hr comp. | | | 0.00020 U | | | | | | | | |
| Zinc, total (mg/L) | Monitor | 0.3 | Quarterly | 3-hr comp. | | | 0.010 U | | | | | | | | |
| | | | | | | | | | | | | | | | |
| cis-1,2-Dichloroethene (ug/L) | Monitor | 10 | 2/Month | Grab | | | 1 U | | | | | | | | |
| trans-1,2-Dichloroethene (ug/L) | Monitor | 10 | 2/Month | Grab | | | 1 U | | | | | | | | |
| Methylene chloride (ug/L) | Monitor | 20 | 2/Month | Grab | | | 0.46 J | | | | | | | | |
| 1,1,2,2-Tetrachloroethane (ug/L) | Monitor | 10 | 2/Month | Grab | | | 1 U | | | | | | | | |
| Tetrachloroethene (ug/L) | Monitor | 10 | 2/Month | Grab | | | 1 U | | | | | | | | |
| Toluene (ug/L) | Monitor | 20 | 2/Month | Grab | | | 1U | | | | | | | | |
| Trichloroethene (ug/L) | Monitor | 10 | 2/Month | Grab | | | 1 U | | | | | | | | |

Notes:

--- - Not analyzed, NA - Data Not available

U - Not Detected, J - Estimated, H - Holding times for preparation or analyses exceeded, B - Compound found in the blank and sample

(1) Minimum monitoring requirements based on SPEDES permit modified November, 21, 1997.

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-151144-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

*Authorized for release by:*
*4/12/2019 9:22:42 AM*
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

# Table of Contents

Client: O'Brien & Gere Inc of North America
Job ID: 480-151144-1
Project/Site: Former Accurate Die Cast

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Job ID: 480-151144-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-151144-1**

**Receipt**
The samples were received on 4/2/2019 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

**GC/MS VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-151144-1

## Client Sample ID: EFFLUENT 040119 — Lab Sample ID: 480-151144-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 624 | | 10.0 | 4.0 | mg/L | 1 | | SM2540 C | Total/NA |

## Client Sample ID: BETWEEN CARBONS 040119 — Lab Sample ID: 480-151144-2

No Detections.

## Client Sample ID: EFFLUENT 040119 — Lab Sample ID: 480-151144-3

No Detections.

This Detection Summary does not include radiochemical test results.

## Client Sample ID: EFFLUENT 040119
**Lab Sample ID: 480-151144-1**

**Date Collected: 04/01/19 07:20**
**Matrix: Water**
**Date Received: 04/02/19 01:00**

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **624** | | 10.0 | 4.0 | mg/L | | | 04/05/19 08:16 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 4.0 | 4.0 | mg/L | | | 04/04/19 03:14 | 1 |

## Client Sample ID: BETWEEN CARBONS 040119
**Lab Sample ID: 480-151144-2**

**Date Collected: 04/01/19 07:20**
**Matrix: Water**
**Date Received: 04/02/19 01:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 04/03/19 12:49 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 04/03/19 12:49 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 04/03/19 12:49 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 04/03/19 12:49 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 04/03/19 12:49 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 04/03/19 12:49 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 04/03/19 12:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *114* | | *77 - 120* | | *04/03/19 12:49* | *1* |
| *4-Bromofluorobenzene (Surr)* | *97* | | *73 - 120* | | *04/03/19 12:49* | *1* |
| *Toluene-d8 (Surr)* | *88* | | *80 - 120* | | *04/03/19 12:49* | *1* |
| *Dibromofluoromethane (Surr)* | *109* | | *75 - 123* | | *04/03/19 12:49* | *1* |

## Client Sample ID: EFFLUENT 040119
**Lab Sample ID: 480-151144-3**

**Date Collected: 04/01/19 07:20**
**Matrix: Water**
**Date Received: 04/02/19 01:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 04/03/19 13:13 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 04/03/19 13:13 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 04/03/19 13:13 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 04/03/19 13:13 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 04/03/19 13:13 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 04/03/19 13:13 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 04/03/19 13:13 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *108* | | *77 - 120* | | *04/03/19 13:13* | *1* |
| *4-Bromofluorobenzene (Surr)* | *94* | | *73 - 120* | | *04/03/19 13:13* | *1* |
| *Toluene-d8 (Surr)* | *87* | | *80 - 120* | | *04/03/19 13:13* | *1* |
| *Dibromofluoromethane (Surr)* | *108* | | *75 - 123* | | *04/03/19 13:13* | *1* |

# Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-151144-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | TOL | DBFM |
| Lab Sample ID | Client Sample ID | (77-120) | (73-120) | (80-120) | (75-123) |
| 480-151144-2 | BETWEEN CARBONS 040119 | 114 | 97 | 88 | 109 |
| 480-151144-3 | EFFLUENT 040119 | 108 | 94 | 87 | 108 |
| LCS 480-465970/5 | Lab Control Sample | 108 | 103 | 90 | 109 |
| MB 480-465970/7 | Method Blank | 106 | 100 | 90 | 109 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 480-465970/7**
**Matrix: Water**
**Analysis Batch: 465970**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 04/03/19 11:01 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 04/03/19 11:01 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 04/03/19 11:01 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 04/03/19 11:01 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 04/03/19 11:01 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 04/03/19 11:01 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 04/03/19 11:01 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *106* | | *77 - 120* | | *04/03/19 11:01* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *73 - 120* | | *04/03/19 11:01* | *1* |
| *Toluene-d8 (Surr)* | *90* | | *80 - 120* | | *04/03/19 11:01* | *1* |
| *Dibromofluoromethane (Surr)* | *109* | | *75 - 123* | | *04/03/19 11:01* | *1* |

**Lab Sample ID: LCS 480-465970/5**
**Matrix: Water**
**Analysis Batch: 465970**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | | | 25.0 | 21.3 | | ug/L | | 85 | 76 - 120 | | |
| cis-1,2-Dichloroethene | | | 25.0 | 23.2 | | ug/L | | 93 | 74 - 124 | | |
| Methylene Chloride | | | 25.0 | 23.5 | | ug/L | | 94 | 75 - 124 | | |
| Tetrachloroethene | | | 25.0 | 21.6 | | ug/L | | 87 | 74 - 122 | | |
| Toluene | | | 25.0 | 20.1 | | ug/L | | 81 | 80 - 122 | | |
| trans-1,2-Dichloroethene | | | 25.0 | 21.7 | | ug/L | | 87 | 73 - 127 | | |
| Trichloroethene | | | 25.0 | 24.7 | | ug/L | | 99 | 74 - 123 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *108* | | *77 - 120* |
| *4-Bromofluorobenzene (Surr)* | *103* | | *73 - 120* |
| *Toluene-d8 (Surr)* | *90* | | *80 - 120* |
| *Dibromofluoromethane (Surr)* | *109* | | *75 - 123* |

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 480-466156/1**
**Matrix: Water**
**Analysis Batch: 466156**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 1.0 | 1.0 | mg/L | | | 04/04/19 03:14 | 1 |

**Lab Sample ID: LCS 480-466156/2**
**Matrix: Water**
**Analysis Batch: 466156**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | | | 245 | 246.8 | | mg/L | | 101 | 88 - 110 | | |

## Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

**Lab Sample ID: 480-151144-1 DU**
**Matrix: Water**
**Analysis Batch: 466156**

**Client Sample ID: EFFLUENT 040119**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | | ND | | mg/L | | | | NC | 10 |

## Method: SM2540 C - Total Dissolved Solids

**Lab Sample ID: MB 480-466412/1**
**Matrix: Water**
**Analysis Batch: 466412**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | ND | | 10.0 | 4.0 | mg/L | | | 04/05/19 08:16 | 1 |

**Lab Sample ID: LCS 480-466412/2**
**Matrix: Water**
**Analysis Batch: 466412**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | | | 500 | 507.0 | | mg/L | | 101 | 85 - 115 | | |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-151144-1

## GC/MS VOA

### Analysis Batch: 465970

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-151144-2 | BETWEEN CARBONS 040119 | Total/NA | Water | 8260C | |
| 480-151144-3 | EFFLUENT 040119 | Total/NA | Water | 8260C | |
| MB 480-465970/7 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-465970/5 | Lab Control Sample | Total/NA | Water | 8260C | |

## General Chemistry

### Analysis Batch: 466156

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-151144-1 | EFFLUENT 040119 | Total/NA | Water | SM 2540D | |
| MB 480-466156/1 | Method Blank | Total/NA | Water | SM 2540D | |
| LCS 480-466156/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |
| 480-151144-1 DU | EFFLUENT 040119 | Total/NA | Water | SM 2540D | |

### Analysis Batch: 466412

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-151144-1 | EFFLUENT 040119 | Total/NA | Water | SM2540 C | |
| MB 480-466412/1 | Method Blank | Total/NA | Water | SM2540 C | |
| LCS 480-466412/2 | Lab Control Sample | Total/NA | Water | SM2540 C | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-151144-1

## Client Sample ID: EFFLUENT 040119

**Lab Sample ID: 480-151144-1**

**Date Collected: 04/01/19 07:20**
**Matrix: Water**
**Date Received: 04/02/19 01:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540D | | 1 | 466156 | 04/04/19 03:14 | MLS | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 466412 | 04/05/19 08:16 | RAF | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 466412 | 04/05/19 08:16 | RAF | TAL BUF |

## Client Sample ID: BETWEEN CARBONS 040119

**Lab Sample ID: 480-151144-2**

**Date Collected: 04/01/19 07:20**
**Matrix: Water**
**Date Received: 04/02/19 01:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 465970 | 04/03/19 12:49 | OMI | TAL BUF |

## Client Sample ID: EFFLUENT 040119

**Lab Sample ID: 480-151144-3**

**Date Collected: 04/01/19 07:20**
**Matrix: Water**
**Date Received: 04/02/19 01:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 465970 | 04/03/19 13:13 | OMI | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-151144-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-151144-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260C | Volatile Organic Compounds by GC/MS | SW846 | TAL BUF |
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL BUF |
| SM2540 C | Total Dissolved Solids | SM18 | TAL BUF |
| 5030C | Purge and Trap | SW846 | TAL BUF |

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-151144-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 480-151144-1 | EFFLUENT 040119 | Water | 04/01/19 07:20 | 04/02/19 01:00 |
| 480-151144-2 | BETWEEN CARBONS 040119 | Water | 04/01/19 07:20 | 04/02/19 01:00 |
| 480-151144-3 | EFFLUENT 040119 | Water | 04/01/19 07:20 | 04/02/19 01:00 |

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: Martin Koennecke | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): | COC No: 480-122337-10588.1 |
|---|---|---|---|---|
| Client Contact: Mr. Yuri Veliz | Phone: 315-729-1300 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Company: O'Brien & Gere Inc of North America | | | | Job #: |
| Address: 333 West Washington St. PO BOX 4873 | Due Date Requested: | | | |
| City: East Syracuse | TAT Requested (days): | | | |
| State, Zip: NY, 13221 | | | | |
| Phone: 315-956-6100(Tel) 315-463-7554(Fax) | PO #: 11900114 | | | |
| Email: Yuri.Veliz@obg.com | WO #: | | | |
| Project Name: Former Accurate Die Cast | Project #: 48008584 | | | |
| Site: | SSOW#: | | | |

480-151144 Chain of Custody

**Analysis Requested**

I - Ice; J - DI Water; K - EDTA; L - EDA; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify); Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 2540D - Total Suspended Solids | 2540C_Calcd - Total Dissolved Solids | 8260C - Volatile Organic Compounds | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Preservation Code: | | | | | | | N | N | A | | |
| Effluent 040119 | 4-1-19 | 7:20 | C | Water | | | 1 | 1 | | 2 | |
| Between Carbons 040119 | 4-1-19 | 7:20 | G | Water | | | | | 3 | 3 | |
| Effluent 040119 | 4-1-19 | 7:20 | G | Water | | | | | 3 | 3 | |

R2=
4-1-19

Syracuse
#225

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)***
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Martin Koennecke | 4-1-19 / 9:55 | OBG | | 4/1/19 | 9:55 |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| | 4-1-19, 19:00 | | | 04/02/19 0800 | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.2 #1 |
|---|---|---|

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-151144-1

**Login Number: 151144**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Wallace, Cameron**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | True | |
| Chlorine Residual checked. | N/A | |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-151799-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

*Authorized for release by:*
*4/30/2019 11:12:54 AM*
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

# Table of Contents

# Definitions/Glossary

Client: O'Brien & Gere Inc of North America
Job ID: 480-151799-1
Project/Site: Former Accurate Die Cast

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Job ID: 480-151799-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-151799-1**

**Receipt**
The sample was received on 4/11/2019 1:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9º C.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-151799-1

## Client Sample ID: EFFLUENT 041019

## Lab Sample ID: 480-151799-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 613 | | 10.0 | 4.0 | mg/L | 1 | | SM2540 C | Total/NA |

This Detection Summary does not include radiochemical test results.

# Client Sample Results

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-151799-1

**Client Sample ID: EFFLUENT 041019**
**Date Collected: 04/10/19 07:15**
**Date Received: 04/11/19 01:00**

**Lab Sample ID: 480-151799-1**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **613** | | 10.0 | 4.0 | mg/L | | | 04/17/19 01:21 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 4.0 | 4.0 | mg/L | | | 04/16/19 01:46 | 1 |

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-151799-1

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 480-468058/1**
**Matrix: Water**
**Analysis Batch: 468058**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 1.0 | 1.0 | mg/L | | | 04/16/19 01:46 | 1 |

**Lab Sample ID: LCS 480-468058/2**
**Matrix: Water**
**Analysis Batch: 468058**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 246 | 245.2 | | mg/L | | 100 | 88 - 110 |

**Lab Sample ID: 480-151799-1 DU**
**Matrix: Water**
**Analysis Batch: 468058**

**Client Sample ID: EFFLUENT 041019**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | ND | | mg/L | | NC | 10 |

## Method: SM2540 C - Total Dissolved Solids

**Lab Sample ID: MB 480-468258/1**
**Matrix: Water**
**Analysis Batch: 468258**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | ND | | 10.0 | 4.0 | mg/L | | | 04/17/19 01:21 | 1 |

**Lab Sample ID: LCS 480-468258/2**
**Matrix: Water**
**Analysis Batch: 468258**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 500 | 491.0 | | mg/L | | 98 | 85 - 115 |

**Lab Sample ID: 480-151799-1 DU**
**Matrix: Water**
**Analysis Batch: 468258**

**Client Sample ID: EFFLUENT 041019**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 613 | | 626.0 | | mg/L | | 2 | 10 |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-151799-1

## General Chemistry

### Analysis Batch: 468058

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-151799-1 | EFFLUENT 041019 | Total/NA | Water | SM 2540D | |
| MB 480-468058/1 | Method Blank | Total/NA | Water | SM 2540D | |
| LCS 480-468058/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |
| 480-151799-1 DU | EFFLUENT 041019 | Total/NA | Water | SM 2540D | |

### Analysis Batch: 468258

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-151799-1 | EFFLUENT 041019 | Total/NA | Water | SM2540 C | |
| MB 480-468258/1 | Method Blank | Total/NA | Water | SM2540 C | |
| LCS 480-468258/2 | Lab Control Sample | Total/NA | Water | SM2540 C | |
| 480-151799-1 DU | EFFLUENT 041019 | Total/NA | Water | SM2540 C | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Job ID: 480-151799-1
Project/Site: Former Accurate Die Cast

**Client Sample ID: EFFLUENT 041019**
**Lab Sample ID: 480-151799-1**
**Date Collected: 04/10/19 07:15**
**Matrix: Water**
**Date Received: 04/11/19 01:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540D | | 1 | 468058 | 04/16/19 01:46 | MLS | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 468258 | 04/17/19 01:21 | MLS | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-151799-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-151799-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL BUF |
| SM2540 C | Total Dissolved Solids | SM18 | TAL BUF |

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-151799-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 480-151799-1 | EFFLUENT 041019 | Water | 04/10/19 07:15 | 04/11/19 01:00 |

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: MARTIN Koennecke | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): | COC No: 480-122360-10586.1 |
|---|---|---|---|---|
| Client Contact: Mr. Yuri Veliz | Phone: 315-429-1300 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Company: O'Brien & Gere Inc of North America | | | | Job #: |
| Address: 333 West Washington St. PO BOX 4873 | Due Date Requested: | | | |
| City: East Syracuse | TAT Requested (days): | | | |
| State, Zip: NY, 13221 | | | | |
| Phone: 315-956-6100(Tel) 315-463-7554(Fax) | PO #: 11800225 | | | |
| Email: Yuri.Veliz@obg.com | WO #: | | | |
| Project Name: Former Accurate Die Cast | Project #: 48008584 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

480-151799 Chain of Custody

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 2540D - Total Suspended Solids | 2540C_Calcd - Total Dissolved Solids | Total Num | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | N | | |
| Effluent 04 10 19 | 4-10-19 | 7:15 | C | Water | | | 1 | 1 | 2 | |

Syracuse #225

4-10-19 RE

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Martin Koennecke | 4-10-19 / 8:55 | OBG | RE 4/11/19 | 4-10-19, 08:55 | Syr |
| Relinquished by: RE 4/11/19 | Date/Time: 4-10-19, 19:00 | Company Syr | Received by: | Date/Time: 04/11/19 0100 | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.9 #1 |
|---|---|---|

Ver: 08/04/2016

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-151799-1

**Login Number: 151799**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Harper, Marcus D**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | OBG |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | N/A | |
| Chlorine Residual checked. | N/A | |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-152073-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

Melissa Deyo

*Authorized for release by:*
*6/3/2019 9:42:11 AM*

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

# Table of Contents

# Definitions/Glossary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152073-1

## Qualifiers

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |
| H | Sample was prepped or analyzed beyond the specified holding time |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Job ID: 480-152073-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-152073-1**

**Receipt**
The samples were received on 4/17/2019 7:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.4° C.

**GC/MS VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**General Chemistry**
Method(s) SM 2540D: Due to the matrix, the initial volumes used for the following sample deviated from the standard procedure: Effluent 041519 (480-152073-1). The reporting limits (RLs) have been adjusted proportionately.

Method(s) SM 2540D: Reanalysis of the following sample was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis: Effluent 041519 (480-152073-1). Since the initial analysis was also performed outside of holding time it was not included in the report.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152073-1

## Client Sample ID: Effluent 041519 — Lab Sample ID: 480-152073-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 612 | B | 10.0 | 4.0 | mg/L | 1 | | SM2540 C | Total/NA |

## Client Sample ID: Effluent 041519 — Lab Sample ID: 480-152073-2

No Detections.

This Detection Summary does not include radiochemical test results.

## Client Sample ID: Effluent 041519
**Lab Sample ID: 480-152073-1**
**Date Collected: 04/15/19 07:20**
**Matrix: Water**
**Date Received: 04/17/19 19:00**

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **612** | **B** | 10.0 | 4.0 | mg/L | | | 04/22/19 12:37 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | H | 8.5 | 8.5 | mg/L | | | 05/30/19 15:51 | 1 |

## Client Sample ID: Effluent 041519
**Lab Sample ID: 480-152073-2**
**Date Collected: 04/15/19 07:20**
**Matrix: Water**
**Date Received: 04/17/19 19:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.82 | ug/L | | | 04/24/19 02:40 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 04/24/19 02:40 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.31 | ug/L | | | 04/24/19 02:40 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 04/24/19 02:40 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.38 | ug/L | | | 04/24/19 02:40 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 04/24/19 02:40 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.41 | ug/L | | | 04/24/19 02:40 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 1.0 | 0.39 | ug/L | | | 04/24/19 02:40 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.73 | ug/L | | | 04/24/19 02:40 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.79 | ug/L | | | 04/24/19 02:40 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.21 | ug/L | | | 04/24/19 02:40 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.72 | ug/L | | | 04/24/19 02:40 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.78 | ug/L | | | 04/24/19 02:40 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.84 | ug/L | | | 04/24/19 02:40 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.3 | ug/L | | | 04/24/19 02:40 | 1 |
| 2-Hexanone | ND | | 5.0 | 1.2 | ug/L | | | 04/24/19 02:40 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 5.0 | 2.1 | ug/L | | | 04/24/19 02:40 | 1 |
| Acetone | ND | | 10 | 3.0 | ug/L | | | 04/24/19 02:40 | 1 |
| Benzene | ND | | 1.0 | 0.41 | ug/L | | | 04/24/19 02:40 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.39 | ug/L | | | 04/24/19 02:40 | 1 |
| Bromoform | ND | | 1.0 | 0.26 | ug/L | | | 04/24/19 02:40 | 1 |
| Bromomethane | ND | | 1.0 | 0.69 | ug/L | | | 04/24/19 02:40 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.19 | ug/L | | | 04/24/19 02:40 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.27 | ug/L | | | 04/24/19 02:40 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.75 | ug/L | | | 04/24/19 02:40 | 1 |
| Chloroethane | ND | | 1.0 | 0.32 | ug/L | | | 04/24/19 02:40 | 1 |
| Chloroform | ND | | 1.0 | 0.34 | ug/L | | | 04/24/19 02:40 | 1 |
| Chloromethane | ND | | 1.0 | 0.35 | ug/L | | | 04/24/19 02:40 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 04/24/19 02:40 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.36 | ug/L | | | 04/24/19 02:40 | 1 |
| Cyclohexane | ND | | 1.0 | 0.18 | ug/L | | | 04/24/19 02:40 | 1 |
| Dibromochloromethane | ND | | 1.0 | 0.32 | ug/L | | | 04/24/19 02:40 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.68 | ug/L | | | 04/24/19 02:40 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.74 | ug/L | | | 04/24/19 02:40 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.79 | ug/L | | | 04/24/19 02:40 | 1 |
| Methyl acetate | ND | | 2.5 | 1.3 | ug/L | | | 04/24/19 02:40 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | 0.16 | ug/L | | | 04/24/19 02:40 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.16 | ug/L | | | 04/24/19 02:40 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 04/24/19 02:40 | 1 |
| Styrene | ND | | 1.0 | 0.73 | ug/L | | | 04/24/19 02:40 | 1 |

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152073-1

**Client Sample ID: Effluent 041519**
**Date Collected: 04/15/19 07:20**
**Date Received: 04/17/19 19:00**

**Lab Sample ID: 480-152073-2**
**Matrix: Water**

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 04/24/19 02:40 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 04/24/19 02:40 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 04/24/19 02:40 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.37 | ug/L | | | 04/24/19 02:40 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 04/24/19 02:40 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.88 | ug/L | | | 04/24/19 02:40 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.90 | ug/L | | | 04/24/19 02:40 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.66 | ug/L | | | 04/24/19 02:40 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *106* | | *77 - 120* | | *04/24/19 02:40* | *1* |
| *4-Bromofluorobenzene (Surr)* | *82* | | *73 - 120* | | *04/24/19 02:40* | *1* |
| *Dibromofluoromethane (Surr)* | *97* | | *75 - 123* | | *04/24/19 02:40* | *1* |
| *Toluene-d8 (Surr)* | *94* | | *80 - 120* | | *04/24/19 02:40* | *1* |

# Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152073-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | DBFM | TOL |
| Lab Sample ID | Client Sample ID | (77-120) | (73-120) | (75-123) | (80-120) |
| 480-152073-2 | Effluent 041519 | 106 | 82 | 97 | 94 |
| LCS 480-469386/5 | Lab Control Sample | 100 | 89 | 88 | 98 |
| MB 480-469386/7 | Method Blank | 106 | 90 | 103 | 99 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152073-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 480-469386/7**
**Matrix: Water**
**Analysis Batch: 469386**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.82 | ug/L | | | 04/23/19 20:58 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 04/23/19 20:58 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.31 | ug/L | | | 04/23/19 20:58 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 04/23/19 20:58 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.38 | ug/L | | | 04/23/19 20:58 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 04/23/19 20:58 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.41 | ug/L | | | 04/23/19 20:58 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 1.0 | 0.39 | ug/L | | | 04/23/19 20:58 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.73 | ug/L | | | 04/23/19 20:58 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.79 | ug/L | | | 04/23/19 20:58 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.21 | ug/L | | | 04/23/19 20:58 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.72 | ug/L | | | 04/23/19 20:58 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.78 | ug/L | | | 04/23/19 20:58 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.84 | ug/L | | | 04/23/19 20:58 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.3 | ug/L | | | 04/23/19 20:58 | 1 |
| 2-Hexanone | ND | | 5.0 | 1.2 | ug/L | | | 04/23/19 20:58 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 5.0 | 2.1 | ug/L | | | 04/23/19 20:58 | 1 |
| Acetone | ND | | 10 | 3.0 | ug/L | | | 04/23/19 20:58 | 1 |
| Benzene | ND | | 1.0 | 0.41 | ug/L | | | 04/23/19 20:58 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.39 | ug/L | | | 04/23/19 20:58 | 1 |
| Bromoform | ND | | 1.0 | 0.26 | ug/L | | | 04/23/19 20:58 | 1 |
| Bromomethane | ND | | 1.0 | 0.69 | ug/L | | | 04/23/19 20:58 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.19 | ug/L | | | 04/23/19 20:58 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.27 | ug/L | | | 04/23/19 20:58 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.75 | ug/L | | | 04/23/19 20:58 | 1 |
| Chloroethane | ND | | 1.0 | 0.32 | ug/L | | | 04/23/19 20:58 | 1 |
| Chloroform | ND | | 1.0 | 0.34 | ug/L | | | 04/23/19 20:58 | 1 |
| Chloromethane | ND | | 1.0 | 0.35 | ug/L | | | 04/23/19 20:58 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 04/23/19 20:58 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.36 | ug/L | | | 04/23/19 20:58 | 1 |
| Cyclohexane | ND | | 1.0 | 0.18 | ug/L | | | 04/23/19 20:58 | 1 |
| Dibromochloromethane | ND | | 1.0 | 0.32 | ug/L | | | 04/23/19 20:58 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.68 | ug/L | | | 04/23/19 20:58 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.74 | ug/L | | | 04/23/19 20:58 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.79 | ug/L | | | 04/23/19 20:58 | 1 |
| Methyl acetate | ND | | 2.5 | 1.3 | ug/L | | | 04/23/19 20:58 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | 0.16 | ug/L | | | 04/23/19 20:58 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.16 | ug/L | | | 04/23/19 20:58 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 04/23/19 20:58 | 1 |
| Styrene | ND | | 1.0 | 0.73 | ug/L | | | 04/23/19 20:58 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 04/23/19 20:58 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 04/23/19 20:58 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 04/23/19 20:58 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.37 | ug/L | | | 04/23/19 20:58 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 04/23/19 20:58 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.88 | ug/L | | | 04/23/19 20:58 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.90 | ug/L | | | 04/23/19 20:58 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.66 | ug/L | | | 04/23/19 20:58 | 1 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-469386/7**
**Matrix: Water**
**Analysis Batch: 469386**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 106 | | 77 - 120 | | 04/23/19 20:58 | 1 |
| 4-Bromofluorobenzene (Surr) | 90 | | 73 - 120 | | 04/23/19 20:58 | 1 |
| Dibromofluoromethane (Surr) | 103 | | 75 - 123 | | 04/23/19 20:58 | 1 |
| Toluene-d8 (Surr) | 99 | | 80 - 120 | | 04/23/19 20:58 | 1 |

**Lab Sample ID: LCS 480-469386/5**
**Matrix: Water**
**Analysis Batch: 469386**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 25.0 | 23.4 | | ug/L | | 93 | 73 - 126 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 25.8 | | ug/L | | 103 | 76 - 120 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0 | 26.0 | | ug/L | | 104 | 61 - 148 |
| 1,1,2-Trichloroethane | 25.0 | 25.8 | | ug/L | | 103 | 76 - 122 |
| 1,1-Dichloroethane | 25.0 | 24.0 | | ug/L | | 96 | 77 - 120 |
| 1,1-Dichloroethene | 25.0 | 24.0 | | ug/L | | 96 | 66 - 127 |
| 1,2,4-Trichlorobenzene | 25.0 | 22.4 | | ug/L | | 90 | 79 - 122 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 23.3 | | ug/L | | 93 | 56 - 134 |
| 1,2-Dibromoethane | 25.0 | 23.8 | | ug/L | | 95 | 77 - 120 |
| 1,2-Dichlorobenzene | 25.0 | 23.9 | | ug/L | | 96 | 80 - 124 |
| 1,2-Dichloroethane | 25.0 | 23.5 | | ug/L | | 94 | 75 - 120 |
| 1,2-Dichloropropane | 25.0 | 27.5 | | ug/L | | 110 | 76 - 120 |
| 1,3-Dichlorobenzene | 25.0 | 25.5 | | ug/L | | 102 | 77 - 120 |
| 1,4-Dichlorobenzene | 25.0 | 24.5 | | ug/L | | 98 | 80 - 120 |
| 2-Butanone (MEK) | 125 | 117 | | ug/L | | 93 | 57 - 140 |
| 2-Hexanone | 125 | 130 | | ug/L | | 104 | 65 - 127 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 121 | | ug/L | | 97 | 71 - 125 |
| Acetone | 125 | 124 | | ug/L | | 99 | 56 - 142 |
| Benzene | 25.0 | 25.1 | | ug/L | | 100 | 71 - 124 |
| Bromodichloromethane | 25.0 | 24.9 | | ug/L | | 100 | 80 - 122 |
| Bromoform | 25.0 | 22.0 | | ug/L | | 88 | 61 - 132 |
| Bromomethane | 25.0 | 21.4 | | ug/L | | 85 | 55 - 144 |
| Carbon disulfide | 25.0 | 23.7 | | ug/L | | 95 | 59 - 134 |
| Carbon tetrachloride | 25.0 | 24.7 | | ug/L | | 99 | 72 - 134 |
| Chlorobenzene | 25.0 | 24.3 | | ug/L | | 97 | 80 - 120 |
| Chloroethane | 25.0 | 23.2 | | ug/L | | 93 | 69 - 136 |
| Chloroform | 25.0 | 22.1 | | ug/L | | 88 | 73 - 127 |
| Chloromethane | 25.0 | 22.7 | | ug/L | | 91 | 68 - 124 |
| cis-1,2-Dichloroethene | 25.0 | 22.1 | | ug/L | | 88 | 74 - 124 |
| cis-1,3-Dichloropropene | 25.0 | 26.2 | | ug/L | | 105 | 74 - 124 |
| Cyclohexane | 25.0 | 27.5 | | ug/L | | 110 | 59 - 135 |
| Dibromochloromethane | 25.0 | 24.9 | | ug/L | | 100 | 75 - 125 |
| Dichlorodifluoromethane | 25.0 | 23.6 | | ug/L | | 95 | 59 - 135 |
| Ethylbenzene | 25.0 | 24.7 | | ug/L | | 99 | 77 - 123 |
| Isopropylbenzene | 25.0 | 26.2 | | ug/L | | 105 | 77 - 122 |
| Methyl acetate | 50.0 | 45.6 | | ug/L | | 91 | 74 - 133 |
| Methyl tert-butyl ether | 25.0 | 22.3 | | ug/L | | 89 | 77 - 120 |
| Methylcyclohexane | 25.0 | 26.1 | | ug/L | | 104 | 68 - 134 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 480-469386/5**
**Matrix: Water**
**Analysis Batch: 469386**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Methylene Chloride | 25.0 | 23.7 | | ug/L | | 95 | 75 - 124 |
| Styrene | 25.0 | 24.3 | | ug/L | | 97 | 80 - 120 |
| Tetrachloroethene | 25.0 | 23.7 | | ug/L | | 95 | 74 - 122 |
| Toluene | 25.0 | 24.9 | | ug/L | | 100 | 80 - 122 |
| trans-1,2-Dichloroethene | 25.0 | 22.2 | | ug/L | | 89 | 73 - 127 |
| trans-1,3-Dichloropropene | 25.0 | 26.8 | | ug/L | | 107 | 80 - 120 |
| Trichloroethene | 25.0 | 23.8 | | ug/L | | 95 | 74 - 123 |
| Trichlorofluoromethane | 25.0 | 24.6 | | ug/L | | 98 | 62 - 150 |
| Vinyl chloride | 25.0 | 23.5 | | ug/L | | 94 | 65 - 133 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *77 - 120* |
| *4-Bromofluorobenzene (Surr)* | *89* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *88* | | *75 - 123* |
| *Toluene-d8 (Surr)* | *98* | | *80 - 120* |

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 480-475418/1**
**Matrix: Water**
**Analysis Batch: 475418**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 1.0 | 1.0 | mg/L | | | 05/30/19 15:51 | 1 |

**Lab Sample ID: LCS 480-475418/2**
**Matrix: Water**
**Analysis Batch: 475418**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 279 | 271.2 | | mg/L | | 97 | 88 - 110 |

## Method: SM2540 C - Total Dissolved Solids

**Lab Sample ID: MB 480-469113/1**
**Matrix: Water**
**Analysis Batch: 469113**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | ND | | 10.0 | 4.0 | mg/L | | | 04/22/19 12:37 | 1 |

**Lab Sample ID: LCS 480-469113/2**
**Matrix: Water**
**Analysis Batch: 469113**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 500 | 471.0 | | mg/L | | 94 | 85 - 115 |

## Method: SM2540 C - Total Dissolved Solids (Continued)

**Lab Sample ID: 480-152073-1 DU**
**Matrix: Water**
**Analysis Batch: 469113**

**Client Sample ID: Effluent 041519**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 612 | B | | 612.0 | | mg/L | | | | 0 | 10 |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152073-1

## GC/MS VOA

### Analysis Batch: 469386

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-152073-2 | Effluent 041519 | Total/NA | Water | 8260C | |
| MB 480-469386/7 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-469386/5 | Lab Control Sample | Total/NA | Water | 8260C | |

## General Chemistry

### Analysis Batch: 469113

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-152073-1 | Effluent 041519 | Total/NA | Water | SM2540 C | |
| MB 480-469113/1 | Method Blank | Total/NA | Water | SM2540 C | |
| LCS 480-469113/2 | Lab Control Sample | Total/NA | Water | SM2540 C | |
| 480-152073-1 DU | Effluent 041519 | Total/NA | Water | SM2540 C | |

### Analysis Batch: 475418

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-152073-1 | Effluent 041519 | Total/NA | Water | SM 2540D | |
| MB 480-475418/1 | Method Blank | Total/NA | Water | SM 2540D | |
| LCS 480-475418/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152073-1

## Client Sample ID: Effluent 041519

**Lab Sample ID: 480-152073-1**

**Date Collected: 04/15/19 07:20**

**Matrix: Water**

**Date Received: 04/17/19 19:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540D | | 1 | 475418 | 05/30/19 15:51 | CSS | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 469113 | 04/22/19 12:37 | RAF | TAL BUF |

## Client Sample ID: Effluent 041519

**Lab Sample ID: 480-152073-2**

**Date Collected: 04/15/19 07:20**

**Matrix: Water**

**Date Received: 04/17/19 19:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 469386 | 04/24/19 02:40 | AMM | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-152073-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152073-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260C | Volatile Organic Compounds by GC/MS | SW846 | TAL BUF |
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL BUF |
| SM2540 C | Total Dissolved Solids | SM18 | TAL BUF |
| 5030C | Purge and Trap | SW846 | TAL BUF |

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152073-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 480-152073-1 | Effluent 041519 | Water | 04/15/19 07:20 | 04/17/19 19:00 | |
| 480-152073-2 | Effluent 041519 | Water | 04/15/19 07:20 | 04/17/19 19:00 | |

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: MARTin Koennecke | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): | COC No: 480-122350-10587.1 |
|---|---|---|---|---|
| Client Contact: Mr. Yuri Veliz | Phone: 315-729-1300 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Company: O'Brien & Gere Inc of North America | | | | Job #: |

| Address: 333 West Washington St. PO BOX 4873 | Due Date Requested: | Analysis Requested |
|---|---|---|
| City: East Syracuse | TAT Requested (days): | |
| State, Zip: NY, 13221 | | |
| Phone: 315-956-6100(Tel) 315-463-7554(Fax) | PO #: 11900114 | |
| Email: Yuri.Veliz@obg.com | WO #: | |
| Project Name: Former Accurate Die Cast | Project #: 48008584 | |
| Site: | SSOW#: | |

480-152073 Chain of Custody

Preservation Codes:
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 2540D - Total Suspended Solids | 2540C_Calcd - Total Dissolved Solids | 8260C - Volatile Organic Compounds | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Preservation Code: | | | | | | | N | N | A | | |
| Effluent 041519 | 4-15-19 | 7:20 | C | Water | | | 1 | 1 | | 2 | |
| Effluent 041519 | 4-15-19 | 7:20 | G | water | | | | | 3 | 3 | |
| 4-15-19 RE | | | | | | | | | | | |

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested: I, II, III, IV, Other (specify) | Special Instructions/QC Requirements: |

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Martin Koennecke | 4-15-19 / 9:40 | OBG | RECEIVED | 4-15-19, 0940 | Dyn |
| Relinquished by: RECEIVED | Date/Time: 4-15-19, 19:00 | Company Dyn | Received by: Howard | Date/Time: 04/17/19 1900 | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 5.4 #1 ICE MELTED |
|---|---|---|

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-152073-1

**Login Number: 152073**
**List Number: 1**
**Creator: Velickovic, Zoran**

**List Source: Eurofins TestAmerica, Buffalo**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | OBG |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | N/A | |
| Chlorine Residual checked. | N/A | |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-152394-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

*Authorized for release by:*
*5/13/2019 12:11:54 PM*
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

# Table of Contents

# Definitions/Glossary

Client: O'Brien & Gere Inc of North America
Job ID: 480-152394-1
Project/Site: Former Accurate Die Cast

## Qualifiers

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Case Narrative

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152394-1

## Job ID: 480-152394-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-152394-1**

**Receipt**
The sample was received on 4/24/2019 1:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8° C.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152394-1

## Client Sample ID: Effluent 042319

## Lab Sample ID: 480-152394-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 646 | B | 10.0 | 4.0 | mg/L | 1 | | SM2540 C | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: O'Brien & Gere Inc of North America
Job ID: 480-152394-1
Project/Site: Former Accurate Die Cast

**Client Sample ID: Effluent 042319**
**Lab Sample ID: 480-152394-1**
**Date Collected: 04/23/19 07:10**
**Matrix: Water**
**Date Received: 04/24/19 01:00**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **646** | **B** | 10.0 | 4.0 | mg/L | | | 04/29/19 17:06 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 4.0 | 4.0 | mg/L | | | 04/29/19 12:41 | 1 |

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152394-1

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 480-470282/1**
**Matrix: Water**
**Analysis Batch: 470282**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 1.0 | 1.0 | mg/L | | | 04/29/19 12:41 | 1 |

**Lab Sample ID: LCS 480-470282/2**
**Matrix: Water**
**Analysis Batch: 470282**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | | | 262 | 259.2 | | mg/L | | 99 | 88 - 110 | | |

**Lab Sample ID: 480-152394-1 DU**
**Matrix: Water**
**Analysis Batch: 470282**

**Client Sample ID: Effluent 042319**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | | ND | | mg/L | | | | NC | 10 |

## Method: SM2540 C - Total Dissolved Solids

**Lab Sample ID: MB 480-470333/1**
**Matrix: Water**
**Analysis Batch: 470333**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 4.00 | J | 10.0 | 4.0 | mg/L | | | 04/29/19 17:06 | 1 |

**Lab Sample ID: LCS 480-470333/2**
**Matrix: Water**
**Analysis Batch: 470333**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | | | 500 | 469.0 | | mg/L | | 94 | 85 - 115 | | |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152394-1

## General Chemistry

### Analysis Batch: 470282

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-152394-1 | Effluent 042319 | Total/NA | Water | SM 2540D | |
| MB 480-470282/1 | Method Blank | Total/NA | Water | SM 2540D | |
| LCS 480-470282/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |
| 480-152394-1 DU | Effluent 042319 | Total/NA | Water | SM 2540D | |

### Analysis Batch: 470333

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-152394-1 | Effluent 042319 | Total/NA | Water | SM2540 C | |
| MB 480-470333/1 | Method Blank | Total/NA | Water | SM2540 C | |
| LCS 480-470333/2 | Lab Control Sample | Total/NA | Water | SM2540 C | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Job ID: 480-152394-1
Project/Site: Former Accurate Die Cast

**Client Sample ID: Effluent 042319**
**Lab Sample ID: 480-152394-1**
**Date Collected: 04/23/19 07:10**
**Matrix: Water**
**Date Received: 04/24/19 01:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540D | | 1 | 470282 | 04/29/19 12:41 | RAF | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 470333 | 04/29/19 17:06 | RAF | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-152394-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152394-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL BUF |
| SM2540 C | Total Dissolved Solids | SM18 | TAL BUF |

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152394-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 480-152394-1 | Effluent 042319 | Water | 04/23/19 07:10 | 04/24/19 01:00 |

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: Martin Koennecke | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): | COC No: 480-122366-10586.1 |
|---|---|---|---|---|
| Client Contact: Mr. Yuri Veliz | Phone: 315-729-1300 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Company: O'Brien & Gere Inc of North America | | | | Job #: |
| Address: 333 West Washington St. PO BOX 4873 | Due Date Requested: | | | |
| City: East Syracuse | TAT Requested (days): | | | |
| State, Zip: NY, 13221 | | | | |
| Phone: 315-956-6100(Tel) 315-463-7554(Fax) | PO #: 11900114 | | | |
| Email: Yuri.Veliz@obg.com | WO #: | | | |
| Project Name: Former Accurate Die Cast | Project #: 48008584 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

480-152394 Chain of Custody

**Preservation Codes:**

| | |
|---|---|
| HCL | M - Hexane |
| NaOH | N - None |
| Zn Acetate | O - AsNaO2 |
| Nitric Acid | P - Na2O4S |
| NaHSO4 | Q - Na2SO3 |
| MeOH | R - Na2S2O3 |
| Amchlor | S - H2SO4 |
| Ascorbic Acid | T - TSP Dodecahydrate |
| Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 2540D - Total Suspended Solids | 2540C_Calcd - Total Dissolved Solids | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | N | | |
| Effluent 042319 | 4-23-19 | 7:10 | C | Water | | | 1 | 1 | 2 | |

RE
4-23-19

Syracuse
#225

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Martin Koennecke | 4-23-19 / 9:55 | OBG | | 4-23-19 | |
| 2 | Relinquished | 4-23-19, 19:00 | hya | Marshall | 04/24/19 0100 | |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.8 #1 |
|---|---|---|

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-152394-1

**Login Number: 152394**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Velickovic, Zoran**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | OBG |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | N/A | |
| Chlorine Residual checked. | N/A | |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-152725-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

*Authorized for release by:*
*5/20/2019 2:38:49 PM*
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

# Table of Contents

# Definitions/Glossary

Client: O'Brien & Gere Inc of North America
Job ID: 480-152725-1
Project/Site: Former Accurate Die Cast

## Qualifiers

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Job ID: 480-152725-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-152725-1**

**Receipt**
The sample was received on 4/30/2019 1:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.6° C.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152725-1

## Client Sample ID: Effluent 042919

Lab Sample ID: 480-152725-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 640 | B | 10.0 | 4.0 | mg/L | 1 | | SM2540 C | Total/NA |

This Detection Summary does not include radiochemical test results.

# Client Sample Results

Client: O'Brien & Gere Inc of North America
Job ID: 480-152725-1
Project/Site: Former Accurate Die Cast

**Client Sample ID: Effluent 042919**
**Lab Sample ID: 480-152725-1**
**Date Collected: 04/29/19 07:10**
**Matrix: Water**
**Date Received: 04/30/19 01:00**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **640** | **B** | 10.0 | 4.0 | mg/L | | | 05/06/19 08:10 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 4.0 | 4.0 | mg/L | | | 05/03/19 21:56 | 1 |

# QC Sample Results

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152725-1

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 480-471187/1**
**Matrix: Water**
**Analysis Batch: 471187**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 1.0 | 1.0 | mg/L | | | 05/03/19 21:56 | 1 |

**Lab Sample ID: LCS 480-471187/2**
**Matrix: Water**
**Analysis Batch: 471187**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 240 | 237.2 | | mg/L | | 99 | 88 - 110 |

## Method: SM2540 C - Total Dissolved Solids

**Lab Sample ID: MB 480-471327/1**
**Matrix: Water**
**Analysis Batch: 471327**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 8.00 | J | 10.0 | 4.0 | mg/L | | | 05/06/19 08:10 | 1 |

**Lab Sample ID: LCS 480-471327/2**
**Matrix: Water**
**Analysis Batch: 471327**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 500 | 506.0 | | mg/L | | 101 | 85 - 115 |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152725-1

## General Chemistry

### Analysis Batch: 471187

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-152725-1 | Effluent 042919 | Total/NA | Water | SM 2540D | |
| MB 480-471187/1 | Method Blank | Total/NA | Water | SM 2540D | |
| LCS 480-471187/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |

### Analysis Batch: 471327

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-152725-1 | Effluent 042919 | Total/NA | Water | SM2540 C | |
| MB 480-471327/1 | Method Blank | Total/NA | Water | SM2540 C | |
| LCS 480-471327/2 | Lab Control Sample | Total/NA | Water | SM2540 C | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152725-1

**Client Sample ID: Effluent 042919**
**Date Collected: 04/29/19 07:10**
**Date Received: 04/30/19 01:00**

**Lab Sample ID: 480-152725-1**
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540D | | 1 | 471187 | 05/03/19 21:56 | SMH | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 471327 | 05/06/19 08:10 | CSS | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-152725-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152725-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL BUF |
| SM2540 C | Total Dissolved Solids | SM18 | TAL BUF |

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152725-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 480-152725-1 | Effluent 042919 | Water | 04/29/19 07:10 | 04/30/19 01:00 |

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| | | | | |
|---|---|---|---|---|
| **Client Information** | Sampler: MARTIN Koenecke | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): | COC No: 480-122366-10586.1 |
| Client Contact: Mr. Yuri Veliz | Phone: 315-729-1300 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Company: O'Brien & Gere Inc of North America | | **Analysis Requested** | | Job #: |
| Address: 333 West Washington St. PO BOX 4873 | Due Date Requested: | | | Preservation Codes: |
| City: East Syracuse | TAT Requested (days): | | | A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify) |
| State, Zip: NY, 13221 | | | | |
| Phone: 315-956-6100(Tel) 315-463-7 54(Fax) | PO #: 11900114 | | | |
| Email: Yuri.Veliz@obg.com | WO #: | | | Other: |
| Project Name: Former Accurate Die Cast | Project #: 48008584 | | | |
| Site: | SSOW#: | | | |

480-152725 Chain of Custody

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 2540D - Total Suspended Solids | 2540C_Calcd - Total Dissolved Solids | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | N | | |
| Effluent 04 29 19 | 4-29-19 | 7:10 | C | Water | | | 1 | 1 | 2 | |

Syracuse
#225

4-29-19

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| | | | | | | |
|---|---|---|---|---|---|---|
| Empty Kit Relinquished by: | | Date: | Time: | Method of Shipment: | | |
| Relinquished by: Martin Koenecke | Date/Time: 4-29-19 1455 | Company: OBG | Received by: [illegible] | Date/Time: 4-29-19 | Company: | |
| Relinquished by: RELINQUISHED | Date/Time: 4-29-19 15:05 | Company: Dyz | Received by: Matthew Likolb | Date/Time: 04/30/19 0600 | Company: TA | |
| Relinquished by: | Date/Time: | Company: | Received by: | Date/Time: | Company: | |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.6 -A

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-152725-1

**Login Number: 152725**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Velickovic, Zoran**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | OBG |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | N/A | |
| Chlorine Residual checked. | N/A | |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-152812-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

*Authorized for release by:*
*5/13/2019 6:12:12 PM*
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

# Table of Contents

# Definitions/Glossary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152812-1

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| * | LCS or LCSD is outside acceptance limits. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Job ID: 480-152812-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-152812-1**

**Receipt**
The samples were received on 5/2/2019 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9º C.

**GC/MS VOA**
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-472168 recovered above the upper control limit for Chlorodibromomethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW 24 050119 (480-152812-3) and MW 18 050119 (480-152812-4).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-472168 recovered outside control limits for the following analytes: Bromoform and Chlorodibromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: MW 24 050119 (480-152812-3) and MW 18 050119 (480-152812-4).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW 24 050119 (480-152812-3) and MW 18 050119 (480-152812-4). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW 11 050119 (480-152812-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW 10 050119 (480-152812-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152812-1

## Client Sample ID: MW 11 050119 — Lab Sample ID: 480-152812-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | 310 | | 8.0 | 3.7 | ug/L | 8 | | 8260C | Total/NA |

## Client Sample ID: MW 10 050119 — Lab Sample ID: 480-152812-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | 140 | | 2.0 | 0.92 | ug/L | 2 | | 8260C | Total/NA |

## Client Sample ID: MW 24 050119 — Lab Sample ID: 480-152812-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | 6.2 | | 5.0 | 4.1 | ug/L | 5 | | 8260C | Total/NA |
| Methylene Chloride | 3.1 | J | 5.0 | 2.2 | ug/L | 5 | | 8260C | Total/NA |
| Trichloroethene | 140 | | 5.0 | 2.3 | ug/L | 5 | | 8260C | Total/NA |

## Client Sample ID: MW 18 050119 — Lab Sample ID: 480-152812-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | 290 | | 20 | 16 | ug/L | 20 | | 8260C | Total/NA |
| Trichloroethene | 960 | | 20 | 9.2 | ug/L | 20 | | 8260C | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152812-1

**Client Sample ID: MW 11 050119**
**Date Collected: 05/01/19 11:00**
**Date Received: 05/02/19 01:00**

**Lab Sample ID: 480-152812-1**
**Matrix: Water**

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 8.0 | 6.6 | ug/L | | | 05/10/19 03:52 | 8 |
| 1,1,2,2-Tetrachloroethane | ND | | 8.0 | 1.7 | ug/L | | | 05/10/19 03:52 | 8 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 8.0 | 2.5 | ug/L | | | 05/10/19 03:52 | 8 |
| 1,1,2-Trichloroethane | ND | | 8.0 | 1.8 | ug/L | | | 05/10/19 03:52 | 8 |
| 1,1-Dichloroethane | ND | | 8.0 | 3.0 | ug/L | | | 05/10/19 03:52 | 8 |
| 1,1-Dichloroethene | ND | | 8.0 | 2.3 | ug/L | | | 05/10/19 03:52 | 8 |
| 1,2,4-Trichlorobenzene | ND | | 8.0 | 3.3 | ug/L | | | 05/10/19 03:52 | 8 |
| 1,2-Dibromo-3-Chloropropane | ND | | 8.0 | 3.1 | ug/L | | | 05/10/19 03:52 | 8 |
| 1,2-Dibromoethane | ND | | 8.0 | 5.8 | ug/L | | | 05/10/19 03:52 | 8 |
| 1,2-Dichlorobenzene | ND | | 8.0 | 6.3 | ug/L | | | 05/10/19 03:52 | 8 |
| 1,2-Dichloroethane | ND | | 8.0 | 1.7 | ug/L | | | 05/10/19 03:52 | 8 |
| 1,2-Dichloropropane | ND | | 8.0 | 5.8 | ug/L | | | 05/10/19 03:52 | 8 |
| 1,3-Dichlorobenzene | ND | | 8.0 | 6.2 | ug/L | | | 05/10/19 03:52 | 8 |
| 1,4-Dichlorobenzene | ND | | 8.0 | 6.7 | ug/L | | | 05/10/19 03:52 | 8 |
| 2-Butanone (MEK) | ND | | 80 | 11 | ug/L | | | 05/10/19 03:52 | 8 |
| 2-Hexanone | ND | | 40 | 9.9 | ug/L | | | 05/10/19 03:52 | 8 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 40 | 17 | ug/L | | | 05/10/19 03:52 | 8 |
| Acetone | ND | | 80 | 24 | ug/L | | | 05/10/19 03:52 | 8 |
| Benzene | ND | | 8.0 | 3.3 | ug/L | | | 05/10/19 03:52 | 8 |
| Bromodichloromethane | ND | | 8.0 | 3.1 | ug/L | | | 05/10/19 03:52 | 8 |
| Bromoform | ND | | 8.0 | 2.1 | ug/L | | | 05/10/19 03:52 | 8 |
| Bromomethane | ND | | 8.0 | 5.5 | ug/L | | | 05/10/19 03:52 | 8 |
| Carbon disulfide | ND | | 8.0 | 1.5 | ug/L | | | 05/10/19 03:52 | 8 |
| Carbon tetrachloride | ND | | 8.0 | 2.2 | ug/L | | | 05/10/19 03:52 | 8 |
| Chlorobenzene | ND | | 8.0 | 6.0 | ug/L | | | 05/10/19 03:52 | 8 |
| Chloroethane | ND | | 8.0 | 2.6 | ug/L | | | 05/10/19 03:52 | 8 |
| Chloroform | ND | | 8.0 | 2.7 | ug/L | | | 05/10/19 03:52 | 8 |
| Chloromethane | ND | | 8.0 | 2.8 | ug/L | | | 05/10/19 03:52 | 8 |
| cis-1,2-Dichloroethene | ND | | 8.0 | 6.5 | ug/L | | | 05/10/19 03:52 | 8 |
| cis-1,3-Dichloropropene | ND | | 8.0 | 2.9 | ug/L | | | 05/10/19 03:52 | 8 |
| Cyclohexane | ND | | 8.0 | 1.4 | ug/L | | | 05/10/19 03:52 | 8 |
| Dibromochloromethane | ND | | 8.0 | 2.6 | ug/L | | | 05/10/19 03:52 | 8 |
| Dichlorodifluoromethane | ND | | 8.0 | 5.4 | ug/L | | | 05/10/19 03:52 | 8 |
| Ethylbenzene | ND | | 8.0 | 5.9 | ug/L | | | 05/10/19 03:52 | 8 |
| Isopropylbenzene | ND | | 8.0 | 6.3 | ug/L | | | 05/10/19 03:52 | 8 |
| Methyl acetate | ND | | 20 | 10 | ug/L | | | 05/10/19 03:52 | 8 |
| Methyl tert-butyl ether | ND | | 8.0 | 1.3 | ug/L | | | 05/10/19 03:52 | 8 |
| Methylcyclohexane | ND | | 8.0 | 1.3 | ug/L | | | 05/10/19 03:52 | 8 |
| Methylene Chloride | ND | | 8.0 | 3.5 | ug/L | | | 05/10/19 03:52 | 8 |
| Styrene | ND | | 8.0 | 5.8 | ug/L | | | 05/10/19 03:52 | 8 |
| Tetrachloroethene | ND | | 8.0 | 2.9 | ug/L | | | 05/10/19 03:52 | 8 |
| Toluene | ND | | 8.0 | 4.1 | ug/L | | | 05/10/19 03:52 | 8 |
| trans-1,2-Dichloroethene | ND | | 8.0 | 7.2 | ug/L | | | 05/10/19 03:52 | 8 |
| trans-1,3-Dichloropropene | ND | | 8.0 | 3.0 | ug/L | | | 05/10/19 03:52 | 8 |
| **Trichloroethene** | **310** | | 8.0 | 3.7 | ug/L | | | 05/10/19 03:52 | 8 |
| Trichlorofluoromethane | ND | | 8.0 | 7.0 | ug/L | | | 05/10/19 03:52 | 8 |
| Vinyl chloride | ND | | 8.0 | 7.2 | ug/L | | | 05/10/19 03:52 | 8 |
| Xylenes, Total | ND | | 16 | 5.3 | ug/L | | | 05/10/19 03:52 | 8 |

## Client Sample ID: MW 11 050119

**Lab Sample ID: 480-152812-1**

**Date Collected: 05/01/19 11:00**
**Matrix: Water**
**Date Received: 05/02/19 01:00**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *101* | | *77 - 120* | | *05/10/19 03:52* | *8* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *73 - 120* | | *05/10/19 03:52* | *8* |
| *Dibromofluoromethane (Surr)* | *104* | | *75 - 123* | | *05/10/19 03:52* | *8* |
| *Toluene-d8 (Surr)* | *94* | | *80 - 120* | | *05/10/19 03:52* | *8* |

## Client Sample ID: MW 10 050119

**Lab Sample ID: 480-152812-2**

**Date Collected: 05/01/19 13:00**
**Matrix: Water**
**Date Received: 05/02/19 01:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 2.0 | 1.6 | ug/L | | | 05/09/19 23:38 | 2 |
| 1,1,2,2-Tetrachloroethane | ND | | 2.0 | 0.42 | ug/L | | | 05/09/19 23:38 | 2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 2.0 | 0.62 | ug/L | | | 05/09/19 23:38 | 2 |
| 1,1,2-Trichloroethane | ND | | 2.0 | 0.46 | ug/L | | | 05/09/19 23:38 | 2 |
| 1,1-Dichloroethane | ND | | 2.0 | 0.76 | ug/L | | | 05/09/19 23:38 | 2 |
| 1,1-Dichloroethene | ND | | 2.0 | 0.58 | ug/L | | | 05/09/19 23:38 | 2 |
| 1,2,4-Trichlorobenzene | ND | | 2.0 | 0.82 | ug/L | | | 05/09/19 23:38 | 2 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.78 | ug/L | | | 05/09/19 23:38 | 2 |
| 1,2-Dibromoethane | ND | | 2.0 | 1.5 | ug/L | | | 05/09/19 23:38 | 2 |
| 1,2-Dichlorobenzene | ND | | 2.0 | 1.6 | ug/L | | | 05/09/19 23:38 | 2 |
| 1,2-Dichloroethane | ND | | 2.0 | 0.42 | ug/L | | | 05/09/19 23:38 | 2 |
| 1,2-Dichloropropane | ND | | 2.0 | 1.4 | ug/L | | | 05/09/19 23:38 | 2 |
| 1,3-Dichlorobenzene | ND | | 2.0 | 1.6 | ug/L | | | 05/09/19 23:38 | 2 |
| 1,4-Dichlorobenzene | ND | | 2.0 | 1.7 | ug/L | | | 05/09/19 23:38 | 2 |
| 2-Butanone (MEK) | ND | | 20 | 2.6 | ug/L | | | 05/09/19 23:38 | 2 |
| 2-Hexanone | ND | | 10 | 2.5 | ug/L | | | 05/09/19 23:38 | 2 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 4.2 | ug/L | | | 05/09/19 23:38 | 2 |
| Acetone | ND | | 20 | 6.0 | ug/L | | | 05/09/19 23:38 | 2 |
| Benzene | ND | | 2.0 | 0.82 | ug/L | | | 05/09/19 23:38 | 2 |
| Bromodichloromethane | ND | | 2.0 | 0.78 | ug/L | | | 05/09/19 23:38 | 2 |
| Bromoform | ND | | 2.0 | 0.52 | ug/L | | | 05/09/19 23:38 | 2 |
| Bromomethane | ND | | 2.0 | 1.4 | ug/L | | | 05/09/19 23:38 | 2 |
| Carbon disulfide | ND | | 2.0 | 0.38 | ug/L | | | 05/09/19 23:38 | 2 |
| Carbon tetrachloride | ND | | 2.0 | 0.54 | ug/L | | | 05/09/19 23:38 | 2 |
| Chlorobenzene | ND | | 2.0 | 1.5 | ug/L | | | 05/09/19 23:38 | 2 |
| Chloroethane | ND | | 2.0 | 0.64 | ug/L | | | 05/09/19 23:38 | 2 |
| Chloroform | ND | | 2.0 | 0.68 | ug/L | | | 05/09/19 23:38 | 2 |
| Chloromethane | ND | | 2.0 | 0.70 | ug/L | | | 05/09/19 23:38 | 2 |
| cis-1,2-Dichloroethene | ND | | 2.0 | 1.6 | ug/L | | | 05/09/19 23:38 | 2 |
| cis-1,3-Dichloropropene | ND | | 2.0 | 0.72 | ug/L | | | 05/09/19 23:38 | 2 |
| Cyclohexane | ND | | 2.0 | 0.36 | ug/L | | | 05/09/19 23:38 | 2 |
| Dibromochloromethane | ND | | 2.0 | 0.64 | ug/L | | | 05/09/19 23:38 | 2 |
| Dichlorodifluoromethane | ND | | 2.0 | 1.4 | ug/L | | | 05/09/19 23:38 | 2 |
| Ethylbenzene | ND | | 2.0 | 1.5 | ug/L | | | 05/09/19 23:38 | 2 |
| Isopropylbenzene | ND | | 2.0 | 1.6 | ug/L | | | 05/09/19 23:38 | 2 |
| Methyl acetate | ND | | 5.0 | 2.6 | ug/L | | | 05/09/19 23:38 | 2 |
| Methyl tert-butyl ether | ND | | 2.0 | 0.32 | ug/L | | | 05/09/19 23:38 | 2 |
| Methylcyclohexane | ND | | 2.0 | 0.32 | ug/L | | | 05/09/19 23:38 | 2 |
| Methylene Chloride | ND | | 2.0 | 0.88 | ug/L | | | 05/09/19 23:38 | 2 |

## Client Sample ID: MW 10 050119

**Lab Sample ID: 480-152812-2**

**Date Collected: 05/01/19 13:00**

**Matrix: Water**

**Date Received: 05/02/19 01:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Styrene | ND | | 2.0 | 1.5 | ug/L | | | 05/09/19 23:38 | 2 |
| Tetrachloroethene | ND | | 2.0 | 0.72 | ug/L | | | 05/09/19 23:38 | 2 |
| Toluene | ND | | 2.0 | 1.0 | ug/L | | | 05/09/19 23:38 | 2 |
| trans-1,2-Dichloroethene | ND | | 2.0 | 1.8 | ug/L | | | 05/09/19 23:38 | 2 |
| trans-1,3-Dichloropropene | ND | | 2.0 | 0.74 | ug/L | | | 05/09/19 23:38 | 2 |
| **Trichloroethene** | **140** | | 2.0 | 0.92 | ug/L | | | 05/09/19 23:38 | 2 |
| Trichlorofluoromethane | ND | | 2.0 | 1.8 | ug/L | | | 05/09/19 23:38 | 2 |
| Vinyl chloride | ND | | 2.0 | 1.8 | ug/L | | | 05/09/19 23:38 | 2 |
| Xylenes, Total | ND | | 4.0 | 1.3 | ug/L | | | 05/09/19 23:38 | 2 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *77 - 120* | | *05/09/19 23:38* | *2* |
| *4-Bromofluorobenzene (Surr)* | *88* | | *73 - 120* | | *05/09/19 23:38* | *2* |
| *Dibromofluoromethane (Surr)* | *89* | | *75 - 123* | | *05/09/19 23:38* | *2* |
| *Toluene-d8 (Surr)* | *94* | | *80 - 120* | | *05/09/19 23:38* | *2* |

## Client Sample ID: MW 24 050119

**Lab Sample ID: 480-152812-3**

**Date Collected: 05/01/19 12:45**

**Matrix: Water**

**Date Received: 05/02/19 01:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5.0 | 4.1 | ug/L | | | 05/10/19 00:43 | 5 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 1.1 | ug/L | | | 05/10/19 00:43 | 5 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.0 | 1.6 | ug/L | | | 05/10/19 00:43 | 5 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 1.2 | ug/L | | | 05/10/19 00:43 | 5 |
| 1,1-Dichloroethane | ND | | 5.0 | 1.9 | ug/L | | | 05/10/19 00:43 | 5 |
| 1,1-Dichloroethene | ND | | 5.0 | 1.5 | ug/L | | | 05/10/19 00:43 | 5 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 2.1 | ug/L | | | 05/10/19 00:43 | 5 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 2.0 | ug/L | | | 05/10/19 00:43 | 5 |
| 1,2-Dibromoethane | ND | | 5.0 | 3.7 | ug/L | | | 05/10/19 00:43 | 5 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 4.0 | ug/L | | | 05/10/19 00:43 | 5 |
| 1,2-Dichloroethane | ND | | 5.0 | 1.1 | ug/L | | | 05/10/19 00:43 | 5 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.6 | ug/L | | | 05/10/19 00:43 | 5 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 05/10/19 00:43 | 5 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 4.2 | ug/L | | | 05/10/19 00:43 | 5 |
| 2-Butanone (MEK) | ND | | 50 | 6.6 | ug/L | | | 05/10/19 00:43 | 5 |
| 2-Hexanone | ND | | 25 | 6.2 | ug/L | | | 05/10/19 00:43 | 5 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 25 | 11 | ug/L | | | 05/10/19 00:43 | 5 |
| Acetone | ND | | 50 | 15 | ug/L | | | 05/10/19 00:43 | 5 |
| Benzene | ND | | 5.0 | 2.1 | ug/L | | | 05/10/19 00:43 | 5 |
| Bromodichloromethane | ND | | 5.0 | 2.0 | ug/L | | | 05/10/19 00:43 | 5 |
| Bromoform | ND | * | 5.0 | 1.3 | ug/L | | | 05/10/19 00:43 | 5 |
| Bromomethane | ND | | 5.0 | 3.5 | ug/L | | | 05/10/19 00:43 | 5 |
| Carbon disulfide | ND | | 5.0 | 0.95 | ug/L | | | 05/10/19 00:43 | 5 |
| Carbon tetrachloride | ND | | 5.0 | 1.4 | ug/L | | | 05/10/19 00:43 | 5 |
| Chlorobenzene | ND | | 5.0 | 3.8 | ug/L | | | 05/10/19 00:43 | 5 |
| Chloroethane | ND | | 5.0 | 1.6 | ug/L | | | 05/10/19 00:43 | 5 |
| Chloroform | ND | | 5.0 | 1.7 | ug/L | | | 05/10/19 00:43 | 5 |
| Chloromethane | ND | | 5.0 | 1.8 | ug/L | | | 05/10/19 00:43 | 5 |

## Client Sample ID: MW 24 050119

**Lab Sample ID: 480-152812-3**

**Date Collected: 05/01/19 12:45**

**Matrix: Water**

**Date Received: 05/02/19 01:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **cis-1,2-Dichloroethene** | **6.2** | | 5.0 | 4.1 | ug/L | | | 05/10/19 00:43 | 5 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 1.8 | ug/L | | | 05/10/19 00:43 | 5 |
| Cyclohexane | ND | | 5.0 | 0.90 | ug/L | | | 05/10/19 00:43 | 5 |
| Dibromochloromethane | ND | * | 5.0 | 1.6 | ug/L | | | 05/10/19 00:43 | 5 |
| Dichlorodifluoromethane | ND | | 5.0 | 3.4 | ug/L | | | 05/10/19 00:43 | 5 |
| Ethylbenzene | ND | | 5.0 | 3.7 | ug/L | | | 05/10/19 00:43 | 5 |
| Isopropylbenzene | ND | | 5.0 | 4.0 | ug/L | | | 05/10/19 00:43 | 5 |
| Methyl acetate | ND | | 13 | 6.5 | ug/L | | | 05/10/19 00:43 | 5 |
| Methyl tert-butyl ether | ND | | 5.0 | 0.80 | ug/L | | | 05/10/19 00:43 | 5 |
| Methylcyclohexane | ND | | 5.0 | 0.80 | ug/L | | | 05/10/19 00:43 | 5 |
| **Methylene Chloride** | **3.1** | **J** | 5.0 | 2.2 | ug/L | | | 05/10/19 00:43 | 5 |
| Styrene | ND | | 5.0 | 3.7 | ug/L | | | 05/10/19 00:43 | 5 |
| Tetrachloroethene | ND | | 5.0 | 1.8 | ug/L | | | 05/10/19 00:43 | 5 |
| Toluene | ND | | 5.0 | 2.6 | ug/L | | | 05/10/19 00:43 | 5 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 4.5 | ug/L | | | 05/10/19 00:43 | 5 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 1.9 | ug/L | | | 05/10/19 00:43 | 5 |
| **Trichloroethene** | **140** | | 5.0 | 2.3 | ug/L | | | 05/10/19 00:43 | 5 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 05/10/19 00:43 | 5 |
| Vinyl chloride | ND | | 5.0 | 4.5 | ug/L | | | 05/10/19 00:43 | 5 |
| Xylenes, Total | ND | | 10 | 3.3 | ug/L | | | 05/10/19 00:43 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *106* | | *77 - 120* | | *05/10/19 00:43* | *5* |
| *4-Bromofluorobenzene (Surr)* | *112* | | *73 - 120* | | *05/10/19 00:43* | *5* |
| *Dibromofluoromethane (Surr)* | *103* | | *75 - 123* | | *05/10/19 00:43* | *5* |
| *Toluene-d8 (Surr)* | *107* | | *80 - 120* | | *05/10/19 00:43* | *5* |

## Client Sample ID: MW 18 050119

**Lab Sample ID: 480-152812-4**

**Date Collected: 05/01/19 13:00**

**Matrix: Water**

**Date Received: 05/02/19 01:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 20 | 16 | ug/L | | | 05/10/19 01:07 | 20 |
| 1,1,2,2-Tetrachloroethane | ND | | 20 | 4.2 | ug/L | | | 05/10/19 01:07 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 20 | 6.2 | ug/L | | | 05/10/19 01:07 | 20 |
| 1,1,2-Trichloroethane | ND | | 20 | 4.6 | ug/L | | | 05/10/19 01:07 | 20 |
| 1,1-Dichloroethane | ND | | 20 | 7.6 | ug/L | | | 05/10/19 01:07 | 20 |
| 1,1-Dichloroethene | ND | | 20 | 5.8 | ug/L | | | 05/10/19 01:07 | 20 |
| 1,2,4-Trichlorobenzene | ND | | 20 | 8.2 | ug/L | | | 05/10/19 01:07 | 20 |
| 1,2-Dibromo-3-Chloropropane | ND | | 20 | 7.8 | ug/L | | | 05/10/19 01:07 | 20 |
| 1,2-Dibromoethane | ND | | 20 | 15 | ug/L | | | 05/10/19 01:07 | 20 |
| 1,2-Dichlorobenzene | ND | | 20 | 16 | ug/L | | | 05/10/19 01:07 | 20 |
| 1,2-Dichloroethane | ND | | 20 | 4.2 | ug/L | | | 05/10/19 01:07 | 20 |
| 1,2-Dichloropropane | ND | | 20 | 14 | ug/L | | | 05/10/19 01:07 | 20 |
| 1,3-Dichlorobenzene | ND | | 20 | 16 | ug/L | | | 05/10/19 01:07 | 20 |
| 1,4-Dichlorobenzene | ND | | 20 | 17 | ug/L | | | 05/10/19 01:07 | 20 |
| 2-Butanone (MEK) | ND | | 200 | 26 | ug/L | | | 05/10/19 01:07 | 20 |
| 2-Hexanone | ND | | 100 | 25 | ug/L | | | 05/10/19 01:07 | 20 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 100 | 42 | ug/L | | | 05/10/19 01:07 | 20 |

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152812-1

**Client Sample ID: MW 18 050119**
**Date Collected: 05/01/19 13:00**
**Date Received: 05/02/19 01:00**

**Lab Sample ID: 480-152812-4**
**Matrix: Water**

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | ND | | 200 | 60 | ug/L | | | 05/10/19 01:07 | 20 |
| Benzene | ND | | 20 | 8.2 | ug/L | | | 05/10/19 01:07 | 20 |
| Bromodichloromethane | ND | | 20 | 7.8 | ug/L | | | 05/10/19 01:07 | 20 |
| Bromoform | ND | * | 20 | 5.2 | ug/L | | | 05/10/19 01:07 | 20 |
| Bromomethane | ND | | 20 | 14 | ug/L | | | 05/10/19 01:07 | 20 |
| Carbon disulfide | ND | | 20 | 3.8 | ug/L | | | 05/10/19 01:07 | 20 |
| Carbon tetrachloride | ND | | 20 | 5.4 | ug/L | | | 05/10/19 01:07 | 20 |
| Chlorobenzene | ND | | 20 | 15 | ug/L | | | 05/10/19 01:07 | 20 |
| Chloroethane | ND | | 20 | 6.4 | ug/L | | | 05/10/19 01:07 | 20 |
| Chloroform | ND | | 20 | 6.8 | ug/L | | | 05/10/19 01:07 | 20 |
| Chloromethane | ND | | 20 | 7.0 | ug/L | | | 05/10/19 01:07 | 20 |
| **cis-1,2-Dichloroethene** | **290** | | 20 | 16 | ug/L | | | 05/10/19 01:07 | 20 |
| cis-1,3-Dichloropropene | ND | | 20 | 7.2 | ug/L | | | 05/10/19 01:07 | 20 |
| Cyclohexane | ND | | 20 | 3.6 | ug/L | | | 05/10/19 01:07 | 20 |
| Dibromochloromethane | ND | * | 20 | 6.4 | ug/L | | | 05/10/19 01:07 | 20 |
| Dichlorodifluoromethane | ND | | 20 | 14 | ug/L | | | 05/10/19 01:07 | 20 |
| Ethylbenzene | ND | | 20 | 15 | ug/L | | | 05/10/19 01:07 | 20 |
| Isopropylbenzene | ND | | 20 | 16 | ug/L | | | 05/10/19 01:07 | 20 |
| Methyl acetate | ND | | 50 | 26 | ug/L | | | 05/10/19 01:07 | 20 |
| Methyl tert-butyl ether | ND | | 20 | 3.2 | ug/L | | | 05/10/19 01:07 | 20 |
| Methylcyclohexane | ND | | 20 | 3.2 | ug/L | | | 05/10/19 01:07 | 20 |
| Methylene Chloride | ND | | 20 | 8.8 | ug/L | | | 05/10/19 01:07 | 20 |
| Styrene | ND | | 20 | 15 | ug/L | | | 05/10/19 01:07 | 20 |
| Tetrachloroethene | ND | | 20 | 7.2 | ug/L | | | 05/10/19 01:07 | 20 |
| Toluene | ND | | 20 | 10 | ug/L | | | 05/10/19 01:07 | 20 |
| trans-1,2-Dichloroethene | ND | | 20 | 18 | ug/L | | | 05/10/19 01:07 | 20 |
| trans-1,3-Dichloropropene | ND | | 20 | 7.4 | ug/L | | | 05/10/19 01:07 | 20 |
| **Trichloroethene** | **960** | | 20 | 9.2 | ug/L | | | 05/10/19 01:07 | 20 |
| Trichlorofluoromethane | ND | | 20 | 18 | ug/L | | | 05/10/19 01:07 | 20 |
| Vinyl chloride | ND | | 20 | 18 | ug/L | | | 05/10/19 01:07 | 20 |
| Xylenes, Total | ND | | 40 | 13 | ug/L | | | 05/10/19 01:07 | 20 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *105* | | *77 - 120* | | *05/10/19 01:07* | *20* |
| *4-Bromofluorobenzene (Surr)* | *116* | | *73 - 120* | | *05/10/19 01:07* | *20* |
| *Dibromofluoromethane (Surr)* | *106* | | *75 - 123* | | *05/10/19 01:07* | *20* |
| *Toluene-d8 (Surr)* | *103* | | *80 - 120* | | *05/10/19 01:07* | *20* |

# Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152812-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | DBFM | TOL |
| Lab Sample ID | Client Sample ID | (77-120) | (73-120) | (75-123) | (80-120) |
| 480-152812-1 | MW 11 050119 | 101 | 101 | 104 | 94 |
| 480-152812-2 | MW 10 050119 | 97 | 88 | 89 | 94 |
| 480-152812-3 | MW 24 050119 | 106 | 112 | 103 | 107 |
| 480-152812-4 | MW 18 050119 | 105 | 116 | 106 | 103 |
| LCS 480-472092/5 | Lab Control Sample | 97 | 105 | 104 | 100 |
| LCS 480-472158/5 | Lab Control Sample | 94 | 95 | 89 | 102 |
| LCS 480-472168/5 | Lab Control Sample | 111 | 111 | 111 | 104 |
| MB 480-472092/7 | Method Blank | 102 | 103 | 104 | 95 |
| MB 480-472158/7 | Method Blank | 99 | 89 | 93 | 97 |
| MB 480-472168/9 | Method Blank | 113 | 108 | 108 | 100 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152812-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 480-472092/7**
**Matrix: Water**
**Analysis Batch: 472092**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.82 | ug/L | | | 05/09/19 22:18 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 05/09/19 22:18 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.31 | ug/L | | | 05/09/19 22:18 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 05/09/19 22:18 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.38 | ug/L | | | 05/09/19 22:18 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 05/09/19 22:18 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.41 | ug/L | | | 05/09/19 22:18 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 1.0 | 0.39 | ug/L | | | 05/09/19 22:18 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.73 | ug/L | | | 05/09/19 22:18 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.79 | ug/L | | | 05/09/19 22:18 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.21 | ug/L | | | 05/09/19 22:18 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.72 | ug/L | | | 05/09/19 22:18 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.78 | ug/L | | | 05/09/19 22:18 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.84 | ug/L | | | 05/09/19 22:18 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.3 | ug/L | | | 05/09/19 22:18 | 1 |
| 2-Hexanone | ND | | 5.0 | 1.2 | ug/L | | | 05/09/19 22:18 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 5.0 | 2.1 | ug/L | | | 05/09/19 22:18 | 1 |
| Acetone | ND | | 10 | 3.0 | ug/L | | | 05/09/19 22:18 | 1 |
| Benzene | ND | | 1.0 | 0.41 | ug/L | | | 05/09/19 22:18 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.39 | ug/L | | | 05/09/19 22:18 | 1 |
| Bromoform | ND | | 1.0 | 0.26 | ug/L | | | 05/09/19 22:18 | 1 |
| Bromomethane | ND | | 1.0 | 0.69 | ug/L | | | 05/09/19 22:18 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.19 | ug/L | | | 05/09/19 22:18 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.27 | ug/L | | | 05/09/19 22:18 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.75 | ug/L | | | 05/09/19 22:18 | 1 |
| Chloroethane | ND | | 1.0 | 0.32 | ug/L | | | 05/09/19 22:18 | 1 |
| Chloroform | ND | | 1.0 | 0.34 | ug/L | | | 05/09/19 22:18 | 1 |
| Chloromethane | ND | | 1.0 | 0.35 | ug/L | | | 05/09/19 22:18 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 05/09/19 22:18 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.36 | ug/L | | | 05/09/19 22:18 | 1 |
| Cyclohexane | ND | | 1.0 | 0.18 | ug/L | | | 05/09/19 22:18 | 1 |
| Dibromochloromethane | ND | | 1.0 | 0.32 | ug/L | | | 05/09/19 22:18 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.68 | ug/L | | | 05/09/19 22:18 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.74 | ug/L | | | 05/09/19 22:18 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.79 | ug/L | | | 05/09/19 22:18 | 1 |
| Methyl acetate | ND | | 2.5 | 1.3 | ug/L | | | 05/09/19 22:18 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | 0.16 | ug/L | | | 05/09/19 22:18 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.16 | ug/L | | | 05/09/19 22:18 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 05/09/19 22:18 | 1 |
| Styrene | ND | | 1.0 | 0.73 | ug/L | | | 05/09/19 22:18 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 05/09/19 22:18 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 05/09/19 22:18 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 05/09/19 22:18 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.37 | ug/L | | | 05/09/19 22:18 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 05/09/19 22:18 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.88 | ug/L | | | 05/09/19 22:18 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.90 | ug/L | | | 05/09/19 22:18 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.66 | ug/L | | | 05/09/19 22:18 | 1 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-472092/7**
**Matrix: Water**
**Analysis Batch: 472092**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 102 | | 77 - 120 | | 05/09/19 22:18 | 1 |
| 4-Bromofluorobenzene (Surr) | 103 | | 73 - 120 | | 05/09/19 22:18 | 1 |
| Dibromofluoromethane (Surr) | 104 | | 75 - 123 | | 05/09/19 22:18 | 1 |
| Toluene-d8 (Surr) | 95 | | 80 - 120 | | 05/09/19 22:18 | 1 |

**Lab Sample ID: LCS 480-472092/5**
**Matrix: Water**
**Analysis Batch: 472092**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 25.0 | 26.5 | | ug/L | | 106 | 73 - 126 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 23.5 | | ug/L | | 94 | 76 - 120 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0 | 26.7 | | ug/L | | 107 | 61 - 148 |
| 1,1,2-Trichloroethane | 25.0 | 24.8 | | ug/L | | 99 | 76 - 122 |
| 1,1-Dichloroethane | 25.0 | 25.3 | | ug/L | | 101 | 77 - 120 |
| 1,1-Dichloroethene | 25.0 | 24.5 | | ug/L | | 98 | 66 - 127 |
| 1,2,4-Trichlorobenzene | 25.0 | 25.4 | | ug/L | | 102 | 79 - 122 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 24.6 | | ug/L | | 98 | 56 - 134 |
| 1,2-Dibromoethane | 25.0 | 25.5 | | ug/L | | 102 | 77 - 120 |
| 1,2-Dichlorobenzene | 25.0 | 24.3 | | ug/L | | 97 | 80 - 124 |
| 1,2-Dichloroethane | 25.0 | 23.8 | | ug/L | | 95 | 75 - 120 |
| 1,2-Dichloropropane | 25.0 | 23.8 | | ug/L | | 95 | 76 - 120 |
| 1,3-Dichlorobenzene | 25.0 | 24.3 | | ug/L | | 97 | 77 - 120 |
| 1,4-Dichlorobenzene | 25.0 | 24.4 | | ug/L | | 97 | 80 - 120 |
| 2-Butanone (MEK) | 125 | 126 | | ug/L | | 101 | 57 - 140 |
| 2-Hexanone | 125 | 124 | | ug/L | | 99 | 65 - 127 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 117 | | ug/L | | 93 | 71 - 125 |
| Acetone | 125 | 127 | | ug/L | | 102 | 56 - 142 |
| Benzene | 25.0 | 24.4 | | ug/L | | 97 | 71 - 124 |
| Bromodichloromethane | 25.0 | 25.6 | | ug/L | | 102 | 80 - 122 |
| Bromoform | 25.0 | 27.6 | | ug/L | | 110 | 61 - 132 |
| Bromomethane | 25.0 | 26.6 | | ug/L | | 106 | 55 - 144 |
| Carbon disulfide | 25.0 | 25.5 | | ug/L | | 102 | 59 - 134 |
| Carbon tetrachloride | 25.0 | 27.1 | | ug/L | | 108 | 72 - 134 |
| Chlorobenzene | 25.0 | 25.4 | | ug/L | | 102 | 80 - 120 |
| Chloroethane | 25.0 | 27.5 | | ug/L | | 110 | 69 - 136 |
| Chloroform | 25.0 | 24.1 | | ug/L | | 97 | 73 - 127 |
| Chloromethane | 25.0 | 26.6 | | ug/L | | 107 | 68 - 124 |
| cis-1,2-Dichloroethene | 25.0 | 25.9 | | ug/L | | 104 | 74 - 124 |
| cis-1,3-Dichloropropene | 25.0 | 24.6 | | ug/L | | 98 | 74 - 124 |
| Cyclohexane | 25.0 | 26.2 | | ug/L | | 105 | 59 - 135 |
| Dibromochloromethane | 25.0 | 26.6 | | ug/L | | 106 | 75 - 125 |
| Dichlorodifluoromethane | 25.0 | 25.1 | | ug/L | | 101 | 59 - 135 |
| Ethylbenzene | 25.0 | 25.0 | | ug/L | | 100 | 77 - 123 |
| Isopropylbenzene | 25.0 | 24.2 | | ug/L | | 97 | 77 - 122 |
| Methyl acetate | 50.0 | 50.0 | | ug/L | | 100 | 74 - 133 |
| Methyl tert-butyl ether | 25.0 | 23.8 | | ug/L | | 95 | 77 - 120 |
| Methylcyclohexane | 25.0 | 27.8 | | ug/L | | 111 | 68 - 134 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 480-472092/5**
**Matrix: Water**
**Analysis Batch: 472092**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Methylene Chloride | 25.0 | 25.9 | | ug/L | | 104 | 75 - 124 |
| Styrene | 25.0 | 26.2 | | ug/L | | 105 | 80 - 120 |
| Tetrachloroethene | 25.0 | 25.8 | | ug/L | | 103 | 74 - 122 |
| Toluene | 25.0 | 24.1 | | ug/L | | 96 | 80 - 122 |
| trans-1,2-Dichloroethene | 25.0 | 25.5 | | ug/L | | 102 | 73 - 127 |
| trans-1,3-Dichloropropene | 25.0 | 24.1 | | ug/L | | 96 | 80 - 120 |
| Trichloroethene | 25.0 | 24.8 | | ug/L | | 99 | 74 - 123 |
| Trichlorofluoromethane | 25.0 | 27.9 | | ug/L | | 112 | 62 - 150 |
| Vinyl chloride | 25.0 | 26.2 | | ug/L | | 105 | 65 - 133 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *77 - 120* |
| *4-Bromofluorobenzene (Surr)* | *105* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *104* | | *75 - 123* |
| *Toluene-d8 (Surr)* | *100* | | *80 - 120* |

**Lab Sample ID: MB 480-472158/7**
**Matrix: Water**
**Analysis Batch: 472158**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.82 | ug/L | | | 05/09/19 21:25 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 05/09/19 21:25 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.31 | ug/L | | | 05/09/19 21:25 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 05/09/19 21:25 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.38 | ug/L | | | 05/09/19 21:25 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 05/09/19 21:25 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.41 | ug/L | | | 05/09/19 21:25 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 1.0 | 0.39 | ug/L | | | 05/09/19 21:25 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.73 | ug/L | | | 05/09/19 21:25 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.79 | ug/L | | | 05/09/19 21:25 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.21 | ug/L | | | 05/09/19 21:25 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.72 | ug/L | | | 05/09/19 21:25 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.78 | ug/L | | | 05/09/19 21:25 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.84 | ug/L | | | 05/09/19 21:25 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.3 | ug/L | | | 05/09/19 21:25 | 1 |
| 2-Hexanone | ND | | 5.0 | 1.2 | ug/L | | | 05/09/19 21:25 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 5.0 | 2.1 | ug/L | | | 05/09/19 21:25 | 1 |
| Acetone | ND | | 10 | 3.0 | ug/L | | | 05/09/19 21:25 | 1 |
| Benzene | ND | | 1.0 | 0.41 | ug/L | | | 05/09/19 21:25 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.39 | ug/L | | | 05/09/19 21:25 | 1 |
| Bromoform | ND | | 1.0 | 0.26 | ug/L | | | 05/09/19 21:25 | 1 |
| Bromomethane | ND | | 1.0 | 0.69 | ug/L | | | 05/09/19 21:25 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.19 | ug/L | | | 05/09/19 21:25 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.27 | ug/L | | | 05/09/19 21:25 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.75 | ug/L | | | 05/09/19 21:25 | 1 |
| Chloroethane | ND | | 1.0 | 0.32 | ug/L | | | 05/09/19 21:25 | 1 |
| Chloroform | ND | | 1.0 | 0.34 | ug/L | | | 05/09/19 21:25 | 1 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-472158/7**
**Matrix: Water**
**Analysis Batch: 472158**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | ND | | 1.0 | 0.35 | ug/L | | | 05/09/19 21:25 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 05/09/19 21:25 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.36 | ug/L | | | 05/09/19 21:25 | 1 |
| Cyclohexane | ND | | 1.0 | 0.18 | ug/L | | | 05/09/19 21:25 | 1 |
| Dibromochloromethane | ND | | 1.0 | 0.32 | ug/L | | | 05/09/19 21:25 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.68 | ug/L | | | 05/09/19 21:25 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.74 | ug/L | | | 05/09/19 21:25 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.79 | ug/L | | | 05/09/19 21:25 | 1 |
| Methyl acetate | ND | | 2.5 | 1.3 | ug/L | | | 05/09/19 21:25 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | 0.16 | ug/L | | | 05/09/19 21:25 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.16 | ug/L | | | 05/09/19 21:25 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 05/09/19 21:25 | 1 |
| Styrene | ND | | 1.0 | 0.73 | ug/L | | | 05/09/19 21:25 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 05/09/19 21:25 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 05/09/19 21:25 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 05/09/19 21:25 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.37 | ug/L | | | 05/09/19 21:25 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 05/09/19 21:25 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.88 | ug/L | | | 05/09/19 21:25 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.90 | ug/L | | | 05/09/19 21:25 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.66 | ug/L | | | 05/09/19 21:25 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *77 - 120* | | *05/09/19 21:25* | *1* |
| *4-Bromofluorobenzene (Surr)* | *89* | | *73 - 120* | | *05/09/19 21:25* | *1* |
| *Dibromofluoromethane (Surr)* | *93* | | *75 - 123* | | *05/09/19 21:25* | *1* |
| *Toluene-d8 (Surr)* | *97* | | *80 - 120* | | *05/09/19 21:25* | *1* |

**Lab Sample ID: LCS 480-472158/5**
**Matrix: Water**
**Analysis Batch: 472158**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 25.0 | 22.5 | | ug/L | | 90 | 73 - 126 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 24.2 | | ug/L | | 97 | 76 - 120 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0 | 25.1 | | ug/L | | 100 | 61 - 148 |
| 1,1,2-Trichloroethane | 25.0 | 25.2 | | ug/L | | 101 | 76 - 122 |
| 1,1-Dichloroethane | 25.0 | 22.5 | | ug/L | | 90 | 77 - 120 |
| 1,1-Dichloroethene | 25.0 | 22.5 | | ug/L | | 90 | 66 - 127 |
| 1,2,4-Trichlorobenzene | 25.0 | 21.6 | | ug/L | | 86 | 79 - 122 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 22.7 | | ug/L | | 91 | 56 - 134 |
| 1,2-Dibromoethane | 25.0 | 23.9 | | ug/L | | 95 | 77 - 120 |
| 1,2-Dichlorobenzene | 25.0 | 21.9 | | ug/L | | 88 | 80 - 124 |
| 1,2-Dichloroethane | 25.0 | 20.3 | | ug/L | | 81 | 75 - 120 |
| 1,2-Dichloropropane | 25.0 | 27.0 | | ug/L | | 108 | 76 - 120 |
| 1,3-Dichlorobenzene | 25.0 | 23.2 | | ug/L | | 93 | 77 - 120 |
| 1,4-Dichlorobenzene | 25.0 | 22.7 | | ug/L | | 91 | 80 - 120 |
| 2-Butanone (MEK) | 125 | 123 | | ug/L | | 98 | 57 - 140 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 480-472158/5**
**Matrix: Water**
**Analysis Batch: 472158**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 2-Hexanone | 125 | 139 | | ug/L | | 111 | 65 - 127 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 117 | | ug/L | | 94 | 71 - 125 |
| Acetone | 125 | 129 | | ug/L | | 103 | 56 - 142 |
| Benzene | 25.0 | 24.4 | | ug/L | | 97 | 71 - 124 |
| Bromodichloromethane | 25.0 | 23.9 | | ug/L | | 96 | 80 - 122 |
| Bromoform | 25.0 | 25.3 | | ug/L | | 101 | 61 - 132 |
| Bromomethane | 25.0 | 22.9 | | ug/L | | 92 | 55 - 144 |
| Carbon disulfide | 25.0 | 23.6 | | ug/L | | 94 | 59 - 134 |
| Carbon tetrachloride | 25.0 | 22.8 | | ug/L | | 91 | 72 - 134 |
| Chlorobenzene | 25.0 | 23.9 | | ug/L | | 96 | 80 - 120 |
| Chloroethane | 25.0 | 23.9 | | ug/L | | 96 | 69 - 136 |
| Chloroform | 25.0 | 21.1 | | ug/L | | 84 | 73 - 127 |
| Chloromethane | 25.0 | 24.5 | | ug/L | | 98 | 68 - 124 |
| cis-1,2-Dichloroethene | 25.0 | 21.0 | | ug/L | | 84 | 74 - 124 |
| cis-1,3-Dichloropropene | 25.0 | 25.9 | | ug/L | | 104 | 74 - 124 |
| Cyclohexane | 25.0 | 25.5 | | ug/L | | 102 | 59 - 135 |
| Dibromochloromethane | 25.0 | 25.1 | | ug/L | | 100 | 75 - 125 |
| Dichlorodifluoromethane | 25.0 | 26.1 | | ug/L | | 104 | 59 - 135 |
| Ethylbenzene | 25.0 | 23.9 | | ug/L | | 96 | 77 - 123 |
| Isopropylbenzene | 25.0 | 23.0 | | ug/L | | 92 | 77 - 122 |
| Methyl acetate | 50.0 | 42.7 | | ug/L | | 85 | 74 - 133 |
| Methyl tert-butyl ether | 25.0 | 19.8 | | ug/L | | 79 | 77 - 120 |
| Methylcyclohexane | 25.0 | 24.8 | | ug/L | | 99 | 68 - 134 |
| Methylene Chloride | 25.0 | 23.5 | | ug/L | | 94 | 75 - 124 |
| Styrene | 25.0 | 23.8 | | ug/L | | 95 | 80 - 120 |
| Tetrachloroethene | 25.0 | 23.2 | | ug/L | | 93 | 74 - 122 |
| Toluene | 25.0 | 25.2 | | ug/L | | 101 | 80 - 122 |
| trans-1,2-Dichloroethene | 25.0 | 21.9 | | ug/L | | 88 | 73 - 127 |
| trans-1,3-Dichloropropene | 25.0 | 26.5 | | ug/L | | 106 | 80 - 120 |
| Trichloroethene | 25.0 | 23.3 | | ug/L | | 93 | 74 - 123 |
| Trichlorofluoromethane | 25.0 | 24.3 | | ug/L | | 97 | 62 - 150 |
| Vinyl chloride | 25.0 | 26.0 | | ug/L | | 104 | 65 - 133 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *94* | | *77 - 120* |
| *4-Bromofluorobenzene (Surr)* | *95* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *89* | | *75 - 123* |
| *Toluene-d8 (Surr)* | *102* | | *80 - 120* |

**Lab Sample ID: MB 480-472168/9**
**Matrix: Water**
**Analysis Batch: 472168**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.82 | ug/L | | | 05/09/19 23:42 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 05/09/19 23:42 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.31 | ug/L | | | 05/09/19 23:42 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 05/09/19 23:42 | 1 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-472168/9**
**Matrix: Water**
**Analysis Batch: 472168**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | ND | | 1.0 | 0.38 | ug/L | | | 05/09/19 23:42 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 05/09/19 23:42 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.41 | ug/L | | | 05/09/19 23:42 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 1.0 | 0.39 | ug/L | | | 05/09/19 23:42 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.73 | ug/L | | | 05/09/19 23:42 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.79 | ug/L | | | 05/09/19 23:42 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.21 | ug/L | | | 05/09/19 23:42 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.72 | ug/L | | | 05/09/19 23:42 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.78 | ug/L | | | 05/09/19 23:42 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.84 | ug/L | | | 05/09/19 23:42 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.3 | ug/L | | | 05/09/19 23:42 | 1 |
| 2-Hexanone | ND | | 5.0 | 1.2 | ug/L | | | 05/09/19 23:42 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 5.0 | 2.1 | ug/L | | | 05/09/19 23:42 | 1 |
| Acetone | ND | | 10 | 3.0 | ug/L | | | 05/09/19 23:42 | 1 |
| Benzene | ND | | 1.0 | 0.41 | ug/L | | | 05/09/19 23:42 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.39 | ug/L | | | 05/09/19 23:42 | 1 |
| Bromoform | ND | | 1.0 | 0.26 | ug/L | | | 05/09/19 23:42 | 1 |
| Bromomethane | ND | | 1.0 | 0.69 | ug/L | | | 05/09/19 23:42 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.19 | ug/L | | | 05/09/19 23:42 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.27 | ug/L | | | 05/09/19 23:42 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.75 | ug/L | | | 05/09/19 23:42 | 1 |
| Chloroethane | ND | | 1.0 | 0.32 | ug/L | | | 05/09/19 23:42 | 1 |
| Chloroform | ND | | 1.0 | 0.34 | ug/L | | | 05/09/19 23:42 | 1 |
| Chloromethane | ND | | 1.0 | 0.35 | ug/L | | | 05/09/19 23:42 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 05/09/19 23:42 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.36 | ug/L | | | 05/09/19 23:42 | 1 |
| Cyclohexane | ND | | 1.0 | 0.18 | ug/L | | | 05/09/19 23:42 | 1 |
| Dibromochloromethane | ND | | 1.0 | 0.32 | ug/L | | | 05/09/19 23:42 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.68 | ug/L | | | 05/09/19 23:42 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.74 | ug/L | | | 05/09/19 23:42 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.79 | ug/L | | | 05/09/19 23:42 | 1 |
| Methyl acetate | ND | | 2.5 | 1.3 | ug/L | | | 05/09/19 23:42 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | 0.16 | ug/L | | | 05/09/19 23:42 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.16 | ug/L | | | 05/09/19 23:42 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 05/09/19 23:42 | 1 |
| Styrene | ND | | 1.0 | 0.73 | ug/L | | | 05/09/19 23:42 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 05/09/19 23:42 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 05/09/19 23:42 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 05/09/19 23:42 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.37 | ug/L | | | 05/09/19 23:42 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 05/09/19 23:42 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.88 | ug/L | | | 05/09/19 23:42 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.90 | ug/L | | | 05/09/19 23:42 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.66 | ug/L | | | 05/09/19 23:42 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *113* | | *77 - 120* | | *05/09/19 23:42* | *1* |
| *4-Bromofluorobenzene (Surr)* | *108* | | *73 - 120* | | *05/09/19 23:42* | *1* |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-472168/9**
**Matrix: Water**
**Analysis Batch: 472168**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *Dibromofluoromethane (Surr)* | *108* | | *75 - 123* | | *05/09/19 23:42* | *1* |
| *Toluene-d8 (Surr)* | *100* | | *80 - 120* | | *05/09/19 23:42* | *1* |

**Lab Sample ID: LCS 480-472168/5**
**Matrix: Water**
**Analysis Batch: 472168**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 25.0 | 30.4 | | ug/L | | 121 | 73 - 126 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 24.1 | | ug/L | | 96 | 76 - 120 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0 | 27.0 | | ug/L | | 108 | 61 - 148 |
| 1,1,2-Trichloroethane | 25.0 | 23.4 | | ug/L | | 94 | 76 - 122 |
| 1,1-Dichloroethane | 25.0 | 26.6 | | ug/L | | 106 | 77 - 120 |
| 1,1-Dichloroethene | 25.0 | 23.0 | | ug/L | | 92 | 66 - 127 |
| 1,2,4-Trichlorobenzene | 25.0 | 25.2 | | ug/L | | 101 | 79 - 122 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 24.5 | | ug/L | | 98 | 56 - 134 |
| 1,2-Dibromoethane | 25.0 | 23.4 | | ug/L | | 94 | 77 - 120 |
| 1,2-Dichlorobenzene | 25.0 | 24.2 | | ug/L | | 97 | 80 - 124 |
| 1,2-Dichloroethane | 25.0 | 27.7 | | ug/L | | 111 | 75 - 120 |
| 1,2-Dichloropropane | 25.0 | 28.8 | | ug/L | | 115 | 76 - 120 |
| 1,3-Dichlorobenzene | 25.0 | 24.3 | | ug/L | | 97 | 77 - 120 |
| 1,4-Dichlorobenzene | 25.0 | 24.0 | | ug/L | | 96 | 80 - 120 |
| 2-Butanone (MEK) | 125 | 127 | | ug/L | | 102 | 57 - 140 |
| 2-Hexanone | 125 | 140 | | ug/L | | 112 | 65 - 127 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 133 | | ug/L | | 107 | 71 - 125 |
| Acetone | 125 | 134 | | ug/L | | 107 | 56 - 142 |
| Benzene | 25.0 | 25.9 | | ug/L | | 104 | 71 - 124 |
| Bromodichloromethane | 25.0 | 29.4 | | ug/L | | 118 | 80 - 122 |
| Bromoform | 25.0 | 38.5 | * | ug/L | | 154 | 61 - 132 |
| Bromomethane | 25.0 | 26.1 | | ug/L | | 105 | 55 - 144 |
| Carbon disulfide | 25.0 | 25.9 | | ug/L | | 104 | 59 - 134 |
| Carbon tetrachloride | 25.0 | 32.8 | | ug/L | | 131 | 72 - 134 |
| Chlorobenzene | 25.0 | 23.7 | | ug/L | | 95 | 80 - 120 |
| Chloroethane | 25.0 | 32.0 | | ug/L | | 128 | 69 - 136 |
| Chloroform | 25.0 | 26.6 | | ug/L | | 106 | 73 - 127 |
| Chloromethane | 25.0 | 26.4 | | ug/L | | 106 | 68 - 124 |
| cis-1,2-Dichloroethene | 25.0 | 26.0 | | ug/L | | 104 | 74 - 124 |
| cis-1,3-Dichloropropene | 25.0 | 28.6 | | ug/L | | 115 | 74 - 124 |
| Cyclohexane | 25.0 | 31.2 | | ug/L | | 125 | 59 - 135 |
| Dibromochloromethane | 25.0 | 32.0 | * | ug/L | | 128 | 75 - 125 |
| Dichlorodifluoromethane | 25.0 | 26.4 | | ug/L | | 106 | 59 - 135 |
| Ethylbenzene | 25.0 | 25.6 | | ug/L | | 103 | 77 - 123 |
| Isopropylbenzene | 25.0 | 24.8 | | ug/L | | 99 | 77 - 122 |
| Methyl acetate | 50.0 | 45.8 | | ug/L | | 92 | 74 - 133 |
| Methyl tert-butyl ether | 25.0 | 23.6 | | ug/L | | 94 | 77 - 120 |
| Methylcyclohexane | 25.0 | 28.3 | | ug/L | | 113 | 68 - 134 |
| Methylene Chloride | 25.0 | 24.7 | | ug/L | | 99 | 75 - 124 |
| Styrene | 25.0 | 25.9 | | ug/L | | 104 | 80 - 120 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 480-472168/5**
**Matrix: Water**
**Analysis Batch: 472168**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Tetrachloroethene | 25.0 | 28.3 | | ug/L | | 113 | 74 - 122 |
| Toluene | 25.0 | 24.3 | | ug/L | | 97 | 80 - 122 |
| trans-1,2-Dichloroethene | 25.0 | 24.3 | | ug/L | | 97 | 73 - 127 |
| trans-1,3-Dichloropropene | 25.0 | 25.1 | | ug/L | | 100 | 80 - 120 |
| Trichloroethene | 25.0 | 26.4 | | ug/L | | 106 | 74 - 123 |
| Trichlorofluoromethane | 25.0 | 24.1 | | ug/L | | 96 | 62 - 150 |
| Vinyl chloride | 25.0 | 26.3 | | ug/L | | 105 | 65 - 133 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *111* | | *77 - 120* |
| *4-Bromofluorobenzene (Surr)* | *111* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *111* | | *75 - 123* |
| *Toluene-d8 (Surr)* | *104* | | *80 - 120* |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152812-1

## GC/MS VOA

### Analysis Batch: 472092

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-152812-1 | MW 11 050119 | Total/NA | Water | 8260C | |
| MB 480-472092/7 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-472092/5 | Lab Control Sample | Total/NA | Water | 8260C | |

### Analysis Batch: 472158

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-152812-2 | MW 10 050119 | Total/NA | Water | 8260C | |
| MB 480-472158/7 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-472158/5 | Lab Control Sample | Total/NA | Water | 8260C | |

### Analysis Batch: 472168

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-152812-3 | MW 24 050119 | Total/NA | Water | 8260C | |
| 480-152812-4 | MW 18 050119 | Total/NA | Water | 8260C | |
| MB 480-472168/9 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-472168/5 | Lab Control Sample | Total/NA | Water | 8260C | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152812-1

## Client Sample ID: MW 11 050119
**Lab Sample ID: 480-152812-1**
**Date Collected: 05/01/19 11:00**
**Matrix: Water**
**Date Received: 05/02/19 01:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 8 | 472092 | 05/10/19 03:52 | OMI | TAL BUF |

## Client Sample ID: MW 10 050119
**Lab Sample ID: 480-152812-2**
**Date Collected: 05/01/19 13:00**
**Matrix: Water**
**Date Received: 05/02/19 01:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 2 | 472158 | 05/09/19 23:38 | S1V | TAL BUF |

## Client Sample ID: MW 24 050119
**Lab Sample ID: 480-152812-3**
**Date Collected: 05/01/19 12:45**
**Matrix: Water**
**Date Received: 05/02/19 01:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 5 | 472168 | 05/10/19 00:43 | KMN | TAL BUF |

## Client Sample ID: MW 18 050119
**Lab Sample ID: 480-152812-4**
**Date Collected: 05/01/19 13:00**
**Matrix: Water**
**Date Received: 05/02/19 01:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 20 | 472168 | 05/10/19 01:07 | KMN | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-152812-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152812-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260C | Volatile Organic Compounds by GC/MS | SW846 | TAL BUF |
| 5030C | Purge and Trap | SW846 | TAL BUF |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-152812-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 480-152812-1 | MW 11 050119 | Water | 05/01/19 11:00 | 05/02/19 01:00 |
| 480-152812-2 | MW 10 050119 | Water | 05/01/19 13:00 | 05/02/19 01:00 |
| 480-152812-3 | MW 24 050119 | Water | 05/01/19 12:45 | 05/02/19 01:00 |
| 480-152812-4 | MW 18 050119 | Water | 05/01/19 13:00 | 05/02/19 01:00 |

**Eurofins tAmerica, Buffalo**
10 Hazelwoc e
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

eurofins | Environment Testing TestAmerica

| Client Information | Sampler: MARTin Koennecke | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): | COC No: 480-129733-12806.1 |
|---|---|---|---|---|
| Client Contact: Mr. Yuri Veliz | Phone: 315-729-1300 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Company: O'Brien & Gere Inc of North America | | | | Job #: |

| Address: 333 West Washington St. PO BOX 4873 | Due Date Requested: | Analysis Requested | Preservation Codes: |
|---|---|---|---|
| City: East Syracuse | TAT Requested (days): | | A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - Di Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify) |
| State, Zip: NY, 13221 | | | |
| Phone: 315-956-6100(Tel) 315-463-7554(Fax) | PO #: 11900114 | | Other: |
| Email: Yuri.Veliz@obg.com | WO #: | | |
| Project Name: Former Accurate Die Cast | Project #: 48008584 | | |
| Site: | SSOW#: | | |

480-152812 Chain of Custody

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260C - TCL Volatiles | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | A | | |
| MW 11 050119 | 5-1-19 | 11:00 | G | Water | | | 3 | 3 | |
| MW 10 050119 | 5-1-19 | 11:30 | G | Water | | | 3 | 3 | |
| MW 24 050119 | 5-1-19 | 12:45 | G | Water | | | 3 | 3 | |
| MW 18 050119 | 5-1-19 | 13:00 | G | Water | | | 3 | 3 | |
| | | | | Water | | | | | |

Syracuse #225

5-1-19 AH

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested: I, II, III, IV, Other (specify) | Special Instructions/QC Requirements: |

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: Matt Koennecke | Date/Time: 5-1-19 / 13:55 | Company: OBG | Received by: | Date/Time: 5-1-19 1355 | Company: TAL SFK |
|---|---|---|---|---|---|
| Relinquished by: RETG/11/6 | Date/Time: 5-1-19, 19:05 | Company: Oya | Received by: | Date/Time: 05/02/19 0100 | Company: |
| Relinquished by: | Date/Time: | Company: | Received by: | Date/Time: | Company: |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.9 #1 |
|---|---|---|

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-152812-1

**Login Number: 152812**
**List Number: 1**
**Creator: Velickovic, Zoran**

**List Source: Eurofins TestAmerica, Buffalo**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | OBG |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | N/A | |
| Chlorine Residual checked. | N/A | |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-153338-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

*Authorized for release by:*
*5/29/2019 3:17:52 PM*
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

# Table of Contents

Client: O'Brien & Gere Inc of North America
Job ID: 480-153338-1
Project/Site: Former Accurate Die Cast

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Job ID: 480-153338-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-153338-1**

**Receipt**
The samples were received on 5/10/2019 5:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4º C.

**GC/MS VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-153338-1
Project/Site: Former Accurate Die Cast

## Client Sample ID: EFFLUENT 050919 — Lab Sample ID: 480-153338-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 636 | B | 10.0 | 4.0 | mg/L | 1 | | SM2540 C | Total/NA |

## Client Sample ID: BETWEEN CARBONS 050919 — Lab Sample ID: 480-153338-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | 0.90 | J | 1.0 | 0.81 | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 1.7 | | 1.0 | 0.46 | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: EFFLUENT 050919 — Lab Sample ID: 480-153338-3

No Detections.

## Client Sample ID: Trip Blank — Lab Sample ID: 480-153338-4

No Detections.

This Detection Summary does not include radiochemical test results.

## Client Sample ID: EFFLUENT 050919

**Lab Sample ID: 480-153338-1**

**Date Collected: 05/09/19 11:10**

**Matrix: Water**

**Date Received: 05/10/19 05:00**

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **636** | **B** | 10.0 | 4.0 | mg/L | | | 05/16/19 08:43 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 4.0 | 4.0 | mg/L | | | 05/16/19 12:00 | 1 |

## Client Sample ID: BETWEEN CARBONS 050919

**Lab Sample ID: 480-153338-2**

**Date Collected: 05/09/19 11:10**

**Matrix: Water**

**Date Received: 05/10/19 05:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 05/18/19 02:42 | 1 |
| **cis-1,2-Dichloroethene** | **0.90** | **J** | 1.0 | 0.81 | ug/L | | | 05/18/19 02:42 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 05/18/19 02:42 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 05/18/19 02:42 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 05/18/19 02:42 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 05/18/19 02:42 | 1 |
| **Trichloroethene** | **1.7** | | 1.0 | 0.46 | ug/L | | | 05/18/19 02:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *102* | | *77 - 120* | | *05/18/19 02:42* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *73 - 120* | | *05/18/19 02:42* | *1* |
| *Toluene-d8 (Surr)* | *97* | | *80 - 120* | | *05/18/19 02:42* | *1* |
| *Dibromofluoromethane (Surr)* | *98* | | *75 - 123* | | *05/18/19 02:42* | *1* |

## Client Sample ID: EFFLUENT 050919

**Lab Sample ID: 480-153338-3**

**Date Collected: 05/09/19 11:10**

**Matrix: Water**

**Date Received: 05/10/19 05:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 05/18/19 03:06 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 05/18/19 03:06 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 05/18/19 03:06 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 05/18/19 03:06 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 05/18/19 03:06 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 05/18/19 03:06 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 05/18/19 03:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *105* | | *77 - 120* | | *05/18/19 03:06* | *1* |
| *4-Bromofluorobenzene (Surr)* | *102* | | *73 - 120* | | *05/18/19 03:06* | *1* |
| *Toluene-d8 (Surr)* | *92* | | *80 - 120* | | *05/18/19 03:06* | *1* |
| *Dibromofluoromethane (Surr)* | *100* | | *75 - 123* | | *05/18/19 03:06* | *1* |

## Client Sample ID: Trip Blank

**Lab Sample ID: 480-153338-4**

**Date Collected: 05/09/19 00:00**

**Matrix: Water**

**Date Received: 05/10/19 05:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 05/18/19 10:57 | 1 |

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153338-1

**Client Sample ID: Trip Blank**
**Date Collected: 05/09/19 00:00**
**Date Received: 05/10/19 05:00**

**Lab Sample ID: 480-153338-4**
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 05/18/19 10:57 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 05/18/19 10:57 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 05/18/19 10:57 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 05/18/19 10:57 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 05/18/19 10:57 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 05/18/19 10:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *102* | | *77 - 120* | | *05/18/19 10:57* | *1* |
| *4-Bromofluorobenzene (Surr)* | *95* | | *73 - 120* | | *05/18/19 10:57* | *1* |
| *Toluene-d8 (Surr)* | *95* | | *80 - 120* | | *05/18/19 10:57* | *1* |
| *Dibromofluoromethane (Surr)* | *103* | | *75 - 123* | | *05/18/19 10:57* | *1* |

# Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153338-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | TOL | DBFM |
| Lab Sample ID | Client Sample ID | (77-120) | (73-120) | (80-120) | (75-123) |
| 480-153338-2 | BETWEEN CARBONS 050919 | 102 | 101 | 97 | 98 |
| 480-153338-3 | EFFLUENT 050919 | 105 | 102 | 92 | 100 |
| 480-153338-4 | Trip Blank | 102 | 95 | 95 | 103 |
| LCS 480-473463/5 | Lab Control Sample | 104 | 100 | 98 | 101 |
| LCS 480-473527/5 | Lab Control Sample | 98 | 92 | 101 | 102 |
| MB 480-473463/7 | Method Blank | 105 | 96 | 96 | 96 |
| MB 480-473527/7 | Method Blank | 102 | 96 | 100 | 103 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 480-473463/7**
**Matrix: Water**
**Analysis Batch: 473463**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 05/17/19 21:29 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 05/17/19 21:29 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 05/17/19 21:29 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 05/17/19 21:29 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 05/17/19 21:29 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 05/17/19 21:29 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 05/17/19 21:29 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *105* | | *77 - 120* | | *05/17/19 21:29* | *1* |
| *4-Bromofluorobenzene (Surr)* | *96* | | *73 - 120* | | *05/17/19 21:29* | *1* |
| *Toluene-d8 (Surr)* | *96* | | *80 - 120* | | *05/17/19 21:29* | *1* |
| *Dibromofluoromethane (Surr)* | *96* | | *75 - 123* | | *05/17/19 21:29* | *1* |

**Lab Sample ID: LCS 480-473463/5**
**Matrix: Water**
**Analysis Batch: 473463**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | 25.0 | 22.8 | | ug/L | | 91 | 76 - 120 |
| cis-1,2-Dichloroethene | 25.0 | 23.4 | | ug/L | | 94 | 74 - 124 |
| Methylene Chloride | 25.0 | 21.0 | | ug/L | | 84 | 75 - 124 |
| Tetrachloroethene | 25.0 | 26.1 | | ug/L | | 104 | 74 - 122 |
| Toluene | 25.0 | 24.2 | | ug/L | | 97 | 80 - 122 |
| trans-1,2-Dichloroethene | 25.0 | 23.7 | | ug/L | | 95 | 73 - 127 |
| Trichloroethene | 25.0 | 22.4 | | ug/L | | 90 | 74 - 123 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *104* | | *77 - 120* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *73 - 120* |
| *Toluene-d8 (Surr)* | *98* | | *80 - 120* |
| *Dibromofluoromethane (Surr)* | *101* | | *75 - 123* |

**Lab Sample ID: MB 480-473527/7**
**Matrix: Water**
**Analysis Batch: 473527**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 05/18/19 10:16 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 05/18/19 10:16 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 05/18/19 10:16 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 05/18/19 10:16 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 05/18/19 10:16 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 05/18/19 10:16 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 05/18/19 10:16 | 1 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-473527/7**
**Matrix: Water**
**Analysis Batch: 473527**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *102* | | *77 - 120* | | *05/18/19 10:16* | *1* |
| *4-Bromofluorobenzene (Surr)* | *96* | | *73 - 120* | | *05/18/19 10:16* | *1* |
| *Toluene-d8 (Surr)* | *100* | | *80 - 120* | | *05/18/19 10:16* | *1* |
| *Dibromofluoromethane (Surr)* | *103* | | *75 - 123* | | *05/18/19 10:16* | *1* |

**Lab Sample ID: LCS 480-473527/5**
**Matrix: Water**
**Analysis Batch: 473527**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | 25.0 | 27.1 | | ug/L | | 108 | 76 - 120 |
| cis-1,2-Dichloroethene | 25.0 | 25.8 | | ug/L | | 103 | 74 - 124 |
| Methylene Chloride | 25.0 | 26.9 | | ug/L | | 108 | 75 - 124 |
| Tetrachloroethene | 25.0 | 22.7 | | ug/L | | 91 | 74 - 122 |
| Toluene | 25.0 | 25.5 | | ug/L | | 102 | 80 - 122 |
| trans-1,2-Dichloroethene | 25.0 | 27.0 | | ug/L | | 108 | 73 - 127 |
| Trichloroethene | 25.0 | 25.8 | | ug/L | | 103 | 74 - 123 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *98* | | *77 - 120* |
| *4-Bromofluorobenzene (Surr)* | *92* | | *73 - 120* |
| *Toluene-d8 (Surr)* | *101* | | *80 - 120* |
| *Dibromofluoromethane (Surr)* | *102* | | *75 - 123* |

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 480-473197/1**
**Matrix: Water**
**Analysis Batch: 473197**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 1.0 | 1.0 | mg/L | | | 05/16/19 12:00 | 1 |

**Lab Sample ID: LCS 480-473197/2**
**Matrix: Water**
**Analysis Batch: 473197**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 253 | 246.8 | | mg/L | | 97 | 88 - 110 |

## Method: SM2540 C - Total Dissolved Solids

**Lab Sample ID: MB 480-473125/1**
**Matrix: Water**
**Analysis Batch: 473125**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 6.00 | J | 10.0 | 4.0 | mg/L | | | 05/16/19 08:43 | 1 |

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153338-1

## Method: SM2540 C - Total Dissolved Solids (Continued)

**Lab Sample ID: LCS 480-473125/2**
**Matrix: Water**
**Analysis Batch: 473125**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | | | 500 | 456.0 | | mg/L | | 91 | 85 - 115 | | |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153338-1

## GC/MS VOA

### Analysis Batch: 473463

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-153338-2 | BETWEEN CARBONS 050919 | Total/NA | Water | 8260C | |
| 480-153338-3 | EFFLUENT 050919 | Total/NA | Water | 8260C | |
| MB 480-473463/7 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-473463/5 | Lab Control Sample | Total/NA | Water | 8260C | |

### Analysis Batch: 473527

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-153338-4 | Trip Blank | Total/NA | Water | 8260C | |
| MB 480-473527/7 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-473527/5 | Lab Control Sample | Total/NA | Water | 8260C | |

## General Chemistry

### Analysis Batch: 473125

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-153338-1 | EFFLUENT 050919 | Total/NA | Water | SM2540 C | |
| MB 480-473125/1 | Method Blank | Total/NA | Water | SM2540 C | |
| LCS 480-473125/2 | Lab Control Sample | Total/NA | Water | SM2540 C | |

### Analysis Batch: 473197

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-153338-1 | EFFLUENT 050919 | Total/NA | Water | SM 2540D | |
| MB 480-473197/1 | Method Blank | Total/NA | Water | SM 2540D | |
| LCS 480-473197/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Job ID: 480-153338-1
Project/Site: Former Accurate Die Cast

## Client Sample ID: EFFLUENT 050919
**Lab Sample ID: 480-153338-1**
**Date Collected: 05/09/19 11:10**
**Matrix: Water**
**Date Received: 05/10/19 05:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540D | | 1 | 473197 | 05/16/19 12:00 | CSS | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 473125 | 05/16/19 08:43 | CSS | TAL BUF |

## Client Sample ID: BETWEEN CARBONS 050919
**Lab Sample ID: 480-153338-2**
**Date Collected: 05/09/19 11:10**
**Matrix: Water**
**Date Received: 05/10/19 05:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 473463 | 05/18/19 02:42 | AMM | TAL BUF |

## Client Sample ID: EFFLUENT 050919
**Lab Sample ID: 480-153338-3**
**Date Collected: 05/09/19 11:10**
**Matrix: Water**
**Date Received: 05/10/19 05:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 473463 | 05/18/19 03:06 | AMM | TAL BUF |

## Client Sample ID: Trip Blank
**Lab Sample ID: 480-153338-4**
**Date Collected: 05/09/19 00:00**
**Matrix: Water**
**Date Received: 05/10/19 05:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 473527 | 05/18/19 10:57 | AMM | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-153338-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153338-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260C | Volatile Organic Compounds by GC/MS | SW846 | TAL BUF |
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL BUF |
| SM2540 C | Total Dissolved Solids | SM18 | TAL BUF |
| 5030C | Purge and Trap | SW846 | TAL BUF |

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153338-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 480-153338-1 | EFFLUENT 050919 | Water | 05/09/19 11:10 | 05/10/19 05:00 | |
| 480-153338-2 | BETWEEN CARBONS 050919 | Water | 05/09/19 11:10 | 05/10/19 05:00 | |
| 480-153338-3 | EFFLUENT 050919 | Water | 05/09/19 11:10 | 05/10/19 05:00 | |
| 480-153338-4 | Trip Blank | Water | 05/09/19 00:00 | 05/10/19 05:00 | |

**Eurofins tAmerica, Buffalo**
10 Hazelwoo e
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

eurofins | Environment Testing TestAmerica

| Client Information | Sampler: MARTIN Koennecke | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): | COC No: 480-122339-10588.1 |
|---|---|---|---|---|
| Client Contact: Mr. Yuri Veliz | Phone: 315-729-1300 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Company: O'Brien & Gere Inc of North America | | Analysis Requested | | Job #: |

| | | |
|---|---|---|
| Address: 333 West Washington St. PO BOX 4873 | Due Date Requested: | |
| City: East Syracuse | TAT Requested (days): | |
| State, Zip: NY, 13221 | | |
| Phone: 315-956-6100(Tel) 315-463-7554(Fax) | PO #: 11900114 | |
| Email: Yuri.Veliz@obg.com | WO #: | |
| Project Name: Former Accurate Die Cast | Project #: 48008584 | |
| Site: | SSOW#: | |

480-153338 Chain of Custody

vation Codes:

M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

H
cetate
: Acid
3O4
-I
nlor
rbic Acid
J - DI Water
K - EDTA
L - EDA

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 2540D - Total Suspended Solids | 2540C_Calcd - Total Dissolved Solids | 8260C - Volatile Organic Compounds | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | N | A | | |
| Effluent 050919 | 5-9-19 | 11:10 | C | Water | | | 1 | 1 | | 2 | |
| Between Carbons 050919 | 5-9-19 | 11:10 | G | Water | | | | | 3 | 3 | |
| Effluent 050919 | 5-9-19 | 11:10 | G | water | | | | | 3 | 3 | |

Rec 5-9-19

Syracuse #225

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested: I, II, III, IV, Other (specify) | Special Instructions/QC Requirements: |

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|
| Relinquished by: Martin Koennecke | 5-9-19 / 13:55 | OBG | Received by: RECEIVED | 5-9-19, 13:55 | Syr |
| Relinquished by: RECEIVED | 5-9-19, 19:00 | Syr | Received by: [signature] | 05-10-19 0500 | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: R.4 #1 |
|---|---|---|

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-153338-1

**Login Number: 153338**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Velickovic, Zoran**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | OBG |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | N/A | |
| Chlorine Residual checked. | N/A | |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-153785-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

*Authorized for release by:*
*6/6/2019 5:06:23 PM*
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

# Table of Contents

# Definitions/Glossary

Client: O'Brien & Gere Inc of North America
Job ID: 480-153785-1
Project/Site: Former Accurate Die Cast

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Case Narrative

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153785-1

## Job ID: 480-153785-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-153785-1**

**Receipt**
The samples were received on 5/21/2019 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

**GC/MS VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153785-1

## Client Sample ID: EFFLUENT 052019 — Lab Sample ID: 480-153785-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 599 | | 10.0 | 4.0 | mg/L | 1 | | SM2540 C | Total/NA |

## Client Sample ID: EFFLUENT 052019 — Lab Sample ID: 480-153785-2

No Detections.

This Detection Summary does not include radiochemical test results.

## Client Sample ID: EFFLUENT 052019
**Lab Sample ID: 480-153785-1**

**Date Collected: 05/20/19 07:15**
**Matrix: Water**
**Date Received: 05/21/19 09:30**

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **599** | | 10.0 | 4.0 | mg/L | | | 05/24/19 10:23 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 4.0 | 4.0 | mg/L | | | 05/24/19 14:35 | 1 |

## Client Sample ID: EFFLUENT 052019
**Lab Sample ID: 480-153785-2**

**Date Collected: 05/20/19 07:15**
**Matrix: Water**
**Date Received: 05/21/19 09:30**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 05/28/19 17:32 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 05/28/19 17:32 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 05/28/19 17:32 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 05/28/19 17:32 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 05/28/19 17:32 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 05/28/19 17:32 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 05/28/19 17:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *105* | | *77 - 120* | | *05/28/19 17:32* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *73 - 120* | | *05/28/19 17:32* | *1* |
| *Toluene-d8 (Surr)* | *103* | | *80 - 120* | | *05/28/19 17:32* | *1* |
| *Dibromofluoromethane (Surr)* | *102* | | *75 - 123* | | *05/28/19 17:32* | *1* |

# Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153785-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | TOL | DBFM |
| Lab Sample ID | Client Sample ID | (77-120) | (73-120) | (80-120) | (75-123) |
| 480-153785-2 | EFFLUENT 052019 | 105 | 101 | 103 | 102 |
| LCS 480-474842/6 | Lab Control Sample | 100 | 103 | 102 | 102 |
| MB 480-474842/8 | Method Blank | 103 | 100 | 101 | 104 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 480-474842/8**
**Matrix: Water**
**Analysis Batch: 474842**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 05/28/19 11:49 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 05/28/19 11:49 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 05/28/19 11:49 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 05/28/19 11:49 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 05/28/19 11:49 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 05/28/19 11:49 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 05/28/19 11:49 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *77 - 120* | | *05/28/19 11:49* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *73 - 120* | | *05/28/19 11:49* | *1* |
| *Toluene-d8 (Surr)* | *101* | | *80 - 120* | | *05/28/19 11:49* | *1* |
| *Dibromofluoromethane (Surr)* | *104* | | *75 - 123* | | *05/28/19 11:49* | *1* |

**Lab Sample ID: LCS 480-474842/6**
**Matrix: Water**
**Analysis Batch: 474842**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | | | 25.0 | 25.0 | | ug/L | | 100 | 76 - 120 | | |
| cis-1,2-Dichloroethene | | | 25.0 | 23.8 | | ug/L | | 95 | 74 - 124 | | |
| Methylene Chloride | | | 25.0 | 22.6 | | ug/L | | 90 | 75 - 124 | | |
| Tetrachloroethene | | | 25.0 | 25.8 | | ug/L | | 103 | 74 - 122 | | |
| Toluene | | | 25.0 | 25.4 | | ug/L | | 102 | 80 - 122 | | |
| trans-1,2-Dichloroethene | | | 25.0 | 24.1 | | ug/L | | 96 | 73 - 127 | | |
| Trichloroethene | | | 25.0 | 24.8 | | ug/L | | 99 | 74 - 123 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *77 - 120* |
| *4-Bromofluorobenzene (Surr)* | *103* | | *73 - 120* |
| *Toluene-d8 (Surr)* | *102* | | *80 - 120* |
| *Dibromofluoromethane (Surr)* | *102* | | *75 - 123* |

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 480-474650/1**
**Matrix: Water**
**Analysis Batch: 474650**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 1.0 | 1.0 | mg/L | | | 05/24/19 14:35 | 1 |

**Lab Sample ID: LCS 480-474650/2**
**Matrix: Water**
**Analysis Batch: 474650**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | | | 261 | 253.2 | | mg/L | | 97 | 88 - 110 | | |

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153785-1

## Method: SM2540 C - Total Dissolved Solids

**Lab Sample ID: MB 480-474585/1**
**Matrix: Water**
**Analysis Batch: 474585**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | ND | | 10.0 | 4.0 | mg/L | | | 05/24/19 10:23 | 1 |

**Lab Sample ID: LCS 480-474585/2**
**Matrix: Water**
**Analysis Batch: 474585**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | | | 500 | 468.0 | | mg/L | | 94 | 85 - 115 | | |

**Lab Sample ID: 480-153785-1 DU**
**Matrix: Water**
**Analysis Batch: 474585**

**Client Sample ID: EFFLUENT 052019**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 599 | | | 596.0 | | mg/L | | | | 0.5 | 10 |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153785-1

## GC/MS VOA

### Analysis Batch: 474842

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-153785-2 | EFFLUENT 052019 | Total/NA | Water | 8260C | |
| MB 480-474842/8 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-474842/6 | Lab Control Sample | Total/NA | Water | 8260C | |

## General Chemistry

### Analysis Batch: 474585

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-153785-1 | EFFLUENT 052019 | Total/NA | Water | SM2540 C | |
| MB 480-474585/1 | Method Blank | Total/NA | Water | SM2540 C | |
| LCS 480-474585/2 | Lab Control Sample | Total/NA | Water | SM2540 C | |
| 480-153785-1 DU | EFFLUENT 052019 | Total/NA | Water | SM2540 C | |

### Analysis Batch: 474650

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-153785-1 | EFFLUENT 052019 | Total/NA | Water | SM 2540D | |
| MB 480-474650/1 | Method Blank | Total/NA | Water | SM 2540D | |
| LCS 480-474650/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153785-1

## Client Sample ID: EFFLUENT 052019

**Lab Sample ID: 480-153785-1**

**Date Collected: 05/20/19 07:15**

**Matrix: Water**

**Date Received: 05/21/19 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540D | | 1 | 474650 | 05/24/19 14:35 | CSS | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 474585 | 05/24/19 10:23 | CSS | TAL BUF |

## Client Sample ID: EFFLUENT 052019

**Lab Sample ID: 480-153785-2**

**Date Collected: 05/20/19 07:15**

**Matrix: Water**

**Date Received: 05/21/19 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 474842 | 05/28/19 17:32 | AMM | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-153785-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153785-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260C | Volatile Organic Compounds by GC/MS | SW846 | TAL BUF |
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL BUF |
| SM2540 C | Total Dissolved Solids | SM18 | TAL BUF |
| 5030C | Purge and Trap | SW846 | TAL BUF |

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153785-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 480-153785-1 | EFFLUENT 052019 | Water | 05/20/19 07:15 | 05/21/19 09:30 | |
| 480-153785-2 | EFFLUENT 052019 | Water | 05/20/19 07:15 | 05/21/19 09:30 | |

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: MARTIN Koennecke | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): | COC No: 480-122349-10587.1 |
|---|---|---|---|---|
| Client Contact: Mr. Yuri Veliz | Phone: 315-729-1300 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Company: O'Brien & Gere Inc of North America | | | | Job #: |
| Address: 333 West Washington St. PO BOX 4873 | Due Date Requested: | | | |
| City: East Syracuse | TAT Requested (days): | | | |
| State, Zip: NY, 13221 | | | | |
| Phone: 315-956-6100(Tel) 315-463-7554(Fax) | PO #: 11900114 | | | |
| Email: Yuri.Veliz@obg.com | WO #: | | | |
| Project Name: Former Accurate Die Cast | Project #: 48008584 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

Preservation Codes: M - Hexane; L - EDA; Z - other (specify); Other:

480-153785 Chain of Custody

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 2540D - Total Suspended Solids | 2540C_Calcd - Total Dissolved Solids | 8260C - Volatile Organic Compounds | Total Number of containe | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Preservation Code: | | | | | | | N | N | A | | |
| Effluent 052019 | 5-20-19 | 7:15 | C | Water | | | 1 | 1 | | 2 | |
| Effluent 052019 | 5-20-19 | 7:15 | G | water | | | | | 3 | 3 | |

5-20-19 AT

Syracuse #225

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Martin Koennecke | 5-20-19 / 1025 | OBG | | 5-20-19 1025 | TASBU |
| 2 | RELINQUISHED | 5-20-19, 19:00 | Syr | Wallace | 5/21/19 0930 | TASB |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: #13;3

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-153785-1

**Login Number: 153785**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Wallace, Cameron**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | True | |
| Chlorine Residual checked. | N/A | |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-153811-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

*Authorized for release by:*
*6/3/2019 11:49:57 AM*
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

# Table of Contents

Client: O'Brien & Gere Inc of North America
Job ID: 480-153811-1
Project/Site: Former Accurate Die Cast

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Case Narrative

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153811-1

## Job ID: 480-153811-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-153811-1**

**Receipt**
The sample was received on 5/16/2019 8:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153811-1

## Client Sample ID: EFFLUENT 051519

## Lab Sample ID: 480-153811-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 931 | | 10.0 | 4.0 | mg/L | 1 | | SM2540 C | Total/NA |

This Detection Summary does not include radiochemical test results.

# Client Sample Results

Client: O'Brien & Gere Inc of North America
Job ID: 480-153811-1
Project/Site: Former Accurate Die Cast

**Client Sample ID: EFFLUENT 051519**
**Lab Sample ID: 480-153811-1**
**Date Collected: 05/15/19 07:20**
**Matrix: Water**
**Date Received: 05/16/19 08:00**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **931** | | 10.0 | 4.0 | mg/L | | | 05/22/19 09:45 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 4.0 | 4.0 | mg/L | | | 05/22/19 09:55 | 1 |

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153811-1

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 480-474118/1**
**Matrix: Water**
**Analysis Batch: 474118**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 1.0 | 1.0 | mg/L | | | 05/22/19 09:55 | 1 |

**Lab Sample ID: LCS 480-474118/2**
**Matrix: Water**
**Analysis Batch: 474118**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 247 | 242.8 | | mg/L | | 98 | 88 - 110 |

**Lab Sample ID: 480-153811-1 DU**
**Matrix: Water**
**Analysis Batch: 474118**

**Client Sample ID: EFFLUENT 051519**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | ND | | mg/L | | NC | 10 |

## Method: SM2540 C - Total Dissolved Solids

**Lab Sample ID: MB 480-474117/1**
**Matrix: Water**
**Analysis Batch: 474117**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | ND | | 10.0 | 4.0 | mg/L | | | 05/22/19 09:45 | 1 |

**Lab Sample ID: LCS 480-474117/2**
**Matrix: Water**
**Analysis Batch: 474117**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 500 | 500.0 | | mg/L | | 100 | 85 - 115 |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153811-1

## General Chemistry

### Analysis Batch: 474117

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-153811-1 | EFFLUENT 051519 | Total/NA | Water | SM2540 C | |
| MB 480-474117/1 | Method Blank | Total/NA | Water | SM2540 C | |
| LCS 480-474117/2 | Lab Control Sample | Total/NA | Water | SM2540 C | |

### Analysis Batch: 474118

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-153811-1 | EFFLUENT 051519 | Total/NA | Water | SM 2540D | |
| MB 480-474118/1 | Method Blank | Total/NA | Water | SM 2540D | |
| LCS 480-474118/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |
| 480-153811-1 DU | EFFLUENT 051519 | Total/NA | Water | SM 2540D | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Job ID: 480-153811-1
Project/Site: Former Accurate Die Cast

**Client Sample ID: EFFLUENT 051519**
**Lab Sample ID: 480-153811-1**
**Date Collected: 05/15/19 07:20**
**Matrix: Water**
**Date Received: 05/16/19 08:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540D | | 1 | 474118 | 05/22/19 09:55 | CSS | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 474117 | 05/22/19 09:45 | CSS | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-153811-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153811-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL BUF |
| SM2540 C | Total Dissolved Solids | SM18 | TAL BUF |

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-153811-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 480-153811-1 | EFFLUENT 051519 | Water | 05/15/19 07:20 | 05/16/19 08:00 | |

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: MARTIN Kuenzle | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): | COC No: 480-122366-10586.1 |
|---|---|---|---|---|
| Client Contact: Mr. Yuri Veliz | Phone: 315-729-1300 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Company: O'Brien & Gere Inc of North America | | Analysis Requested | | Job #: |
| Address: 333 West Washington St. PO BOX 4873 | Due Date Requested: | | | Preservation Codes: |
| City: East Syracuse | TAT Requested (days): | | | A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify) |
| State, Zip: NY, 13221 | | | | |
| Phone: 315-956-6100(Tel) 315-463-7554(Fax) | PO #: 11900114 | | | Other: |
| Email: Yuri.Veliz@obg.com | WO #: | | | |
| Project Name: Former Accurate Die Cast | Project #: 48008584 | | | |
| Site: | SSOW#: | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 2540D - Total Suspended Solids | 2540C_Calcd - Total Dissolved Solids | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | N | | |
| Effluent 051519 | 5-15-19 | 7:20 | C | Water | | | 1 | 1 | 2 | |

RE
5-15-19

Syracuse
#225

480-153811 Chain of Custody

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Martin Kuenzle | 5-15-19 / 10:05 | OBG | Redlich | 5-15-19 10:05 | Syr |
| 2 | Redlich | 5-15-19 19:10 | Syr | | 05/16/19 0730 | |
| 3 | | | | | | |

| Custody Seals Intact: ∆ Yes ∆ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.6 ±1 |
|---|---|---|

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-153811-1

**Login Number: 153811**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Kasperek, Kenneth E**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | True | |
| Chlorine Residual checked. | N/A | |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-154127-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

*Authorized for release by:*
*6/17/2019 2:46:03 PM*
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

# Table of Contents

# Definitions/Glossary

Client: O'Brien & Gere Inc of North America
Job ID: 480-154127-1
Project/Site: Former Accurate Die Cast

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Case Narrative

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154127-1

## Job ID: 480-154127-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-154127-1**

**Receipt**
The sample was received on 5/29/2019 5:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154127-1

## Client Sample ID: EFFLUENT 052819

## Lab Sample ID: 480-154127-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 635 | | 10.0 | 4.0 | mg/L | 1 | | SM2540 C | Total/NA |

This Detection Summary does not include radiochemical test results.

# Client Sample Results

Client: O'Brien & Gere Inc of North America
Job ID: 480-154127-1
Project/Site: Former Accurate Die Cast

**Client Sample ID: EFFLUENT 052819**
**Lab Sample ID: 480-154127-1**
**Date Collected: 05/28/19 07:20**
**Matrix: Water**
**Date Received: 05/29/19 05:00**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **635** | | 10.0 | 4.0 | mg/L | | | 06/04/19 03:25 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 4.0 | 4.0 | mg/L | | | 06/03/19 08:24 | 1 |

# QC Sample Results

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154127-1

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 480-475818/1**
**Matrix: Water**
**Analysis Batch: 475818**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 1.0 | 1.0 | mg/L | | | 06/03/19 08:24 | 1 |

**Lab Sample ID: LCS 480-475818/2**
**Matrix: Water**
**Analysis Batch: 475818**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 256 | 247.2 | | mg/L | | 97 | 88 - 110 |

## Method: SM2540 C - Total Dissolved Solids

**Lab Sample ID: MB 480-475963/1**
**Matrix: Water**
**Analysis Batch: 475963**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | ND | | 10.0 | 4.0 | mg/L | | | 06/04/19 03:25 | 1 |

**Lab Sample ID: LCS 480-475963/2**
**Matrix: Water**
**Analysis Batch: 475963**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 502 | 483.0 | | mg/L | | 96 | 85 - 115 |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154127-1

## General Chemistry

### Analysis Batch: 475818

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-154127-1 | EFFLUENT 052819 | Total/NA | Water | SM 2540D | |
| MB 480-475818/1 | Method Blank | Total/NA | Water | SM 2540D | |
| LCS 480-475818/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |

### Analysis Batch: 475963

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-154127-1 | EFFLUENT 052819 | Total/NA | Water | SM2540 C | |
| MB 480-475963/1 | Method Blank | Total/NA | Water | SM2540 C | |
| LCS 480-475963/2 | Lab Control Sample | Total/NA | Water | SM2540 C | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154127-1

**Client Sample ID: EFFLUENT 052819**
**Date Collected: 05/28/19 07:20**
**Date Received: 05/29/19 05:00**

**Lab Sample ID: 480-154127-1**
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540D | | 1 | 475818 | 06/03/19 08:24 | CSS | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 475963 | 06/04/19 03:25 | EY | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-154127-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154127-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL BUF |
| SM2540 C | Total Dissolved Solids | SM18 | TAL BUF |

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154127-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 480-154127-1 | EFFLUENT 052819 | Water | 05/28/19 07:20 | 05/29/19 05:00 | |

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Syracuse #225

480-154127 Chain of Custody

| Client Information | Sampler: Martin Koennecke | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): | COC No: 480-122365-10586.1 |
|---|---|---|---|---|
| Client Contact: Mr. Yuri Veliz | Phone: 315-729-1300 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Company: O'Brien & Gere Inc of North America | | | | |
| Address: 333 West Washington St. PO BOX 4873 | Due Date Requested: | | | |
| City: East Syracuse | TAT Requested (days): | | | |
| State, Zip: NY, 13221 | | | | |
| Phone: 315-956-6100(Tel) 315-463-7554(Fax) | PO #: 11900114 | | | |
| Email: Yuri.Veliz@obg.com | WO #: | | | |
| Project Name: Former Accurate Die Cast | Project #: 48008584 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 2540D - Total Suspended Solids | 2540C_Calcd - Total Dissolved Solids | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | N | | |
| Effluent 052819 | 5-28-19 | 17:20 | C | Water | | | 1 | 1 | 2 | |

RE 5-28-19

F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)
Other:

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Martin Koennecke | 5-28-19 / 10:40 | OBG | R. Reigle | 5-28-19, 10:40 | Sya |
| 2 | R. Reigle | 5-28-19, 19:00 | Sya | Monica R | 05/29/19 0500 | |
| 3 | | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.2 #1 |
|---|---|---|

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-154127-1

**Login Number: 154127**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Stopa, Erik S**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | N/A | |
| Chlorine Residual checked. | N/A | |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-154498-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

*Authorized for release by:*
*6/20/2019 11:10:22 AM*
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

# Table of Contents

# Definitions/Glossary

Client: O'Brien & Gere Inc of North America
Job ID: 480-154498-1
Project/Site: Former Accurate Die Cast

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| * | LCS or LCSD is outside acceptance limits. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Job ID: 480-154498-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-154498-1**

**Receipt**
The samples were received on 6/6/2019 5:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9º C.

**GC/MS VOA**
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-476433 recovered above the upper control limit for Tetrachloroethene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: Between Carbons 060519 (480-154498-2) and Influent 060519 (480-154498-5).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-476433 recovered outside control limits for the following analyte: Tetrachloroethene. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: Between Carbons 060519 (480-154498-2) and Influent 060519 (480-154498-5).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-476659 recovered outside acceptance criteria, low biased, for 1,1-Dichloroethene and Carbon disulfide. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for these analytes, the data have been reported. The following sample is impacted: Effluent 060519 (480-154498-4).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: Influent 060519 (480-154498-5), (480-154498-B-5 MS) and (480-154498-B-5 MSD). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154498-1

## Client Sample ID: Effluent 060519 — Lab Sample ID: 480-154498-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 622 | | 10.0 | 4.0 | mg/L | 1 | | SM2540 C | Total/NA |

## Client Sample ID: Between Carbons 060519 — Lab Sample ID: 480-154498-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | 1.9 | | 1.0 | 0.81 | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 10 | | 1.0 | 0.46 | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: Influent 060519 — Lab Sample ID: 480-154498-3

No Detections.

## Client Sample ID: Effluent 060519 — Lab Sample ID: 480-154498-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | 0.46 | J | 1.0 | 0.44 | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: Influent 060519 — Lab Sample ID: 480-154498-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | 1.8 | | 1.0 | 0.81 | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene - DL | 330 | | 8.0 | 3.7 | ug/L | 8 | | 8260C | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154498-1

## Client Sample ID: Effluent 060519

**Lab Sample ID: 480-154498-1**

**Date Collected: 06/05/19 07:20**
**Matrix: Water**
**Date Received: 06/06/19 05:00**

### Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | ND | | 0.010 | 0.0015 | mg/L | | 06/07/19 08:36 | 06/13/19 23:05 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.00020 | 0.00012 | mg/L | | 06/07/19 11:51 | 06/07/19 15:08 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **622** | | 10.0 | 4.0 | mg/L | | | 06/11/19 12:35 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 4.0 | 4.0 | mg/L | | | 06/12/19 08:20 | 1 |

## Client Sample ID: Between Carbons 060519

**Lab Sample ID: 480-154498-2**

**Date Collected: 06/05/19 07:20**
**Matrix: Water**
**Date Received: 06/06/19 05:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.82 | ug/L | | | 06/06/19 14:25 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 06/06/19 14:25 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.31 | ug/L | | | 06/06/19 14:25 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 06/06/19 14:25 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.38 | ug/L | | | 06/06/19 14:25 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 06/06/19 14:25 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.41 | ug/L | | | 06/06/19 14:25 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 1.0 | 0.39 | ug/L | | | 06/06/19 14:25 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.73 | ug/L | | | 06/06/19 14:25 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.79 | ug/L | | | 06/06/19 14:25 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.21 | ug/L | | | 06/06/19 14:25 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.72 | ug/L | | | 06/06/19 14:25 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.78 | ug/L | | | 06/06/19 14:25 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.84 | ug/L | | | 06/06/19 14:25 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.3 | ug/L | | | 06/06/19 14:25 | 1 |
| 2-Hexanone | ND | | 5.0 | 1.2 | ug/L | | | 06/06/19 14:25 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 5.0 | 2.1 | ug/L | | | 06/06/19 14:25 | 1 |
| Acetone | ND | | 10 | 3.0 | ug/L | | | 06/06/19 14:25 | 1 |
| Benzene | ND | | 1.0 | 0.41 | ug/L | | | 06/06/19 14:25 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.39 | ug/L | | | 06/06/19 14:25 | 1 |
| Bromoform | ND | | 1.0 | 0.26 | ug/L | | | 06/06/19 14:25 | 1 |
| Bromomethane | ND | | 1.0 | 0.69 | ug/L | | | 06/06/19 14:25 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.19 | ug/L | | | 06/06/19 14:25 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.27 | ug/L | | | 06/06/19 14:25 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.75 | ug/L | | | 06/06/19 14:25 | 1 |
| Chloroethane | ND | | 1.0 | 0.32 | ug/L | | | 06/06/19 14:25 | 1 |
| Chloroform | ND | | 1.0 | 0.34 | ug/L | | | 06/06/19 14:25 | 1 |
| Chloromethane | ND | | 1.0 | 0.35 | ug/L | | | 06/06/19 14:25 | 1 |
| **cis-1,2-Dichloroethene** | **1.9** | | 1.0 | 0.81 | ug/L | | | 06/06/19 14:25 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.36 | ug/L | | | 06/06/19 14:25 | 1 |
| Cyclohexane | ND | | 1.0 | 0.18 | ug/L | | | 06/06/19 14:25 | 1 |
| Dibromochloromethane | ND | | 1.0 | 0.32 | ug/L | | | 06/06/19 14:25 | 1 |

## Client Sample ID: Between Carbons 060519

**Lab Sample ID: 480-154498-2**

**Date Collected: 06/05/19 07:20**

**Matrix: Water**

**Date Received: 06/06/19 05:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 1.0 | 0.68 | ug/L | | | 06/06/19 14:25 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.74 | ug/L | | | 06/06/19 14:25 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.79 | ug/L | | | 06/06/19 14:25 | 1 |
| Methyl acetate | ND | | 2.5 | 1.3 | ug/L | | | 06/06/19 14:25 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | 0.16 | ug/L | | | 06/06/19 14:25 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.16 | ug/L | | | 06/06/19 14:25 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 06/06/19 14:25 | 1 |
| Styrene | ND | | 1.0 | 0.73 | ug/L | | | 06/06/19 14:25 | 1 |
| Tetrachloroethene | ND | * | 1.0 | 0.36 | ug/L | | | 06/06/19 14:25 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 06/06/19 14:25 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 06/06/19 14:25 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.37 | ug/L | | | 06/06/19 14:25 | 1 |
| **Trichloroethene** | **10** | | 1.0 | 0.46 | ug/L | | | 06/06/19 14:25 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.88 | ug/L | | | 06/06/19 14:25 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.90 | ug/L | | | 06/06/19 14:25 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.66 | ug/L | | | 06/06/19 14:25 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *77 - 120* | | *06/06/19 14:25* | *1* |
| *4-Bromofluorobenzene (Surr)* | *104* | | *73 - 120* | | *06/06/19 14:25* | *1* |
| *Dibromofluoromethane (Surr)* | *99* | | *75 - 123* | | *06/06/19 14:25* | *1* |
| *Toluene-d8 (Surr)* | *104* | | *80 - 120* | | *06/06/19 14:25* | *1* |

## Client Sample ID: Influent 060519

**Lab Sample ID: 480-154498-3**

**Date Collected: 06/05/19 07:20**

**Matrix: Water**

**Date Received: 06/06/19 05:00**

### Method: 6010C - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | ND | | 0.010 | 0.0015 | mg/L | | 06/07/19 08:36 | 06/13/19 23:09 | 1 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.00020 | 0.00012 | mg/L | | 06/07/19 11:51 | 06/07/19 15:12 | 1 |

## Client Sample ID: Effluent 060519

**Lab Sample ID: 480-154498-4**

**Date Collected: 06/05/19 07:20**

**Matrix: Water**

**Date Received: 06/06/19 05:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.82 | ug/L | | | 06/07/19 12:03 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 06/07/19 12:03 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.31 | ug/L | | | 06/07/19 12:03 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 06/07/19 12:03 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.38 | ug/L | | | 06/07/19 12:03 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 06/07/19 12:03 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.41 | ug/L | | | 06/07/19 12:03 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 1.0 | 0.39 | ug/L | | | 06/07/19 12:03 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.73 | ug/L | | | 06/07/19 12:03 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.79 | ug/L | | | 06/07/19 12:03 | 1 |

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154498-1

**Client Sample ID: Effluent 060519**
**Date Collected: 06/05/19 07:20**
**Date Received: 06/06/19 05:00**

**Lab Sample ID: 480-154498-4**
**Matrix: Water**

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | ND | | 1.0 | 0.21 | ug/L | | | 06/07/19 12:03 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.72 | ug/L | | | 06/07/19 12:03 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.78 | ug/L | | | 06/07/19 12:03 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.84 | ug/L | | | 06/07/19 12:03 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.3 | ug/L | | | 06/07/19 12:03 | 1 |
| 2-Hexanone | ND | | 5.0 | 1.2 | ug/L | | | 06/07/19 12:03 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 5.0 | 2.1 | ug/L | | | 06/07/19 12:03 | 1 |
| Acetone | ND | | 10 | 3.0 | ug/L | | | 06/07/19 12:03 | 1 |
| Benzene | ND | | 1.0 | 0.41 | ug/L | | | 06/07/19 12:03 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.39 | ug/L | | | 06/07/19 12:03 | 1 |
| Bromoform | ND | | 1.0 | 0.26 | ug/L | | | 06/07/19 12:03 | 1 |
| Bromomethane | ND | | 1.0 | 0.69 | ug/L | | | 06/07/19 12:03 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.19 | ug/L | | | 06/07/19 12:03 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.27 | ug/L | | | 06/07/19 12:03 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.75 | ug/L | | | 06/07/19 12:03 | 1 |
| Chloroethane | ND | | 1.0 | 0.32 | ug/L | | | 06/07/19 12:03 | 1 |
| Chloroform | ND | | 1.0 | 0.34 | ug/L | | | 06/07/19 12:03 | 1 |
| Chloromethane | ND | | 1.0 | 0.35 | ug/L | | | 06/07/19 12:03 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 06/07/19 12:03 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.36 | ug/L | | | 06/07/19 12:03 | 1 |
| Cyclohexane | ND | | 1.0 | 0.18 | ug/L | | | 06/07/19 12:03 | 1 |
| Dibromochloromethane | ND | | 1.0 | 0.32 | ug/L | | | 06/07/19 12:03 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.68 | ug/L | | | 06/07/19 12:03 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.74 | ug/L | | | 06/07/19 12:03 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.79 | ug/L | | | 06/07/19 12:03 | 1 |
| Methyl acetate | ND | | 2.5 | 1.3 | ug/L | | | 06/07/19 12:03 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | 0.16 | ug/L | | | 06/07/19 12:03 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.16 | ug/L | | | 06/07/19 12:03 | 1 |
| **Methylene Chloride** | **0.46** | **J** | 1.0 | 0.44 | ug/L | | | 06/07/19 12:03 | 1 |
| Styrene | ND | | 1.0 | 0.73 | ug/L | | | 06/07/19 12:03 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 06/07/19 12:03 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 06/07/19 12:03 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 06/07/19 12:03 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.37 | ug/L | | | 06/07/19 12:03 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 06/07/19 12:03 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.88 | ug/L | | | 06/07/19 12:03 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.90 | ug/L | | | 06/07/19 12:03 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.66 | ug/L | | | 06/07/19 12:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *101* | | *77 - 120* | | *06/07/19 12:03* | *1* |
| *4-Bromofluorobenzene (Surr)* | *88* | | *73 - 120* | | *06/07/19 12:03* | *1* |
| *Dibromofluoromethane (Surr)* | *96* | | *75 - 123* | | *06/07/19 12:03* | *1* |
| *Toluene-d8 (Surr)* | *89* | | *80 - 120* | | *06/07/19 12:03* | *1* |

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154498-1

**Client Sample ID: Influent 060519**
**Date Collected: 06/05/19 07:20**
**Date Received: 06/06/19 05:00**

**Lab Sample ID: 480-154498-5**
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.82 | ug/L | | | 06/06/19 13:32 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 06/06/19 13:32 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.31 | ug/L | | | 06/06/19 13:32 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 06/06/19 13:32 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.38 | ug/L | | | 06/06/19 13:32 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 06/06/19 13:32 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.41 | ug/L | | | 06/06/19 13:32 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 1.0 | 0.39 | ug/L | | | 06/06/19 13:32 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.73 | ug/L | | | 06/06/19 13:32 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.79 | ug/L | | | 06/06/19 13:32 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.21 | ug/L | | | 06/06/19 13:32 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.72 | ug/L | | | 06/06/19 13:32 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.78 | ug/L | | | 06/06/19 13:32 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.84 | ug/L | | | 06/06/19 13:32 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.3 | ug/L | | | 06/06/19 13:32 | 1 |
| 2-Hexanone | ND | | 5.0 | 1.2 | ug/L | | | 06/06/19 13:32 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 5.0 | 2.1 | ug/L | | | 06/06/19 13:32 | 1 |
| Acetone | ND | | 10 | 3.0 | ug/L | | | 06/06/19 13:32 | 1 |
| Benzene | ND | | 1.0 | 0.41 | ug/L | | | 06/06/19 13:32 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.39 | ug/L | | | 06/06/19 13:32 | 1 |
| Bromoform | ND | | 1.0 | 0.26 | ug/L | | | 06/06/19 13:32 | 1 |
| Bromomethane | ND | | 1.0 | 0.69 | ug/L | | | 06/06/19 13:32 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.19 | ug/L | | | 06/06/19 13:32 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.27 | ug/L | | | 06/06/19 13:32 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.75 | ug/L | | | 06/06/19 13:32 | 1 |
| Chloroethane | ND | | 1.0 | 0.32 | ug/L | | | 06/06/19 13:32 | 1 |
| Chloroform | ND | | 1.0 | 0.34 | ug/L | | | 06/06/19 13:32 | 1 |
| Chloromethane | ND | | 1.0 | 0.35 | ug/L | | | 06/06/19 13:32 | 1 |
| **cis-1,2-Dichloroethene** | **1.8** | | 1.0 | 0.81 | ug/L | | | 06/06/19 13:32 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.36 | ug/L | | | 06/06/19 13:32 | 1 |
| Cyclohexane | ND | | 1.0 | 0.18 | ug/L | | | 06/06/19 13:32 | 1 |
| Dibromochloromethane | ND | | 1.0 | 0.32 | ug/L | | | 06/06/19 13:32 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.68 | ug/L | | | 06/06/19 13:32 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.74 | ug/L | | | 06/06/19 13:32 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.79 | ug/L | | | 06/06/19 13:32 | 1 |
| Methyl acetate | ND | | 2.5 | 1.3 | ug/L | | | 06/06/19 13:32 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | 0.16 | ug/L | | | 06/06/19 13:32 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.16 | ug/L | | | 06/06/19 13:32 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 06/06/19 13:32 | 1 |
| Styrene | ND | | 1.0 | 0.73 | ug/L | | | 06/06/19 13:32 | 1 |
| Tetrachloroethene | ND | * | 1.0 | 0.36 | ug/L | | | 06/06/19 13:32 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 06/06/19 13:32 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 06/06/19 13:32 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.37 | ug/L | | | 06/06/19 13:32 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.88 | ug/L | | | 06/06/19 13:32 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.90 | ug/L | | | 06/06/19 13:32 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.66 | ug/L | | | 06/06/19 13:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *77 - 120* | | *06/06/19 13:32* | *1* |

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154498-1

**Client Sample ID: Influent 060519**
**Date Collected: 06/05/19 07:20**
**Date Received: 06/06/19 05:00**

**Lab Sample ID: 480-154498-5**
**Matrix: Water**

### Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 102 | | 73 - 120 | | 06/06/19 13:32 | 1 |
| Dibromofluoromethane (Surr) | 95 | | 75 - 123 | | 06/06/19 13:32 | 1 |
| Toluene-d8 (Surr) | 104 | | 80 - 120 | | 06/06/19 13:32 | 1 |

### Method: 8260C - Volatile Organic Compounds by GC/MS - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | 330 | | 8.0 | 3.7 | ug/L | | | 06/07/19 12:27 | 8 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 98 | | 77 - 120 | | 06/07/19 12:27 | 8 |
| 4-Bromofluorobenzene (Surr) | 91 | | 73 - 120 | | 06/07/19 12:27 | 8 |
| Dibromofluoromethane (Surr) | 96 | | 75 - 123 | | 06/07/19 12:27 | 8 |
| Toluene-d8 (Surr) | 92 | | 80 - 120 | | 06/07/19 12:27 | 8 |

# Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154498-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | DBFM | TOL |
| Lab Sample ID | Client Sample ID | (77-120) | (73-120) | (75-123) | (80-120) |
| 480-154498-2 | Between Carbons 060519 | 100 | 104 | 99 | 104 |
| 480-154498-4 | Effluent 060519 | 101 | 88 | 96 | 89 |
| 480-154498-5 | Influent 060519 | 97 | 102 | 95 | 104 |
| 480-154498-5 - DL | Influent 060519 | 98 | 91 | 96 | 92 |
| 480-154498-5 MS | Influent 060519 | 103 | 90 | 101 | 94 |
| 480-154498-5 MSD | Influent 060519 | 104 | 94 | 100 | 94 |
| LCS 480-476433/5 | Lab Control Sample | 101 | 107 | 99 | 106 |
| LCS 480-476659/5 | Lab Control Sample | 105 | 90 | 96 | 92 |
| MB 480-476433/7 | Method Blank | 103 | 106 | 101 | 108 |
| MB 480-476659/7 | Method Blank | 99 | 92 | 93 | 92 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154498-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 480-476433/7**
**Matrix: Water**
**Analysis Batch: 476433**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.82 | ug/L | | | 06/06/19 11:05 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 06/06/19 11:05 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.31 | ug/L | | | 06/06/19 11:05 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 06/06/19 11:05 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.38 | ug/L | | | 06/06/19 11:05 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 06/06/19 11:05 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.41 | ug/L | | | 06/06/19 11:05 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 1.0 | 0.39 | ug/L | | | 06/06/19 11:05 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.73 | ug/L | | | 06/06/19 11:05 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.79 | ug/L | | | 06/06/19 11:05 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.21 | ug/L | | | 06/06/19 11:05 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.72 | ug/L | | | 06/06/19 11:05 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.78 | ug/L | | | 06/06/19 11:05 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.84 | ug/L | | | 06/06/19 11:05 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.3 | ug/L | | | 06/06/19 11:05 | 1 |
| 2-Hexanone | ND | | 5.0 | 1.2 | ug/L | | | 06/06/19 11:05 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 5.0 | 2.1 | ug/L | | | 06/06/19 11:05 | 1 |
| Acetone | ND | | 10 | 3.0 | ug/L | | | 06/06/19 11:05 | 1 |
| Benzene | ND | | 1.0 | 0.41 | ug/L | | | 06/06/19 11:05 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.39 | ug/L | | | 06/06/19 11:05 | 1 |
| Bromoform | ND | | 1.0 | 0.26 | ug/L | | | 06/06/19 11:05 | 1 |
| Bromomethane | ND | | 1.0 | 0.69 | ug/L | | | 06/06/19 11:05 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.19 | ug/L | | | 06/06/19 11:05 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.27 | ug/L | | | 06/06/19 11:05 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.75 | ug/L | | | 06/06/19 11:05 | 1 |
| Chloroethane | ND | | 1.0 | 0.32 | ug/L | | | 06/06/19 11:05 | 1 |
| Chloroform | ND | | 1.0 | 0.34 | ug/L | | | 06/06/19 11:05 | 1 |
| Chloromethane | ND | | 1.0 | 0.35 | ug/L | | | 06/06/19 11:05 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 06/06/19 11:05 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.36 | ug/L | | | 06/06/19 11:05 | 1 |
| Cyclohexane | ND | | 1.0 | 0.18 | ug/L | | | 06/06/19 11:05 | 1 |
| Dibromochloromethane | ND | | 1.0 | 0.32 | ug/L | | | 06/06/19 11:05 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.68 | ug/L | | | 06/06/19 11:05 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.74 | ug/L | | | 06/06/19 11:05 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.79 | ug/L | | | 06/06/19 11:05 | 1 |
| Methyl acetate | ND | | 2.5 | 1.3 | ug/L | | | 06/06/19 11:05 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | 0.16 | ug/L | | | 06/06/19 11:05 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.16 | ug/L | | | 06/06/19 11:05 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 06/06/19 11:05 | 1 |
| Styrene | ND | | 1.0 | 0.73 | ug/L | | | 06/06/19 11:05 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 06/06/19 11:05 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 06/06/19 11:05 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 06/06/19 11:05 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.37 | ug/L | | | 06/06/19 11:05 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 06/06/19 11:05 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.88 | ug/L | | | 06/06/19 11:05 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.90 | ug/L | | | 06/06/19 11:05 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.66 | ug/L | | | 06/06/19 11:05 | 1 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-476433/7**
**Matrix: Water**
**Analysis Batch: 476433**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *77 - 120* | | *06/06/19 11:05* | *1* |
| *4-Bromofluorobenzene (Surr)* | *106* | | *73 - 120* | | *06/06/19 11:05* | *1* |
| *Dibromofluoromethane (Surr)* | *101* | | *75 - 123* | | *06/06/19 11:05* | *1* |
| *Toluene-d8 (Surr)* | *108* | | *80 - 120* | | *06/06/19 11:05* | *1* |

**Lab Sample ID: LCS 480-476433/5**
**Matrix: Water**
**Analysis Batch: 476433**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 25.0 | 26.2 | | ug/L | | 105 | 73 - 126 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 22.9 | | ug/L | | 92 | 76 - 120 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0 | 28.5 | | ug/L | | 114 | 61 - 148 |
| 1,1,2-Trichloroethane | 25.0 | 26.0 | | ug/L | | 104 | 76 - 122 |
| 1,1-Dichloroethane | 25.0 | 24.8 | | ug/L | | 99 | 77 - 120 |
| 1,1-Dichloroethene | 25.0 | 25.6 | | ug/L | | 103 | 66 - 127 |
| 1,2,4-Trichlorobenzene | 25.0 | 26.6 | | ug/L | | 106 | 79 - 122 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 18.2 | | ug/L | | 73 | 56 - 134 |
| 1,2-Dibromoethane | 25.0 | 26.3 | | ug/L | | 105 | 77 - 120 |
| 1,2-Dichlorobenzene | 25.0 | 25.2 | | ug/L | | 101 | 80 - 124 |
| 1,2-Dichloroethane | 25.0 | 25.2 | | ug/L | | 101 | 75 - 120 |
| 1,2-Dichloropropane | 25.0 | 25.6 | | ug/L | | 102 | 76 - 120 |
| 1,3-Dichlorobenzene | 25.0 | 26.1 | | ug/L | | 105 | 77 - 120 |
| 1,4-Dichlorobenzene | 25.0 | 26.3 | | ug/L | | 105 | 80 - 120 |
| 2-Butanone (MEK) | 125 | 119 | | ug/L | | 95 | 57 - 140 |
| 2-Hexanone | 125 | 120 | | ug/L | | 96 | 65 - 127 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 117 | | ug/L | | 94 | 71 - 125 |
| Acetone | 125 | 115 | | ug/L | | 92 | 56 - 142 |
| Benzene | 25.0 | 26.9 | | ug/L | | 108 | 71 - 124 |
| Bromodichloromethane | 25.0 | 24.6 | | ug/L | | 98 | 80 - 122 |
| Bromoform | 25.0 | 21.9 | | ug/L | | 88 | 61 - 132 |
| Bromomethane | 25.0 | 24.7 | | ug/L | | 99 | 55 - 144 |
| Carbon disulfide | 25.0 | 23.6 | | ug/L | | 94 | 59 - 134 |
| Carbon tetrachloride | 25.0 | 26.0 | | ug/L | | 104 | 72 - 134 |
| Chlorobenzene | 25.0 | 28.0 | | ug/L | | 112 | 80 - 120 |
| Chloroethane | 25.0 | 23.7 | | ug/L | | 95 | 69 - 136 |
| Chloroform | 25.0 | 25.1 | | ug/L | | 100 | 73 - 127 |
| Chloromethane | 25.0 | 22.5 | | ug/L | | 90 | 68 - 124 |
| cis-1,2-Dichloroethene | 25.0 | 25.0 | | ug/L | | 100 | 74 - 124 |
| cis-1,3-Dichloropropene | 25.0 | 26.2 | | ug/L | | 105 | 74 - 124 |
| Cyclohexane | 25.0 | 26.2 | | ug/L | | 105 | 59 - 135 |
| Dibromochloromethane | 25.0 | 24.1 | | ug/L | | 96 | 75 - 125 |
| Dichlorodifluoromethane | 25.0 | 22.2 | | ug/L | | 89 | 59 - 135 |
| Ethylbenzene | 25.0 | 27.1 | | ug/L | | 108 | 77 - 123 |
| Isopropylbenzene | 25.0 | 26.4 | | ug/L | | 106 | 77 - 122 |
| Methyl acetate | 50.0 | 44.1 | | ug/L | | 88 | 74 - 133 |
| Methyl tert-butyl ether | 25.0 | 23.3 | | ug/L | | 93 | 77 - 120 |
| Methylcyclohexane | 25.0 | 28.0 | | ug/L | | 112 | 68 - 134 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 480-476433/5**
**Matrix: Water**
**Analysis Batch: 476433**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Methylene Chloride | 25.0 | 24.8 | | ug/L | | 99 | 75 - 124 |
| Styrene | 25.0 | 26.6 | | ug/L | | 106 | 80 - 120 |
| Tetrachloroethene | 25.0 | 31.3 | * | ug/L | | 125 | 74 - 122 |
| Toluene | 25.0 | 27.5 | | ug/L | | 110 | 80 - 122 |
| trans-1,2-Dichloroethene | 25.0 | 26.2 | | ug/L | | 105 | 73 - 127 |
| trans-1,3-Dichloropropene | 25.0 | 26.4 | | ug/L | | 106 | 80 - 120 |
| Trichloroethene | 25.0 | 27.0 | | ug/L | | 108 | 74 - 123 |
| Trichlorofluoromethane | 25.0 | 27.0 | | ug/L | | 108 | 62 - 150 |
| Vinyl chloride | 25.0 | 23.3 | | ug/L | | 93 | 65 - 133 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *101* | | *77 - 120* |
| *4-Bromofluorobenzene (Surr)* | *107* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *99* | | *75 - 123* |
| *Toluene-d8 (Surr)* | *106* | | *80 - 120* |

**Lab Sample ID: MB 480-476659/7**
**Matrix: Water**
**Analysis Batch: 476659**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.82 | ug/L | | | 06/07/19 11:25 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 06/07/19 11:25 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.31 | ug/L | | | 06/07/19 11:25 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 06/07/19 11:25 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.38 | ug/L | | | 06/07/19 11:25 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 06/07/19 11:25 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.41 | ug/L | | | 06/07/19 11:25 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 1.0 | 0.39 | ug/L | | | 06/07/19 11:25 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.73 | ug/L | | | 06/07/19 11:25 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.79 | ug/L | | | 06/07/19 11:25 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.21 | ug/L | | | 06/07/19 11:25 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.72 | ug/L | | | 06/07/19 11:25 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.78 | ug/L | | | 06/07/19 11:25 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.84 | ug/L | | | 06/07/19 11:25 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.3 | ug/L | | | 06/07/19 11:25 | 1 |
| 2-Hexanone | ND | | 5.0 | 1.2 | ug/L | | | 06/07/19 11:25 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 5.0 | 2.1 | ug/L | | | 06/07/19 11:25 | 1 |
| Acetone | ND | | 10 | 3.0 | ug/L | | | 06/07/19 11:25 | 1 |
| Benzene | ND | | 1.0 | 0.41 | ug/L | | | 06/07/19 11:25 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.39 | ug/L | | | 06/07/19 11:25 | 1 |
| Bromoform | ND | | 1.0 | 0.26 | ug/L | | | 06/07/19 11:25 | 1 |
| Bromomethane | ND | | 1.0 | 0.69 | ug/L | | | 06/07/19 11:25 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.19 | ug/L | | | 06/07/19 11:25 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.27 | ug/L | | | 06/07/19 11:25 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.75 | ug/L | | | 06/07/19 11:25 | 1 |
| Chloroethane | ND | | 1.0 | 0.32 | ug/L | | | 06/07/19 11:25 | 1 |
| Chloroform | ND | | 1.0 | 0.34 | ug/L | | | 06/07/19 11:25 | 1 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-476659/7**
**Matrix: Water**
**Analysis Batch: 476659**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | ND | | 1.0 | 0.35 | ug/L | | | 06/07/19 11:25 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 06/07/19 11:25 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.36 | ug/L | | | 06/07/19 11:25 | 1 |
| Cyclohexane | ND | | 1.0 | 0.18 | ug/L | | | 06/07/19 11:25 | 1 |
| Dibromochloromethane | ND | | 1.0 | 0.32 | ug/L | | | 06/07/19 11:25 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.68 | ug/L | | | 06/07/19 11:25 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.74 | ug/L | | | 06/07/19 11:25 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.79 | ug/L | | | 06/07/19 11:25 | 1 |
| Methyl acetate | ND | | 2.5 | 1.3 | ug/L | | | 06/07/19 11:25 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | 0.16 | ug/L | | | 06/07/19 11:25 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.16 | ug/L | | | 06/07/19 11:25 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 06/07/19 11:25 | 1 |
| Styrene | ND | | 1.0 | 0.73 | ug/L | | | 06/07/19 11:25 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 06/07/19 11:25 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 06/07/19 11:25 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 06/07/19 11:25 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.37 | ug/L | | | 06/07/19 11:25 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 06/07/19 11:25 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.88 | ug/L | | | 06/07/19 11:25 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.90 | ug/L | | | 06/07/19 11:25 | 1 |
| Xylenes, Total | ND | | 2.0 | 0.66 | ug/L | | | 06/07/19 11:25 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *77 - 120* | | *06/07/19 11:25* | *1* |
| *4-Bromofluorobenzene (Surr)* | *92* | | *73 - 120* | | *06/07/19 11:25* | *1* |
| *Dibromofluoromethane (Surr)* | *93* | | *75 - 123* | | *06/07/19 11:25* | *1* |
| *Toluene-d8 (Surr)* | *92* | | *80 - 120* | | *06/07/19 11:25* | *1* |

**Lab Sample ID: LCS 480-476659/5**
**Matrix: Water**
**Analysis Batch: 476659**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 25.0 | 24.6 | | ug/L | | 98 | 73 - 126 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 20.2 | | ug/L | | 81 | 76 - 120 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.0 | 23.2 | | ug/L | | 93 | 61 - 148 |
| 1,1,2-Trichloroethane | 25.0 | 23.6 | | ug/L | | 94 | 76 - 122 |
| 1,1-Dichloroethane | 25.0 | 25.0 | | ug/L | | 100 | 77 - 120 |
| 1,1-Dichloroethene | 25.0 | 20.6 | | ug/L | | 82 | 66 - 127 |
| 1,2,4-Trichlorobenzene | 25.0 | 23.1 | | ug/L | | 92 | 79 - 122 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 20.4 | | ug/L | | 82 | 56 - 134 |
| 1,2-Dibromoethane | 25.0 | 21.9 | | ug/L | | 88 | 77 - 120 |
| 1,2-Dichlorobenzene | 25.0 | 22.9 | | ug/L | | 92 | 80 - 124 |
| 1,2-Dichloroethane | 25.0 | 24.9 | | ug/L | | 100 | 75 - 120 |
| 1,2-Dichloropropane | 25.0 | 25.6 | | ug/L | | 102 | 76 - 120 |
| 1,3-Dichlorobenzene | 25.0 | 22.3 | | ug/L | | 89 | 77 - 120 |
| 1,4-Dichlorobenzene | 25.0 | 22.7 | | ug/L | | 91 | 80 - 120 |
| 2-Butanone (MEK) | 125 | 108 | | ug/L | | 86 | 57 - 140 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 480-476659/5**
**Matrix: Water**
**Analysis Batch: 476659**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 2-Hexanone | 125 | 116 | | ug/L | | 93 | 65 - 127 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 111 | | ug/L | | 89 | 71 - 125 |
| Acetone | 125 | 113 | | ug/L | | 91 | 56 - 142 |
| Benzene | 25.0 | 24.3 | | ug/L | | 97 | 71 - 124 |
| Bromodichloromethane | 25.0 | 25.1 | | ug/L | | 101 | 80 - 122 |
| Bromoform | 25.0 | 24.8 | | ug/L | | 99 | 61 - 132 |
| Bromomethane | 25.0 | 22.9 | | ug/L | | 91 | 55 - 144 |
| Carbon disulfide | 25.0 | 20.5 | | ug/L | | 82 | 59 - 134 |
| Carbon tetrachloride | 25.0 | 27.4 | | ug/L | | 110 | 72 - 134 |
| Chlorobenzene | 25.0 | 22.8 | | ug/L | | 91 | 80 - 120 |
| Chloroethane | 25.0 | 24.7 | | ug/L | | 99 | 69 - 136 |
| Chloroform | 25.0 | 23.1 | | ug/L | | 92 | 73 - 127 |
| Chloromethane | 25.0 | 24.4 | | ug/L | | 98 | 68 - 124 |
| cis-1,2-Dichloroethene | 25.0 | 23.5 | | ug/L | | 94 | 74 - 124 |
| cis-1,3-Dichloropropene | 25.0 | 24.1 | | ug/L | | 96 | 74 - 124 |
| Cyclohexane | 25.0 | 27.1 | | ug/L | | 109 | 59 - 135 |
| Dibromochloromethane | 25.0 | 26.5 | | ug/L | | 106 | 75 - 125 |
| Dichlorodifluoromethane | 25.0 | 22.4 | | ug/L | | 89 | 59 - 135 |
| Ethylbenzene | 25.0 | 23.4 | | ug/L | | 93 | 77 - 123 |
| Isopropylbenzene | 25.0 | 23.3 | | ug/L | | 93 | 77 - 122 |
| Methyl acetate | 50.0 | 41.8 | | ug/L | | 84 | 74 - 133 |
| Methyl tert-butyl ether | 25.0 | 22.8 | | ug/L | | 91 | 77 - 120 |
| Methylcyclohexane | 25.0 | 23.4 | | ug/L | | 94 | 68 - 134 |
| Methylene Chloride | 25.0 | 21.7 | | ug/L | | 87 | 75 - 124 |
| Styrene | 25.0 | 23.2 | | ug/L | | 93 | 80 - 120 |
| Tetrachloroethene | 25.0 | 24.2 | | ug/L | | 97 | 74 - 122 |
| Toluene | 25.0 | 23.1 | | ug/L | | 92 | 80 - 122 |
| trans-1,2-Dichloroethene | 25.0 | 23.5 | | ug/L | | 94 | 73 - 127 |
| trans-1,3-Dichloropropene | 25.0 | 23.5 | | ug/L | | 94 | 80 - 120 |
| Trichloroethene | 25.0 | 24.1 | | ug/L | | 96 | 74 - 123 |
| Trichlorofluoromethane | 25.0 | 26.7 | | ug/L | | 107 | 62 - 150 |
| Vinyl chloride | 25.0 | 26.4 | | ug/L | | 106 | 65 - 133 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *105* | | *77 - 120* |
| *4-Bromofluorobenzene (Surr)* | *90* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *96* | | *75 - 123* |
| *Toluene-d8 (Surr)* | *92* | | *80 - 120* |

**Lab Sample ID: 480-154498-5 MS**
**Matrix: Water**
**Analysis Batch: 476659**

**Client Sample ID: Influent 060519**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 200 | 205 | | ug/L | | 103 | 73 - 126 |
| 1,1,2,2-Tetrachloroethane | ND | | 200 | 170 | | ug/L | | 85 | 76 - 120 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 200 | 200 | | ug/L | | 100 | 61 - 148 |
| 1,1,2-Trichloroethane | ND | | 200 | 176 | | ug/L | | 88 | 76 - 122 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 480-154498-5 MS**
**Matrix: Water**
**Analysis Batch: 476659**

**Client Sample ID: Influent 060519**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | ND | | 200 | 206 | | ug/L | | 103 | 77 - 120 |
| 1,1-Dichloroethene | ND | | 200 | 177 | | ug/L | | 88 | 66 - 127 |
| 1,2,4-Trichlorobenzene | ND | | 200 | 188 | | ug/L | | 94 | 79 - 122 |
| 1,2-Dibromo-3-Chloropropane | ND | | 200 | 149 | | ug/L | | 75 | 56 - 134 |
| 1,2-Dibromoethane | ND | | 200 | 172 | | ug/L | | 86 | 77 - 120 |
| 1,2-Dichlorobenzene | ND | | 200 | 188 | | ug/L | | 94 | 80 - 124 |
| 1,2-Dichloroethane | ND | | 200 | 200 | | ug/L | | 100 | 75 - 120 |
| 1,2-Dichloropropane | ND | | 200 | 214 | | ug/L | | 107 | 76 - 120 |
| 1,3-Dichlorobenzene | ND | | 200 | 184 | | ug/L | | 92 | 77 - 120 |
| 1,4-Dichlorobenzene | ND | | 200 | 187 | | ug/L | | 94 | 78 - 124 |
| 2-Butanone (MEK) | ND | | 1000 | 786 | | ug/L | | 79 | 57 - 140 |
| 2-Hexanone | ND | | 1000 | 856 | | ug/L | | 86 | 65 - 127 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 1000 | 861 | | ug/L | | 86 | 71 - 125 |
| Acetone | ND | | 1000 | 748 | | ug/L | | 75 | 56 - 142 |
| Benzene | ND | | 200 | 199 | | ug/L | | 100 | 71 - 124 |
| Bromodichloromethane | ND | | 200 | 198 | | ug/L | | 99 | 80 - 122 |
| Bromoform | ND | | 200 | 157 | | ug/L | | 79 | 61 - 132 |
| Bromomethane | ND | | 200 | 185 | | ug/L | | 92 | 55 - 144 |
| Carbon disulfide | ND | | 200 | 167 | | ug/L | | 83 | 59 - 134 |
| Carbon tetrachloride | ND | | 200 | 221 | | ug/L | | 111 | 72 - 134 |
| Chlorobenzene | ND | | 200 | 187 | | ug/L | | 94 | 80 - 120 |
| Chloroethane | ND | | 200 | 198 | | ug/L | | 99 | 69 - 136 |
| Chloroform | ND | | 200 | 194 | | ug/L | | 97 | 73 - 127 |
| Chloromethane | ND | | 200 | 211 | | ug/L | | 105 | 68 - 124 |
| cis-1,2-Dichloroethene | ND | | 200 | 194 | | ug/L | | 97 | 74 - 124 |
| cis-1,3-Dichloropropene | ND | | 200 | 185 | | ug/L | | 93 | 74 - 124 |
| Cyclohexane | ND | | 200 | 229 | | ug/L | | 115 | 59 - 135 |
| Dibromochloromethane | ND | | 200 | 193 | | ug/L | | 96 | 75 - 125 |
| Dichlorodifluoromethane | ND | | 200 | 168 | | ug/L | | 84 | 59 - 135 |
| Ethylbenzene | ND | | 200 | 189 | | ug/L | | 94 | 77 - 123 |
| Isopropylbenzene | ND | | 200 | 201 | | ug/L | | 101 | 77 - 122 |
| Methyl acetate | ND | | 400 | 334 | | ug/L | | 83 | 74 - 133 |
| Methyl tert-butyl ether | ND | | 200 | 180 | | ug/L | | 90 | 77 - 120 |
| Methylcyclohexane | ND | | 200 | 200 | | ug/L | | 100 | 68 - 134 |
| Methylene Chloride | 11 | | 200 | 189 | | ug/L | | 89 | 75 - 124 |
| Styrene | ND | | 200 | 183 | | ug/L | | 92 | 80 - 120 |
| Tetrachloroethene | ND | | 200 | 193 | | ug/L | | 96 | 74 - 122 |
| Toluene | ND | | 200 | 186 | | ug/L | | 93 | 80 - 122 |
| trans-1,2-Dichloroethene | ND | | 200 | 194 | | ug/L | | 97 | 73 - 127 |
| trans-1,3-Dichloropropene | ND | | 200 | 170 | | ug/L | | 85 | 80 - 120 |
| Trichloroethene | 330 | | 200 | 519 | | ug/L | | 95 | 74 - 123 |
| Trichlorofluoromethane | ND | | 200 | 208 | | ug/L | | 104 | 62 - 150 |
| Vinyl chloride | ND | | 200 | 215 | | ug/L | | 107 | 65 - 133 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *77 - 120* |
| *4-Bromofluorobenzene (Surr)* | *90* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *101* | | *75 - 123* |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 480-154498-5 MS**
**Matrix: Water**
**Analysis Batch: 476659**

**Client Sample ID: Influent 060519**
**Prep Type: Total/NA**

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *94* | | *80 - 120* |

**Lab Sample ID: 480-154498-5 MSD**
**Matrix: Water**
**Analysis Batch: 476659**

**Client Sample ID: Influent 060519**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 200 | 202 | | ug/L | | 101 | 73 - 126 | 2 | 15 |
| 1,1,2,2-Tetrachloroethane | ND | | 200 | 159 | | ug/L | | 80 | 76 - 120 | 7 | 15 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 200 | 186 | | ug/L | | 93 | 61 - 148 | 7 | 20 |
| 1,1,2-Trichloroethane | ND | | 200 | 178 | | ug/L | | 89 | 76 - 122 | 1 | 15 |
| 1,1-Dichloroethane | ND | | 200 | 201 | | ug/L | | 100 | 77 - 120 | 3 | 20 |
| 1,1-Dichloroethene | ND | | 200 | 166 | | ug/L | | 83 | 66 - 127 | 6 | 16 |
| 1,2,4-Trichlorobenzene | ND | | 200 | 182 | | ug/L | | 91 | 79 - 122 | 3 | 20 |
| 1,2-Dibromo-3-Chloropropane | ND | | 200 | 147 | | ug/L | | 74 | 56 - 134 | 1 | 15 |
| 1,2-Dibromoethane | ND | | 200 | 171 | | ug/L | | 86 | 77 - 120 | 1 | 15 |
| 1,2-Dichlorobenzene | ND | | 200 | 182 | | ug/L | | 91 | 80 - 124 | 4 | 20 |
| 1,2-Dichloroethane | ND | | 200 | 195 | | ug/L | | 98 | 75 - 120 | 2 | 20 |
| 1,2-Dichloropropane | ND | | 200 | 207 | | ug/L | | 104 | 76 - 120 | 3 | 20 |
| 1,3-Dichlorobenzene | ND | | 200 | 178 | | ug/L | | 89 | 77 - 120 | 3 | 20 |
| 1,4-Dichlorobenzene | ND | | 200 | 182 | | ug/L | | 91 | 78 - 124 | 3 | 20 |
| 2-Butanone (MEK) | ND | | 1000 | 795 | | ug/L | | 80 | 57 - 140 | 1 | 20 |
| 2-Hexanone | ND | | 1000 | 874 | | ug/L | | 87 | 65 - 127 | 2 | 15 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 1000 | 868 | | ug/L | | 87 | 71 - 125 | 1 | 35 |
| Acetone | ND | | 1000 | 736 | | ug/L | | 74 | 56 - 142 | 2 | 15 |
| Benzene | ND | | 200 | 196 | | ug/L | | 98 | 71 - 124 | 2 | 13 |
| Bromodichloromethane | ND | | 200 | 193 | | ug/L | | 97 | 80 - 122 | 2 | 15 |
| Bromoform | ND | | 200 | 162 | | ug/L | | 81 | 61 - 132 | 3 | 15 |
| Bromomethane | ND | | 200 | 181 | | ug/L | | 90 | 55 - 144 | 2 | 15 |
| Carbon disulfide | ND | | 200 | 160 | | ug/L | | 80 | 59 - 134 | 4 | 15 |
| Carbon tetrachloride | ND | | 200 | 212 | | ug/L | | 106 | 72 - 134 | 4 | 15 |
| Chlorobenzene | ND | | 200 | 185 | | ug/L | | 93 | 80 - 120 | 1 | 25 |
| Chloroethane | ND | | 200 | 189 | | ug/L | | 95 | 69 - 136 | 4 | 15 |
| Chloroform | ND | | 200 | 189 | | ug/L | | 95 | 73 - 127 | 3 | 20 |
| Chloromethane | ND | | 200 | 200 | | ug/L | | 100 | 68 - 124 | 5 | 15 |
| cis-1,2-Dichloroethene | ND | | 200 | 190 | | ug/L | | 95 | 74 - 124 | 2 | 15 |
| cis-1,3-Dichloropropene | ND | | 200 | 187 | | ug/L | | 93 | 74 - 124 | 1 | 15 |
| Cyclohexane | ND | | 200 | 223 | | ug/L | | 112 | 59 - 135 | 3 | 20 |
| Dibromochloromethane | ND | | 200 | 195 | | ug/L | | 97 | 75 - 125 | 1 | 15 |
| Dichlorodifluoromethane | ND | | 200 | 160 | | ug/L | | 80 | 59 - 135 | 4 | 20 |
| Ethylbenzene | ND | | 200 | 188 | | ug/L | | 94 | 77 - 123 | 0 | 15 |
| Isopropylbenzene | ND | | 200 | 189 | | ug/L | | 95 | 77 - 122 | 6 | 20 |
| Methyl acetate | ND | | 400 | 327 | | ug/L | | 82 | 74 - 133 | 2 | 20 |
| Methyl tert-butyl ether | ND | | 200 | 177 | | ug/L | | 88 | 77 - 120 | 2 | 37 |
| Methylcyclohexane | ND | | 200 | 194 | | ug/L | | 97 | 68 - 134 | 3 | 20 |
| Methylene Chloride | 11 | | 200 | 184 | | ug/L | | 86 | 75 - 124 | 3 | 15 |
| Styrene | ND | | 200 | 184 | | ug/L | | 92 | 80 - 120 | 0 | 20 |
| Tetrachloroethene | ND | | 200 | 186 | | ug/L | | 93 | 74 - 122 | 4 | 20 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 480-154498-5 MSD**
**Matrix: Water**
**Analysis Batch: 476659**

**Client Sample ID: Influent 060519**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Toluene | ND | | 200 | 186 | | ug/L | | 93 | 80 - 122 | 0 | 15 |
| trans-1,2-Dichloroethene | ND | | 200 | 180 | | ug/L | | 90 | 73 - 127 | 8 | 20 |
| trans-1,3-Dichloropropene | ND | | 200 | 176 | | ug/L | | 88 | 80 - 120 | 3 | 15 |
| Trichloroethene | 330 | | 200 | 505 | | ug/L | | 89 | 74 - 123 | 3 | 16 |
| Trichlorofluoromethane | ND | | 200 | 200 | | ug/L | | 100 | 62 - 150 | 4 | 20 |
| Vinyl chloride | ND | | 200 | 205 | | ug/L | | 102 | 65 - 133 | 5 | 15 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *104* | | *77 - 120* |
| *4-Bromofluorobenzene (Surr)* | *94* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *100* | | *75 - 123* |
| *Toluene-d8 (Surr)* | *94* | | *80 - 120* |

## Method: 6010C - Metals (ICP)

**Lab Sample ID: MB 480-476566/1-A**
**Matrix: Water**
**Analysis Batch: 477794**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 476566**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | ND | | 0.010 | 0.0015 | mg/L | | 06/07/19 08:36 | 06/13/19 21:38 | 1 |

**Lab Sample ID: LCS 480-476566/2-A**
**Matrix: Water**
**Analysis Batch: 477794**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 476566**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Zinc | 0.200 | 0.201 | | mg/L | | 100 | 80 - 120 |

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 480-476690/1-A**
**Matrix: Water**
**Analysis Batch: 476809**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 476690**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.00020 | 0.00012 | mg/L | | 06/07/19 11:51 | 06/07/19 14:32 | 1 |

**Lab Sample ID: LCS 480-476690/2-A**
**Matrix: Water**
**Analysis Batch: 476809**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 476690**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 0.00667 | 0.00655 | | mg/L | | 98 | 80 - 120 |

## Method: 7470A - Mercury (CVAA) (Continued)

**Lab Sample ID: MB 480-476691/1-A**
**Matrix: Water**
**Analysis Batch: 476809**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 476691**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.00020 | 0.00012 | mg/L | | 06/07/19 11:51 | 06/07/19 15:09 | 1 |

**Lab Sample ID: LCS 480-476691/2-A**
**Matrix: Water**
**Analysis Batch: 476809**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 476691**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 0.00667 | 0.00657 | | mg/L | | 98 | 80 - 120 |

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 480-477352/1**
**Matrix: Water**
**Analysis Batch: 477352**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 1.0 | 1.0 | mg/L | | | 06/12/19 08:20 | 1 |

**Lab Sample ID: LCS 480-477352/2**
**Matrix: Water**
**Analysis Batch: 477352**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 260 | 253.6 | | mg/L | | 97 | 88 - 110 |

## Method: SM2540 C - Total Dissolved Solids

**Lab Sample ID: MB 480-477218/1**
**Matrix: Water**
**Analysis Batch: 477218**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | ND | | 10.0 | 4.0 | mg/L | | | 06/11/19 12:35 | 1 |

**Lab Sample ID: LCS 480-477218/2**
**Matrix: Water**
**Analysis Batch: 477218**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 501 | 483.0 | | mg/L | | 97 | 85 - 115 |

## GC/MS VOA

### Analysis Batch: 476433

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-154498-2 | Between Carbons 060519 | Total/NA | Water | 8260C | |
| 480-154498-5 | Influent 060519 | Total/NA | Water | 8260C | |
| MB 480-476433/7 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-476433/5 | Lab Control Sample | Total/NA | Water | 8260C | |

### Analysis Batch: 476659

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-154498-4 | Effluent 060519 | Total/NA | Water | 8260C | |
| 480-154498-5 - DL | Influent 060519 | Total/NA | Water | 8260C | |
| MB 480-476659/7 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-476659/5 | Lab Control Sample | Total/NA | Water | 8260C | |
| 480-154498-5 MS | Influent 060519 | Total/NA | Water | 8260C | |
| 480-154498-5 MSD | Influent 060519 | Total/NA | Water | 8260C | |

## Metals

### Prep Batch: 476566

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-154498-1 | Effluent 060519 | Total/NA | Water | 3005A | |
| 480-154498-3 | Influent 060519 | Total/NA | Water | 3005A | |
| MB 480-476566/1-A | Method Blank | Total/NA | Water | 3005A | |
| LCS 480-476566/2-A | Lab Control Sample | Total/NA | Water | 3005A | |

### Prep Batch: 476690

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-154498-1 | Effluent 060519 | Total/NA | Water | 7470A | |
| MB 480-476690/1-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 480-476690/2-A | Lab Control Sample | Total/NA | Water | 7470A | |

### Prep Batch: 476691

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-154498-3 | Influent 060519 | Total/NA | Water | 7470A | |
| MB 480-476691/1-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 480-476691/2-A | Lab Control Sample | Total/NA | Water | 7470A | |

### Analysis Batch: 476809

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-154498-1 | Effluent 060519 | Total/NA | Water | 7470A | 476690 |
| 480-154498-3 | Influent 060519 | Total/NA | Water | 7470A | 476691 |
| MB 480-476690/1-A | Method Blank | Total/NA | Water | 7470A | 476690 |
| MB 480-476691/1-A | Method Blank | Total/NA | Water | 7470A | 476691 |
| LCS 480-476690/2-A | Lab Control Sample | Total/NA | Water | 7470A | 476690 |
| LCS 480-476691/2-A | Lab Control Sample | Total/NA | Water | 7470A | 476691 |

### Analysis Batch: 477794

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-154498-1 | Effluent 060519 | Total/NA | Water | 6010C | 476566 |
| 480-154498-3 | Influent 060519 | Total/NA | Water | 6010C | 476566 |
| MB 480-476566/1-A | Method Blank | Total/NA | Water | 6010C | 476566 |
| LCS 480-476566/2-A | Lab Control Sample | Total/NA | Water | 6010C | 476566 |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154498-1

## General Chemistry

### Analysis Batch: 477218

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-154498-1 | Effluent 060519 | Total/NA | Water | SM2540 C | |
| MB 480-477218/1 | Method Blank | Total/NA | Water | SM2540 C | |
| LCS 480-477218/2 | Lab Control Sample | Total/NA | Water | SM2540 C | |

### Analysis Batch: 477352

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-154498-1 | Effluent 060519 | Total/NA | Water | SM 2540D | |
| MB 480-477352/1 | Method Blank | Total/NA | Water | SM 2540D | |
| LCS 480-477352/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Job ID: 480-154498-1
Project/Site: Former Accurate Die Cast

## Client Sample ID: Effluent 060519
**Lab Sample ID: 480-154498-1**
**Date Collected: 06/05/19 07:20**
**Matrix: Water**
**Date Received: 06/06/19 05:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3005A | | | 476566 | 06/07/19 08:36 | EMB | TAL BUF |
| Total/NA | Analysis | 6010C | | 1 | 477794 | 06/13/19 23:05 | AMH | TAL BUF |
| Total/NA | Prep | 7470A | | | 476690 | 06/07/19 11:51 | BMB | TAL BUF |
| Total/NA | Analysis | 7470A | | 1 | 476809 | 06/07/19 15:08 | BMB | TAL BUF |
| Total/NA | Analysis | SM 2540D | | 1 | 477352 | 06/12/19 08:20 | RAF | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 477218 | 06/11/19 12:35 | RAF | TAL BUF |

## Client Sample ID: Between Carbons 060519
**Lab Sample ID: 480-154498-2**
**Date Collected: 06/05/19 07:20**
**Matrix: Water**
**Date Received: 06/06/19 05:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 476433 | 06/06/19 14:25 | KMN | TAL BUF |

## Client Sample ID: Influent 060519
**Lab Sample ID: 480-154498-3**
**Date Collected: 06/05/19 07:20**
**Matrix: Water**
**Date Received: 06/06/19 05:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3005A | | | 476566 | 06/07/19 08:36 | EMB | TAL BUF |
| Total/NA | Analysis | 6010C | | 1 | 477794 | 06/13/19 23:09 | AMH | TAL BUF |
| Total/NA | Prep | 7470A | | | 476691 | 06/07/19 11:51 | BMB | TAL BUF |
| Total/NA | Analysis | 7470A | | 1 | 476809 | 06/07/19 15:12 | BMB | TAL BUF |

## Client Sample ID: Effluent 060519
**Lab Sample ID: 480-154498-4**
**Date Collected: 06/05/19 07:20**
**Matrix: Water**
**Date Received: 06/06/19 05:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 476659 | 06/07/19 12:03 | AEM | TAL BUF |

## Client Sample ID: Influent 060519
**Lab Sample ID: 480-154498-5**
**Date Collected: 06/05/19 07:20**
**Matrix: Water**
**Date Received: 06/06/19 05:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 476433 | 06/06/19 13:32 | KMN | TAL BUF |
| Total/NA | Analysis | 8260C | DL | 8 | 476659 | 06/07/19 12:27 | AEM | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-154498-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154498-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260C | Volatile Organic Compounds by GC/MS | SW846 | TAL BUF |
| 6010C | Metals (ICP) | SW846 | TAL BUF |
| 7470A | Mercury (CVAA) | SW846 | TAL BUF |
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL BUF |
| SM2540 C | Total Dissolved Solids | SM18 | TAL BUF |
| 3005A | Preparation, Total Metals | SW846 | TAL BUF |
| 5030C | Purge and Trap | SW846 | TAL BUF |
| 7470A | Preparation, Mercury | SW846 | TAL BUF |

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154498-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 480-154498-1 | Effluent 060519 | Water | 06/05/19 07:20 | 06/06/19 05:00 | |
| 480-154498-2 | Between Carbons 060519 | Water | 06/05/19 07:20 | 06/06/19 05:00 | |
| 480-154498-3 | Influent 060519 | Water | 06/05/19 07:20 | 06/06/19 05:00 | |
| 480-154498-4 | Effluent 060519 | Water | 06/05/19 07:20 | 06/06/19 05:00 | |
| 480-154498-5 | Influent 060519 | Water | 06/05/19 07:20 | 06/06/19 05:00 | |

**Eurofins TestAmerica, Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

# Chain of Custody Record

eurofins | Environment Testing TestAmerica

**Client Information**

| | | | | |
|---|---|---|---|---|
| Client Contact: Mr. Yuri Veliz | Sampler: MARTIN Koenecke | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): Syracuse #225 | COC No: 480-122345-10589.1 |
| Company: O'Brien & Gere Inc of North America | Phone: 315-729-1300 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Address: 333 West Washington St. PO BOX 4873 | Due Date Requested: | | | Job #: |
| City: East Syracuse | TAT Requested (days): | | | |
| State, Zip: NY, 13221 | | | | |
| Phone: 315-956-6100(Tel) 315-463-7554(Fax) | PO #: 11900114 | | | |
| Email: Yuri.Veliz@obg.com | WO #: | | | |
| Project Name: Former Accurate Die Cast | Project #: 48008584 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

480-154498 Chain of Custody

Preservation Codes:
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)
J - DI Water
K - EDTA
L - EDA
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 2540D - Total Suspended Solids | 2540C_Calcd - Total Dissolved Solids | 8260C - Volatile Organic Compounds | 6010C - Zinc | 7470A - Mercury | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Preservation Code: | | | | | X | X | N | N | A | D | D | X | |
| Effluent 060519 | 6-5-19 | 7:20 | C | Water | | | 1 | 1 | | 1 | 1 | 4 | |
| Between Carbons 060519 | 6-5-19 | 7:20 | G | Water | | | | | 3 | | | 3 | |
| Inffluent 060519 | 6-5-19 | 7:20 | C | Water | | | | | | 1 | 1 | 2 | |
| Effluent 060519 | 6-5-19 | 7:20 | G | water | | | | | 3 | | | 3 | |
| Influent 060519 | 6-5-19 | 7:20 | G | WATER | | | | | 3 | | | 3 | |
| Rec 6-5-19 | | | | | | | | | | | | | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)***
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| | | | |
|---|---|---|---|
| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
| Relinquished by: Matt Koenecke | Date/Time: 6-5-19 / 12:55 | Company: OBG | Received by: Rec 6-5-19 | Date/Time: 6-5-19, 13:55 | Company: Syr |
| Relinquished by: Rec 6-5-19 | Date/Time: 6-5-19, 19:00 | Company: Syr | Received by: | Date/Time: 06/06/19 0800 | Company |
| Relinquished by: | Date/Time: | Company: | Received by: | Date/Time: | Company |

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.9 #1

V. 6/6/2019

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-154498-1

**Login Number: 154498**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Velickovic, Zoran**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | OBG |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | N/A | |
| Chlorine Residual checked. | N/A | |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-154898-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

*Authorized for release by:*
*6/25/2019 5:38:07 PM*
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

# Table of Contents

# Definitions/Glossary

Client: O'Brien & Gere Inc of North America
Job ID: 480-154898-1
Project/Site: Former Accurate Die Cast

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Case Narrative

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154898-1

## Job ID: 480-154898-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-154898-1**

**Receipt**
The sample was received on 6/12/2019 8:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154898-1

## Client Sample ID: EFFLUENT 061119

## Lab Sample ID: 480-154898-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 617 | | 10.0 | 4.0 | mg/L | 1 | | SM2540 C | Total/NA |

This Detection Summary does not include radiochemical test results.

# Client Sample Results

Client: O'Brien & Gere Inc of North America
Job ID: 480-154898-1
Project/Site: Former Accurate Die Cast

**Client Sample ID: EFFLUENT 061119**
**Lab Sample ID: 480-154898-1**
**Date Collected: 06/11/19 07:20**
**Matrix: Water**
**Date Received: 06/12/19 08:00**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **617** | | 10.0 | 4.0 | mg/L | | | 06/17/19 09:53 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 4.0 | 4.0 | mg/L | | | 06/17/19 08:39 | 1 |

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154898-1

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 480-478072/1**
**Matrix: Water**
**Analysis Batch: 478072**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 1.0 | 1.0 | mg/L | | | 06/17/19 08:39 | 1 |

**Lab Sample ID: LCS 480-478072/2**
**Matrix: Water**
**Analysis Batch: 478072**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | | | 274 | 266.4 | | mg/L | | 97 | 88 - 110 | | |

## Method: SM2540 C - Total Dissolved Solids

**Lab Sample ID: MB 480-478083/1**
**Matrix: Water**
**Analysis Batch: 478083**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | ND | | 10.0 | 4.0 | mg/L | | | 06/17/19 09:53 | 1 |

**Lab Sample ID: LCS 480-478083/2**
**Matrix: Water**
**Analysis Batch: 478083**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | | | 501 | 483.0 | | mg/L | | 97 | 85 - 115 | | |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154898-1

## General Chemistry

### Analysis Batch: 478072

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-154898-1 | EFFLUENT 061119 | Total/NA | Water | SM 2540D | |
| MB 480-478072/1 | Method Blank | Total/NA | Water | SM 2540D | |
| LCS 480-478072/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |

### Analysis Batch: 478083

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-154898-1 | EFFLUENT 061119 | Total/NA | Water | SM2540 C | |
| MB 480-478083/1 | Method Blank | Total/NA | Water | SM2540 C | |
| LCS 480-478083/2 | Lab Control Sample | Total/NA | Water | SM2540 C | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Job ID: 480-154898-1
Project/Site: Former Accurate Die Cast

**Client Sample ID: EFFLUENT 061119**
**Lab Sample ID: 480-154898-1**
**Date Collected: 06/11/19 07:20**
**Matrix: Water**
**Date Received: 06/12/19 08:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540D | | 1 | 478072 | 06/17/19 08:39 | RAF | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 478083 | 06/17/19 09:53 | CSS | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-154898-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154898-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL BUF |
| SM2540 C | Total Dissolved Solids | SM18 | TAL BUF |

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-154898-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 480-154898-1 | EFFLUENT 061119 | Water | 06/11/19 07:20 | 06/12/19 08:00 | |

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**Client Information**
Client Contact: Mr. Yuri Veliz
Company: O'Brien & Gere Inc of North America
Address: 333 West Washington St. PO BOX 4873
City: East Syracuse
State, Zip: NY, 13221
Phone: 315-956-6100(Tel) 315-463-7554(Fax)
Email: Yuri.Veliz@obg.com
Project Name: Former Accurate Die Cast
Site:

Sampler: MARTIN Koennecke
Phone: 315-729-1300
Due Date Requested:
TAT Requested (days):
PO #: 11800225
WO #:
Project #: 48008584
SSOW#:

Lab PM: Deyo, Melissa L
E-Mail: melissa.deyo@testamericainc.com
Carrier Tracking No(s):

Syracuse #225

COC No: 480-120188-10586.1
Page: Page 1 of 1
Job #:

**Analysis Requested**

Preservation Codes:
A - HCL M - Hexane
B - NaOH N - None
C - Zn Acetate O - AsNaO2
D - Nitric Acid P - Na2O4S

480-154898 Chain of Custody

Irate

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 2540D - Total Suspended Solids | 2540C_Calcd - Total Dissolved Solids | Total Number of | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | N | | |
| Effluent 061119 | 6-11-19 | 7:20 | C | Water | | | 1 | 1 | 2 | |

RE
6-11-19

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: Time: Method of Shipment:

| | Date/Time | Company | | Date/Time | Company |
|---|---|---|---|---|---|
| Relinquished by: Martin Koennecke | 6-11-19 / 9:55 | OBG | Received by: MIST | 7:35 | 6-11-19 |
| Relinquished by: RE 6/11/19 | 6-11-19, 19:00 | Syr | Received by: | 06/12/19 0800 | TA |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 3.0 #1 ICE

Ver: 08/04/2016

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-154898-1

**Login Number: 154898**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Kolb, Chris M**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | N/A | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | OBG |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | True | |
| Chlorine Residual checked. | N/A | |

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# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-155128-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

*Authorized for release by:*
*7/2/2019 11:49:26 AM*
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com



*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

# Table of Contents

# Definitions/Glossary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-155128-1

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Job ID: 480-155128-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-155128-1**

**Receipt**
The samples were received on 6/18/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4º C.

**GC/MS VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-155128-1

## Client Sample ID: EFFLUENT 061719 — Lab Sample ID: 480-155128-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 647 | | 10.0 | 4.0 | mg/L | 1 | | SM2540 C | Total/NA |

## Client Sample ID: EFFLUENT 061719 — Lab Sample ID: 480-155128-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

## Client Sample ID: EFFLUENT 061719
**Lab Sample ID: 480-155128-1**
**Date Collected: 06/17/19 07:15**
**Matrix: Water**
**Date Received: 06/18/19 09:00**

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **647** | | 10.0 | 4.0 | mg/L | | | 06/21/19 08:25 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 4.0 | 4.0 | mg/L | | | 06/21/19 10:01 | 1 |

## Client Sample ID: EFFLUENT 061719
**Lab Sample ID: 480-155128-2**
**Date Collected: 06/17/19 07:15**
**Matrix: Water**
**Date Received: 06/18/19 09:00**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 06/20/19 13:53 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 06/20/19 13:53 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 06/20/19 13:53 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 06/20/19 13:53 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 06/20/19 13:53 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 06/20/19 13:53 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 06/20/19 13:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *105* | | *77 - 120* | | *06/20/19 13:53* | *1* |
| *4-Bromofluorobenzene (Surr)* | *86* | | *73 - 120* | | *06/20/19 13:53* | *1* |
| *Toluene-d8 (Surr)* | *92* | | *80 - 120* | | *06/20/19 13:53* | *1* |
| *Dibromofluoromethane (Surr)* | *104* | | *75 - 123* | | *06/20/19 13:53* | *1* |

# Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-155128-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | TOL | DBFM |
| Lab Sample ID | Client Sample ID | (77-120) | (73-120) | (80-120) | (75-123) |
| 480-155128-2 | EFFLUENT 061719 | 105 | 86 | 92 | 104 |
| LCS 480-478721/5 | Lab Control Sample | 98 | 85 | 98 | 92 |
| MB 480-478721/7 | Method Blank | 103 | 80 | 93 | 95 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 480-478721/7**
**Matrix: Water**
**Analysis Batch: 478721**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.21 | ug/L | | | 06/20/19 10:54 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.81 | ug/L | | | 06/20/19 10:54 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.44 | ug/L | | | 06/20/19 10:54 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.36 | ug/L | | | 06/20/19 10:54 | 1 |
| Toluene | ND | | 1.0 | 0.51 | ug/L | | | 06/20/19 10:54 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.90 | ug/L | | | 06/20/19 10:54 | 1 |
| Trichloroethene | ND | | 1.0 | 0.46 | ug/L | | | 06/20/19 10:54 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *77 - 120* | | *06/20/19 10:54* | *1* |
| *4-Bromofluorobenzene (Surr)* | *80* | | *73 - 120* | | *06/20/19 10:54* | *1* |
| *Toluene-d8 (Surr)* | *93* | | *80 - 120* | | *06/20/19 10:54* | *1* |
| *Dibromofluoromethane (Surr)* | *95* | | *75 - 123* | | *06/20/19 10:54* | *1* |

**Lab Sample ID: LCS 480-478721/5**
**Matrix: Water**
**Analysis Batch: 478721**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | 25.0 | 28.7 | | ug/L | | 115 | 76 - 120 |
| cis-1,2-Dichloroethene | 25.0 | 22.6 | | ug/L | | 90 | 74 - 124 |
| Methylene Chloride | 25.0 | 24.7 | | ug/L | | 99 | 75 - 124 |
| Tetrachloroethene | 25.0 | 21.2 | | ug/L | | 85 | 74 - 122 |
| Toluene | 25.0 | 24.2 | | ug/L | | 97 | 80 - 122 |
| trans-1,2-Dichloroethene | 25.0 | 24.7 | | ug/L | | 99 | 73 - 127 |
| Trichloroethene | 25.0 | 24.2 | | ug/L | | 97 | 74 - 123 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *98* | | *77 - 120* |
| *4-Bromofluorobenzene (Surr)* | *85* | | *73 - 120* |
| *Toluene-d8 (Surr)* | *98* | | *80 - 120* |
| *Dibromofluoromethane (Surr)* | *92* | | *75 - 123* |

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 480-479010/1**
**Matrix: Water**
**Analysis Batch: 479010**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 1.0 | 1.0 | mg/L | | | 06/21/19 10:01 | 1 |

**Lab Sample ID: LCS 480-479010/2**
**Matrix: Water**
**Analysis Batch: 479010**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 272 | 268.8 | | mg/L | | 99 | 88 - 110 |

## Method: SM2540 C - Total Dissolved Solids

**Lab Sample ID: MB 480-478978/1**
**Matrix: Water**
**Analysis Batch: 478978**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | ND | | 10.0 | 4.0 | mg/L | | | 06/21/19 08:25 | 1 |

**Lab Sample ID: LCS 480-478978/2**
**Matrix: Water**
**Analysis Batch: 478978**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | | | 501 | 516.0 | | mg/L | | 103 | 85 - 115 | | |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-155128-1
Project/Site: Former Accurate Die Cast

## GC/MS VOA

### Analysis Batch: 478721

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-155128-2 | EFFLUENT 061719 | Total/NA | Water | 8260C | |
| MB 480-478721/7 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-478721/5 | Lab Control Sample | Total/NA | Water | 8260C | |

## General Chemistry

### Analysis Batch: 478978

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-155128-1 | EFFLUENT 061719 | Total/NA | Water | SM2540 C | |
| MB 480-478978/1 | Method Blank | Total/NA | Water | SM2540 C | |
| LCS 480-478978/2 | Lab Control Sample | Total/NA | Water | SM2540 C | |

### Analysis Batch: 479010

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-155128-1 | EFFLUENT 061719 | Total/NA | Water | SM 2540D | |
| MB 480-479010/1 | Method Blank | Total/NA | Water | SM 2540D | |
| LCS 480-479010/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-155128-1

## Client Sample ID: EFFLUENT 061719

**Lab Sample ID: 480-155128-1**

**Date Collected: 06/17/19 07:15**

**Matrix: Water**

**Date Received: 06/18/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540D | | 1 | 479010 | 06/21/19 10:01 | CSS | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 478978 | 06/21/19 08:25 | CSS | TAL BUF |

## Client Sample ID: EFFLUENT 061719

**Lab Sample ID: 480-155128-2**

**Date Collected: 06/17/19 07:15**

**Matrix: Water**

**Date Received: 06/18/19 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 478721 | 06/20/19 13:53 | OMI | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-155128-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-155128-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260C | Volatile Organic Compounds by GC/MS | SW846 | TAL BUF |
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL BUF |
| SM2540 C | Total Dissolved Solids | SM18 | TAL BUF |
| 5030C | Purge and Trap | SW846 | TAL BUF |

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-155128-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 480-155128-1 | EFFLUENT 061719 | Water | 06/17/19 07:15 | 06/18/19 09:00 | |
| 480-155128-2 | EFFLUENT 061719 | Water | 06/17/19 07:15 | 06/18/19 09:00 | |

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

TestAmerica Syracuse — THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: MARTIN Koennecke | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): #225 | COC No: 480-122348-10587.1 |
|---|---|---|---|---|
| Client Contact: Mr. Yuri Veliz | Phone: 315-729-1300 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Company: O'Brien & Gere Inc of North America | | | | Job #: |
| Address: 333 West Washington St. PO BOX 4873 | Due Date Requested: | | | |
| City: East Syracuse | TAT Requested (days): | | | |
| State, Zip: NY, 13221 | | | | |
| Phone: 315-956-6100(Tel) 315-463-7554(Fax) | PO #: 11800225 | | | |
| Email: Yuri.Veliz@obg.com | WO #: | | | |
| Project Name: Former Accurate Die Cast | Project #: 48008584 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 2540D - Total Suspended Solids | 2540C_Calcd - Total Dissolved Solids | 8260C - Volatile Organic Compounds | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | N | A | | |
| Effluent 06 17 19 | 6-17-19 | 7:15 | C | Water | | | 1 | 1 | | 2 | |
| Effluent 06 17 19 | 6-17-19 | 7:15 | G | W | | | | | 3 | 3 | |

Re 6-17-19

480-155128 Chain of Custody

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Martin Koennecke | 6-17-19 / 9:50 | OBG | DALSXC | 6-17-19 | 9:50 |
| 2 | RELINQ 1 | 6-17-19, 19:00 | Syr | | 6/18/19 0900 | TMS. |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: #1 2.4°C |
|---|---|---|

Ver: 08/04/2016

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-155128-1

**Login Number: 155128**
**List Number: 1**
**Creator: Hulbert, Michael J**

**List Source: Eurofins TestAmerica, Buffalo**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | OBG |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | N/A | |
| Chlorine Residual checked. | N/A | |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-155377-1
Client Project/Site: Former Accurate Die Cast

For:
O'Brien & Gere Inc of North America
333 West Washington St.
PO BOX 4873
East Syracuse, New York 13221

Attn: Mr. David J Carnevale

*Authorized for release by:*
*7/9/2019 5:28:14 PM*
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

# Table of Contents

Client: O'Brien & Gere Inc of North America
Job ID: 480-155377-1
Project/Site: Former Accurate Die Cast

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Case Narrative

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-155377-1

## Job ID: 480-155377-1

### Laboratory: Eurofins TestAmerica, Buffalo

**Narrative**

**Job Narrative**
**480-155377-1**

**Receipt**
The sample was received on 6/25/2019 8:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-155377-1

## Client Sample ID: EFFLUENT

## Lab Sample ID: 480-155377-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 617 | | 10.0 | 4.0 | mg/L | 1 | | SM2540 C | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: O'Brien & Gere Inc of North America
Job ID: 480-155377-1
Project/Site: Former Accurate Die Cast

**Client Sample ID: EFFLUENT**
**Lab Sample ID: 480-155377-1**
**Date Collected: 06/24/19 07:15**
**Matrix: Water**
**Date Received: 06/25/19 08:00**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **617** | | 10.0 | 4.0 | mg/L | | | 06/28/19 10:44 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 4.0 | 4.0 | mg/L | | | 06/27/19 10:07 | 1 |

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-155377-1

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 480-479919/1**
**Matrix: Water**
**Analysis Batch: 479919**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 1.0 | 1.0 | mg/L | | | 06/27/19 10:07 | 1 |

**Lab Sample ID: LCS 480-479919/2**
**Matrix: Water**
**Analysis Batch: 479919**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 256 | 253.6 | | mg/L | | 99 | 88 - 110 |

## Method: SM2540 C - Total Dissolved Solids

**Lab Sample ID: MB 480-480138/1**
**Matrix: Water**
**Analysis Batch: 480138**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | ND | | 10.0 | 4.0 | mg/L | | | 06/28/19 10:44 | 1 |

**Lab Sample ID: LCS 480-480138/2**
**Matrix: Water**
**Analysis Batch: 480138**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 501 | 478.0 | | mg/L | | 95 | 85 - 115 |

# QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-155377-1

## General Chemistry

### Analysis Batch: 479919

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-155377-1 | EFFLUENT | Total/NA | Water | SM 2540D | |
| MB 480-479919/1 | Method Blank | Total/NA | Water | SM 2540D | |
| LCS 480-479919/2 | Lab Control Sample | Total/NA | Water | SM 2540D | |

### Analysis Batch: 480138

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-155377-1 | EFFLUENT | Total/NA | Water | SM2540 C | |
| MB 480-480138/1 | Method Blank | Total/NA | Water | SM2540 C | |
| LCS 480-480138/2 | Lab Control Sample | Total/NA | Water | SM2540 C | |

# Lab Chronicle

Client: O'Brien & Gere Inc of North America
Job ID: 480-155377-1
Project/Site: Former Accurate Die Cast

**Client Sample ID: EFFLUENT**
**Lab Sample ID: 480-155377-1**
**Date Collected: 06/24/19 07:15**
**Matrix: Water**
**Date Received: 06/25/19 08:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540D | | 1 | 479919 | 06/27/19 10:07 | RAF | TAL BUF |
| Total/NA | Analysis | SM2540 C | | 1 | 480138 | 06/28/19 10:44 | CSS | TAL BUF |

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Accreditation/Certification Summary

Client: O'Brien & Gere Inc of North America
Job ID: 480-155377-1
Project/Site: Former Accurate Die Cast

## Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| New York | NELAP | 2 | 10026 | 03-31-20 |

# Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-155377-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL BUF |
| SM2540 C | Total Dissolved Solids | SM18 | TAL BUF |

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

**Laboratory References:**

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-155377-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 480-155377-1 | EFFLUENT | Water | 06/24/19 07:15 | 06/25/19 08:00 | |

**Eurofins TestAmerica, Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

eurofins | Environment Testing TestAmerica

| Client Information | Sampler: MARTin Koenecke | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): Syracuse #225 | COC No: 480-122370-10586.1 |
|---|---|---|---|---|
| Client Contact: Mr. Yuri Veliz | Phone: 315-729-1300 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Company: O'Brien & Gere Inc of North America | | Analysis Requested | | Job #: |
| Address: 333 West Washington St. PO BOX 4873 | Due Date Requested: | | | |
| City: East Syracuse | TAT Requested (days): | | | |
| State, Zip: NY, 13221 | | | | |
| Phone: 315-956-6100(Tel) 315-463-7554(Fax) | PO #: 11900114 | | | |
| Email: Yuri.Veliz@obg.com | WO #: | | | |
| Project Name: Former Accurate Die Cast | Project #: 48008584 | | | |
| Site: | SSOW#: | | | |

480-155377 Chain of Custody

I - Ice
J - DI Water
K - EDTA
L - EDA
V - MCAA
W - pH 4-5
Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 2540D - Total Suspended Solids | 2540C_Calcd - Total Dissolved Solids | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | N | | |
| Effluent 062419 | 6-24-19 | 7:15 | C | Water | | | 1 | 1 | 2 | |

Rec 6-24-19

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|
| Martin Koenecke | 6-24-19 / 940 | OBG | REHglish | 6-24-19 09:40 | SYR |
| REHglish | 6-24-19, 19:00 | SYR | C Wallace | 6/25/19 0800 | TAB |
| | | | | | |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: #1 3.4 |
|---|---|---|

Ver: 01/16/2019

# Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-155377-1

**Login Number: 155377**

**List Source: Eurofins TestAmerica, Buffalo**

**List Number: 1**

**Creator: Wallace, Cameron**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time (Excluding tests with immediate HTs).. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | N/A | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | True | |
| Chlorine Residual checked. | N/A | |