From: King, Justin <JKing@trccompanies.com>
Sent: Tuesday, May 05, 2020 11:18 AM
To: Spellman, John (DEC)
Cc: LaRock, Jeffrey; 'Workman, Greg'
Subject: Former Chromalloy Facility (NYSDEC Site No. 344039) - 2019 Annual Monitoring Report
Attachments: 2019 Annual Monitoring Report, Former Chromalloy Facility, West Nyack NY.pdf

John,

For your use, please find the attached 2019 Annual Monitoring Report for the Former Chromalloy Facility (NYSDEC Site No. 344039). Please don't hesitate to contact me on my cell phone number below if you have any comments, questions, or concerns. Hope all is well.

Thanks,

Justin King
Project Manager

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2019 Annual Monitoring Report

Former Chromalloy Facility
Operable Unit 1

169 Western Highway
West Nyack, Rockland County, New York 12233
NYSDEC Site No. 344039

May 5, 2020

TRC Project No. 190273.2015.0000

Prepared For:
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Submitted To:
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ACRONYMS AND ABBREVIATIONS

AGVs	Air Guideline Values
Alpha	Alpha Analytical of Westborough, Massachusetts
AMR	Annual Monitoring Report
AMSL	above mean sea level
ASP	Analytical Services Protocol
CCR	Construction Completion Report
CD	compact disk
Consent Order	Order on Consent
DPE	dual phase extraction
ECs	Emerging Contaminants
EFF	effluent
gpm	gallons per minute
HCl	hydrochloric acid
INF	influent
Lbs	pounds
MID	midfluent
MS/MSD	matrix spike and matrix spike duplicate
NYCRR	New York Code of Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDWC	New York State Drinking Water Council
OU-1	Operable Unit 1
OU-2	Operable Unit 2
O&M	operation and maintenance
PFAS	Polyfluoroalkyl Substances
P&T	pump and treat
ROD	Record of Decision
SCOs	Soil Cleanup Objectives
SMP	Site Management Plan
SVI	soil vapor intrusion
TCE	trichloroethylene
TCL	Target Compound List
TestAmerica	TestAmerica Laboratories of Amherst, New York
TOGS	Technical and Operational Guidance Series
TRC	TRC Engineers, Inc.
Sequa	Sequa Corporation
USEPA	United States Environmental Protection Agency
VOCs	volatile organic compounds

1.0 Introduction

This Annual Monitoring Report (AMR) has been prepared for the New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) to summarize the 2019 environmental monitoring and maintenance activities conducted at the former Chromalloy Facility (the "Site") and associated properties in the vicinity of Pineview Road in West Nyack, Rockland County, New York. This AMR provides a summary of remediation system operation and maintenance (O&M) activities, remediation system sampling and performance, site inspections, and groundwater monitoring events between January 1, 2018 through December 31, 2019.

1.1 Site Description

The Site has been assigned NYSDEC Site No. 344039 and encompasses areas/properties near and adjacent to the intersection of Western Highway and Pineview Road in West Nyack, Rockland County, New York. The physical Site address 169 Western Highway, West Nyack, New York. The Site is bordered to the north by residential properties, to the east by woodlands followed by the Clarkstown Landfill, to the south by commercial properties, and to the west by commercial properties followed by the Hackensack River. Maps showing the Site location and layout are provided as **Figures 1** and **2**, respectively.

1.2 Project Background

TRC Engineers, Inc. (TRC), on behalf of Sequa Corporation (Sequa), continues to manage Site remedial actions under the NYSDEC *March 1999 Record of Decision (ROD)* and *March 2001 Order on Consent (Consent Order),* between Sequa and NYSDEC for Operable Unit 1 (OU-1), to address volatile organic compounds (VOCs) in soil and groundwater. The NYSDEC approved OU-1 remedial actions include on-going pump and treat (P&T) system operations to address bedrock groundwater impacts located across the Site and dual phase extraction (DPE) system operations to treat localized shallow overburden soils and groundwater. The OU-1 remediation systems began operation in October 2002 and have shown to be effective in capturing and containing trichloroethylene (TCE) to the Site boundaries. The DPE system reached asymptotic conditions and was shut down, upon NYSDEC approval following a February 2014 Site status meeting, and will be decommissioned in accordance with the NYSDEC approved *September 2019 OU-1 DPE System Decommissioning Request* in the spring of 2020.

Environmental actions pertaining to chromium in soil for Operable Unit 2 (OU-2) were conducted under the initial NYSDEC *January 1994 Consent Order*. The *April 2017 Soil Excavation Work Plan* outlined excavation of soil areas containing concentrations of chromium exceeding 6 New York Code of Rules and Regulations (NYCRR) Part 375 Commercial Use Soil Cleanup Objectives (SCOs). Excavation activities were completed in October 2017 and the results and conclusions were submitted to the NYSDEC in the *February 2018 Construction Completion Report (CCR)*. A description of remedial alternatives to address residual chromium impacts following excavation activities were submitted to the NYSDEC in the *January 2019 Focused Feasibility Study Report*. To advance approval of the *January 2019 Focused Feasibility Study Report* and in a February 2020 letter, the NYSDEC requested additional subsurface investigation/soil

sampling activities to determine the presence/absence of chemical contaminants identified on DER-10's target analyte list and target compound list.

To monitor and assess on-going Site management activities, the Interim Site Management Plan (SMP) outlined bi-monthly system O&M tasks, quarterly P&T system performance monitoring, annual groundwater monitoring, annual site inspections, and reporting procedures. The NYSDEC approved the Interim SMP in July 2014 under the condition that a soil vapor intrusion (SVI) study be conducted within the former Chromalloy building. Initial and follow up SVI investigations were completed in December 2016 and March 2018, respectively. Results and conclusions of those activities were submitted to the NYSDEC under the *April 2017* and *July 2018 SVI Assessment Report* covers.

1.2.1 Site Monitoring Activities and Frequency

In accordance with the June 5, 2013 NYSDEC correspondence, Interim SMP, and *July 2018 SVI Assessment Report,* the current Site monitoring activities and their respective frequencies can be found below:

- Bi-monthly P&T system O&M visits;
- Quarterly P&T system performance sampling (influent, midfluent, and effluent);
- Annual Site inspection;
- Annual building use and occupancy assessment;
- Biennial groundwater sampling; and
- Biennial SVI assessment within the former Chromalloy building.

Results for each Site monitoring activity, where applicable during this monitoring period, are discussed below in the following sections.

2.0 Remediation System Operation and Maintenance

In accordance with the Interim SMP, Site P&T system O&M activities include bi-monthly visits to conduct routine and non-routine maintenance and quarterly performance sampling. P&T system routine maintenance generally includes operational checks of system pumps, process flow meters, totalizer readings, and bag filter change outs on an as needed basis. During these routine O&M visits, minor repairs are typically completed the same day or following receipt of the replacement equipment/supplies.

2.1 Pump and Treat System Operations

The P&T system has been operating efficiently. Prolonged intermittent downtime occurred from July 27, 2018 to February 18, 2019 due inoperability of the RW-1 and electrical issues with the relays and breakers. New electrical relays and breakers were installed to keep the system operational. The system was able to run sufficiently throughout this time to collect the quarterly samples and maintain treatment. For this reporting period (January 2018 through December 2019), the P&T system has treated approximately 8,786,000 gallons of groundwater at an average of 14.7 gallons per minute (gpm). A graph showing this monitoring period's cumulative gallons recovered and average recovery rate is provided on **Graph 1**.

Routine descaling of the P&T system air stripper trays were completed in November 2018. All generated waste was containerized in 55-gallon steel drums onsite for offsite disposal. On January 2, 2020, the waste was transported off-Site to American Bio Mass of Walterboro, South Carolina for disposal. The final waste manifest can be found in **Appendix A**.

2.2 Quarterly Pump and Treat System Performance Monitoring and Sampling

Between January 1, 2018 and December 31, 2019, eight rounds of quarterly performance samples were collected from the P&T system influent (INF), midfluent (MID), and effluent (EFF). All samples were submitted to TestAmerica Laboratories of Amherst, New York (TestAmerica), for the analysis of VOCs by United States Environmental Protection Agency (USEPA) Method 8260. Additionally, pursuant to the Interim SMP Effluent Limitations and Monitoring Requirements (Interim SMP, Appendix J), all collected P&T system EFF samples were submitted for the analysis of Priority Pollutant Metals by USEPA Method 200.7. Due to their number and large file size, all quarterly P&T performance sampling laboratory analytical reports are provided as **Appendix B** on a separate compact disk (CD). A summary of detected compounds for the quarterly P&T system performance samples collected during this monitoring period is provided in **Table 1**.

Based on the INF analytical results and gallons treated during this monitoring period, the P&T system has removed approximately 0.55 pounds (lbs) of VOCs from the affected aquifer. A graph depicting the 2018 to 2019 monitoring period cumulative VOC mass removed and removal rate (lbs/day) can be found on **Graph 2**. To date, the P&T system has removed an approximate total of 1,267.33 lbs of VOCs. A figure showing the cumulative VOC mass removed since 2012 is provided on **Graph 3**.

3.0 Site Inspections and Use

3.1 Site Wide Inspection

To determine compliance with the Interim SMP, an annual inspection was completed on September 20, 2019 to assess existing Site conditions and ongoing Site management. The Site-wide inspection limits, as determined by the Interim SMP, are presented on **Figure 3**. As a result of the September 2019 site inspection, no non-compliant conditions were observed. The Site-Wide Inspection Form and a photographic log can be found in **Appendix C**.

3.2 Building Use and Occupancy

In accordance with the *July 2018 SVI Assessment Report,* the building use and occupancy was evaluated annually throughout this monitoring period.

The main building located on the Site is currently used by Tarrytown Honda to stare and prepare new vehicles for sale. Cleaning and detailing operations of vehicles are limited to the southern portion of this building. A small office/vestibule is in use on the northern portion of the building. Overhead entry doors, located throughout the warehouse area of the building, typically remain open during normal business hours. There is an extension to the east side of the main building, which is occupied by Hayden Building Maintenance Corporation. Large parking areas, for the storage of cleaned/detailed cars, are located north and south of the main building.

Throughout this January 1, 2018 through December 31, 2019 monitoring period, the building use and occupancy has not generally changed from the detail indicated above.

4.0 Groundwater Monitoring

4.1 Groundwater Sampling Methodology

One site-wide groundwater monitoring event was conducted from August 6 to August 8, 2019. The event included groundwater elevation measurements for all Site monitoring wells and groundwater sampling of 20 wells, in accordance with the Interim SMP (Interim SMP, Table 5), utilizing standard low-flow sampling techniques and per the NYSDEC *Collection of Groundwater Samples for Per- and Polyfluoroalkyl Substances (PFAS) from Monitoring Wells Sample Protocol* (Revision 1.2, August 9, 2018). Following stabilization of groundwater parameters (pH, conductivity, dissolved oxygen, oxygen reduction potential, temperature, and turbidity), samples were collected in laboratory supplied glassware, placed on ice, and submitted, under chain-of-custody documentation, to Alpha Analytical of Westborough, Massachusetts (Alpha).

The groundwater samples collected August 6 to August 8, 2019 during the biennial sampling event were submitted to Alpha for the analysis of Target Compound List (TCL) VOCs by USEPA Method 8260C. Additionally, in accordance with the NYSDEC approved *August 2018 Emerging Contaminants (ECs) Work Plan*, groundwater samples collected from monitoring wells MW-1A, MW-1B, MW-5B, MW-9B, MW-12A, and MW-12B were submitted to Alpha for the analysis of PFAS (list of 21 compounds) and 1,4-dioxane by USEPA Methods 537 modified and 8270 SIM, respectively. Samples from monitoring wells MW-12B and MW-23A-D experienced a chemical reaction with the hydrochloric acid (HCl) in the preserved vials leading to an unacceptable amount of headspace within the vials. Samples from these wells were recollected on August 14, 2019 utilizing unpreserved vials and resubmitted for TCL VOCs.

Quality control samples, including matrix spike and matrix spike duplicates (MS/MSD), field duplicates, field blanks, and trip blanks were additionally collected at a frequency of 1 per 20 samples or as otherwise specified in NYSDEC guidance. All laboratory deliverables are in accordance with NYSDEC Analytical Services Protocol (ASP) Category B and were subjected to data validation by TRC.

4.2 Site Hydrogeology

As a result of the groundwater surface measurements, groundwater elevation depth in Site overburden monitoring wells ranged from 56.71 feet above mean sea level (AMSL) (MW-23A(S)) to 85.52 feet AMSL (MW-15A). Additionally, groundwater elevation depth in Site bedrock monitoring wells ranged from 57.62 feet AMSL (MW-24A(D)) to 74.26 feet AMSL (MW-16B). A summary of the groundwater elevation data, collected on August 6, 2019, can be found in **Table 2**.

The collected groundwater elevation measurements were used to generate potentiometric surface maps for the overburden and bedrock aquifers. As shown on **Figure 4**, groundwater flow in the overburden aquifer is to the north, in the direction of the Hackensack River. As shown on **Figure 5**, groundwater flow within the bedrock aquifer is north/northeast. Additionally, bedrock groundwater was also observed to flow east in the direction of RW-1 on the western portion of the Site. This shows that P&T operations are producing a

downward bedrock groundwater flow gradient towards the Site, thus preventing off-Site contaminant migration as designed.

4.3 Groundwater Analytical Results

Groundwater VOC analytical results were compared to the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA Standards and Guidance Values, June 1998. Groundwater PFAS analytical results were compared to the NYSDEC Guidelines for Sampling and Analysis of PFAS, January 2020. A summary of the groundwater sample VOC and PFAS analytical results are provided in **Tables 3** and **4**, respectively.

The summary laboratory analytical reports and associated DUSRs can be found in **Appendices D** and **E**, respectively.

4.3.1 Overburden Groundwater Sample Analytical Results

A brief overview of the overburden groundwater sample analytical results is provided below. The groundwater sample locations including analytes exceeding their respective Groundwater Quality Standard (GWQS), as stated above, can be found on **Figure 4**.

4.3.1.1 Volatile Organic Compounds

Of the five overburden groundwater samples submitted for analysis, only two samples (MW-12A and MW-23A(S)) contained concentrations of one or two VOCs exceeding their respective Class GA GWQS. Of these compounds, the highest measurement in each sample was vinyl chloride at a concentration of 3.8 micrograms per liter (µg/L) (MW-23A(S)) and 310 µg/L (MW-12A), which both exceed the Class GA GWQS of 2 µg/L.

1,4-dioxane was only detected in one of the two samples submitted for ECs at a concentration of 0.422 µg/L (MW-12A).

4.3.1.2 Per- and Polyfluoroalkyl Substances

Of the two overburden groundwater samples submitted for analysis of ECs, PFAS compounds were detected in both. Perfluoroocatanoic acid (PFOS), the highest measured compound in both samples, was detected at a concentration of 59.2 nanograms per liter (ng/L) (MW-12A) and 256 ng/L (MW-01A), which both exceed its respective GWQS of 10 ng/L. Total detected PFAS in the two samples was 111.201 ng/L (MW-12A) and 403.13 ng/L (MW-01A), which are both below its respective GWQS of 500 ng/L.

4.3.2 Bedrock Groundwater Sample Analytical Results

An overview of the bedrock groundwater sample analytical results is provided below. The groundwater sample locations including analytes exceeding their respective GWQS can be found on **Figure 5**.

4.3.2.1 Volatile Organic Compounds

Of the 15 bedrock groundwater samples submitted for analysis, 9 samples contained detections of VOCs exceeding their respective GWQS. Of these samples, TCE, was generally detected at the highest concentration and is a primary Site contaminant of concern (COC), exceeded its respective GWQS of 5 µg/L in 7 samples, of which ranged in concentration from 7.4 µg/L (MW-24A(D)) to 13,000 µg/L (MW-01B). Cis-1,2-dichloroethene, another Site COC, exceeded its respective GWQS of 5 µg/L in 6 samples, of which ranged in concentration from 5.3 µg/L (MW-24A(D)) to 470 µg/L (MW-01B).

1,4-dioxane was detected in all four samples submitted for ECs and ranged in concentration from 0.0677 µg/L (MW-01B) to 0.486 µg/L (MW-12B).

4.3.2.2 Per- and Polyfluoroalkyl Substances

Of the four bedrock groundwater samples submitted for analysis, PFAS compounds were detected in all. PFOS, generally the highest measured compound in all samples, exceeded its respective GWQS of 10 ng/L in 3 samples, of which ranged in concentration from 72.4 ng/L (MW-12B) to 657 ng/L (MW-01B). Total detected PFAS in all four samples ranged from 34.66 ng/L (MW-09B) to 1,276.188 ng/L (MW-01B) and only exceeded its respective GWQS of 500 ng/L in 1 sample (MW-01B).

5.0 Soil Vapor Intrusion

One SVI monitoring event was completed by TRC during this monitoring period in March 2018. A summary of the March 2018 SVI findings can be found below. The full results and conclusion of the investigation were submitted to the NYSDEC in the *July 2018 SVI Assessment Report.*

5.1 Summary of Findings

Co-located sub-slab vapor and indoor air samples were collected from six locations at the Site. Additionally, one ambient air sample was collected during the vapor intrusion sampling. A copy of Figure 2: Sample Location Plan, provided in the *July 2018 SVI Assessment Report*, has been included with this AMR in **Appendix F**.

Results of the analyses of the sub-slab vapor, indoor air, and ambient air samples were compared to the Air Guideline Values (AGVs) in the NYSDOH Vapor Intrusion Guidance Document. A copy of the vapor intrusion analytical results summary, provided in the *July 2018 SVI Assessment Report,* has also been included with this AMR in **Appendix F**. A comparison to the NYSDOH SVI guidance matrices indicated the following:

- **Matrix 1:** Although TCE is largely undetected in indoor air, there are sub-slab soil vapor concentrations elevated enough to “mitigate” (SSV-07, SSV-08, SSV-09, SSV-10, SSV-11, and SSV-12). 1,1-Dichloroethene, cis-1,2-Dichloroethene, and carbon tetrachloride sub-slab soil vapor concentrations elevated enough to “mitigate” in one location (SSV-11).

- **Matrix 2:** Although PCE is largely undetected in indoor air, there are sub-slab soil vapor concentrations elevated enough to “monitor” at three sampling locations (SSV-09, SSV-11 and SSV-12). 1,1,1-Trichloroethane (SSV-11) sub-slab soil vapor concentrations elevated enough to “mitigate”. Methylene chloride (SSV-11) sub-slab soil vapor concentrations elevated enough to “monitor/mitigate”.

- **Matrix 3**: Although vinyl chloride is largely undetected in indoor air, there are sub-slab soil vapor concentrations elevated enough to “monitor” in one location (SSV-11).

6.0 Conclusions and Recommendations

As shown by the P&T system performance measurements and groundwater sample VOC concentrations, the selected remedy for the Site continues to be effective at containing the contaminant mass to the existing monitoring well network limits. TRC will continue groundwater monitoring activities at the frequencies outlined above in **Section 1.2.1**. The next annual Site inspection and biennial groundwater sampling events will be completed during the 3rd Quarter of 2020 and 2021, respectively. The next biennial SVI assessment will be conducted during the 2019 to 2020 heating season. Reports summarizing each monitoring event will be submitted to the NYSDEC 30 days following receipt of validated analytical results.

In accordance with the NYSDEC approved *September 2019 OU-1 DPE System Decommissioning Request*, TRC will decommission the DPE system and abandon all DPE wells during the during the 2nd Quarter of 2020. During the decommissioning activities, TRC will assess the P&T system's current condition to determine if modifications for optimization are needed. If major modifications, including equipment or design/functionality changes are warranted, TRC will submit a separate System Optimization Summary Letter to the NYSDEC. If minor modifications, including gauge/instrument or piping replacements are needed, TRC will perform and summarize the activities in the next AMR. The NYSDEC will be notified of the anticipated decommissioning activities a minimum of seven days prior to the scheduled mobilization.

TRC and Sequa are in receipt of the February 2020 NYSDEC letter requesting additional OU-2 subsurface investigation/soil sampling activities to determine the presence/absence of chemical contaminants identified on DER-10's target analyte and compound lists. In response to this request and during the 2nd Quarter of 2020, TRC will submit a Subsurface Investigation Work Plan, detailing the proposed subsurface investigation activities, for NYSDEC approval.

TABLES

Table 1
Summary of Detected VOCs and Unfiltered Metals in Pump and Treat System Samples
Former Chromalloy Facility
West Nyack, New York

Sample Date	March 9, 2018			July 17, 2018			September 7, 2018		
Sample Location	Influent	Midfluent	Effluent	Influent	Midfluent	Effluent	Influent	Midfluent	Effluent
Volatile Organic Compounds (ug/L)									
ACETONE	10 U	10 U	10 U	20 U	3.1 J	10 U	20 U	10 U	4 J
CARBON DISULFIDE	1 U	1 U	1 U	0.39 JB	1 U	0.21 JB	2 U	1 U	1 U
CHLOROFORM	0.94 J	1 U	1 U	0.87 J	1 U	1 U	0.81 J	0.78 J	1 U
CIS-1,2-DICHLOROETHENE	5.5	1 U	1 U	6.4	1 U	1 U	5.8	6.7	1.6
METHYL TERT-BUTYL ETHER	0.38 J	1 U	1 U	0.45 J	1 U	1 U	0.33 J	0.35 J	0.17 J
METHYLENE CHLORIDE	1 U	1 U	1 U	2 U	1 U	1 U	4.5	1 U	1 U
TETRACHLOROETHENE	7.1	1 U	1 U	5.6	1 U	1 U	6.2	6.3	0.9 J
TRICHLOROETHENE	97	1 U	1 U	85	5.5	2.3	95	56	12
Metals (ug/L)									
CHROMIUM	NA	NA	0.0048	NA	NA	0.0045	NA	NA	0.0041
COPPER	NA	NA	0.0066 J	NA	NA	0.34	NA	NA	0.01 U
LEAD	NA	NA	0.01 U	NA	NA	0.01 U	NA	NA	0.01 U
NICKEL	NA	NA	0.01 U	NA	NA	0.0022 J	NA	NA	0.0016 J
ZINC	NA	NA	0.019	NA	NA	0.25 B	NA	NA	0.019 B

Notes

ug/L	micrograms per liter
Influent	RW-1 Influent to Air Stripper-1
Midfluent	Influent to Air Stripper-2
Effluent	Outfall
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.
B	Compound was found in the blank and sample
NA	Not Analyzed

Table 1
Summary of Detected VOCs and Unfiltered Metals in Pump and Treat System Samples
Former Chromalloy Facility
West Nyack, New York

Sample Date	December 7, 2018			March 15, 2019			June 14, 2019		
Sample Location	Influent	Midfluent	Effluent	Influent	Midfluent	Effluent	Influent	Midfluent	Effluent
Volatile Organic Compounds (ug/L)									
ACETONE	20 U	10 U	10 U	20 U	3.8 J	5.0 J	20 U	4.1 J	3.8 J
CARBON DISULFIDE	0.69 J	1 U	1 U	2 U	1 U	1 U	2 U	1 U	1 U
CHLOROFORM	2 U	1 U	0.35 J	0.89 J	1 U	1 U	0.78 J	1 U	1 U
CIS-1,2-DICHLOROETHENE	7.0	2.3	2.9	7.8	1 U	1 U	3.3	1 U	1 U
METHYL TERT-BUTYL ETHER	2 U	1 U	1 U	0.49 J	1 U	1 U	0.46 J	1 U	1 U
METHYLENE CHLORIDE	2 U	1 U	1 U	2 U	1 U	1 U	1.6 JB	0.56 JB	0.52 JB
TETRACHLOROETHENE	6.0	1.2	1.1	5.3	1 U	1 U	4.2	1 U	1 U
TRICHLOROETHENE	64	16	17	220	1 U	1 U	44	1 U	1 U
Metals (ug/L)									
CHROMIUM	NA	NA	0.0051	NA	NA	0.0051	NA	NA	0.0038 J
COPPER	NA	NA	0.002 J	NA	NA	0.01 U	NA	NA	0.0017 J
LEAD	NA	NA	0.01 U	NA	NA	0.01 U	NA	NA	0.01 U
NICKEL	NA	NA	0.0041 J	NA	NA	0.01 U	NA	NA	0.0018 J
ZINC	NA	NA	0.057	NA	NA	0.0084 J	NA	NA	0.012

Notes

ug/L	micrograms per liter
Influent	RW-1 Influent to Air Stripper-1
Midfluent	Influent to Air Stripper-2
Effluent	Outfall
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.
B	Compound was found in the blank and sample
NA	Not Analyzed

Table 1
Summary of Detected VOCs and Unfiltered Metals in Pump and Treat System Samples
Former Chromalloy Facility
West Nyack, New York

Sample Date	September 30, 2019			November 11, 2019		
Sample Location	Influent	Midfluent	Effluent	Influent	Midfluent	Effluent
Volatile Organic Compounds (ug/L)						
ACETONE	10 U	10 U	10 U	10 U	10 U	10 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	0.55 JB	1 U	1 U
CIS-1,2-DICHLOROETHENE	3.1	0.97 J	0.88 J	2.5	1 U	0.86 J
METHYL TERT-BUTYL ETHER	0.33 J	0.17 J	0.17 J	0.34 J	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	5.1	0.77 J	0.47 J	5.5	0.76 J	0.93 J
TRICHLOROETHENE	53	11	7 U	38	5.9	6.3
Metals (ug/L)						
CHROMIUM	NA	NA	0.0059	NA	NA	0.0052
COPPER	NA	NA	0.0029 J	NA	NA	0.01 U
LEAD	NA	NA	0.01 U	NA	NA	0.0043 J
NICKEL	NA	NA	0.0017 J	NA	NA	0.01 U
ZINC	NA	NA	0.022 B	NA	NA	0.021

Notes

ug/L	micrograms per liter
Influent	RW-1 Influent to Air Stripper-1
Midfluent	Influent to Air Stripper-2
Effluent	Outfall
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.
B	Compound was found in the blank and sample
NA	Not Analyzed

Table 2
Summary of Groundwater Elevation Measurements - August 2019
Former Chromalloy Facility
West Nyack, New York

Well ID	Top of Casing Elevation (FAMSL)	Total Well Depth (ft.)	8/6/2019	
			Depth to Water (ft. BTOC)	Water Elevation (FAMSL)
RW-01	85.77	NA	NG	-
MW- 01A	87.96	18.00	7.37	80.59
MW- 01B	88.21	66.00	28.75	59.46
MW- 02A	83.97	23.00	NG	-
MW- 02B	84.15	66.00	24.70	59.45
MW- 03A	69.15	22.00	NG	-
MW- 03B	69.23	53.00	10.00	59.23
MW- 04A	80.78	39.00	NG	-
MW- 04B	80.58	68.00	21.32	59.26
MW- 05A	83.85	41.00	7.08	76.77
MW- 05B	83.68	68.00	24.47	59.21
MW- 06A	82.85	21.00	13.85	69.00
MW- 06B	82.56	66.00	20.34	62.22
MW- 07B	85.00	73.00	25.59	59.41
MW- 08B	75.90	63.00	16.49	59.41
MW- 09B	70.89	64.00	8.84	62.05
MW- 11A	69.15	34.00	NG	-
MW- 11B	68.96	112.00	4.87	64.09
MW- 12A	62.19	34.00	4.37	57.82
MW- 12B	62.15	112.00	NG	-
MW- 14A	86.42	30.00	17.38	69.04
MW- 14B	86.31	62.00	26.92	59.39
MW- 15A	86.02	35.00	0.50	85.52
MW- 16A	74.44	23.00	5.85	68.59
MW- 16B	74.26	163.00	0.00	74.26
MW- 17A	85.76	36.00	19.85	65.91
MW- 18B	77.36	275.00	NG	-
MW- 19A	62.71	28.50	NG	-
MW- 20A	64.10	14.00	NG	-
MW- 21A(S)	59.41	15.90	2.43	56.98
MW- 21A(I)	59.44	29.70	1.71	57.73
MW- 22A(S)	64.92	18.40	7.40	57.52
MW- 22A(I)	64.79	29.60	7.07	57.72
MW- 23A(S)	61.80	17.90	5.09	56.71
MW- 23A(I)	61.69	26.75	4.02	57.67
MW- 23A(D)	61.79	42.00	4.00	57.79
MW- 24A(S)	68.90	21.90	9.04	59.86
MW- 24A(I)	68.82	31.20	11.21	57.61
MW- 24A(D)	68.75	43.20	11.13	57.62
MW- 25A(I)	80.13	23.80	NG	-
MW-25A(S)	80.13	15.00	3.59	76.54
MW- 26A	66.40	20.00	NG	-
MW- 27A	67.37	20.00	NG	-
Well #12	79.19	NA	NG	-
Well #16	76.11	NA	17.45	58.66
Well #20	72.58	NA	NG	-
Well #25	76.23	NA	NG	-
Well #35	67.91	NA	9.69	58.22
Well #36	71.84	NA	13.62	58.22
Well #41	NA	9.15	NG	-

Notes:
NA : Not available
FAMSL : Feet above mean sea level
ft : Feet
BTOC : Below top of casing
(S) : Shallow groundwater monitoring well
(I) : Intermediate groundwater monitoring well (well bottom set at top of bedrock interface
(D) : Bedrock groundwater monitoring well
Wells identified with "A" indicate shallow water table wells.
Wells identified with "B" indicate bedrock wells.

Table 3
Summary of VOCs in Groundwater Samples - August 2019
Former Chromalloy Facility
West Nyack, New York

Sample Location:		MW-01A	MW-01B	MW-02B	MW-03B	MW-04B	MW-05B		MW-06A
Sample Name:		TRC-MW-1A	TRC-MW-1B	TRC-MW-2B	TRC-MW-3B	TRC-MW-4B	TRC-MW-5B	TRC-DUP-1	TRC-MW-6A
Sample Date:		08/07/2019	08/07/2019	08/07/2019	08/07/2019	08/07/2019	08/07/2019	08/07/2019	08/07/2019
Screened Formation:		Overburden	Bedrock	Bedrock	Bedrock	Bedrock	Bedrock		Overburden
Analyte	**GWQS***	**Results (ug/L)**							
Methylene chloride	5	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethane	5	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	2.5 U	250 U	50 U	2.5 U	2.5 U	1.6 J	1.7 J	2.5 U
Carbon tetrachloride	5	0.50 U	50 U	10 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	1	1.0 U	100 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	0.50 U	50 U	10 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	1	1.5 U	150 U	30 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Tetrachloroethene	5	0.50 U	**18 J**	4.9 J	0.80	0.42 J	1.5	1.5	0.50 U
Chlorobenzene	5	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trichlorofluoromethane	5	2.5 UJ	250 U	50 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U
1,2-Dichloroethane	0.6	0.50 UJ	50 U	10 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U
1,1,1-Trichloroethane	5	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	0.50 U	50 U	10 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
trans-1,3-Dichloropropene	0.4(b)	0.50 U	50 U	10 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
cis-1,3-Dichloropropene	0.4(b)	0.50 U	50 U	10 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	50	2.0 UJ	200 U	40 U	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U
1,1,2,2-Tetrachloroethane	5	0.50 U	50 U	10 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzene	1	0.50 U	50 U	10 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	5	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	5	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromomethane	5	2.5 UJ	250 UJ	50 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ
Vinyl chloride	2	1.0 U	100 U	**2.9 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	2.5 UJ	250 U	50 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U
1,1-Dichloroethene	5	0.50 U	50 U	10 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	5	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trichloroethene	5	1.2	**13,000**	**2,200**	**130**	4.2	**13**	**14**	0.55
1,2-Dichlorobenzene	3	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl tert butyl ether	10	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
p/m-Xylene	5(a)	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
o-Xylene	5(a)	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
cis-1,2-Dichloroethene	5	2.5 U	**470**	**100**	**6.2**	2.5 U	3.4	3.5	2.5 U
Styrene	5	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Dichlorodifluoromethane	5	5.0 U	500 U	100 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50	7.3 UJ	500 U	100 U	6.9 U	7.6 UJ	6.5 UJ	7.3 UJ	7.6 U
Carbon disulfide	60	5.0 U	500 U	100 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	50	5.0 U	500 U	100 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	NC	5.0 U	500 U	100 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	50	5.0 U	500 U	100 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	0.0006	2.0 U	200 U	40 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dibromo-3-chloropropane	0.04	2.5 UJ	250 U	50 U	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U
Isopropylbenzene	5	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Acetate	NC	2.0 U	200 U	40 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Cyclohexane	NC	10 U	1,000 U	200 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	2.5 U	250 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl cyclohexane	NC	10 U	1,000 U	200 U	10 U	10 U	10 U	10 U	10 U
1,4-Dioxane	NC	0.144 U	0.0677 J	NA	NA	NA	0.175	0.152	NA

Notes:

ug/L - micrograms per liter.

J- - Estimated value; biased low.

J - Estimated value.

NA - Sample not analyzed for the listed analyte.

NC - No NYSDEC standards exist for this analyte.

UJ - Estimated non-detect.

U - Analyte was not detected at specified quantitation limit.

VOCs - Volatile Organic Compounds.

Values shown in **bold** exceed the listed Guidance Value.

GWQS - Groundwater Quality Standard

* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with the April 2000 Addendum.

** - Sample was collected on 8/8/2019 for 1,4-Dioxane analysis.

(a) - criteria applicable to xylene (total), the sum of the xylene isomers.

(b) - criteria applicable to the sum of the cis and trans isomers.

Table 3
Summary of VOCs in Groundwater Samples - August 2019
Former Chromalloy Facility
West Nyack, New York

Sample Location:		MW-06B	MW-07B	MW-08B	MW-09B	MW-12A	MW-12B	MW-14B	MW-21A(S)
Sample Name:		TRC-MW-6B	TRC-MW-7B	TRC-MW-8B	TRC-MW-9B	TRC-MW-12A	TRC-MW-12B	TRC-MW-14B	TRC-MW-21A-S
Sample Date:		08/07/2019	08/08/2019	08/07/2019	08/07/2019	08/08/2019	08/14/2019	08/07/2019	08/08/2019
Screened Formation:		Bedrock	Bedrock	Bedrock	Bedrock	Overburden	Bedrock	Bedrock	Overburden
Analyte	**GWQS***	**Results (ug/L)**							
Methylene chloride	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
1,1-Dichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
Chloroform	7	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
Carbon tetrachloride	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	1	1.5 U	1.5 U	1.5 U	1.5 U	1.5 UJ	1.5 U	1.5 U	1.5 U
Tetrachloroethene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U
Chlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
Trichlorofluoromethane	5	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	0.50 U	0.50 U	0.50 U	0.50 UJ	0.31 J	0.27 J	0.50 U	0.50 U
1,1,1-Trichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U
trans-1,3-Dichloropropene	0.4(b)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U
cis-1,3-Dichloropropene	0.4(b)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U
Bromoform	50	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U
1,1,2,2-Tetrachloroethane	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U
Benzene	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U
Toluene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
Chloromethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
Bromomethane	5	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 U	2.5 UJ	2.5 UJ
Vinyl chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	**310 J-**	**330**	1.0 U	1.0 U
Chloroethane	5	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	2.5 U	0.90 J	1.3 J	2.5 U	2.5 U
Trichloroethene	5	0.50 U	0.35 J	0.50 U	0.50 U	0.50 UJ	0.50 U	**10**	2.6
1,2-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
Methyl tert butyl ether	10	0.82 J	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	0.88 J	2.5 U
p/m-Xylene	5(a)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
o-Xylene	5(a)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
cis-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	2.5 U	**140**	**180**	**7.1**	0.95 J
Styrene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
Dichlorodifluoromethane	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Acetone	50	7.5 U	6.6 U	12	9.0 UJ	6.1 UJ	5.0 UJ	7.9 U	11
Carbon disulfide	60	5.0 U	5.0 U	5.0 U	5.0 U	2.0 J	5.0 U	5.0 U	5.0 U
2-Butanone	50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U
4-Methyl-2-pentanone	NC	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
2-Hexanone	50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	0.0006	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U
1,2-Dibromo-3-chloropropane	0.04	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	2.5 U	2.5 U	2.5 U
Isopropylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
Methyl Acetate	NC	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U
Cyclohexane	NC	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
Methyl cyclohexane	NC	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
1,4-Dioxane	NC	NA	NA	NA	0.144 U	0.422	0.486 **	NA	NA

Notes:

ug/L - micrograms per liter.

J- - Estimated value; biased low.

J - Estimated value.

NA - Sample not analyzed for the listed analyte.

NC - No NYSDEC standards exist for this analyte.

UJ - Estimated non-detect.

U - Analyte was not detected at specified quantitation limi

VOCs - Volatile Organic Compounds.

Values shown in **bold** exceed the listed Guidance Value.

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* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with the April 2000 Addendum.

** - Sample was collected on 8/8/2019 for 1,4-Dioxane analysis.

(a) - criteria applicable to xylene (total), the sum of the xylene isomers.

(b) - criteria applicable to the sum of the cis and trans isomers.

Table 3
Summary of VOCs in Groundwater Samples - August 2019
Former Chromalloy Facility
West Nyack, New York

Sample Location:		MW-23A(D)	MW-23A(S)	MW-24A(D)	Well 35	Well 36
Sample Name:		TRC-MW-23A-D	TRC-MW-23A-S	TRC-MW-24A-D	TRC-MW-35	TRC-MW-36
Sample Date:		08/14/2019	08/08/2019	08/08/2019	08/08/2019	08/08/2019
Screened Formation:		Bedrock	Overburden	Bedrock	Bedrock	Bedrock
Analyte	**GWQS***	**Results (ug/L)**				
Methylene chloride	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon tetrachloride	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	1	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Tetrachloroethene	5	0.50 U	0.50 U	0.56	0.50 U	0.50 U
Chlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trichlorofluoromethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,1-Trichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
trans-1,3-Dichloropropene	0.4(b)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
cis-1,3-Dichloropropene	0.4(b)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2,2-Tetrachloroethane	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzene	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Toluene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromomethane	5	2.5 U	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ
Vinyl chloride	2	1.0 U	**3.8**	0.13 J	1.0 U	1.0 U
Chloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trichloroethene	5	0.50 U	0.50 U	**7.4**	2.9	1.3
1,2-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl tert butyl ether	10	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
p/m-Xylene	5(a)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
o-Xylene	5(a)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
cis-1,2-Dichloroethene	5	2.5 U	0.94 J	**5.3**	2.5 U	2.5 U
Styrene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Dichlorodifluoromethane	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50	5.0 UJ	6.7 U	6.6 U	6.8 U	7.0 U
Carbon disulfide	60	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	50	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	NC	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	0.0006	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dibromo-3-chloropropane	0.04	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Acetate	NC	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Cyclohexane	NC	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl cyclohexane	NC	10 U	10 U	10 U	10 U	10 U
1,4-Dioxane	NC	NA	NA	NA	NA	NA

Notes:

ug/L - micrograms per liter.
J- - Estimated value; biased low.
J - Estimated value.
NA - Sample not analyzed for the listed analyte.
NC - No NYSDEC standards exist for this analyte.
UJ - Estimated non-detect.
U - Analyte was not detected at specified quantitation limi
VOCs - Volatile Organic Compounds.

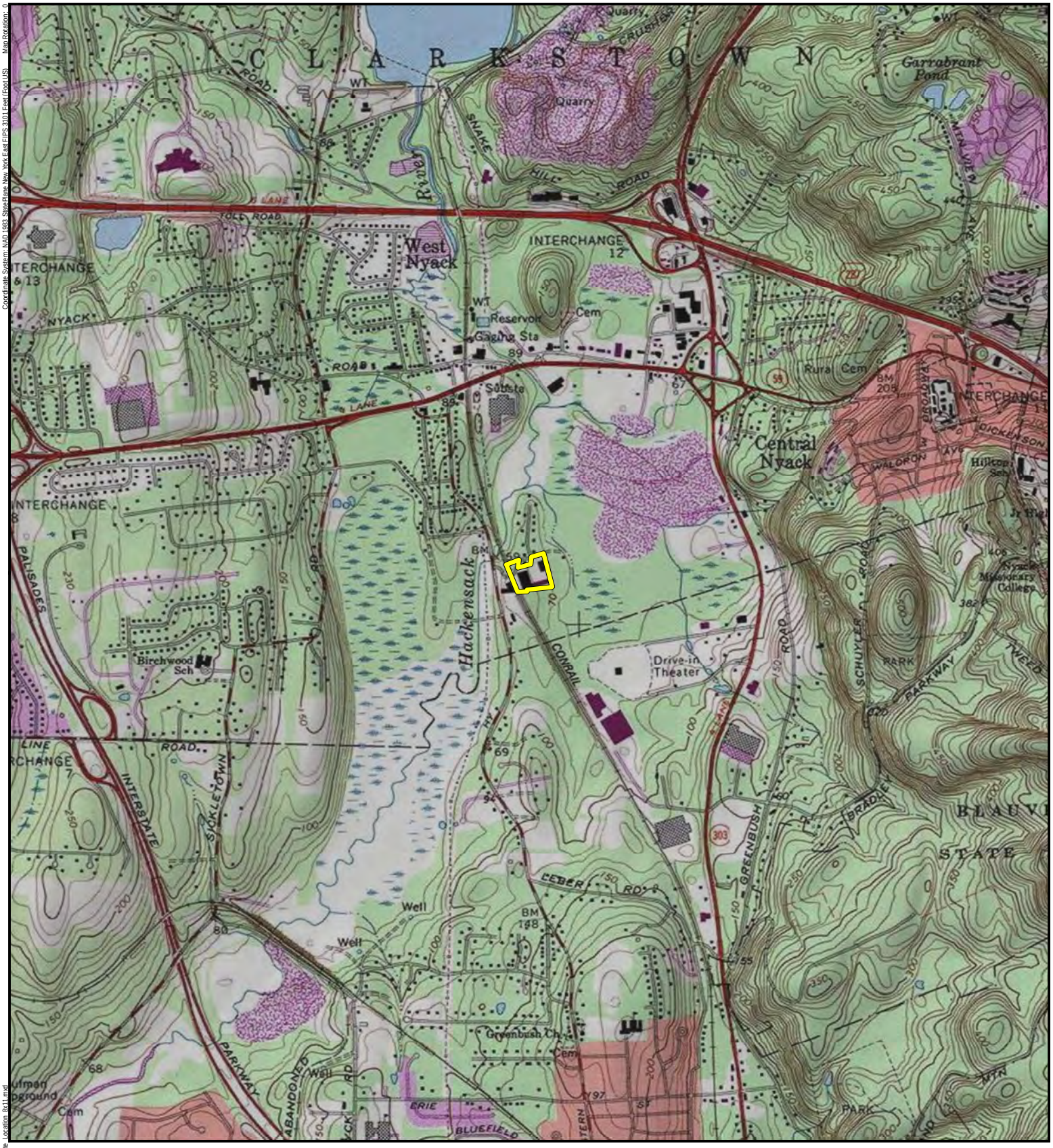
Values shown in **bold** exceed the listed Guidance Value.
GWQS - Groundwater Quality Standard
* - NYSDEC Ambient Water Quality Standards and Guidance Values Class GA Water, June 1998 with the April 2000 Addendum.
** - Sample was collected on 8/8/2019 for 1,4-Dioxane analysis.
(a) - criteria applicable to xylene (total), the sum of the xylene isomers.
(b) - criteria applicable to the sum of the cis and trans isomers.

Table 4
Summary of PFAS in Groundwater Samples - August 2019
Former Chromalloy Facility
West Nyack, New York

Sample Location:		MW-01A	MW-01B	MW-05B		MW-09B	MW-12A	MW-12B
Sample Name:		TRC-MW-1A	TRC-MW-1B	TRC-MW-5B	TRC-DUP-1	TRC-MW-9B	TRC-MW-12A	TRC-MW-12B
Sample Date:		08/07/2019	08/07/2019	08/07/2019	08/07/2019	08/07/2019	08/08/2019	08/08/2019
Screened Formation:		Overburden	Bedrock	Bedrock		Bedrock	Overburden	Bedrock
Analyte	**GWQS***	**Results (ng/L)**						
Perfluorobutanoic acid (PFBA)	100	7.8	23.8	4.87	4.88	4.44	1.90	1.65 J
Perfluoropentanoic acid (PFPeA)	100	7.56	26.0	6.07	6.31	3.82	1.62 J	1.48 J
Perfluorobutanesulfonic acid (PFBS)	100	6.76	36.8 J-	4.91	4.85	1.50 J	3.10	3.35
Perfluorohexanoic acid (PFHxA)	100	11.4	94.3 J-	10.3	10.3	5.01	3.90	3.99
Perfluoroheptanoic acid (PFHpA)	100	5.04	9.93	5.20	5.24	3.16	1.46 J	1.54 J
Perfluorohexanesulfonic acid (PFHxS)	100	78.0	**376**	41.0	39.1	1.32 J	30.5	32.6
Perfluorooctanoic acid (PFOA)	10	**24.1**	**34.1**	**17.5**	**17.5**	**13.3**	7.30	7.97
6:2 Perfluorooctane Sulfonate (6:2 FTS)	100	2.03 U	1.78 U	1.77 U	1.78 U	1.76 U	1.80 U	1.79 U
Perfluoroheptanesulfonic acid (PFHpS)	100	1.96 J	14.2	1.88	1.57 J	1.76 U	1.86	1.92
Perfluorononanoic acid (PFNA)	100	3.30	2.3	2.06	2.07	0.370 J	0.361 J	0.358 J
Perfluorooctanesulfonic acid (PFOS)	10	**256**	**657**	**124**	**121**	1.74 J	**59.2**	**72.4**
Perfluorodecanoic acid (PFDA)	100	1.21 J	0.886 J	0.890 J	0.739 J	1.76 U	1.80 U	1.79 U
8:2 Perfluorodecane Sulfonate (8:2 FTS)	100	2.03 UJ	1.78 UJ	1.77 UJ	1.78 UJ	1.76 UJ	1.80 UJ	1.79 UJ
2-(N-methyl perfluorooctanesulfonamido) acetic acid (N-MeFOSAA)	100	2.03 U	1.78 U	1.77 U	1.78 U	1.76 U	1.80 U	1.79 U
Perfluoroundecanoic acid (PFUnA)	100	2.03 U	1.78 U	1.77 U	1.78 U	1.76 U	1.80 U	1.79 U
Perfluorodecanesulfonic acid (PFDS)	100	2.03 U	1.78 U	1.77 U	1.78 U	1.76 U	1.80 U	1.79 U
Perfluorooctane Sulfonamide (PFOSA)	100	2.03 U	1.78 U	1.77 UJ	1.78 U	1.76 U	1.80 U	1.79 U
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine (N-EtFOSAA)	100	2.03 U	0.872 J	1.77 U	1.78 U	1.76 U	1.80 U	1.79 U
Perfluorododecanoic acid (PFDoA)	100	2.03 U	1.78 U	0.344 J	1.78 U	1.76 U	1.80 U	1.79 U
Perfluorotridecanoic acid (PFTriA)	100	2.03 U	1.78 U	1.77 U	1.78 U	1.76 U	1.80 U	1.79 U
Perfluorotetradecanoic acid (PFTeA)	100	2.03 U	1.78 U	1.77 U	1.78 U	1.76 U	1.80 U	1.79 U
Sum of PFOA and PFOS	10	**280.1**	**691.1**	**141.5**	**138.5**	**15.04**	**66.5**	**80.37**
Total Detected PFAS	500	403.13	**1,276.188**	219.024	213.559	34.66	111.201	127.258

Notes:
ng/L : Nanograms per liter
J- : Estimated value; biased low
J : Estimated value
PFAS : Per- and poly-fluorinated alkyl substances
U : Analyte was not detected at the specified quantitation limit
UJ : Estimated non-detect.
GWQS : Groundwater Quality Standard
Bold : Value exceeds the listed Guidance Value
* : Guidelines for Sampling and Analysis of PFAS, NYSDEC Part 375 Remedial Programs, January 2020

FIGURES



NEW YORK OVERVIEW

LEGEND

FORMER CHROMALLOY FACILITY PROPERTY

N

1 " = 2,000 '

0 1,000 2,000 Feet

NOTES:
1. BASEMAP IMAGERY FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES. NYACK QUAD

PROJECT:
FORMER CHROMALLOY FACILITY
WEST NYACK, ROCKLAND COUNTY, NEW YORK
NYSDEC SITE NO. 344039

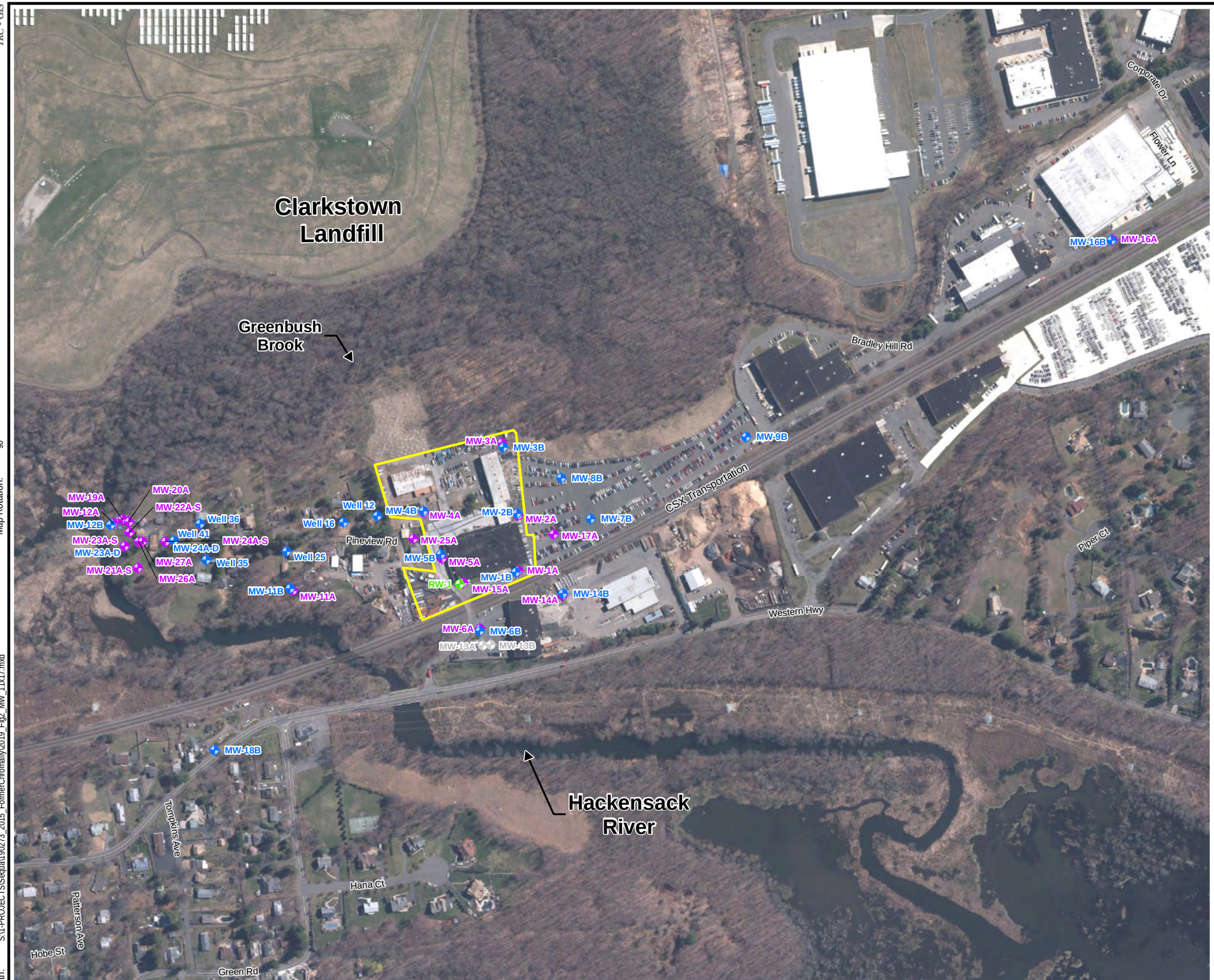
TITLE:
SITE LOCATION MAP

DRAWN BY:	M. OPEL	PROJ NO.:	190273.2015.0000 P5
CHECKED BY:	A. FISHMAN		
APPROVED BY:	J. KING		**FIGURE 1**
DATE:	DECEMBER 2019		

10 MAXWELL DRIVE
CLIFTON PARK, NY 12065

TRC

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet (Post US) Map Rotation: 0
Path: S:\1-PROJECTS\Secure\190273. 2015. FormerChromally\2019. Fig1 Site Location 8x11.mxd



LEGEND

- FORMER CHROMALLOY FACILITY PROPERTY
- ABANDONED WELL LOCATION
- BEDROCK MONITORING WELL LOCATION
- OVERBURDEN MONITORING WELL LOCATION
- RECOVERY WELL LOCATION

NOTES
1) FORMER CHROMALLOY FACILITY PROPERTY BOUNDARY IS APPROXIMATE.
2) MONITORING WELL LOCATIONS WERE SURVEYED BY A NEW YORK STATE LICENSED SURVEYOR IN JUNE, 2011, AND ARE OVERLAIN ON AERIAL IMAGE PROVIDED BY THE ROCKLAND COUNTY DIGITAL ORTHOIMAGERY, 2016. DEPICTED WELL LOCATIONS ARE APPROXIMATE.

0 350 700 Feet

1:4,200 1 " = 350 '

N

PROJECT:
FORMER CHROMALLOY FACILITY
WEST NYACK, ROCKLAND COUNTY, NEW YORK
NYSDEC SITE NO. 344039

TITLE:
MONITORING WELL LOCATION MAP

DRAWN BY:	M. OPEL	PROJ NO.:	190273.2015.0000 P5
CHECKED BY:	A. FISHMAN		
APPROVED BY:	J. KING		**FIGURE 2**
DATE:	DECEMBER 2019		

TRC
10 MAXWELL DRIVE
CLIFTON PARK, NY 12065

FILE NO.: 2019_Fig2_MW_11x17.mxd

Plot Date: 12/31/2019, 16:02:04 PM by MOPEL -- LAYOUT: ANSI B(11"x17")
Path: S:\1-PROJECTS\Sequal\190273_2015_FormerChromally\2019_Fig2_MW_11x17.mxd
Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet (Foot US)
Map Rotation: 90

TRC - GIS

LEGEND

- FORMER CHROMALLOY FACILITY PROPERTY
- FORMER PRODUCTION WELL
- RECOVERY WELL
- MONITORING WELL LOCATION

NOTES
1.) FORMER CHROMALLOY FACILITY PROPERTY BOUNDARY IS APPROXIMATE.
2.) MONITORING WELL LOCATIONS WERE SURVEYED BY A NEW YORK STATE LICENSED SURVEYOR IN JUNE 2011. DEPICTED WELL LOCATIONS ARE APPROXIMATE.

0 100 200 Feet

1:1,200 1 " = 100 '

N

PROJECT:
FORMER CHROMALLOY FACILITY
WEST NYACK, ROCKLAND COUNTY, NEW YORK
NYSDEC SITE NO. 344039

TITLE:
ANNUAL INSPECTION AREA LIMITS

DRAWN BY:	M. OPEL	PROJ NO.:	190273.2015
CHECKED BY:	J. KING		
APPROVED BY:	J. LAROCK		**FIGURE 3**
DATE:	MARCH 2020		

TRC
10 MAXWELL DRIVE
CLIFTON PARK, NY 12065

FILE NO.: Fig3_InspectionLimits_11x17.mxd

Plot Date: 3/26/2020, 14:31:30 PM by MOPEL -- LAYOUT: ANSI B(11"x17")
Path: S:\1-PROJECTS\Sequa\190273_2015_FormerChromally\Fig3_InspectionLimits_11x17.mxd
Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet (Foot US)
Map Rotation: 90

TRC - GIS

Clarkstown Landfill

Greenbush Brook

Hackensack River

MW-12A	
VOCs	µg/L
Vinyl chloride	310
cis-1,2-Dichloroethene	140
PFAS	ng/L
PFOS	59.2
Sum of PFOA and PFOS	66.5

MW-23A (S)	
VOCs	µg/L
Vinyl chloride	3.8

MW-01A	
PFAS	ng/L
PFOA	24.1
PFOS	256
Sum of PFOA and PFOS	280.1

MW-1A 80.59
MW-1B
MW-2A
MW-2B
MW-3A
MW-3B
MW-4A
MW-4B
MW-5A 76.77
MW-5B
MW-6A 69.00
MW-6B
MW-7B
MW-8B
MW-9B
MW-11A
MW-11B
MW-12A 57.82
MW-12B
MW-13A
MW-13B
MW-14A 69.04
MW-14B
MW-15A 85.52
MW-16A 68.59
MW-16B
MW-17A 65.91
MW-18B
MW-19A
MW-20A
MW-21A-S 56.98
MW-22A-S 57.52
MW-23A-D
MW-23A-S 56.71
MW-24A-D
MW-24A-S 59.86
MW-25A 76.54
MW-26A
MW-27A
RW-1
Well 12
Well 16
Well 25
Well 35
Well 36
Well 41

Bradley Hill Rd
Railroad Right of Way
Western Hwy
Pineview Rd
Corporate Dr
Flower Ln
Piper Ct
Tompkins Ave
Hana Ct
Patterson Ave
Hobe St
Green Rd

LEGEND

- FORMER CHROMALLOY FACILITY PROPERTY
- ABANDONED WELL LOCATION
- BEDROCK MONITORING WELL LOCATION
- OVERBURDEN MONITORING WELL LOCATION
- RECOVERY WELL LOCATION
- SAMPLED WELL
- GROUNDWATER CONTOUR XX FEET ABOVE MEAN SEA LEVEL
- GROUNDWATER FLOW

CONSTITUENT	GWQS
VOCs	µg/L
Tetrachloroethene	5
Vinyl chloride	2
Trichloroethene	5
cis-1,2-Dichloroethene	5
Naphthalene	10
PFAS	ng/L
PFHxS	100*
PFOA	10*
PFOS	10*
Sum of PFOA and PFOS	10*
Total Detected PFAS	500*

NOTES
GROUNDWATER SAMPLES WERE COLLECTED ON AUGUST 7 TO 8, AND AUGUST 14, 2019.
SAMPLES COLLECTED FROM HIGHLIGHTED WELLS WERE SUBMITTED FOR LABORATORY ANLYSIS OF VOCS.
ONLY SAMPLES FROM MW-1A, MW-1B, MW-5B, MW-9B, MW-12A, AND MW-12B WERE SUBMITTED FOR ANALYSIS OF 1,4-DIOXANE AND PFAS.
FOR FIGURE CLARITY:
1) CONSTITUENTS AND INDIVIDUAL COMPOUNDS NOT SHOWN WERE EITHER NOT DETECTED OR DID NOT EXCEED THEIR RESPECTIVE GWQS.
2) LABORATORY ANALYTICAL DATA QUALIFIERS HAVE BEEN OMITTED, REFER TO THE SUMMARY DATA TABLES FOR ANALYTICAL DETAILS REGARDING QUALIFIERS.

LIST OF ACRONYMS
µG/L - MICROGRAMS PER LITER
NG/L - NANOGRAMS PER LITER
VOCS - VOLATILE ORGANIC COMPOUNDS
PFAS - PER- AND POLYFLUOROALKYL SUBSTANCES
PFHxS - PERFLUOROHEXANESULFONIC ACID
PFOA - PERFLUOROOCTANOIC ACID
PFOS - PERFLUOROOCTANESULFONIC ACID
GWQS - NYSDEC TOGS 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR CLASS GA WATER, JUNE 1998.
* - NYSDEC GUIDELINES FOR SAMPLING AND ANALYSIS OF PFAS, JANUARY 2020.

0 350 700 Feet
1:4,200 1 " = 350 '

PROJECT:
FORMER CHROMALLOY FACILITY
WEST NYACK, ROCKLAND COUNTY, NEW YORK
NYSDEC SITE NO. 344039

TITLE:
OVERBURDEN GROUNDWATER MONITORING MAP - AUGUST 2019

DRAWN BY:	M. OPEL	PROJ NO.:	190273.2015.0000 P5
CHECKED BY:	J. KING		
APPROVED BY:	J. LAROCK		**FIGURE 4**
DATE:	MARCH 2020		

TRC
10 MAXWELL DRIVE
CLIFTON PARK, NY 12065

FILE NO.: 2019_Fig3_Overburden_11x17.mxd

TRC - GIS
Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet (Foot US)
Map Rotation: 90
Plot Date: 3/20/2020, 11:38:41 AM by MOPEL -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\Sequa\190273_2015_FormerChromally\2019_Fig3_Overburden_11x17.mxd

Clarkstown Landfill

Greenbush Brook

Hackensack River

Pineview Rd

Bradley Hill Rd

Railroad Right of Way

Corporate Dr

Flower Ln

Piper Ct

Western Hwy

Hana Ct

Patterson Ave

Hobe St

Green Rd

MW-12B	
VOCs	µg/L
Vinyl chloride	330
cis-1,2-Dichloroethene	180
PFAS	ng/L
PFOS	72.4
Sum of PFOA and PFOS	80.37

MW-03B	
VOCs	µg/L
Trichloroethene	130
cis-1,2-Dichloroethene	6.2

MW-02B	
VOCs	µg/L
Vinyl chloride	2.9
Trichloroethene	2,200
cis-1,2-Dichloroethene	100

MW-09B	
PFAS	ng/L
PFOA	13.3
Sum of PFOA and PFOS	15.04

MW-01B	
VOCs	µg/L
Tetrachloroethene	18
Trichloroethene	13,000
cis-1,2-Dichloroethene	470
PFAS	ng/L
PFHxS	376
PFOA	34.1
PFOS	657
Sum of PFOA and PFOS	691.1
Total Detected PFAS	1,276.188

MW-14B	
VOCs	µg/L
Trichloroethene	10
cis-1,2-Dichloroethene	7.1

MW-24A (D)	
VOCs	µg/L
Trichloroethene	7.4
cis-1,2-Dichloroethene	5.3

MW-05B		DUP
VOCs	µg/L	
Trichloroethene	13	14
PFAS	ng/L	
PFOA	17.5	17.5
PFOS	124	121
Sum of PFOA and PFOS	141.5	138.5

LEGEND

- FORMER CHROMALLOY FACILITY PROPERTY
- ABANDONED WELL LOCATION
- BEDROCK MONITORING WELL LOCATION
- OVERBURDEN MONITORING WELL LOCATION
- RECOVERY WELL LOCATION
- SAMPLED WELL
- GROUNDWATER CONTOUR XX FEET ABOVE MEAN SEA LEVEL
- GROUNDWATER FLOW

CONSTITUENT	GWQS
VOCs	µg/L
Tetrachloroethene	5
Vinyl chloride	2
Trichloroethene	5
cis-1,2-Dichloroethene	5
Naphthalene	10
PFAS	ng/L
PFHxS	100*
PFOA	10*
PFOS	10*
Sum of PFOA and PFOS	10*
Total Detected PFAS	500*

NOTES
GROUNDWATER SAMPLES WERE COLLECTED ON AUGUST 7 TO 8, AND AUGUST 14, 2019.
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FOR FIGURE CLARITY:
1) CONSTITUENTS AND INDIVIDUAL COMPOUNDS NOT SHOWN WERE EITHER NOT DETECTED OR DID NOT EXCEED THEIR RESPECTIVE GWQS.
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LIST OF ACRONYMS
µG/L - MICROGRAMS PER LITER
NG/L - NANOGRAMS PER LITER
VOCS - VOLATILE ORGANIC COMPOUNDS
PFAS - PER- AND POLYFLUOROALKYL SUBSTANCES
PFHxS - PERFLUOROHEXANESULFONIC ACID
PFOA - PERFLUOROOCTANOIC ACID
PFOS - PERFLUOROOCTANESULFONIC ACID
GWQS - NYSDEC TOGS 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR CLASS GA WATER, JUNE 1998.
* - NYSDEC GUIDELINES FOR SAMPLING AND ANALYSIS OF PFAS, JANUARY 2020.

0 350 700 Feet

1:4,200 1 " = 350 '

N

PROJECT:
FORMER CHROMALLOY FACILITY
WEST NYACK, ROCKLAND COUNTY, NEW YORK
NYSDEC SITE NO. 344039

TITLE:
BEDROCK GROUNDWATER MONITORING MAP AUGUST 2019

DRAWN BY:	M. OPEL	PROJ NO.:	190273.2015.0000 P5
CHECKED BY:	J. KING		
APPROVED BY:	J. LAROCK		**FIGURE 5**
DATE:	MARCH 2020		

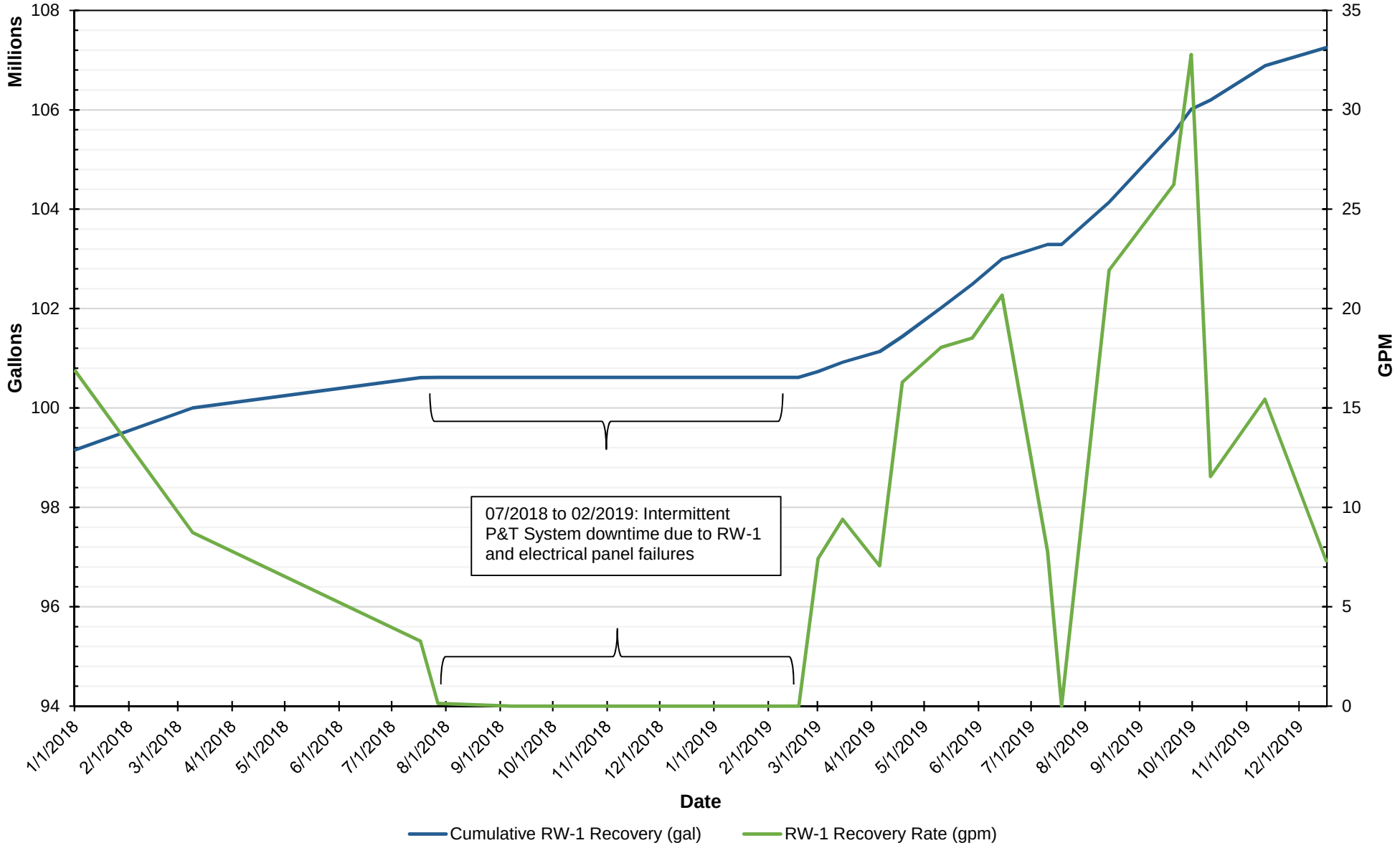
TRC
10 MAXWELL DRIVE
CLIFTON PARK, NY 12065

FILE NO.: 2019_Fig4_Bedrock_11x17.mxd

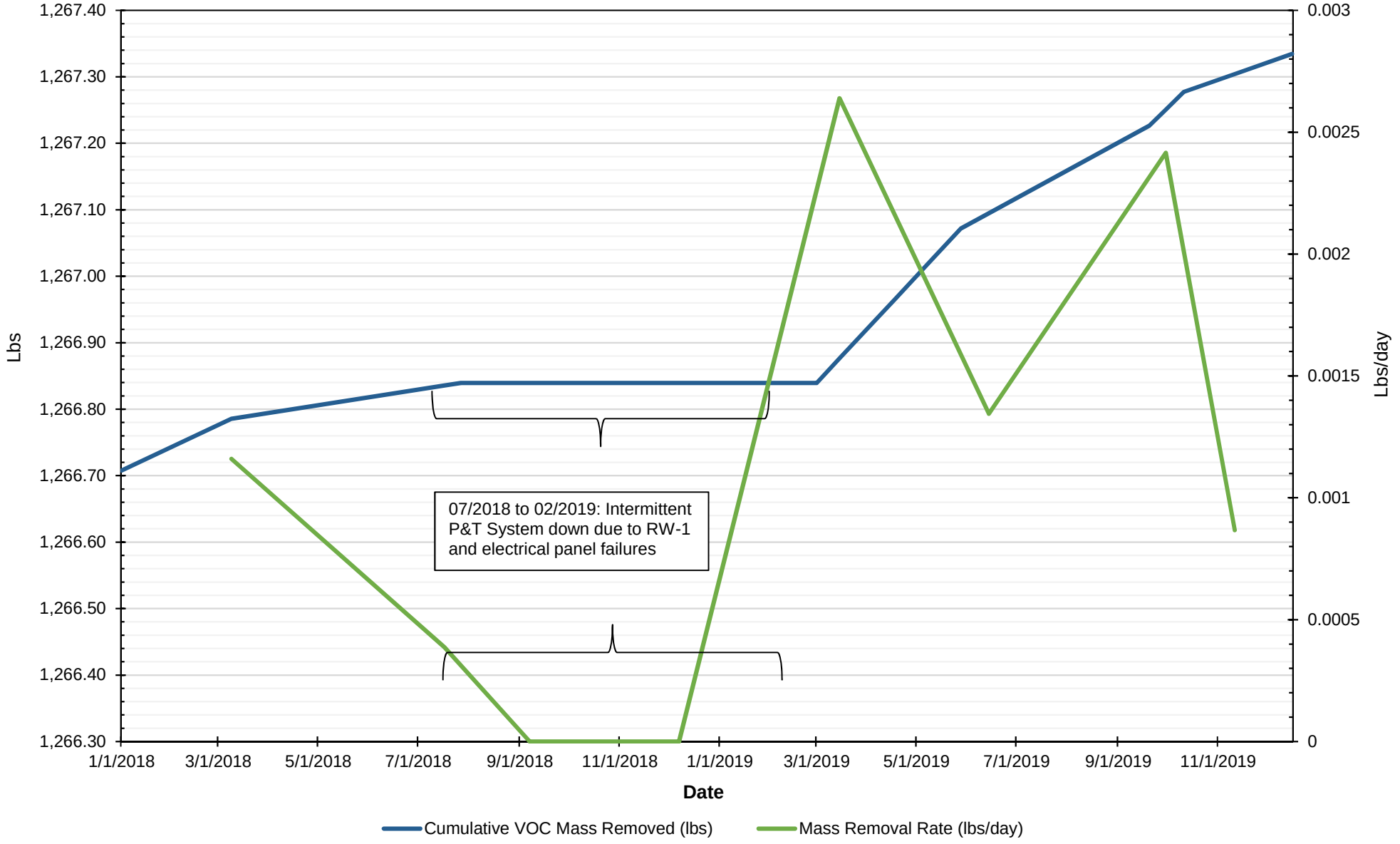
Plot Date: 3/20/2020, 12:02:49 PM by MOPEL -- LAYOUT: ANSI B(11"x17")
Path: S:\1-PROJECTS\Sequa\190273_2015_FormerChromally\2019_Fig4_Bedrock_11x17.mxd
Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet (Foot US)
Map Rotation: 90
TRC - GIS

GRAPHS

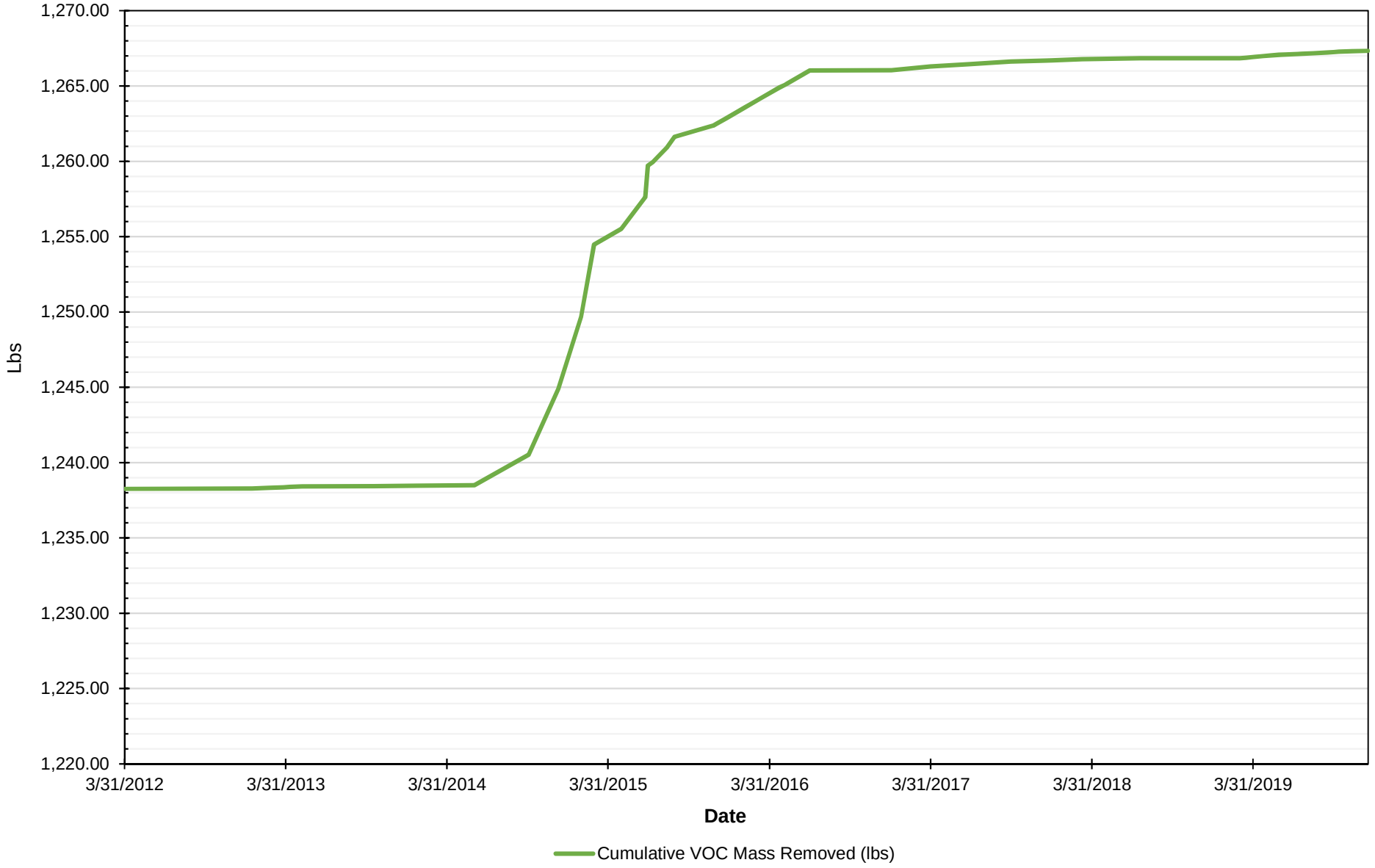
Graph 1
Pump and Treat System - 2018 to 2019 Monitoring Period
Cumulative Gallons Recovered and Recovery Rate
Former Chromalloy Facility
West Nyack, New York



Graph 2
Pump and Treat System - 2018 to 2019 Monitoring Period
Cumulative VOC Mass Removed and Removal Rate
Former Chromalloy Facility
West Nyack, New York



Graph 3
Pump and Treat System - 2012 to 2019
Cumulative VOC Mass Removed
Former Chromalloy Facility
West Nyack, New York



APPENDIX A

AIR STRIPPER DESCALING WASTE MANIFEST

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	1	1-800-888-7659	1992.4127

GENERATOR

5. Generator's Name and Mailing Address: Sequa Corporation, 4100 RCA Boulevard, Palm Beach Gardens, FL 33410

Generator's Site Address (if different than mailing address): Former Chromalloy Facility, 169 Western Highway, West Nyack, NY 12233

Generator's Phone:

6. Transporter 1 Company Name: Freehold Cartage Inc — U.S. EPA ID Number: NJD054126164

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: American Bio Mass, 310 Clearwater Dr., Walterboro, SC 29488 — U.S. EPA ID Number: N/A

Facility's Phone: 843-893-2580

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non RCRA/Non DOT Regulated Material (Purge Water Waste)	1	DM	55	G	
2.	Non RCRA/Non DOT Regulated Material (Purge Solid Debris)	3	DM	500	P	
3.	Non RCRA/Non DOT Regulated Material (RCRA Empty)	2	DM	55	G	
4.						

13. Special Handling Instructions and Additional Information

USW-11024 - Solids
USW-11023 - Liquids
USW-Empty - Empty drums

Hepaco Project # 1992.4127
Hepaco PO# 94-100598

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Andrew Fishman as agent for Sequa Corp — Signature: [signature] as agent for Sequa — Month: 1 — Day: 2 — Year: 20

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael Brochu — Signature: [signature] — Month: 01 — Day: 02 — Year: 20

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Robert Hogan — Signature: [signature] — Month: 1 — Day: 8 — Year: 20

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY'S COPY

American Bio-Mass
Permit # 152630-2001
36 Clearwater Drive
P O Box 704
Walterboro, SC 29488
Phone: (843) 893-2580
Fax: (843) 893-3328

CERTIFICATE OF DISPOSAL

American Bio-Mass LLC,
hereby certifies all materials described in
Manifest/Bill of Lading # 1942.4127
were disposed of in compliance with all applicable local,
state and federal regulations on the date of:

January 13, 2020

For:

Sequa Corporation

Joel R. Hogan
General Manager
of
American Bio-Mass, LLC

APPENDIX B

LABORATORY ANALYTICAL REPORTS (ON CD)

QUARTERLY P&T SYSTEM PERFORMANCE SAMPLES

APPENDIX C

SITE-WIDE INSPECTION FORM

SEPTEMBER 2019

SITE-WIDE INSPECTION FORM

General Information

Client/Project:	**Sequa/Former Chromalloy**	**Project Number:**	**190273**
Location:	**West Nyack, NY**	**Time of Inspection:**	**10:00 AM**
Weather:	**Clear, 80F**	**:**	
Date:	**9/20/19**		

Pre-Inspection:

- Notification of property owner and building occupants onsite
- Inspector shall review prior inspection form to help aid in order to determine any changes on site.
- Inspector shall bring a digital camera with a date stamp for photo documentation of site conditions and a copy of the Site Plans to note areas of change since the last inspection.

Access:

Any changes in the fence line for the Site? Note any change on the Site Plan.
No change in the fence line for the Site.

Any breaks in the fence line surrounding the Site?
No breaks in the fence were observed.

Are the gates secure?
Gates surrounding the main parking lot were open, but employees of Paragon Auto Warehouse confirmed that the gates are shut and secured with padlocks while cars are not being loaded or unloaded.

Existing Conditions:

Any changes to the building layout since the past inspection?
The building layout has remained the same since the last inspection.

Any new occupants on-site since the last inspection?
No new occupants since last inspection.

Does the current occupant have a materials storage area, is it secured, contained? (Note on the Site Plan)
Yes, the materials storage area used by the car warehouse is secure and contained.

SITE-WIDE INSPECTION FORM

Provide a summary of the materials observed.
Motor oil
Cleaning supplies

Asphalt /Building Cover Inspection:

Is there any evidence or excavation or trenching activity since the last inspection? (Note any areas on the Site Plan)
No evidence of excavation or trenching since last inspection.

Any evidence of new monitoring wells or abandonment of monitoring wells?
No evidence of new wells or abandonment of old wells.

Is there any areas of erosion since the last inspection?
No erosion visible.

Are there any areas of removed asphalt or building slab with exposed soil?
No evidence of removed asphalt or exposed soil.

Are there any areas of proposed improvement according to the property owner/building occupants?
Occupants did not know of any proposed improvements to the site.

Items of Concern:

List additional items/conditions
None

Post Inspection

This form shall be accompanied by the photo documentation and revised Site Plans and submitted hard copy and electronic (PDF) to:

Mr. John Spellman
NYSDEC – DER
625 Broadway
Albany, NY 12233
Email: john.spellman@dec.ny.gov

Sequa – Former Chromalloy Facility
Photograph Log
Date: September 20, 2019

Photo 1: Door to the area containing the pump and treat system was secured with a padlock.

Photo 2: The hatch that allows access to the telecom system was secure.

Photo 3: The western side of the automotive warehouse, no erosion or disturbance observed.

Photo 4: The effluent pipe for the pump and treat system.

Photo 5: Northern gate to the parking lot used by the automotive warehouse. Secured when not in use.

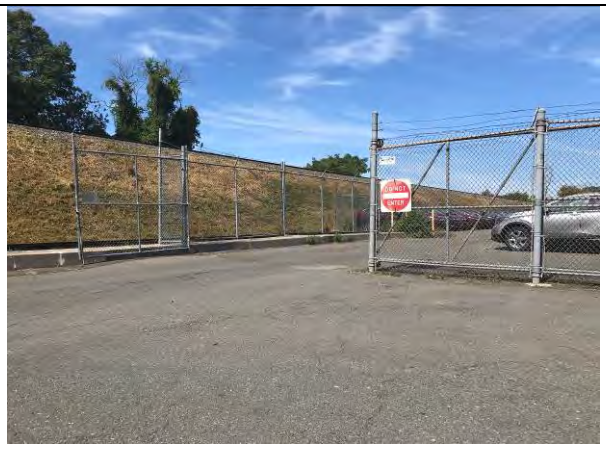


Photo 6: The southern gate to the parking lot. Secured when not in use.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
190273.2015 .0000	Nathaniel Peterson	1 of 2	Sequa	Sequa – Former Chromalloy Facility, West Nyack, NY	TRC

Sequa – Former Chromalloy Facility
Photograph Log
Date: September 20, 2019

Photo 7: The southern border of the Site.

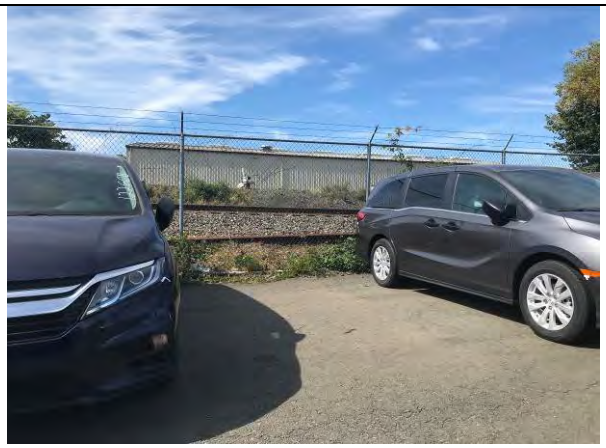


Photo 8: A portion of the western fence line, no breaks observed.

Photo 9: Drums containing air stripper scale buildup and filter socks awaiting analysis and disposal.

Photo 10: The pump and treat system.

APPENDIX D

SUMMARY LABORATORY ANALYTICAL REPORTS

GROUNDWATER SAMPLES

ANALYTICAL REPORT

Lab Number:	L1935705
Client:	TRC Solutions 10 Maxwell Drive Suite 200 Clifton Park, NY 12065
ATTN:	Jeffrey LaRock
Phone:	(518) 688-3109
Project Name:	CHROMALLOY
Project Number:	190273.2015.0000
Report Date:	08/23/19

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1935705-01	TRC-MW-9B	WATER	WEST NYACK, NY	08/07/19 09:55	08/08/19
L1935705-02	TRC-MW-1A	WATER	WEST NYACK, NY	08/07/19 11:05	08/08/19
L1935705-03	TRC-MW-1B	WATER	WEST NYACK, NY	08/07/19 12:05	08/08/19
L1935705-04	TRC-MW-5B	WATER	WEST NYACK, NY	08/07/19 13:40	08/08/19
L1935705-05	TRC-DUP-1	WATER	WEST NYACK, NY	08/07/19 08:00	08/08/19
L1935705-06	TRC-EB-1	WATER	WEST NYACK, NY	08/07/19 14:00	08/08/19
L1935705-07	TRC-MW-4B	WATER	WEST NYACK, NY	08/07/19 15:00	08/08/19
L1935705-08	TRC-MW-6A	WATER	WEST NYACK, NY	08/07/19 09:50	08/08/19
L1935705-09	TRC-MW-6B	WATER	WEST NYACK, NY	08/07/19 10:50	08/08/19
L1935705-10	TRC-MW-14B	WATER	WEST NYACK, NY	08/07/19 12:00	08/08/19
L1935705-11	TRC-MW-8B	WATER	WEST NYACK, NY	08/07/19 12:55	08/08/19
L1935705-12	TRC-MW-2B	WATER	WEST NYACK, NY	08/07/19 13:50	08/08/19
L1935705-13	TRC-MW-3B	WATER	WEST NYACK, NY	08/07/19 15:00	08/08/19
L1935705-14	TRC-MW-35	WATER	WEST NYACK, NY	08/07/19 08:45	08/08/19
L1935705-15	TRC-MW-12A	WATER	WEST NYACK, NY	08/08/19 09:50	08/08/19
L1935705-16	TRC-MW-12B	WATER	WEST NYACK, NY	08/08/19 10:30	08/08/19
L1935705-17	TRC-MW-36	WATER	WEST NYACK, NY	08/08/19 11:30	08/08/19
L1935705-18	TRC-MW-23A-S	WATER	WEST NYACK, NY	08/08/19 09:30	08/08/19
L1935705-19	TRC-MW-23A-D	WATER	WEST NYACK, NY	08/08/19 10:10	08/08/19
L1935705-20	TRC-MW-21A-S	WATER	WEST NYACK, NY	08/08/19 11:10	08/08/19
L1935705-21	TRC-MW-24A-D	WATER	WEST NYACK, NY	08/08/19 08:30	08/08/19
L1935705-22	TRIP BLANK	WATER	WEST NYACK, NY	08/08/19 00:00	08/08/19
L1935705-24	TRC-MW-7B	WATER	WEST NYACK, NY	08/08/19 12:35	08/08/19
L1935705-25	FB	WATER	WEST NYACK, NY	08/08/19 00:00	08/08/19

Project Name:	CHROMALLOY	**Lab Number:**	L1935705
Project Number:	190273.2015.0000	**Report Date:**	08/23/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	CHROMALLOY	**Lab Number:**	L1935705
Project Number:	190273.2015.0000	**Report Date:**	08/23/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L1935705-03: The sample identified as "TRC-MW-1A" on the chain of custody was identified as "TRC-MW-1B" on the container label. At the client's request, the sample is reported as "TRC-MW-1B".

L1935705-16 and -19: Headspace was noted in the sample containers submitted for Volatile Organics analysis. The analysis was cancelled at the client's request.

L1935705-25: A sample identified as "FB" was received but not listed on the Chain of Custody. This sample was not analyzed.

Volatile Organics

L1935705-15 and -15RE: Headspace was noted in the sample container utilized for analysis.

L1935705-22: The Trip Blank has a result for Acetone present above the reporting limit. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

The WG1274159-6/-7 MS/MSD recoveries, performed on L1935705-03, are outside the acceptance criteria for trichloroethene (0%/0%). The unacceptable percent recoveries are attributed to the elevated concentrations of target compounds present in the native sample.

Perfluorinated Alkyl Acids by Isotope Dilution

The WG1273407-4/-5 MS/MSD recoveries, performed on L1935705-03, are outside the acceptance criteria for perfluorobutanesulfonic acid (pfbs) (60%/62%), perfluorohexanoic acid (pfhxa) (49%/52%), perfluorohexanesulfonic acid (pfhxs) (0%/0%) and perfluorooctanesulfonic acid (pfos) (0%/0%). The unacceptable percent recoveries are attributed to the elevated concentrations of target compounds present in the native sample.

Project Name:	CHROMALLOY	**Lab Number:**	L1935705
Project Number:	190273.2015.0000	**Report Date:**	08/23/19

Case Narrative (continued)

WG1273981-1: The continuing calibration standard had the response for 6:2 FTS outside the acceptance criteria for the method. This value represents less than 10% of all compounds; therefore, the calibration was accepted.

WG1273981-3: The continuing calibration standard had the response for 8:2FTS outside the acceptance criteria for the method. This value represents less than 10% of all compounds; therefore, the calibration was accepted.

WG1273981-3: The continuing calibration standard had the response for (EIS) outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria; therefore, no further action was taken.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 08/23/19

ORGANICS

VOLATILES

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-01 Date Collected: 08/07/19 09:55
Client ID: TRC-MW-9B Date Received: 08/08/19
Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 15:09
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	1.2	J	ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-01 Date Collected: 08/07/19 09:55

Client ID: TRC-MW-9B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	9.0		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-01 Date Collected: 08/07/19 09:55

Client ID: TRC-MW-9B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	95		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-02
Client ID: TRC-MW-1A
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 11:05
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 15:34
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	1.2		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-02 Date Collected: 08/07/19 11:05

Client ID: TRC-MW-1A Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.3		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-02 Date Collected: 08/07/19 11:05

Client ID: TRC-MW-1A Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	95		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-03 D
Client ID: TRC-MW-1B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 12:05
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 13:01
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	250	70.	100
1,1-Dichloroethane	ND		ug/l	250	70.	100
Chloroform	ND		ug/l	250	70.	100
Carbon tetrachloride	ND		ug/l	50	13.	100
1,2-Dichloropropane	ND		ug/l	100	14.	100
Dibromochloromethane	ND		ug/l	50	15.	100
1,1,2-Trichloroethane	ND		ug/l	150	50.	100
Tetrachloroethene	18	J	ug/l	50	18.	100
Chlorobenzene	ND		ug/l	250	70.	100
Trichlorofluoromethane	ND		ug/l	250	70.	100
1,2-Dichloroethane	ND		ug/l	50	13.	100
1,1,1-Trichloroethane	ND		ug/l	250	70.	100
Bromodichloromethane	ND		ug/l	50	19.	100
trans-1,3-Dichloropropene	ND		ug/l	50	16.	100
cis-1,3-Dichloropropene	ND		ug/l	50	14.	100
1,3-Dichloropropene, Total	ND		ug/l	50	14.	100
Bromoform	ND		ug/l	200	65.	100
1,1,2,2-Tetrachloroethane	ND		ug/l	50	17.	100
Benzene	ND		ug/l	50	16.	100
Toluene	ND		ug/l	250	70.	100
Ethylbenzene	ND		ug/l	250	70.	100
Chloromethane	ND		ug/l	250	70.	100
Bromomethane	ND		ug/l	250	70.	100
Vinyl chloride	ND		ug/l	100	7.1	100
Chloroethane	ND		ug/l	250	70.	100
1,1-Dichloroethene	ND		ug/l	50	17.	100
trans-1,2-Dichloroethene	ND		ug/l	250	70.	100
Trichloroethene	13000		ug/l	50	18.	100

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-03 D
Client ID: TRC-MW-1B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 12:05
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	250	70.	100
1,3-Dichlorobenzene	ND		ug/l	250	70.	100
1,4-Dichlorobenzene	ND		ug/l	250	70.	100
Methyl tert butyl ether	ND		ug/l	250	70.	100
p/m-Xylene	ND		ug/l	250	70.	100
o-Xylene	ND		ug/l	250	70.	100
Xylenes, Total	ND		ug/l	250	70.	100
cis-1,2-Dichloroethene	470		ug/l	250	70.	100
1,2-Dichloroethene, Total	470		ug/l	250	70.	100
Styrene	ND		ug/l	250	70.	100
Dichlorodifluoromethane	ND		ug/l	500	100	100
Acetone	ND		ug/l	500	150	100
Carbon disulfide	ND		ug/l	500	100	100
2-Butanone	ND		ug/l	500	190	100
4-Methyl-2-pentanone	ND		ug/l	500	100	100
2-Hexanone	ND		ug/l	500	100	100
Bromochloromethane	ND		ug/l	250	70.	100
1,2-Dibromoethane	ND		ug/l	200	65.	100
n-Butylbenzene	ND		ug/l	250	70.	100
sec-Butylbenzene	ND		ug/l	250	70.	100
tert-Butylbenzene	ND		ug/l	250	70.	100
1,2-Dibromo-3-chloropropane	ND		ug/l	250	70.	100
Isopropylbenzene	ND		ug/l	250	70.	100
p-Isopropyltoluene	ND		ug/l	250	70.	100
Naphthalene	ND		ug/l	250	70.	100
n-Propylbenzene	ND		ug/l	250	70.	100
1,2,3-Trichlorobenzene	ND		ug/l	250	70.	100
1,2,4-Trichlorobenzene	ND		ug/l	250	70.	100
1,3,5-Trimethylbenzene	ND		ug/l	250	70.	100
1,2,4-Trimethylbenzene	ND		ug/l	250	70.	100
Methyl Acetate	ND		ug/l	200	23.	100
Cyclohexane	ND		ug/l	1000	27.	100
1,4-Dioxane	ND		ug/l	25000	6100	100
Freon-113	ND		ug/l	250	70.	100
Methyl cyclohexane	ND		ug/l	1000	40.	100

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-03 D
Client ID: TRC-MW-1B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 12:05
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	96		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-04
Client ID: TRC-MW-5B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 13:40
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 16:00
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	1.6	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	1.5		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	0.99	J	ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	13		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-04 Date Collected: 08/07/19 13:40

Client ID: TRC-MW-5B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	3.4		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	3.4		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.5		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-04 Date Collected: 08/07/19 13:40

Client ID: TRC-MW-5B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	96		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-05
Client ID: TRC-DUP-1
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 08:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 16:25
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	1.7	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	1.5		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	2.1	J	ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	14		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-05 Date Collected: 08/07/19 08:00

Client ID: TRC-DUP-1 Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	3.5		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	3.5		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.3		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-05 Date Collected: 08/07/19 08:00

Client ID: TRC-DUP-1 Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	97		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-07
Client ID: TRC-MW-4B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 15:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 16:50
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.42	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	1.1	J	ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	4.2		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-07 Date Collected: 08/07/19 15:00

Client ID: TRC-MW-4B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.6		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-07 Date Collected: 08/07/19 15:00

Client ID: TRC-MW-4B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	95		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-08
Client ID: TRC-MW-6A
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 09:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 11:45
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.55		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-08 Date Collected: 08/07/19 09:50

Client ID: TRC-MW-6A Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.6		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-08 Date Collected: 08/07/19 09:50

Client ID: TRC-MW-6A Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-09
Client ID: TRC-MW-6B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 10:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 12:10
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	0.74	J	ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-09 Date Collected: 08/07/19 10:50

Client ID: TRC-MW-6B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	0.82	J	ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.5		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-09 Date Collected: 08/07/19 10:50

Client ID: TRC-MW-6B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	98		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-10
Client ID: TRC-MW-14B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 12:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 12:36
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	10		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-10 Date Collected: 08/07/19 12:00

Client ID: TRC-MW-14B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	0.88	J	ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	7.1		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	7.1		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.9		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-10 Date Collected: 08/07/19 12:00

Client ID: TRC-MW-14B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	97		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-11
Client ID: TRC-MW-8B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 12:55
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 11:19
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-11 Date Collected: 08/07/19 12:55

Client ID: TRC-MW-8B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	12		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-11 Date Collected: 08/07/19 12:55

Client ID: TRC-MW-8B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	98		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-12 D
Client ID: TRC-MW-2B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 13:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 13:27
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	50	14.	20
1,1-Dichloroethane	ND		ug/l	50	14.	20
Chloroform	ND		ug/l	50	14.	20
Carbon tetrachloride	ND		ug/l	10	2.7	20
1,2-Dichloropropane	ND		ug/l	20	2.7	20
Dibromochloromethane	ND		ug/l	10	3.0	20
1,1,2-Trichloroethane	ND		ug/l	30	10.	20
Tetrachloroethene	4.9	J	ug/l	10	3.6	20
Chlorobenzene	ND		ug/l	50	14.	20
Trichlorofluoromethane	ND		ug/l	50	14.	20
1,2-Dichloroethane	ND		ug/l	10	2.6	20
1,1,1-Trichloroethane	ND		ug/l	50	14.	20
Bromodichloromethane	ND		ug/l	10	3.8	20
trans-1,3-Dichloropropene	ND		ug/l	10	3.3	20
cis-1,3-Dichloropropene	ND		ug/l	10	2.9	20
1,3-Dichloropropene, Total	ND		ug/l	10	2.9	20
Bromoform	ND		ug/l	40	13.	20
1,1,2,2-Tetrachloroethane	ND		ug/l	10	3.3	20
Benzene	ND		ug/l	10	3.2	20
Toluene	ND		ug/l	50	14.	20
Ethylbenzene	ND		ug/l	50	14.	20
Chloromethane	ND		ug/l	50	14.	20
Bromomethane	ND		ug/l	50	14.	20
Vinyl chloride	2.9	J	ug/l	20	1.4	20
Chloroethane	ND		ug/l	50	14.	20
1,1-Dichloroethene	ND		ug/l	10	3.4	20
trans-1,2-Dichloroethene	ND		ug/l	50	14.	20
Trichloroethene	2200		ug/l	10	3.5	20

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-12 D Date Collected: 08/07/19 13:50

Client ID: TRC-MW-2B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	50	14.	20
1,3-Dichlorobenzene	ND		ug/l	50	14.	20
1,4-Dichlorobenzene	ND		ug/l	50	14.	20
Methyl tert butyl ether	ND		ug/l	50	14.	20
p/m-Xylene	ND		ug/l	50	14.	20
o-Xylene	ND		ug/l	50	14.	20
Xylenes, Total	ND		ug/l	50	14.	20
cis-1,2-Dichloroethene	100		ug/l	50	14.	20
1,2-Dichloroethene, Total	100		ug/l	50	14.	20
Styrene	ND		ug/l	50	14.	20
Dichlorodifluoromethane	ND		ug/l	100	20.	20
Acetone	ND		ug/l	100	29.	20
Carbon disulfide	ND		ug/l	100	20.	20
2-Butanone	ND		ug/l	100	39.	20
4-Methyl-2-pentanone	ND		ug/l	100	20.	20
2-Hexanone	ND		ug/l	100	20.	20
Bromochloromethane	ND		ug/l	50	14.	20
1,2-Dibromoethane	ND		ug/l	40	13.	20
n-Butylbenzene	ND		ug/l	50	14.	20
sec-Butylbenzene	ND		ug/l	50	14.	20
tert-Butylbenzene	ND		ug/l	50	14.	20
1,2-Dibromo-3-chloropropane	ND		ug/l	50	14.	20
Isopropylbenzene	ND		ug/l	50	14.	20
p-Isopropyltoluene	ND		ug/l	50	14.	20
Naphthalene	ND		ug/l	50	14.	20
n-Propylbenzene	ND		ug/l	50	14.	20
1,2,3-Trichlorobenzene	ND		ug/l	50	14.	20
1,2,4-Trichlorobenzene	ND		ug/l	50	14.	20
1,3,5-Trimethylbenzene	ND		ug/l	50	14.	20
1,2,4-Trimethylbenzene	ND		ug/l	50	14.	20
Methyl Acetate	ND		ug/l	40	4.7	20
Cyclohexane	ND		ug/l	200	5.4	20
1,4-Dioxane	ND		ug/l	5000	1200	20
Freon-113	ND		ug/l	50	14.	20
Methyl cyclohexane	ND		ug/l	200	7.9	20

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-12 D Date Collected: 08/07/19 13:50

Client ID: TRC-MW-2B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	97		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-13
Client ID: TRC-MW-3B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 15:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 13:52
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.80		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	1.8	J	ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	130		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-13 Date Collected: 08/07/19 15:00

Client ID: TRC-MW-3B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	6.2		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	6.2		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.9		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-13 Date Collected: 08/07/19 15:00

Client ID: TRC-MW-3B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	98		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-14
Client ID: TRC-MW-35
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 08:45
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 14:18
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	2.9		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-14 Date Collected: 08/07/19 08:45

Client ID: TRC-MW-35 Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.8		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-14 Date Collected: 08/07/19 08:45

Client ID: TRC-MW-35 Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	97		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-15
Client ID: TRC-MW-12A
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 09:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/22/19 02:53
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	0.31	J	ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	340	E	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	0.90	J	ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-15 Date Collected: 08/08/19 09:50

Client ID: TRC-MW-12A Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	140		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	140	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.1		ug/l	5.0	1.5	1
Carbon disulfide	2.0	J	ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-15 Date Collected: 08/08/19 09:50

Client ID: TRC-MW-12A Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	116		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-15 D
Client ID: TRC-MW-12A
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 09:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/22/19 11:42
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Vinyl chloride	310		ug/l	4.0	0.28	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-17
Client ID: TRC-MW-36
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 11:30
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 14:43
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	0.79	J	ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	1.3		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-17 Date Collected: 08/08/19 11:30

Client ID: TRC-MW-36 Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.0		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-17 Date Collected: 08/08/19 11:30

Client ID: TRC-MW-36 Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	98		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-18
Client ID: TRC-MW-23A-S
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 09:30
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 15:08
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	3.8		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-18 Date Collected: 08/08/19 09:30

Client ID: TRC-MW-23A-S Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	0.94	J	ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	0.94	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.7		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-18 Date Collected: 08/08/19 09:30

Client ID: TRC-MW-23A-S Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	98		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-20
Client ID: TRC-MW-21A-S
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 11:10
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 15:34
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	2.6		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-20 Date Collected: 08/08/19 11:10

Client ID: TRC-MW-21A-S Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	0.95	J	ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	0.95	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	11		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-20 Date Collected: 08/08/19 11:10

Client ID: TRC-MW-21A-S Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	98		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-21
Client ID: TRC-MW-24A-D
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 08:30
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 16:00
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.56		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	0.85	J	ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	0.13	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	7.4		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-21 Date Collected: 08/08/19 08:30

Client ID: TRC-MW-24A-D Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	5.3		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	5.3		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.6		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-21 Date Collected: 08/08/19 08:30

Client ID: TRC-MW-24A-D Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	97		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-22
Client ID: TRIP BLANK
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 00:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 16:25
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	0.79	J	ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-22 Date Collected: 08/08/19 00:00

Client ID: TRIP BLANK Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	5.0		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-22 Date Collected: 08/08/19 00:00

Client ID: TRIP BLANK Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	99		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-24
Client ID: TRC-MW-7B
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 12:35
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 16:51
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.35	J	ug/l	0.50	0.18	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-24 Date Collected: 08/08/19 12:35

Client ID: TRC-MW-7B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.6		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-24 Date Collected: 08/08/19 12:35

Client ID: TRC-MW-7B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/19/19 08:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03,08-14,17-18,20-22,24 Batch: WG1274159-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/19/19 08:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03,08-14,17-18,20-22,24 Batch: WG1274159-5					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Project Name: CHROMALLOY
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Lab Number: L1935705
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Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/19/19 08:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03,08-14,17-18,20-22,24 Batch: WG1274159-5					
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	96		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/19/19 08:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-05,07 Batch: WG1274207-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
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Report Date: 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/19/19 08:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-05,07 Batch: WG1274207-5					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

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Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/19/19 08:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-05,07 Batch: WG1274207-5					
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	95		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/22/19 10:58
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 15 Batch: WG1275562-10					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/22/19 10:58
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 15 Batch: WG1275562-10					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/22/19 10:58
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 15 Batch: WG1275562-10					
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	102		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/21/19 19:33
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 15 Batch: WG1275562-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
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Report Date: 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/21/19 19:33
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 15 Batch: WG1275562-5					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/21/19 19:33
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 15 Batch: WG1275562-5					
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	106		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,08-14,17-18,20-22,24 Batch: WG1274159-3 WG1274159-4								
Methylene chloride	93		94		70-130	1		20
1,1-Dichloroethane	93		95		70-130	2		20
Chloroform	92		97		70-130	5		20
Carbon tetrachloride	97		100		63-132	3		20
1,2-Dichloropropane	94		96		70-130	2		20
Dibromochloromethane	95		99		63-130	4		20
1,1,2-Trichloroethane	98		100		70-130	2		20
Tetrachloroethene	99		100		70-130	1		20
Chlorobenzene	96		98		75-130	2		20
Trichlorofluoromethane	99		100		62-150	1		20
1,2-Dichloroethane	93		96		70-130	3		20
1,1,1-Trichloroethane	93		96		67-130	3		20
Bromodichloromethane	93		96		67-130	3		20
trans-1,3-Dichloropropene	98		99		70-130	1		20
cis-1,3-Dichloropropene	95		99		70-130	4		20
Bromoform	100		100		54-136	0		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	96		98		70-130	2		20
Toluene	96		97		70-130	1		20
Ethylbenzene	95		96		70-130	1		20
Chloromethane	94		96		64-130	2		20
Bromomethane	120		120		39-139	0		20
Vinyl chloride	94		94		55-140	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,08-14,17-18,20-22,24 Batch: WG1274159-3 WG1274159-4								
Chloroethane	90		92		55-138	2		20
1,1-Dichloroethene	96		95		61-145	1		20
trans-1,2-Dichloroethene	93		96		70-130	3		20
Trichloroethene	94		97		70-130	3		20
1,2-Dichlorobenzene	99		100		70-130	1		20
1,3-Dichlorobenzene	98		98		70-130	0		20
1,4-Dichlorobenzene	98		99		70-130	1		20
Methyl tert butyl ether	94		99		63-130	5		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	93		98		70-130	5		20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	90		91		36-147	1		20
Acetone	120		120		58-148	0		20
Carbon disulfide	92		94		51-130	2		20
2-Butanone	120		130		63-138	8		20
4-Methyl-2-pentanone	100		110		59-130	10		20
2-Hexanone	100		110		57-130	10		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,08-14,17-18,20-22,24 Batch: WG1274159-3 WG1274159-4								
1,2-Dibromo-3-chloropropane	100		100		41-144	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	110		110		70-130	0		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	110		110		70-130	0		20
1,2,4-Trichlorobenzene	100		110		70-130	10		20
1,3,5-Trimethylbenzene	98		99		64-130	1		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
Methyl Acetate	100		110		70-130	10		20
Cyclohexane	96		96		70-130	0		20
1,4-Dioxane	152		150		56-162	1		20
Freon-113	100		100		70-130	0		20
Methyl cyclohexane	96		100		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		101		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	96		99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05,07 Batch: WG1274207-3 WG1274207-4								
Methylene chloride	100		98		70-130	2		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	95		92		63-132	3		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	88		86		63-130	2		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	96		94		70-130	2		20
Chlorobenzene	100		99		75-130	1		20
Trichlorofluoromethane	130		130		62-150	0		20
1,2-Dichloroethane	120		120		70-130	0		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	95		96		67-130	1		20
trans-1,3-Dichloropropene	86		85		70-130	1		20
cis-1,3-Dichloropropene	92		89		70-130	3		20
Bromoform	72		70		54-136	3		20
1,1,2,2-Tetrachloroethane	110		110		67-130	0		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	120		110		64-130	9		20
Bromomethane	65		68		39-139	5		20
Vinyl chloride	120		120		55-140	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05,07 Batch: WG1274207-3 WG1274207-4								
Chloroethane	**160**	Q	**160**	Q	55-138	0		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	97		94		70-130	3		20
1,2-Dichlorobenzene	97		95		70-130	2		20
1,3-Dichlorobenzene	97		96		70-130	1		20
1,4-Dichlorobenzene	97		96		70-130	1		20
Methyl tert butyl ether	96		95		63-130	1		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	100		100		36-147	0		20
Acetone	140		130		58-148	7		20
Carbon disulfide	96		93		51-130	3		20
2-Butanone	110		110		63-138	0		20
4-Methyl-2-pentanone	100		100		59-130	0		20
2-Hexanone	110		110		57-130	0		20
Bromochloromethane	98		97		70-130	1		20
1,2-Dibromoethane	97		94		70-130	3		20
n-Butylbenzene	110		110		53-136	0		20
sec-Butylbenzene	110		110		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHROMALLOY

Project Number: 190273.2015.0000

Lab Number: L1935705

Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05,07 Batch: WG1274207-3 WG1274207-4								
1,2-Dibromo-3-chloropropane	74		70		41-144	6		20
Isopropylbenzene	110		100		70-130	10		20
p-Isopropyltoluene	110		100		70-130	10		20
Naphthalene	95		95		70-130	0		20
n-Propylbenzene	110		110		69-130	0		20
1,2,3-Trichlorobenzene	94		92		70-130	2		20
1,2,4-Trichlorobenzene	91		88		70-130	3		20
1,3,5-Trimethylbenzene	110		100		64-130	10		20
1,2,4-Trimethylbenzene	110		100		70-130	10		20
Methyl Acetate	120		120		70-130	0		20
Cyclohexane	120		110		70-130	9		20
1,4-Dioxane	104		102		56-162	2		20
Freon-113	110		110		70-130	0		20
Methyl cyclohexane	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	122		121		70-130
Toluene-d8	103		103		70-130
4-Bromofluorobenzene	108		107		70-130
Dibromofluoromethane	101		100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 Batch: WG1275562-3 WG1275562-4								
Methylene chloride	90		92		70-130	2		20
1,1-Dichloroethane	96		91		70-130	5		20
Chloroform	95		92		70-130	3		20
Carbon tetrachloride	110		100		63-132	10		20
1,2-Dichloropropane	100		94		70-130	6		20
Dibromochloromethane	98		96		63-130	2		20
1,1,2-Trichloroethane	92		96		70-130	4		20
Tetrachloroethene	83		82		70-130	1		20
Chlorobenzene	92		92		75-130	0		20
Trichlorofluoromethane	94		89		62-150	5		20
1,2-Dichloroethane	110		100		70-130	10		20
1,1,1-Trichloroethane	96		93		67-130	3		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	97		98		70-130	1		20
cis-1,3-Dichloropropene	100		95		70-130	5		20
Bromoform	100		98		54-136	2		20
1,1,2,2-Tetrachloroethane	97		100		67-130	3		20
Benzene	99		99		70-130	0		20
Toluene	93		94		70-130	1		20
Ethylbenzene	96		96		70-130	0		20
Chloromethane	93		92		64-130	1		20
Bromomethane	87		85		39-139	2		20
Vinyl chloride	94		88		55-140	7		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 Batch: WG1275562-3 WG1275562-4								
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	90		91		61-145	1		20
trans-1,2-Dichloroethene	89		93		70-130	4		20
Trichloroethene	100		94		70-130	6		20
1,2-Dichlorobenzene	100		96		70-130	4		20
1,3-Dichlorobenzene	100		94		70-130	6		20
1,4-Dichlorobenzene	98		97		70-130	1		20
Methyl tert butyl ether	93		94		63-130	1		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	100		92		70-130	8		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	86		88		36-147	2		20
Acetone	96		91		58-148	5		20
Carbon disulfide	92		88		51-130	4		20
2-Butanone	91		91		63-138	0		20
4-Methyl-2-pentanone	91		96		59-130	5		20
2-Hexanone	92		98		57-130	6		20
Bromochloromethane	100		91		70-130	9		20
1,2-Dibromoethane	96		98		70-130	2		20
n-Butylbenzene	100		99		53-136	1		20
sec-Butylbenzene	100		98		70-130	2		20
tert-Butylbenzene	84		81		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHROMALLOY

Project Number: 190273.2015.0000

Lab Number: L1935705

Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 Batch: WG1275562-3 WG1275562-4								
1,2-Dibromo-3-chloropropane	100		94		41-144	6		20
Isopropylbenzene	98		95		70-130	3		20
p-Isopropyltoluene	100		98		70-130	2		20
Naphthalene	95		94		70-130	1		20
n-Propylbenzene	100		97		69-130	3		20
1,2,3-Trichlorobenzene	99		98		70-130	1		20
1,2,4-Trichlorobenzene	99		96		70-130	3		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
Methyl Acetate	100		95		70-130	5		20
Cyclohexane	78		78		70-130	0		20
1,4-Dioxane	88		84		56-162	5		20
Freon-113	80		81		70-130	1		20
Methyl cyclohexane	82		80		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	117		104		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	102		97		70-130
Dibromofluoromethane	103		104		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 Batch: WG1275562-8 WG1275562-9								
Methylene chloride	88		89		70-130	1		20
1,1-Dichloroethane	99		99		70-130	0		20
Chloroform	97		99		70-130	2		20
Carbon tetrachloride	99		100		63-132	1		20
1,2-Dichloropropane	94		97		70-130	3		20
Dibromochloromethane	96		97		63-130	1		20
1,1,2-Trichloroethane	96		94		70-130	2		20
Tetrachloroethene	85		85		70-130	0		20
Chlorobenzene	93		92		75-130	1		20
Trichlorofluoromethane	92		97		62-150	5		20
1,2-Dichloroethane	100		96		70-130	4		20
1,1,1-Trichloroethane	98		100		67-130	2		20
Bromodichloromethane	97		99		67-130	2		20
trans-1,3-Dichloropropene	96		95		70-130	1		20
cis-1,3-Dichloropropene	93		96		70-130	3		20
Bromoform	98		99		54-136	1		20
1,1,2,2-Tetrachloroethane	96		100		67-130	4		20
Benzene	96		96		70-130	0		20
Toluene	91		92		70-130	1		20
Ethylbenzene	93		96		70-130	3		20
Chloromethane	83		78		64-130	6		20
Bromomethane	79		74		39-139	7		20
Vinyl chloride	89		90		55-140	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 Batch: WG1275562-8 WG1275562-9								
Chloroethane	94		96		55-138	2		20
1,1-Dichloroethene	92		92		61-145	0		20
trans-1,2-Dichloroethene	91		94		70-130	3		20
Trichloroethene	99		100		70-130	1		20
1,2-Dichlorobenzene	94		100		70-130	6		20
1,3-Dichlorobenzene	98		99		70-130	1		20
1,4-Dichlorobenzene	95		99		70-130	4		20
Methyl tert butyl ether	98		99		63-130	1		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	95		97		70-130	2		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	86		88		36-147	2		20
Acetone	91		96		58-148	5		20
Carbon disulfide	94		90		51-130	4		20
2-Butanone	84		89		63-138	6		20
4-Methyl-2-pentanone	92		91		59-130	1		20
2-Hexanone	94		98		57-130	4		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	94		95		70-130	1		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	84		85		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 Batch: WG1275562-8 WG1275562-9								
1,2-Dibromo-3-chloropropane	100		110		41-144	10		20
Isopropylbenzene	97		100		70-130	3		20
p-Isopropyltoluene	99		100		70-130	1		20
Naphthalene	95		100		70-130	5		20
n-Propylbenzene	99		100		69-130	1		20
1,2,3-Trichlorobenzene	95		98		70-130	3		20
1,2,4-Trichlorobenzene	94		99		70-130	5		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	99		100		70-130	1		20
Methyl Acetate	92		96		70-130	4		20
Cyclohexane	90		95		70-130	5		20
1,4-Dioxane	106		110		56-162	4		20
Freon-113	99		100		70-130	1		20
Methyl cyclohexane	89		89		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		105		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	107		109		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,08-14,17-18,20-22,24 QC Batch ID: WG1274159-6 WG1274159-7 QC Sample: L1935705-03 Client ID: TRC-MW-1B												
Methylene chloride	ND	1000	1000	100		1100	110		70-130	10		20
1,1-Dichloroethane	ND	1000	1100	110		1100	110		70-130	0		20
Chloroform	ND	1000	1000	100		1100	110		70-130	10		20
Carbon tetrachloride	ND	1000	1100	110		1100	110		63-132	0		20
1,2-Dichloropropane	ND	1000	1100	110		1100	110		70-130	0		20
Dibromochloromethane	ND	1000	960	96		1000	100		63-130	4		20
1,1,2-Trichloroethane	ND	1000	1000	100		1100	110		70-130	10		20
Tetrachloroethene	18J	1000	1000	100		1100	110		70-130	10		20
Chlorobenzene	ND	1000	970	97		1000	100		75-130	3		20
Trichlorofluoromethane	ND	1000	1100	110		1200	120		62-150	9		20
1,2-Dichloroethane	ND	1000	1000	100		1100	110		70-130	10		20
1,1,1-Trichloroethane	ND	1000	1000	100		1100	110		67-130	10		20
Bromodichloromethane	ND	1000	1000	100		1100	110		67-130	10		20
trans-1,3-Dichloropropene	ND	1000	950	95		1000	100		70-130	5		20
cis-1,3-Dichloropropene	ND	1000	970	97		1000	100		70-130	3		20
Bromoform	ND	1000	980	98		1000	100		54-136	2		20
1,1,2,2-Tetrachloroethane	ND	1000	1000	100		1100	110		67-130	10		20
Benzene	ND	1000	1100	110		1100	110		70-130	0		20
Toluene	ND	1000	990	99		1000	100		70-130	1		20
Ethylbenzene	ND	1000	970	97		1000	100		70-130	3		20
Chloromethane	ND	1000	1100	110		1100	110		64-130	0		20
Bromomethane	ND	1000	490	49		640	64		39-139	**27**	Q	20
Vinyl chloride	ND	1000	1100	110		1200	120		55-140	9		20

Matrix Spike Analysis
Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,08-14,17-18,20-22,24 QC Batch ID: WG1274159-6 WG1274159-7 QC Sample: L1935705-03 Client ID: TRC-MW-1B												
Chloroethane	ND	1000	1100	110		1100	110		55-138	0		20
1,1-Dichloroethene	ND	1000	1000	100		1100	110		61-145	10		20
trans-1,2-Dichloroethene	ND	1000	1000	100		1100	110		70-130	10		20
Trichloroethene	13000	1000	13000	**0**	Q	13000	**0**	Q	70-130	0		20
1,2-Dichlorobenzene	ND	1000	960	96		1000	100		70-130	4		20
1,3-Dichlorobenzene	ND	1000	930	93		990	99		70-130	6		20
1,4-Dichlorobenzene	ND	1000	940	94		1000	100		70-130	6		20
Methyl tert butyl ether	ND	1000	1000	100		1100	110		63-130	10		20
p/m-Xylene	ND	2000	1900	95		2000	100		70-130	5		20
o-Xylene	ND	2000	1900	95		2000	100		70-130	5		20
cis-1,2-Dichloroethene	470	1000	1500	103		1600	113		70-130	6		20
Styrene	ND	2000	1900	95		2000	100		70-130	5		20
Dichlorodifluoromethane	ND	1000	1000	100		1100	110		36-147	10		20
Acetone	ND	1000	1500	**150**	Q	1600	**160**	Q	58-148	6		20
Carbon disulfide	ND	1000	1000	100		1000	100		51-130	0		20
2-Butanone	ND	1000	1200	120		1300	130		63-138	8		20
4-Methyl-2-pentanone	ND	1000	1000	100		1100	110		59-130	10		20
2-Hexanone	ND	1000	1000	100		1200	120		57-130	18		20
Bromochloromethane	ND	1000	1100	110		1100	110		70-130	0		20
1,2-Dibromoethane	ND	1000	1000	100		1100	110		70-130	10		20
n-Butylbenzene	ND	1000	960	96		1000	100		53-136	4		20
sec-Butylbenzene	ND	1000	980	98		1000	100		70-130	2		20
tert-Butylbenzene	ND	1000	980	98		1000	100		70-130	2		20

Matrix Spike Analysis

Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03,08-14,17-18,20-22,24 QC Batch ID: WG1274159-6 WG1274159-7 QC Sample: L1935705-03 Client ID: TRC-MW-1B												
1,2-Dibromo-3-chloropropane	ND	1000	940	94		1000	100		41-144	6		20
Isopropylbenzene	ND	1000	1000	100		1000	100		70-130	0		20
p-Isopropyltoluene	ND	1000	980	98		1000	100		70-130	2		20
Naphthalene	ND	1000	940	94		1100	110		70-130	16		20
n-Propylbenzene	ND	1000	970	97		1000	100		69-130	3		20
1,2,3-Trichlorobenzene	ND	1000	980	98		1100	110		70-130	12		20
1,2,4-Trichlorobenzene	ND	1000	960	96		1000	100		70-130	4		20
1,3,5-Trimethylbenzene	ND	1000	980	98		1000	100		64-130	2		20
1,2,4-Trimethylbenzene	ND	1000	990	99		1000	100		70-130	1		20
Methyl Acetate	ND	1000	1200	120		1200	120		70-130	0		20
Cyclohexane	ND	1000	1000	100		1100	110		70-130	10		20
1,4-Dioxane	ND	50000	67000	134		81000	162		56-162	19		20
Freon-113	ND	1000	1100	110		1200	120		70-130	9		20
Methyl cyclohexane	ND	1000	1100	110		1200	120		70-130	9		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		107		70-130
4-Bromofluorobenzene	101		103		70-130
Dibromofluoromethane	97		98		70-130
Toluene-d8	99		100		70-130

SEMIVOLATILES

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-01
Client ID: TRC-MW-9B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 09:55
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 08/14/19 23:46
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 08/14/19 08:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	144	32.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	37		15-110

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-01
Client ID: TRC-MW-9B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 09:55
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 08/19/19 14:10
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 08/16/19 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	4.44		ng/l	1.76	0.359	1
Perfluoropentanoic Acid (PFPeA)	3.82		ng/l	1.76	0.348	1
Perfluorobutanesulfonic Acid (PFBS)	1.50	J	ng/l	1.76	0.210	1
Perfluorohexanoic Acid (PFHxA)	5.01		ng/l	1.76	0.289	1
Perfluoroheptanoic Acid (PFHpA)	3.16		ng/l	1.76	0.198	1
Perfluorohexanesulfonic Acid (PFHxS)	1.32	J	ng/l	1.76	0.331	1
Perfluorooctanoic Acid (PFOA)	13.3		ng/l	1.76	0.208	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.76	1.17	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.76	0.606	1
Perfluorononanoic Acid (PFNA)	0.370	J	ng/l	1.76	0.275	1
Perfluorooctanesulfonic Acid (PFOS)	1.74	J	ng/l	1.76	0.444	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.76	0.268	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.76	1.07	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.76	0.570	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.76	0.229	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.76	0.863	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.76	0.510	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.76	0.708	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.76	0.327	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.76	0.288	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.76	0.218	1
PFOA/PFOS, Total	15.0	J	ng/l	1.76	0.208	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-01 Date Collected: 08/07/19 09:55

Client ID: TRC-MW-9B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	86		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	113		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	86		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	80		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	79		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	90		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	61		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	89		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	83		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	65		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	69		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	84		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	20		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	70		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	75		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	78		33-143

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-02
Client ID: TRC-MW-1A
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 11:05
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 08/15/19 00:07
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 08/14/19 08:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	144	32.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	42		15-110

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-02
Client ID: TRC-MW-1A
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 11:05
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 08/19/19 14:26
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 08/16/19 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	7.80		ng/l	2.03	0.415	1
Perfluoropentanoic Acid (PFPeA)	7.56		ng/l	2.03	0.402	1
Perfluorobutanesulfonic Acid (PFBS)	6.76		ng/l	2.03	0.242	1
Perfluorohexanoic Acid (PFHxA)	11.4		ng/l	2.03	0.333	1
Perfluoroheptanoic Acid (PFHpA)	5.04		ng/l	2.03	0.229	1
Perfluorohexanesulfonic Acid (PFHxS)	78.0		ng/l	2.03	0.382	1
Perfluorooctanoic Acid (PFOA)	24.1		ng/l	2.03	0.240	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.03	1.35	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.96	J	ng/l	2.03	0.699	1
Perfluorononanoic Acid (PFNA)	3.30		ng/l	2.03	0.317	1
Perfluorooctanesulfonic Acid (PFOS)	256		ng/l	2.03	0.512	1
Perfluorodecanoic Acid (PFDA)	1.21	J	ng/l	2.03	0.309	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.03	1.23	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.03	0.658	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.03	0.264	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.03	0.996	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.03	0.589	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.03	0.817	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.03	0.378	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.03	0.332	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.03	0.252	1
PFOA/PFOS, Total	280		ng/l	2.03	0.240	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-02 Date Collected: 08/07/19 11:05

Client ID: TRC-MW-1A Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	92		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	92		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	81		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	66		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	70		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	89		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	171		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	101		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	83		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	125		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	82		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	82		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	34		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	77		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	69		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	63		33-143

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-03
Client ID: TRC-MW-1B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 12:05
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 08/15/19 00:28
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 08/14/19 08:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	67.7	J	ng/l	144	32.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	38		15-110

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-03
Client ID: TRC-MW-1B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 12:05
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 08/19/19 14:43
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 08/16/19 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	23.8		ng/l	1.78	0.363	1
Perfluoropentanoic Acid (PFPeA)	26.0		ng/l	1.78	0.352	1
Perfluorobutanesulfonic Acid (PFBS)	36.8		ng/l	1.78	0.212	1
Perfluorohexanoic Acid (PFHxA)	94.3		ng/l	1.78	0.292	1
Perfluoroheptanoic Acid (PFHpA)	9.93		ng/l	1.78	0.200	1
Perfluorohexanesulfonic Acid (PFHxS)	376		ng/l	1.78	0.334	1
Perfluorooctanoic Acid (PFOA)	34.1		ng/l	1.78	0.210	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.78	1.18	1
Perfluoroheptanesulfonic Acid (PFHpS)	14.2		ng/l	1.78	0.612	1
Perfluorononanoic Acid (PFNA)	2.30		ng/l	1.78	0.278	1
Perfluorooctanesulfonic Acid (PFOS)	657		ng/l	1.78	0.448	1
Perfluorodecanoic Acid (PFDA)	0.886	J	ng/l	1.78	0.270	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.78	1.08	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.78	0.576	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.78	0.231	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.78	0.872	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.78	0.516	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.872	J	ng/l	1.78	0.715	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.78	0.331	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.78	0.291	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.78	0.221	1
PFOA/PFOS, Total	691		ng/l	1.78	0.210	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-03 Date Collected: 08/07/19 12:05

Client ID: TRC-MW-1B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	104		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	98		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	67		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	72		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	90		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	179		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	89		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	79		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	120		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	70		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	78		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	18		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	64		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	71		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	72		33-143

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-04
Client ID: TRC-MW-5B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 13:40
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 08/15/19 01:30
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 08/14/19 08:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	175.		ng/l	144	32.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	41		15-110

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-04
Client ID: TRC-MW-5B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 13:40
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 08/19/19 15:00
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 08/16/19 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	4.87		ng/l	1.77	0.362	1
Perfluoropentanoic Acid (PFPeA)	6.07		ng/l	1.77	0.351	1
Perfluorobutanesulfonic Acid (PFBS)	4.91		ng/l	1.77	0.211	1
Perfluorohexanoic Acid (PFHxA)	10.3		ng/l	1.77	0.291	1
Perfluoroheptanoic Acid (PFHpA)	5.20		ng/l	1.77	0.200	1
Perfluorohexanesulfonic Acid (PFHxS)	41.0		ng/l	1.77	0.333	1
Perfluorooctanoic Acid (PFOA)	17.5		ng/l	1.77	0.209	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.77	1.18	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.88		ng/l	1.77	0.610	1
Perfluorononanoic Acid (PFNA)	2.06		ng/l	1.77	0.276	1
Perfluorooctanesulfonic Acid (PFOS)	124		ng/l	1.77	0.447	1
Perfluorodecanoic Acid (PFDA)	0.890	J	ng/l	1.77	0.270	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.77	1.07	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.77	0.574	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.77	0.230	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.77	0.869	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.77	0.514	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.77	0.713	1
Perfluorododecanoic Acid (PFDoA)	0.344	J	ng/l	1.77	0.330	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.77	0.290	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.77	0.220	1
PFOA/PFOS, Total	142		ng/l	1.77	0.209	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-04 Date Collected: 08/07/19 13:40

Client ID: TRC-MW-5B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	80		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	112		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	102		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	70		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	71		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	84		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	93		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	88		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	73		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	75		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	55		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	72		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	7		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	54		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	63		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	71		33-143

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-05
Client ID: TRC-DUP-1
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 08:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 08/15/19 01:51
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 08/14/19 08:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	152.		ng/l	144	32.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	46		15-110

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-05
Client ID: TRC-DUP-1
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 08:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 08/19/19 15:16
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 08/16/19 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	4.88		ng/l	1.78	0.364	1
Perfluoropentanoic Acid (PFPeA)	6.31		ng/l	1.78	0.354	1
Perfluorobutanesulfonic Acid (PFBS)	4.85		ng/l	1.78	0.212	1
Perfluorohexanoic Acid (PFHxA)	10.3		ng/l	1.78	0.293	1
Perfluoroheptanoic Acid (PFHpA)	5.24		ng/l	1.78	0.201	1
Perfluorohexanesulfonic Acid (PFHxS)	39.1		ng/l	1.78	0.336	1
Perfluorooctanoic Acid (PFOA)	17.5		ng/l	1.78	0.211	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.78	1.19	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.57	J	ng/l	1.78	0.614	1
Perfluorononanoic Acid (PFNA)	2.07		ng/l	1.78	0.278	1
Perfluorooctanesulfonic Acid (PFOS)	121		ng/l	1.78	0.450	1
Perfluorodecanoic Acid (PFDA)	0.739	J	ng/l	1.78	0.271	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.78	1.08	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.78	0.578	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.78	0.232	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.78	0.875	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.78	0.518	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.78	0.718	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.78	0.332	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.78	0.292	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.78	0.221	1
PFOA/PFOS, Total	139		ng/l	1.78	0.211	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-05 Date Collected: 08/07/19 08:00

Client ID: TRC-DUP-1 Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	75		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	105		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	90		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	68		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	71		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	96		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	78		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	74		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	80		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	84		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	65		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	53		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	50		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	60		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	14		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	43		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	53		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	57		33-143

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-06
Client ID: TRC-EB-1
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 14:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 08/19/19 15:33
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 08/16/19 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.75	0.358	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.75	0.347	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.75	0.209	1
Perfluorohexanoic Acid (PFHxA)	0.375	J	ng/l	1.75	0.288	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.75	0.198	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.75	0.330	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.75	0.207	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.75	1.17	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.75	0.604	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.75	0.274	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.75	0.442	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.75	0.267	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.75	1.06	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.75	0.568	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.75	0.228	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.75	0.860	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.75	0.509	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.75	0.705	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.75	0.326	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.75	0.287	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.75	0.218	1
PFOA/PFOS, Total	ND		ng/l	1.75	0.207	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-06 Date Collected: 08/07/19 14:00

Client ID: TRC-EB-1 Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	97		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	137		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	108		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	94		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	99		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	116		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	109		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	74		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	108		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	104		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	60		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	82		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	87		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	13		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	73		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	80		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	96		33-143

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-15
Client ID: TRC-MW-12A
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 09:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 08/22/19 16:11
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 08/15/19 09:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	422.		ng/l	134	30.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	35		15-110

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-15
Client ID: TRC-MW-12A
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 09:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 08/19/19 15:49
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 08/16/19 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	1.90		ng/l	1.80	0.368	1
Perfluoropentanoic Acid (PFPeA)	1.62	J	ng/l	1.80	0.357	1
Perfluorobutanesulfonic Acid (PFBS)	3.10		ng/l	1.80	0.215	1
Perfluorohexanoic Acid (PFHxA)	3.90		ng/l	1.80	0.296	1
Perfluoroheptanoic Acid (PFHpA)	1.46	J	ng/l	1.80	0.203	1
Perfluorohexanesulfonic Acid (PFHxS)	30.5		ng/l	1.80	0.339	1
Perfluorooctanoic Acid (PFOA)	7.30		ng/l	1.80	0.213	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.80	1.20	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.86		ng/l	1.80	0.621	1
Perfluorononanoic Acid (PFNA)	0.361	J	ng/l	1.80	0.282	1
Perfluorooctanesulfonic Acid (PFOS)	59.2		ng/l	1.80	0.455	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.80	0.274	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.80	1.09	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.80	0.585	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.80	0.235	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.80	0.884	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.80	0.523	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.80	0.726	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.80	0.336	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.80	0.295	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.80	0.224	1
PFOA/PFOS, Total	66.5		ng/l	1.80	0.213	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-15 Date Collected: 08/08/19 09:50

Client ID: TRC-MW-12A Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	93		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	135		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	99		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	84		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	100		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	86		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	67		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	73		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	67		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	58		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	48		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	67		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	62		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	15		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	56		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	66		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	78		33-143

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-16
Client ID: TRC-MW-12B
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 10:30
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 08/22/19 16:36
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 08/15/19 09:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	486.		ng/l	144	32.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	40		15-110

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-16
Client ID: TRC-MW-12B
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 10:30
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 08/19/19 16:06
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 08/16/19 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	1.65	J	ng/l	1.79	0.366	1
Perfluoropentanoic Acid (PFPeA)	1.48	J	ng/l	1.79	0.355	1
Perfluorobutanesulfonic Acid (PFBS)	3.35		ng/l	1.79	0.213	1
Perfluorohexanoic Acid (PFHxA)	3.99		ng/l	1.79	0.294	1
Perfluoroheptanoic Acid (PFHpA)	1.54	J	ng/l	1.79	0.202	1
Perfluorohexanesulfonic Acid (PFHxS)	32.6		ng/l	1.79	0.337	1
Perfluorooctanoic Acid (PFOA)	7.97		ng/l	1.79	0.211	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.79	1.19	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.92		ng/l	1.79	0.616	1
Perfluorononanoic Acid (PFNA)	0.358	J	ng/l	1.79	0.280	1
Perfluorooctanesulfonic Acid (PFOS)	72.4		ng/l	1.79	0.452	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.79	0.272	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.79	1.09	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.79	0.581	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.79	0.233	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.79	0.878	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.79	0.520	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.79	0.720	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.79	0.333	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.79	0.293	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.79	0.222	1
PFOA/PFOS, Total	80.4		ng/l	1.79	0.211	1

Project Name: CHROMALLOY **Lab Number:** L1935705

Project Number: 190273.2015.0000 **Report Date:** 08/23/19

SAMPLE RESULTS

Lab ID: L1935705-16 Date Collected: 08/08/19 10:30

Client ID: TRC-MW-12B Date Received: 08/08/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	107		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	156		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	127		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	97		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	128		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	88		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	86		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	86		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	68		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	58		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	83		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	70		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	12		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	65		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	77		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	96		33-143

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 08/14/19 19:39
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 08/14/19 08:45

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-05 Batch: WG1272139-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 08/22/19 07:09
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 08/15/19 09:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 15-16 Batch: WG1272634-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	42		15-110

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 08/19/19 11:52
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 08/16/19 16:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-06,15-16 Batch: WG1273407-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 08/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 08/19/19 11:52
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 08/16/19 16:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-06,15-16 Batch: WG1273407-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	88		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	107		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	80		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	79		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	82		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	84		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	85		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	51		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	87		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	77		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	75		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	51		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	74		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	73		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	36		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	64		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	70		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	73		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHROMALLOY

Project Number: 190273.2015.0000

Lab Number: L1935705

Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01-05		Batch: WG1272139-2		WG1272139-3			
1,4-Dioxane	119		121		40-140	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	29		31		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHROMALLOY

Project Number: 190273.2015.0000

Lab Number: L1935705

Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 15-16		Batch: WG1272634-2	WG1272634-3				
1,4-Dioxane	118		118		40-140	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	33		43		15-110

Lab Control Sample Analysis
Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-06,15-16 Batch: WG1273407-2 WG1273407-3								
Perfluorobutanoic Acid (PFBA)	86		89		67-148	3		30
Perfluoropentanoic Acid (PFPeA)	77		79		63-161	3		30
Perfluorobutanesulfonic Acid (PFBS)	74		76		65-157	3		30
Perfluorohexanoic Acid (PFHxA)	86		89		69-168	3		30
Perfluoroheptanoic Acid (PFHpA)	86		90		58-159	5		30
Perfluorohexanesulfonic Acid (PFHxS)	92		94		69-177	2		30
Perfluorooctanoic Acid (PFOA)	84		88		63-159	5		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	96		98		49-187	2		30
Perfluoroheptanesulfonic Acid (PFHpS)	81		86		61-179	6		30
Perfluorononanoic Acid (PFNA)	84		87		68-171	4		30
Perfluorooctanesulfonic Acid (PFOS)	86		87		52-151	1		30
Perfluorodecanoic Acid (PFDA)	84		91		63-171	8		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	93		81		56-173	14		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	81		96		60-166	17		30
Perfluoroundecanoic Acid (PFUnA)	84		91		60-153	8		30
Perfluorodecanesulfonic Acid (PFDS)	83		88		38-156	6		30
Perfluorooctanesulfonamide (FOSA)	72		76		46-170	5		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	82		79		45-170	4		30
Perfluorododecanoic Acid (PFDoA)	90		94		67-153	4		30
Perfluorotridecanoic Acid (PFTrDA)	93		96		48-158	3		30
Perfluorotetradecanoic Acid (PFTA)	88		98		59-182	11		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CHROMALLOY

Project Number: 190273.2015.0000

Lab Number: L1935705

Report Date: 08/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-06,15-16 Batch: WG1273407-2 WG1273407-3

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	117		108		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	142		130		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	103		101		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	106		95		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	109		97		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	108		105		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	115		101		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	70		64		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	118		104		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	106		104		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	104		92		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	71		78		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	95		82		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	99		89		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	48		45		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	78		81		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	92		84		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	97		86		33-143

Matrix Spike Analysis

Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1272139-4 WG1272139-5 QC Sample: L1935705-03 Client ID: TRC-MW-1B												
1,4-Dioxane	67.7J	4810	5910	123		6060	126		40-140	3		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,4-Dioxane-d8	39		44		15-110

Matrix Spike Analysis
Batch Quality Control

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-06,15-16 QC Batch ID: WG1273407-4 WG1273407-5 QC Sample: L1935705-03 Client ID: TRC-MW-1B												
Perfluorobutanoic Acid (PFBA)	23.8	36.1	52.6	80		52.6	80		67-148	0		30
Perfluoropentanoic Acid (PFPeA)	26.0	36.1	51.0	69		51.5	71		63-161	1		30
Perfluorobutanesulfonic Acid (PFBS)	36.8	32	56.0	**60**	Q	56.5	**62**	Q	65-157	1		30
Perfluorohexanoic Acid (PFHxA)	94.3	36.1	112	**49**	Q	113	**52**	Q	69-168	1		30
Perfluoroheptanoic Acid (PFHpA)	9.93	36.1	40.7	85		41.1	86		58-159	1		30
Perfluorohexanesulfonic Acid (PFHxS)	376	32.9	348	**0**	Q	358	**0**	Q	69-177	3		30
Perfluorooctanoic Acid (PFOA)	34.1	36.1	61.2	75		61.0	74		63-159	0		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	34.3	33.2	97		32.8	96		49-187	1		30
Perfluoroheptanesulfonic Acid (PFHpS)	14.2	34.3	45.8	92		44.7	89		61-179	2		30
Perfluorononanoic Acid (PFNA)	2.30	36.1	33.8	87		34.3	89		68-171	1		30
Perfluorooctanesulfonic Acid (PFOS)	657	33.4	593	**0**	Q	564	**0**	Q	52-151	5		30
Perfluorodecanoic Acid (PFDA)	0.886J	36.1	33.9	94		33.7	93		63-171	1		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	34.6	26.2	76		27.9	80		56-173	6		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	36.1	34.2	95		29.5	82		60-166	15		30
Perfluoroundecanoic Acid (PFUnA)	ND	36.1	31.9	88		31.0	86		60-153	3		30
Perfluorodecanesulfonic Acid (PFDS)	ND	34.9	30.5	88		29.7	85		38-156	3		30
Perfluorooctanesulfonamide (FOSA)	ND	36.1	29.0	80		28.8	80		46-170	1		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.872J	36.1	35.7	99		32.7	91		45-170	9		30
Perfluorododecanoic Acid (PFDoA)	ND	36.1	35.2	98		33.7	93		67-153	4		30
Perfluorotridecanoic Acid (PFTrDA)	ND	36.1	36.2	100		34.6	96		48-158	5		30
Perfluorotetradecanoic Acid (PFTA)	ND	36.1	35.4	98		34.0	94		59-182	4		30

Matrix Spike Analysis

Batch Quality Control

Project Name: CHROMALLOY

Project Number: 190273.2015.0000

Lab Number: L1935705

Report Date: 08/23/19

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-06,15-16 QC Batch ID: WG1273407-4 WG1273407-5 QC Sample: L1935705-03 Client ID: TRC-MW-1B

Surrogate (Extracted Internal Standard)	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	143		156		7-170
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	218		233		1-244
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	62		77		23-146
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	70		93		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	82		95		40-144
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		97		38-144
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	76		84		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	78		90		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	118		126		47-153
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	73		86		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	76		91		33-143
Perfluoro[13C4]Butanoic Acid (MPFBA)	97		106		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	113		126		16-173
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	22		26		1-87
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	105		123		42-146
Perfluoro[13C8]Octanoic Acid (M8PFOA)	99		111		36-149
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	105		116		34-146
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	120		128		31-159

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935705-01A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-01B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-01C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-01D	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-01E	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-01F	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-01G	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-02A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-02B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-02C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-02D	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-02E	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-02F	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-02G	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-03A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-03A1	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-03A2	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-03B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-03B1	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-03B2	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-03C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-03C1	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935705-03C2	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-03D	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-03D1	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-03D2	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-03E	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-03E1	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-03E2	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-03F	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-03F1	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-03F2	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-03G	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-03G1	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-03G2	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-04A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-04B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-04C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-04D	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-04E	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-04F	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-04G	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-05A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-05B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-05C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-05D	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-05E	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-05F	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-05G	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-06A	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)

*Values in parentheses indicate holding time in days

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935705-06B	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-07A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-07B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-07C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-08A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-08B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-08C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-09A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-09B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-09C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-10A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-10B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-10C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-11A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-11B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-11C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-12A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-12B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-12C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-13A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-13B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-13C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-14A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-14B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-14C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-15A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-15B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-15C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935705-15D	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-15E	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-15F	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-15G	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-16A	Vial HCl preserved	A	NA		3.0	Y	Absent		HOLD-8260(14)
L1935705-16B	Vial HCl preserved	A	NA		3.0	Y	Absent		HOLD-8260(14)
L1935705-16C	Vial HCl preserved	A	NA		3.0	Y	Absent		HOLD-8260(14)
L1935705-16D	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-16E	Plastic 250ml Trizma preserved	B	NA		2.8	Y	Absent		A2-NY-537-ISOTOPE(14)
L1935705-16F	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-16G	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1935705-17A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-17B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-17C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-18A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-18B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-18C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-19A	Vial HCl preserved	A	NA		3.0	Y	Absent		HOLD-8260(14)
L1935705-19B	Vial HCl preserved	A	NA		3.0	Y	Absent		HOLD-8260(14)
L1935705-19C	Vial HCl preserved	A	NA		3.0	Y	Absent		HOLD-8260(14)
L1935705-20A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-20B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-20C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-21A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-21B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-21C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-22A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-22B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 08/23/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935705-24A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-24B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-24C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1935705-25A	Plastic 250ml Trizma preserved	A	NA		3.0	Y	Absent		HOLD-537(14)

*Values in parentheses indicate holding time in days

Project Name:	CHROMALLOY	**Lab Number:**	L1935705
Project Number:	190273.2015.0000	**Report Date:**	08/23/19

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	CHROMALLOY	**Lab Number:**	L1935705
Project Number:	190273.2015.0000	**Report Date:**	08/23/19

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when using acetone as a solvent.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	CHROMALLOY	**Lab Number:**	L1935705
Project Number:	190273.2015.0000	**Report Date:**	08/23/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

122 Determination of Selected Perfluorintated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 3

Date Rec'd in Lab: 8/9/19

ALPHA Job #: L1935705

Project Information

Project Name: Chromalloy
Project Location: West Nyack, NY
Project #:
(Use Project name as Project #) ☐
Project Manager: Jeff LaRock
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date: STD
Rush (only if pre approved) ☐ # of Days:

Client Information

Client: TRC Companies
Address: 10 Maxwell Dr. Suite 200 Clifton Park, NY 12065
Phone:
Fax:
Email: jlarock@trccompanies.com

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL Volatiles EPA 8260C	PFAS via EPA 537	1,4 Dioxane via EPA 8270D-SIM	Sample Specific Comments	Total Bottles
35705-01	TRC-MW-9B	08/07/19	09:55	Water	MEC	3	2	2		7
-02	TRC-MW-1A	08/07/19	11:05	Water	MEC	3	2	2		7
-03	TRC-MW-1A	08/07/19	12:05	Water	MEC	9	6	6	MS/MSD Collected	21
-04	TRC-MW-5B	08/07/19	13:40	Water	MEC	3	2	2		7
-05	TRC-DUP-1	08/07/19	08:00	Water	MEC	3	2	2		7
-06	TRC-EB-1	08/07/19	14:00	Water	MEC		2			2
-07	TRC-MW-4B	08/07/19	15:00	Water	MEC	3				3
-08	TRC-MW-6A	08/07/19	09:50	Water	NEP	3				3
-09	TRC-MW-6B	08/07/19	10:50	Water	NEP	3				3
-10	TRC-MW-14B	08/07/19	12:00	Water	NEP	3				3
	Container Type					V	P	A		
	Preservative					B	O	A		

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Marianne Chromerey	08/08/19 15:40	[signature] AAL	8-8-19 15:40
[signature] AAL		[signature]	8/9/19 01:30

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ALPHA

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Page 2 of 3

Date Rec'd in Lab: 8/9/19

ALPHA Job #: L1935705

Project Information
Project Name: Chromalloy
Project Location: West Nyack, NY
Project #
(Use Project name as Project #) ☐
Project Manager: Jeff LaRock
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date: STD
Rush (only if pre approved) ☐ # of Days:

Client Information
Client: TRC Companies
Address: 10 Maxwell Dr. Suite 200
Clifton Park, NY 12065
Phone:
Fax:
Email: jlarock@trccompanies.com

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL Volatiles - EPA 8260C	PFAS via EPA 537	1,4 Dioxane via EPA 8270D-SIM						Sample Specific Comments	Total Bottles
35705-11	TRC-MW-8B	08/07/19	12:55	Water	NEP	3									3
-12	TRC-MW-2B	08/07/19	1350	Water	NEP	3									3
-13	TRC-MW-3B	08/07/19	15:00	Water	NEP	3									3
-14	TRC-MW-35	08/08/19	08:45	Water	MEC	3									3
-15	TRC-MW-12A	08/08/19	09:50	Water	MEC	3	2	2							7
-16	TRC-MW-12B	08/08/19	10:30	Water	MEC	3	2	2							7
-17	TRC-MW-36	08/08/19	11:30	Water	MEC	3									3
-18	TRC-MW-23A-S	08/08/19	9:30	Water	NEP	3									3
-19	TRC-MW-23A-D	08/08/19	10:10	Water	NEP	3									3
-20	TRC-MW-21A-S	08/08/19	11:10	Water	NEP	3									3

	V	P	A					
Container Type	V	P	A					
Preservative	B	O	A					

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Marmu Chermany	08/08/19 15:40	Robert Holm AAL	8-8-19 15:40
		[signature]	8/9/19 01:40

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ALPHA — NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 3 of 3

Date Rec'd in Lab: 8/9/19

ALPHA Job #: L1935705

Westborough, MA 01581, 8 Walkup Dr., TEL: 508-898-9220, FAX: 508-898-9193
Mansfield, MA 02048, 320 Forbes Blvd, TEL: 508-822-9300, FAX: 508-822-3288

Project Information
Project Name: Chromalloy
Project Location: West Nyack, NY
Project #
(Use Project name as Project #) ☐
Project Manager:
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date: STD
Rush (only if pre approved) ☐ # of Days:

Client Information
Client: TRC Companies
Address: 10 Maxwell Dr, Suite 200, Clifton Park, NY 12065
Phone:
Fax:
Email: jlarock@trccompanies.com

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information
☐ Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS: TCL Volatiles - EPA 8260C

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL Volatiles - EPA 8260C	Sample Specific Comments	Total Bottles
35705-21	TRC-MW-24A-D	08/08/19	8:30	water	NCP	3		3
-22	TRIP BLANK	08/08/19						2
-24	TRC-MW-7B	08/08/19	12:35		MCC	3		3

NEL

	TCL Volatiles - EPA 8260C
Container Type	V
Preservative	B

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	08/08/19 15:40	[signature] AAL	8-8-19 1540
		[signature]	8/9/19 01:40

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1936742
Client:	TRC Solutions 10 Maxwell Drive Suite 200 Clifton Park, NY 12065
ATTN:	Jeffrey LaRock
Phone:	(518) 688-3109
Project Name:	FORMER CHROMALLOY FACILITY
Project Number:	190273.2015.0000
Report Date:	08/26/19

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: FORMER CHROMALLOY FACILITY
Project Number: 190273.2015.0000

Lab Number: L1936742
Report Date: 08/26/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1936742-01	TRC-MW-12B	WATER	WEST NYACK, NY	08/14/19 13:00	08/14/19
L1936742-02	TRC-MW-23A-D	WATER	WEST NYACK, NY	08/14/19 14:00	08/14/19
L1936742-03	TRIP BLANK	WATER	WEST NYACK, NY	08/14/19 00:00	08/14/19

Project Name:	FORMER CHROMALLOY FACILITY	**Lab Number:**	L1936742
Project Number:	190273.2015.0000	**Report Date:**	08/26/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	FORMER CHROMALLOY FACILITY	**Lab Number:**	L1936742
Project Number:	190273.2015.0000	**Report Date:**	08/26/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 08/26/19

ORGANICS

VOLATILES

Project Name: FORMER CHROMALLOY FACILITY **Lab Number:** L1936742

Project Number: 190273.2015.0000 **Report Date:** 08/26/19

SAMPLE RESULTS

Lab ID: L1936742-01
Client ID: TRC-MW-12B
Sample Location: WEST NYACK, NY

Date Collected: 08/14/19 13:00
Date Received: 08/14/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/20/19 13:18
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	0.27	J	ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	360	E	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	1.3	J	ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Project Name: FORMER CHROMALLOY FACILITY **Lab Number:** L1936742

Project Number: 190273.2015.0000 **Report Date:** 08/26/19

SAMPLE RESULTS

Lab ID: L1936742-01 Date Collected: 08/14/19 13:00

Client ID: TRC-MW-12B Date Received: 08/14/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	180		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	180	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: FORMER CHROMALLOY FACILITY **Lab Number:** L1936742

Project Number: 190273.2015.0000 **Report Date:** 08/26/19

SAMPLE RESULTS

Lab ID: L1936742-01 Date Collected: 08/14/19 13:00

Client ID: TRC-MW-12B Date Received: 08/14/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	98		70-130

Project Name: FORMER CHROMALLOY FACILITY
Lab Number: L1936742
Project Number: 190273.2015.0000
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1936742-01 D
Client ID: TRC-MW-12B
Sample Location: WEST NYACK, NY

Date Collected: 08/14/19 13:00
Date Received: 08/14/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/20/19 16:16
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Vinyl chloride	330		ug/l	5.0	0.36	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	98		70-130

Project Name: FORMER CHROMALLOY FACILITY **Lab Number:** L1936742

Project Number: 190273.2015.0000 **Report Date:** 08/26/19

SAMPLE RESULTS

Lab ID: L1936742-02
Client ID: TRC-MW-23A-D
Sample Location: WEST NYACK, NY

Date Collected: 08/14/19 14:00
Date Received: 08/14/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/20/19 12:53
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Project Name: FORMER CHROMALLOY FACILITY **Lab Number:** L1936742

Project Number: 190273.2015.0000 **Report Date:** 08/26/19

SAMPLE RESULTS

Lab ID: L1936742-02 Date Collected: 08/14/19 14:00

Client ID: TRC-MW-23A-D Date Received: 08/14/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: FORMER CHROMALLOY FACILITY **Lab Number:** L1936742

Project Number: 190273.2015.0000 **Report Date:** 08/26/19

SAMPLE RESULTS

Lab ID: L1936742-02 Date Collected: 08/14/19 14:00

Client ID: TRC-MW-23A-D Date Received: 08/14/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	96		70-130

Project Name: FORMER CHROMALLOY FACILITY **Lab Number:** L1936742

Project Number: 190273.2015.0000 **Report Date:** 08/26/19

SAMPLE RESULTS

Lab ID: L1936742-03 Date Collected: 08/14/19 00:00
Client ID: TRIP BLANK Date Received: 08/14/19
Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/20/19 12:28
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Project Name: FORMER CHROMALLOY FACILITY **Lab Number:** L1936742

Project Number: 190273.2015.0000 **Report Date:** 08/26/19

SAMPLE RESULTS

Lab ID: L1936742-03 Date Collected: 08/14/19 00:00

Client ID: TRIP BLANK Date Received: 08/14/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: FORMER CHROMALLOY FACILITY **Lab Number:** L1936742

Project Number: 190273.2015.0000 **Report Date:** 08/26/19

SAMPLE RESULTS

Lab ID: L1936742-03 Date Collected: 08/14/19 00:00

Client ID: TRIP BLANK Date Received: 08/14/19

Sample Location: WEST NYACK, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	95		70-130

Project Name: FORMER CHROMALLOY FACILITY **Lab Number:** L1936742

Project Number: 190273.2015.0000 **Report Date:** 08/26/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/20/19 11:37
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1274785-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: FORMER CHROMALLOY FACILITY **Lab Number:** L1936742

Project Number: 190273.2015.0000 **Report Date:** 08/26/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/20/19 11:37
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1274785-5					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Project Name: FORMER CHROMALLOY FACILITY
Project Number: 190273.2015.0000
Lab Number: L1936742
Report Date: 08/26/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/20/19 11:37
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1274785-5					
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: FORMER CHROMALLOY FACILITY
Project Number: 190273.2015.0000

Lab Number: L1936742
Report Date: 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1274785-3 WG1274785-4								
Methylene chloride	96		96		70-130	0		20
1,1-Dichloroethane	93		94		70-130	1		20
Chloroform	93		94		70-130	1		20
Carbon tetrachloride	94		96		63-132	2		20
1,2-Dichloropropane	97		99		70-130	2		20
Dibromochloromethane	93		93		63-130	0		20
1,1,2-Trichloroethane	99		97		70-130	2		20
Tetrachloroethene	92		94		70-130	2		20
Chlorobenzene	93		94		75-130	1		20
Trichlorofluoromethane	97		95		62-150	2		20
1,2-Dichloroethane	94		96		70-130	2		20
1,1,1-Trichloroethane	92		96		67-130	4		20
Bromodichloromethane	94		97		67-130	3		20
trans-1,3-Dichloropropene	94		92		70-130	2		20
cis-1,3-Dichloropropene	96		97		70-130	1		20
Bromoform	97		96		54-136	1		20
1,1,2,2-Tetrachloroethane	99		98		67-130	1		20
Benzene	97		100		70-130	3		20
Toluene	92		93		70-130	1		20
Ethylbenzene	92		93		70-130	1		20
Chloromethane	84		85		64-130	1		20
Bromomethane	93		100		39-139	7		20
Vinyl chloride	90		92		55-140	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER CHROMALLOY FACILITY

Project Number: 190273.2015.0000

Lab Number: L1936742

Report Date: 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1274785-3 WG1274785-4								
Chloroethane	90		92		55-138	2		20
1,1-Dichloroethene	94		94		61-145	0		20
trans-1,2-Dichloroethene	93		97		70-130	4		20
Trichloroethene	96		98		70-130	2		20
1,2-Dichlorobenzene	95		97		70-130	2		20
1,3-Dichlorobenzene	91		94		70-130	3		20
1,4-Dichlorobenzene	93		95		70-130	2		20
Methyl tert butyl ether	99		98		63-130	1		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	90		95		70-130	5		20
cis-1,2-Dichloroethene	95		98		70-130	3		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	81		78		36-147	4		20
Acetone	130		130		58-148	0		20
Carbon disulfide	91		93		51-130	2		20
2-Butanone	120		120		63-138	0		20
4-Methyl-2-pentanone	99		96		59-130	3		20
2-Hexanone	100		98		57-130	2		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	100		99		70-130	1		20
n-Butylbenzene	92		95		53-136	3		20
sec-Butylbenzene	95		96		70-130	1		20
tert-Butylbenzene	95		95		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER CHROMALLOY FACILITY

Project Number: 190273.2015.0000

Lab Number: L1936742

Report Date: 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1274785-3 WG1274785-4								
1,2-Dibromo-3-chloropropane	100		96		41-144	4		20
Isopropylbenzene	94		95		70-130	1		20
p-Isopropyltoluene	94		95		70-130	1		20
Naphthalene	110		110		70-130	0		20
n-Propylbenzene	93		94		69-130	1		20
1,2,3-Trichlorobenzene	110		100		70-130	10		20
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	92		95		64-130	3		20
1,2,4-Trimethylbenzene	95		97		70-130	2		20
Methyl Acetate	110		100		70-130	10		20
Cyclohexane	91		91		70-130	0		20
1,4-Dioxane	128		124		56-162	3		20
Freon-113	97		96		70-130	1		20
Methyl cyclohexane	92		92		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		100		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	99		98		70-130

Project Name: FORMER CHROMALLOY FACILITY
Project Number: 190273.2015.0000

Lab Number: L1936742
Report Date: 08/26/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1936742-01A	Vial unpreserved	A	NA		3.7	Y	Absent		NYTCL-8260-R2(7)
L1936742-01B	Vial unpreserved	A	NA		3.7	Y	Absent		NYTCL-8260-R2(7)
L1936742-01C	Vial unpreserved	A	NA		3.7	Y	Absent		NYTCL-8260-R2(7)
L1936742-02A	Vial unpreserved	A	NA		3.7	Y	Absent		NYTCL-8260-R2(7)
L1936742-02B	Vial unpreserved	A	NA		3.7	Y	Absent		NYTCL-8260-R2(7)
L1936742-02C	Vial unpreserved	A	NA		3.7	Y	Absent		NYTCL-8260-R2(7)
L1936742-03A	Vial unpreserved	A	NA		3.7	Y	Absent		NYTCL-8260-R2(7)
L1936742-03B	Vial unpreserved	A	NA		3.7	Y	Absent		NYTCL-8260-R2(7)

*Values in parentheses indicate holding time in days

Project Name:	FORMER CHROMALLOY FACILITY	**Lab Number:**	L1936742
Project Number:	190273.2015.0000	**Report Date:**	08/26/19

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	FORMER CHROMALLOY FACILITY	**Lab Number:**	L1936742
Project Number:	190273.2015.0000	**Report Date:**	08/26/19

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when using acetone as a solvent.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	FORMER CHROMALLOY FACILITY	**Lab Number:**	L1936742
Project Number:	190273.2015.0000	**Report Date:**	08/26/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page: 1 of 1

Date Rec'd in Lab: 8/15/19

ALPHA Job #: L1936742

Client Information
Client: TRC Companies
Address: 10 Maxwell Dr. Suite 200
Clifton Park, NY 12065
Phone:
Fax:
Email: jlarock@trcompanies.com

Project Information
Project Name: Former Chromalloy Facility
Project Location: West Nyack, NY
Project #: 190273.2015.0000
(Use Project name as Project #)
Project Manager: Jeff LaRock
ALPHAQuote #:

Turn-Around Time
Standard: X
Due Date: STD
Rush (only if pre approved):
# of Days:

These samples have been previously analyzed by Alpha
Other project specific requirements/comments:

Please specify Metals or TAL.

Deliverables
- ASP-A
- ASP-B
- EQuIS (1 File)
- EQuIS (4 File)
- Other

Regulatory Requirement
- NY TOGS
- NY Part 375
- AWQ Standards
- NY CP-51
- NY Restricted Use
- Other
- NY Unrestricted Use
- NYC Sewer Discharge

Billing Information
- Same as Client Info

PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.

Disposal Facility:
- NJ
- NY
- Other:

ANALYSIS
Volatiles via EPA 8260C

Sample Filtration
- Done
- Lab to do

Preservation
- Lab to do

(Please Specify below)

Sample Specific Comments

Total Bottles

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Volatiles via EPA 8260C	Total Bottles
36742 - 01	TRC-MW-12B	8/14	1300	GW	NLP	3	
-02	TRC-MW-23A-D	8/14	1400	GW	NLP	3	
-03	TRIP BLANK					2	

Container Type: V
Preservative: A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	8/14/19 6:00PM		8/14/19 2200
	8/14/19 2200		8/15/19 0630

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

APPENDIX E

DATA USABILITY SUMMARY REPORTS

GROUNDWATER

Data Usability Summary Report

Site: Former Chromalloy, West Nyack, NY
Laboratory: Alpha Analytical Laboratory – Westborough and/or Mansfield, MA
SDG Nos.: L1935705 and L1936742
Parameters: Volatile Organic Compounds (VOCs), 1,4-Dioxane
Data Reviewer: Kristen Morin/TRC
Peer Reviewer: Elizabeth Denly/TRC
Date: September 30, 2019

Samples Reviewed and Evaluation Summary

SDG L1935705

19 Groundwater Samples: TRC-MW-1A, TRC-MW-1B, TRC-MW-2B, TRC-MW-3B, TRC-MW-4B, TRC-MW-5B, TRC-MW-6A, TRC-MW-6B, TRC-MW-7B, TRC-MW-8B, TRC-MW-9B, TRC-MW-12A, TRC-MW-14B, TRC-MW-21A-S, TRC-MW-23A-S, TRC-MW-24A-D, TRC-MW-35, TRC-MW-36, TRC-DUP-1[1]

1 Trip Blank: Trip Blank (8/8/19)

[1] Field duplicate of TRC-MW-5B

SDG L1936742

2 Groundwater Samples: TRC-MW-12B, TRC-MW-23-A-D

1 Trip Blank: Trip Blank (8/14/19)

The above-listed groundwater and trip blank samples were collected on August 7, 8, and 14, 2019 and were analyzed for one or more of the following parameters:

- 1,4-Dioxane by SW-846 8270D with Selective Ion Monitoring (SIM)
- VOCs by SW-846 Method 8260C

The data validation was performed in accordance with the following, modified for the methodologies used:

- USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-2017-002), January 2017
- EPA Region 2 Low/Medium Volatile Data Validation, SOP HW-33A, Revision 1, September 2016

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
- Holding Times and Sample Preservation
- * Gas Chromatography/Mass Spectrometry (GC/MS) Tunes

- Initial and Continuing Calibrations
- Blanks
* • Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Results
* • Field Duplicate Results
* • Internal Standard Performance
- Sample Results and Reported Quantitation Limits (QLs)
* • Target Compound Identification

* All criteria were met.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualifications applied to the data as a result of sampling error are discussed below.

- The positive results for chloromethane and/or acetone in several samples were qualified as nondetect (U) due to trip blank contamination. These results can be used for project objectives as nondetects, which may have a minor impact on the data usability.

Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select results that were below the lowest calibration standard and QL. These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive and nondetect results for all VOCs in sample TRC-MW-12A were qualified as estimated (J-/UJ) with a potential low bias due to headspace in the sample containers used for analysis and/or a holding time exceedance. However, the positive results for select VOCs in this sample were also qualified as estimated by the laboratory since results were below the lowest calibration standard and QL. Thus, the overall qualification was J for these VOCs. These results can be used for project objectives as estimated values and as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for select VOCs in all samples were qualified as nondetect (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

Data Completeness

The data packages were complete Level IV data deliverable packages with the following exceptions.

- In SDG L1935705, there were two samples identified as TRC-MW-1A on the chain-of-custody (COC); the sample listed on the COC as collected on 8/7/19 @12:05 should have been listed as TRC-MW-1B. The laboratory logged this sample in as TRC-MW-1B.
- The collection date for sample TRC-MW-35 was incorrectly logged in by the laboratory as 8/7/19.
- The results and raw data and quality control samples associated with sample TRC-MW-12A

were not reported in the level IV data package for SDG L1935705.

- Discrepancies were noted with the VOC analyte list in both SDGs.
- A discrepancy was noted with the vial used for the diluted analysis of sample TRC-MW-12A.

The laboratory was contacted during validation and submitted revised reports and additional information to address these issues.

Holding Times and Sample Preservation

All holding time and sample preservation criteria were met with the following exceptions:

- The pH of samples TRC-MW-12B, TRC-MW-23A-D, and Trip Blank (8/14/19) were > 2 and were therefore outside of the acceptance criteria (pH <2). No validation actions were required for these three samples since they were analyzed by the laboratory within 7 days of collection.
- Two of the three VOC vials submitted for sample TRC-MW-23A-S were received with headspace. No data validation actions were required for sample TRC-MW-23A-S since an acceptable vial without headspace was used for the VOC analysis of this sample.
- All three of the VOC vials submitted for sample TRC-MW-12A were received with headspace. Further, the diluted analysis of sample TRC-MW-12A was performed approximately two hours past the 14-day holding time. Therefore, the positive and nondetect results for all VOCs in sample TRC-MW-12A were qualified as estimated (J-/UJ) with a potential low bias. However, the positive results for select VOCs in this sample were also qualified as estimated by the laboratory since results were below the lowest calibration standard and QL. Thus, the overall qualification was J for these VOCs. It should be noted that there was a discrepancy with the vial reported for the diluted analysis of sample TRC-MW-12A. According to the raw data, it appeared that both the original and diluted analyses were taken from the same vial, vial “C”. However, upon investigation by the laboratory during validation, the laboratory discovered that the diluted analysis was actually performed from vial “A” and the undiluted analysis was performed from vial “C”. No further validation actions were taken on this basis.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

VOCs

All correlation coefficients, relative response factors (RRFs), and percent relative standard deviations (%RSDs) were within the method acceptance criteria in the initial calibrations (ICs) associated with the samples in this data set.

The following table summarizes the percent differences or percent drifts (%Ds) that did not meet the acceptance criteria in the continuing calibration (CC) standards associated with the samples in this data set, the associated samples, and the validation actions.

CC	Compound	%D	Validation Actions
8/19/19 @07:05 VOA105	Bromomethane	35.5	The nondetect results for these VOCs were qualified as estimated (UJ) in the associated samples. Note that the positive results for acetone were qualified as nondetect (U) due to blank contamination (see blank section below); these results were further qualified as UJ due to calibration nonconformances.
	Chloroethane	-59.1	
	Trichlorofluoromethane	-34.4	
	Acetone	-36.9	
	1,2-Dichloroethane	-20.2	
	Bromoform	28.6	
	1,2-Dibromo-3-chloropropane	25	
Associated samples: TRC-MW-9B, TRC-MW-1A, TRC-MW-5B, TRC-DUP-1, TRC-MW-4B			
8/19/19 @07:06 GONZO	Bromomethane	-20.6	The nondetect results for bromomethane were qualified as estimated (UJ) in the associated samples.
Associated samples: TRC-MW-1B, TRC-MW-2B, TRC-MW-3B, TRC-MW-6A, TRC-MW-6B, TRC-MW-7B, TRC-MW-8B, TRC-MW-14B, TRC-MW-21A-S, TRC-MW-23A-S, TRC-MW-24A-D, TRC-MW-35, TRC-MW-36, Trip Blank (8/8/19)			
8/21/19 @18:27 VOA108	Freon-113	20.3	The nondetect results for these VOCs were qualified as estimated (UJ) in the associated samples.
	Cyclohexane	21.7	
Associated sample: TRC-MW-12A			
08/20/19 @10:21 GONZO	Acetone	-29.0	The nondetect results for these VOCs were qualified as estimated (UJ) in the associated samples.
	2-Butanone	-23.5	
Associated samples: TRC-MW-12B, TRC-MW-23A-D, Trip Blank (8/14/19)			

1,4-Dioxane

The %RSDs and RRFs were within the method acceptance criteria in the ICs. The %Ds and RRFs met the method acceptance criteria in the CC standards associated with the samples in this data set.

Blanks

Target compounds were not detected in the laboratory method blanks.

The following table summarizes the trip blank contaminants, the concentrations detected, and the resulting validation actions.

Blank ID	Analyte	Blank Concentration	Validation Actions
Trip Blank (8/8/19)	Chloromethane	0.79 J ug/L	The positive results for chloromethane in samples TRC-MW-9B, TRC-MW-5B, TRC-DUP-1, TRC-MW-4B, TRC-MW-6B, TRC-MW-3B, TRC-MW-36, and TRC-MW-24A-D were qualified as nondetect at the QL (U) since the results were < the QL. Qualification was not required for the remaining associated samples since chloromethane was not detected.
	Acetone	5.0 ug/L	The positive results for acetone in samples TRC-MW-9B, TRC-MW-1A, TRC-MW-5B, TRC-DUP-1, TRC-MW-4B, TRC-MW-6A, TRC-MW-6B, TRC-MW-14B, TRC-MW-3B, TRC-MW-35, TRC-MW-12A, TRC-MW-36, TRC-MW-23A-S, TRC-MW-24A-D, and TRC-MW-7B were qualified as nondetect at the reported concentration (U) since the results were < 2x the blank concentration. Qualification was not required for the remaining associated samples since acetone was either not detected or detected at a concentration >2x the blank concentration.

Blank ID	Analyte	Blank Concentration	Validation Actions
Associated samples: TRC-MW-1A, TRC-MW-1B, TRC-MW-2B, TRC-MW-3B, TRC-MW-4B, TRC-MW-5B, TRC-MW-6A, TRC-MW-6B, TRC-MW-7B, TRC-MW-8B, TRC-MW-9B, TRC-MW-12A, TRC-MW-14B, TRC-MW-21A-S, TRC-MW-23A-S, TRC-MW-24A-D, TRC-MW-35, TRC-MW-36, TRC-DUP-1			

Surrogate Recoveries

The surrogate percent recoveries (%Rs) met the laboratory acceptance criteria.

MS/MSD Results

MS/MSD analyses were performed on sample TRC-MW-1B for VOCs and 1,4-dioxane. The table below summarizes the MS/MSD %Rs that did not meet the laboratory acceptance criteria and the validation actions. The relative percent differences (RPDs) were within the laboratory's acceptance criteria.

MS/MSD Sample ID	Compound	MS %R	MSD %R	RPD (%)	MS/MSD %R/RPD QC Limits	Validation Action
TRC-MW-1B	Trichloroethene	0	0	0	70-130/20	Qualification was not required since the result for trichloroethene in sample TRW-MW-1B was >4x the spike concentration.
	Acetone	150	160	-	58-148/20	Qualification was not required since acetone and bromomethane were not detected in sample TRW-MW-1B.
	Bromomethane	-	-	27	39-139/20	
"-" Criteria met						

LCS/LCSD Results

VOCs

The following table summarizes the VOC which exhibited %Rs outside of the acceptance criteria, the associated samples, and the validation actions. All RPDs were within the laboratory's acceptance criteria.

LCS/LCSD ID	Compound	LCS %R	LCSD %R	%R QC Limits	Validation Action
WG1274207-3/ WG1274207-4	Chloroethane	160	160	55-138	Qualification was not required since chloroethane was not detected in the associated samples.
Associated samples: TRC-MW-9B, TRC-MW-1A, TRC-MW-5B, TRC-DUP-1, TRC-MW-4B					

1,4-Dioxane

The LCS/LCSD %Rs were within the laboratory acceptance criteria for the 1,4-dioxane analyses.

Field Duplicate Results

Samples TRC-MW-5B/TRC-DUP-1 were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected results; all criteria were met.

Compound	QL	TRC-MW-5B	TRC-DUP-1	RPD (%)	Validation Action
Chloroform	2.5 µg/L	1.6 J µg/L	1.7 J µg/L	6.1	No validation action was required since the RPDs were ≤ 30.
Tetrachloroethene	0.5 µg/L	1.5 µg/L	1.5 µg/L	0	
Trichloroethene	0.5 µg/L	13 µg/L	14 µg/L	7.4	
cis-1,2-Dichloroethene	2.5 µg/L	3.4 µg/L	3.5 µg/L	2.9	
1,4-Dioxane	144 ng/L	175 ng/L	152 ng/L	14.1	

Criteria:

- When both results are ≥ 5x the QL, RPDs must be ≤ 30%.
- When one or both results are < 5x the QL, absolute difference must be < the QL.

Internal Standard Performance

All criteria were met.

Sample Results and Reported Quantitation Limits

Select results for VOCs and 1,4-dioxane were reported below the lowest calibration standard level and QL. These results were qualified as estimated (J) in the associated samples by the laboratory.

Sample calculations were spot-checked; there were no errors noted. There were no dilutions performed for 1,4-dioxane. The following table summarizes the dilutions performed on samples in this data set for VOCs. The QLs were elevated accordingly.

Sample ID	Dilution	Reason for Dilution
TRC-MW-12A	4-fold	A 4-fold dilution was performed due to the concentration of vinyl chloride, which exceeded the calibration range in the undiluted analysis. The results of the diluted and undiluted analyses were combined during validation in order to report the lowest possible QLs and all results within calibration range.
TRC-MW-12B	5-fold	A 5-fold dilution was performed due to the concentration of vinyl chloride, which exceeded the calibration range in the undiluted analysis. The results of the diluted and undiluted analyses were combined during validation in order to report the lowest possible QLs and all results within calibration range.
TRC-MW-2B	20-fold	A 20-fold dilution was performed due to the concentration of trichloroethene, which would have exceeded the calibration range if analyzed undiluted.
TRC-MW-1B	100-fold	A 100-fold dilution was performed due to the concentration of trichloroethene, which would have exceeded the calibration range if analyzed undiluted.

Target Compound Identification

All criteria were met.

QUALIFIED FORM 1s

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-01
Client ID: TRC-MW-9B
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 09:55
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 15:09
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND	UJ ✓	ug/l	2.5	0.70	1
1,2-Dichloroethane	ND	UJ ✓	ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND	UJ ✓	ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND/2.5U ✓		ug/l	2.5	0.70	1
Bromomethane	ND	UJ ✓	ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND	UJ ✓	ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-01
Client ID: TRC-MW-9B
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 09:55
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	9.0	UJ ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	~~ND~~	UJ ✓	ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	95		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-02
Client ID: TRC-MW-1A
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 11:05
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 15:34
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	~~ND~~	UJ ✓	ug/l	2.5	0.70	1
1,2-Dichloroethane	~~ND~~	UJ ✓	ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	~~ND~~	UJ ✓	ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	~~ND~~	UJ ✓	ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	~~ND~~	UJ ✓	ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	1.2		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-02
Client ID: TRC-MW-1A
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 11:05
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.3	UJ ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	~~ND~~	UJ ✓	ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	95		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-03 D
Client ID: TRC-MW-1B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 12:05
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 13:01
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	250	70.	100
1,1-Dichloroethane	ND		ug/l	250	70.	100
Chloroform	ND		ug/l	250	70.	100
Carbon tetrachloride	ND		ug/l	50	13.	100
1,2-Dichloropropane	ND		ug/l	100	14.	100
Dibromochloromethane	ND		ug/l	50	15.	100
1,1,2-Trichloroethane	ND		ug/l	150	50.	100
Tetrachloroethene	18	J	ug/l	50	18.	100
Chlorobenzene	ND		ug/l	250	70.	100
Trichlorofluoromethane	ND		ug/l	250	70.	100
1,2-Dichloroethane	ND		ug/l	50	13.	100
1,1,1-Trichloroethane	ND		ug/l	250	70.	100
Bromodichloromethane	ND		ug/l	50	19.	100
trans-1,3-Dichloropropene	ND		ug/l	50	16.	100
cis-1,3-Dichloropropene	ND		ug/l	50	14.	100
Bromoform	ND		ug/l	200	65.	100
1,1,2,2-Tetrachloroethane	ND		ug/l	50	17.	100
Benzene	ND		ug/l	50	16.	100
Toluene	ND		ug/l	250	70.	100
Ethylbenzene	ND		ug/l	250	70.	100
Chloromethane	ND		ug/l	250	70.	100
Bromomethane	~~ND~~ UJ ✓		ug/l	250	70.	100
Vinyl chloride	ND		ug/l	100	7.1	100
Chloroethane	ND		ug/l	250	70.	100
1,1-Dichloroethene	ND		ug/l	50	17.	100
trans-1,2-Dichloroethene	ND		ug/l	250	70.	100
Trichloroethene	13000		ug/l	50	18.	100
1,2-Dichlorobenzene	ND		ug/l	250	70.	100

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-03 D
Client ID: TRC-MW-1B
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 12:05
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	250	70.	100
1,4-Dichlorobenzene	ND		ug/l	250	70.	100
Methyl tert butyl ether	ND		ug/l	250	70.	100
p/m-Xylene	ND		ug/l	250	70.	100
o-Xylene	ND		ug/l	250	70.	100
cis-1,2-Dichloroethene	470		ug/l	250	70.	100
Styrene	ND		ug/l	250	70.	100
Dichlorodifluoromethane	ND		ug/l	500	100	100
Acetone	ND		ug/l	500	150	100
Carbon disulfide	ND		ug/l	500	100	100
2-Butanone	ND		ug/l	500	190	100
4-Methyl-2-pentanone	ND		ug/l	500	100	100
2-Hexanone	ND		ug/l	500	100	100
1,2-Dibromoethane	ND		ug/l	200	65.	100
1,2-Dibromo-3-chloropropane	ND		ug/l	250	70.	100
Isopropylbenzene	ND		ug/l	250	70.	100
1,2,4-Trichlorobenzene	ND		ug/l	250	70.	100
Methyl Acetate	ND		ug/l	200	23.	100
Cyclohexane	ND		ug/l	1000	27.	100
Freon-113	ND		ug/l	250	70.	100
Methyl cyclohexane	ND		ug/l	1000	40.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	96		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-04
Client ID: TRC-MW-5B
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 13:40
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 16:00
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	1.6	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	1.5		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND	UJ ✓	ug/l	2.5	0.70	1
1,2-Dichloroethane	ND	UJ ✓	ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND	UJ ✓	ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	0.99	ND/2.5U ✓ J	ug/l	2.5	0.70	1
Bromomethane	ND	UJ ✓	ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND	UJ ✓	ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	13		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-04
Client ID: TRC-MW-5B
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 13:40
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	3.4		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.5	UJ ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	~~ND~~	UJ ✓	ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	96		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-05
Client ID: TRC-DUP-1
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 08:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 16:25
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	1.7	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	1.5		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	~~ND~~	UJ ✓	ug/l	2.5	0.70	1
1,2-Dichloroethane	~~ND~~	UJ ✓	ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	~~ND~~	UJ ✓	ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND/2.5 U ~~2.1~~	✓ ~~J~~	ug/l	2.5	0.70	1
Bromomethane	~~ND~~	UJ ✓	ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	~~ND~~	UJ ✓	ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	14		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-05
Client ID: TRC-DUP-1
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 08:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	3.5		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.3	UJ ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	~~ND~~	UJ ✓	ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	97		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-07
Client ID: TRC-MW-4B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 15:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 16:50
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.42	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	~~ND~~ UJ ✓		ug/l	2.5	0.70	1
1,2-Dichloroethane	~~ND~~ UJ ✓		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	~~ND~~ UJ ✓		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	UJ/2.5U ~~1.1~~ ✓	~~J~~	ug/l	2.5	0.70	1
Bromomethane	~~ND~~ UJ ✓		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	~~ND~~ UJ ✓		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	4.2		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-07
Client ID: TRC-MW-4B
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 15:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.6	UJ ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND	UJ ✓	ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	95		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-08
Client ID: TRC-MW-6A
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 09:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 11:45
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	~~ND~~ UJ ✓		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.55		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-08
Client ID: TRC-MW-6A
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 09:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.6	U ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-09
Client ID: TRC-MW-6B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 10:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 12:10
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	~~0.74~~ ND/2.5U	~~J~~ ✓	ug/l	2.5	0.70	1
Bromomethane	~~ND~~ UJ	✓	ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-09
Client ID: TRC-MW-6B
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 10:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	0.82	J	ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.5	U ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	98		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-10
Client ID: TRC-MW-14B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 12:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 12:36
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	~~ND~~ UJ ✓		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	10		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-10
Client ID: TRC-MW-14B
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 12:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	0.88	J	ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	7.1		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.9	U ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	97		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-11
Client ID: TRC-MW-8B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 12:55
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 11:19
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	~~ND~~ UJ ✓		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-11
Client ID: TRC-MW-8B
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 12:55
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	12		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	98		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-12 D
Client ID: TRC-MW-2B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 13:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 13:27
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	50	14.	20
1,1-Dichloroethane	ND		ug/l	50	14.	20
Chloroform	ND		ug/l	50	14.	20
Carbon tetrachloride	ND		ug/l	10	2.7	20
1,2-Dichloropropane	ND		ug/l	20	2.7	20
Dibromochloromethane	ND		ug/l	10	3.0	20
1,1,2-Trichloroethane	ND		ug/l	30	10.	20
Tetrachloroethene	4.9	J	ug/l	10	3.6	20
Chlorobenzene	ND		ug/l	50	14.	20
Trichlorofluoromethane	ND		ug/l	50	14.	20
1,2-Dichloroethane	ND		ug/l	10	2.6	20
1,1,1-Trichloroethane	ND		ug/l	50	14.	20
Bromodichloromethane	ND		ug/l	10	3.8	20
trans-1,3-Dichloropropene	ND		ug/l	10	3.3	20
cis-1,3-Dichloropropene	ND		ug/l	10	2.9	20
Bromoform	ND		ug/l	40	13.	20
1,1,2,2-Tetrachloroethane	ND		ug/l	10	3.3	20
Benzene	ND		ug/l	10	3.2	20
Toluene	ND		ug/l	50	14.	20
Ethylbenzene	ND		ug/l	50	14.	20
Chloromethane	ND		ug/l	50	14.	20
Bromomethane	~~ND~~	UJ ✓	ug/l	50	14.	20
Vinyl chloride	2.9	J	ug/l	20	1.4	20
Chloroethane	ND		ug/l	50	14.	20
1,1-Dichloroethene	ND		ug/l	10	3.4	20
trans-1,2-Dichloroethene	ND		ug/l	50	14.	20
Trichloroethene	2200		ug/l	10	3.5	20
1,2-Dichlorobenzene	ND		ug/l	50	14.	20

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-12 D
Client ID: TRC-MW-2B
Sample Location: WEST NYACK, NY
Date Collected: 08/07/19 13:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	50	14.	20
1,4-Dichlorobenzene	ND		ug/l	50	14.	20
Methyl tert butyl ether	ND		ug/l	50	14.	20
p/m-Xylene	ND		ug/l	50	14.	20
o-Xylene	ND		ug/l	50	14.	20
cis-1,2-Dichloroethene	100		ug/l	50	14.	20
Styrene	ND		ug/l	50	14.	20
Dichlorodifluoromethane	ND		ug/l	100	20.	20
Acetone	ND		ug/l	100	29.	20
Carbon disulfide	ND		ug/l	100	20.	20
2-Butanone	ND		ug/l	100	39.	20
4-Methyl-2-pentanone	ND		ug/l	100	20.	20
2-Hexanone	ND		ug/l	100	20.	20
1,2-Dibromoethane	ND		ug/l	40	13.	20
1,2-Dibromo-3-chloropropane	ND		ug/l	50	14.	20
Isopropylbenzene	ND		ug/l	50	14.	20
1,2,4-Trichlorobenzene	ND		ug/l	50	14.	20
Methyl Acetate	ND		ug/l	40	4.7	20
Cyclohexane	ND		ug/l	200	5.4	20
Freon-113	ND		ug/l	50	14.	20
Methyl cyclohexane	ND		ug/l	200	7.9	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	97		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-13
Client ID: TRC-MW-3B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 15:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 13:52
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.80		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	~~1.8~~ ND/2.5U	~~J~~ ✓	ug/l	2.5	0.70	1
Bromomethane	~~ND~~ UJ	✓	ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	130		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-13
Client ID: TRC-MW-3B
Sample Location: WEST NYACK, NY

Date Collected: 08/07/19 15:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	6.2		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.9	U ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	98		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-14
Client ID: TRC-MW-35
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 08:45
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 14:18
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	~~ND~~ UJ ✓		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	2.9		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-14
Client ID: TRC-MW-35
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 08:45
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.8	U ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	97		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-15
Client ID: TRC-MW-12A
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 09:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/22/19 02:53
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	UJ	ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	0.31	J	ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND	UJ	ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	3.10	E	ug/l	1.0	0.07	1
Chloroethane	ND	UJ	ug/l	2.5	0.70	1
1,1-Dichloroethene	ND	UJ	ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	0.90	J	ug/l	2.5	0.70	1
Trichloroethene	ND	UJ	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Do not report

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-15
Client ID: TRC-MW-12A
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 09:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND	UJ	ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	140		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.1	UJ	ug/l	5.0	1.5	1
Carbon disulfide	2.0	J	ug/l	5.0	1.0	1
2-Butanone	ND	UJ	ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND	UJ	ug/l	10	0.27	1
Freon-113	ND	UJ	ug/l	2.5	0.70	1
Methyl cyclohexane	ND	UJ	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	116		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-15 D
Client ID: TRC-MW-12A
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 09:50
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/22/19 11:42
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Vinyl chloride	310	J-	ug/l	4.0	0.28	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-17
Client ID: TRC-MW-36
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 11:30
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 14:43
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	~~0.79~~ ND | 2.5 U	~~J~~ J	ug/l	2.5	0.70	1
Bromomethane	~~ND~~ U	J	ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	1.3		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-17
Client ID: TRC-MW-36
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 11:30
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.0	U ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	98		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-18
Client ID: TRC-MW-23A-S
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 09:30
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 15:08
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND	UJ ✓	ug/l	2.5	0.70	1
Vinyl chloride	3.8		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-18
Client ID: TRC-MW-23A-S
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 09:30
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	0.94	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.7	U ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	98		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-20
Client ID: TRC-MW-21A-S
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 11:10
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 15:34
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	~~ND~~	UJ ✓	ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	2.6		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-20
Client ID: TRC-MW-21A-S
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 11:10
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	0.95	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	11		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	98		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-21
Client ID: TRC-MW-24A-D
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 08:30
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 16:00
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.56		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	~~0.85~~ ND 2.5U	~~J~~ UJ	ug/l	2.5	0.70	1
Bromomethane	~~ND~~		ug/l	2.5	0.70	1
Vinyl chloride	0.13	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	7.4		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-21
Client ID: TRC-MW-24A-D
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 08:30
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	5.3		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.6	U ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	97		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000

Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-22 (8/8/19)
Client ID: TRIP BLANK
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 00:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 16:25
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	0.79	J	ug/l	2.5	0.70	1
Bromomethane	~~ND~~ UJ ✓		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-22 (8/8/19)
Client ID: TRIP BLANK
Sample Location: WEST NYACK, NY

Date Collected: 08/08/19 00:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	5.0		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	99		70-130

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-24
Client ID: TRC-MW-7B
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 12:35
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 16:51
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND	UJ ✓	ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.35	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CHROMALLOY
Project Number: 190273.2015.0000
Lab Number: L1935705
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1935705-24
Client ID: TRC-MW-7B
Sample Location: WEST NYACK, NY
Date Collected: 08/08/19 12:35
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.6	u ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	: 190273.2015.0000
Lab ID	: L1935705-01	Date Collected	: 08/07/19 09:55
Client ID	: TRC-MW-9B	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/14/19 23:46
Sample Matrix	: WATER	Date Extracted	: 08/14/19
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F1608141937	Analyst	: MA
Sample Amount	: 260 ml	Instrument ID	: PAH16
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	ND	144	32.6	U

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	: 190273.2015.0000
Lab ID	: L1935705-02	Date Collected	: 08/07/19 11:05
Client ID	: TRC-MW-1A	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/15/19 00:07
Sample Matrix	: WATER	Date Extracted	: 08/14/19
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F1608141938	Analyst	: MA
Sample Amount	: 260 ml	Instrument ID	: PAH16
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	ND	144	32.6	U

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	: 190273.2015.0000
Lab ID	: L1935705-03	Date Collected	: 08/07/19 12:05
Client ID	: TRC-MW-1B	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/15/19 00:28
Sample Matrix	: WATER	Date Extracted	: 08/14/19
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F1608141939	Analyst	: MA
Sample Amount	: 260 ml	Instrument ID	: PAH16
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	67.7	144	32.6	J

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	: 190273.2015.0000
Lab ID	: L1935705-04	Date Collected	: 08/07/19 13:40
Client ID	: TRC-MW-5B	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/15/19 01:30
Sample Matrix	: WATER	Date Extracted	: 08/14/19
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F1608141942	Analyst	: MA
Sample Amount	: 260 ml	Instrument ID	: PAH16
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	175.	144	32.6	

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	: 190273.2015.0000
Lab ID	: L1935705-05	Date Collected	: 08/07/19 08:00
Client ID	: TRC-DUP-1	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/15/19 01:51
Sample Matrix	: WATER	Date Extracted	: 08/14/19
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F1608141943	Analyst	: MA
Sample Amount	: 260 ml	Instrument ID	: PAH16
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	152.	144	32.6	

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	: 190273.2015.0000
Lab ID	: L1935705-15	Date Collected	: 08/08/19 09:50
Client ID	: TRC-MW-12A	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/22/19 16:11
Sample Matrix	: WATER	Date Extracted	: 08/15/19
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F1608211958	Analyst	: MA
Sample Amount	: 280 ml	Instrument ID	: PAH16
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ng/l Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	422.	134	30.3	

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	: 190273.2015.0000
Lab ID	: L1935705-16	Date Collected	: 08/08/19 10:30
Client ID	: TRC-MW-12B	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/22/19 16:36
Sample Matrix	: WATER	Date Extracted	: 08/15/19
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F1608211959	Analyst	: MA
Sample Amount	: 260 ml	Instrument ID	: PAH16
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	486.	144	32.6	

Project Name: FORMER CHROMALLOY FACILITY
Project Number: 190273.2015.0000
Lab Number: L1936742
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1936742-01
Client ID: TRC-MW-12B
Sample Location: WEST NYACK, NY

Date Collected: 08/14/19 13:00
Date Received: 08/14/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/20/19 13:18
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	0.27	J	ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	660	E	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	1.3	J	ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

DO NOT REPORT

Project Name: FORMER CHROMALLOY FACILITY
Project Number: 190273.2015.0000
Lab Number: L1936742
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1936742-01
Client ID: TRC-MW-12B
Sample Location: WEST NYACK, NY
Date Collected: 08/14/19 13:00
Date Received: 08/14/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	180		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	~~ND~~	UJ ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	~~ND~~	UJ ✓	ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	98		70-130

Project Name: FORMER CHROMALLOY FACILITY
Project Number: 190273.2015.0000
Lab Number: L1936742
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1936742-01 D
Client ID: TRC-MW-12B
Sample Location: WEST NYACK, NY

Date Collected: 08/14/19 13:00
Date Received: 08/14/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/20/19 16:16
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Vinyl chloride	330		ug/l	5.0	0.36	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	98		70-130

Project Name: FORMER CHROMALLOY FACILITY
Project Number: 190273.2015.0000
Lab Number: L1936742
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1936742-02
Client ID: TRC-MW-23A-D
Sample Location: WEST NYACK, NY

Date Collected: 08/14/19 14:00
Date Received: 08/14/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/20/19 12:53
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER CHROMALLOY FACILITY
Project Number: 190273.2015.0000
Lab Number: L1936742
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1936742-02
Client ID: TRC-MW-23A-D
Sample Location: WEST NYACK, NY
Date Collected: 08/14/19 14:00
Date Received: 08/14/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	~~ND~~ UJ ✓		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	~~ND~~ UJ ✓		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	96		70-130

Project Name: FORMER CHROMALLOY FACILITY
Project Number: 190273.2015.0000
Lab Number: L1936742
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1936742-03 (8/14/19)
Client ID: TRIP BLANK
Sample Location: WEST NYACK, NY

Date Collected: 08/14/19 00:00
Date Received: 08/14/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/20/19 12:28
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FORMER CHROMALLOY FACILITY
Project Number: 190273.2015.0000
Lab Number: L1936742
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1936742-03 (8/14/19)
Client ID: TRIP BLANK
Sample Location: WEST NYACK, NY

Date Collected: 08/14/19 00:00
Date Received: 08/14/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	~~ND~~	UJ ✓	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	~~ND~~	UJ ✓	ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	95		70-130

QC NONCONFORMANCE DOCUMENTATION

Inst: Gonzo BFB: V7408 Method GC 8260_RTX_\

Initials: PD IS/SS: V7471 Autosampler: 8260

Date: **08/20/19** ICAL: V7440D,V7474 Concentrator: 8260

Run: **A** ICV: V7429,V7424,V7465,V7423,V7475,V7412 QC: Seq:

Vial	DATA FILE	SAMPLE			
1	VG190820ABF1	BFB TUNE 09:41			
1	VG190820A01	8260 CCAL			
2	VG190820A02	8260 CCAL LCS			
3	VG190820A03	8260 CCAL LCSD			
4	VG190820A04	BLK			
5	VG190820A05	METHOD BLK			
6	VG190820A06	I1937306-01,31,10,10,,a	PA8260/15		pH<2
7	VG190820A07	I1936742-03,31,10,10,,a	NYCURVE	Trip blank (8/14/19)	HT 8/20 pH>2
8	VG190820A08	I1936742-02,31,10,10,,a	NYCURVE	TRC-MW-23A-D	HT 8/20 pH>2
9	VG190820A09	I1936742-01,31,10,10,,a	NYCURVE	TRC-MW-12B	HT 8/20 pH>2
10	VG190820A10	I1936667-03,31,10,10,,a	NJ/15		pH<2
11	VG190820A11	I1936667-06,31,10,10,,a	NJ/15		pH<2
12	VG190820A12	I1936667-01,31,10,10,,a	NJ/15		pH<2
13	VG190820A13	I1936667-02,31,10,10,,a	NJ/15		pH<2
14	VG190820A14	I1936667-04,31,10,10,,a	NJ/15		pH<2
15	VG190820A15	I1936667-05,31,10,10,,a	NJ/15		pH<2
16	VG190820A16	I1936742-01D,31,2,10,,c	NYCURVE	TRC-MW-12B	HT 8/20 pH>2
17	VG190820A17	I1936813-01,31,10,10,,a	NYCURVE		pH<2
18	VG190820A18	I1936813-02,31,10,10,,a	NYCURVE		pH<2
19	VG190820A19	I1936813-03,31,10,10,,a	NYCURVE		pH<2
20	VG190820A20	I1936813-04,31,10,10,,a	NYCURVE		pH<2
21	VG190820A21	I1936813-05,31,10,10,,a	NYCURVE		pH<2
22	VG190820A22	I1936813-06,31,10,10,,a	NYCURVE		pH<2
23	VG190820A23	I1936813-07,31,10,10,,a	NYCURVE		pH<2
24	VG190820A24	I1936813-10,31,10,10,,a	NYCURVE		pH<2
25	VG190820A25	I1936813-09D,31,5,10,,a	NYCURVE		OILY pH<2
26	VG190820A26	I1936813-07MS,31,10,10,,a1	NYCURVE		pH<2
27	VG190820A27	I1936813-07MSD,31,10,10,,a2	NYCURVE		pH<2

Sample Delivery Group Summary

Alpha Job Number : L1935705

Account Name : TRC Solutions
Project Number :
Project Name : CHROMALLOY

Received : 08-AUG-2019
Reviewer : Craig Green

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.0	
B	Absent/	Ice	2.8	

Condition Information

1) All samples on COC received? YES

2) Extra samples received? YES
Following additional samples were received: -25

3) Are there any sample container discrepancies? NO

4) Are there any discrepancies between sample labels & COC? YES
L1935705-03: TRC-MW-1A vs. TRC-MW-1B

5) Are samples in appropriate containers for requested analysis? YES

6) Are samples properly preserved for requested analysis? NO
Following containers were received with headspace: -15A, -15B, -15C, -16A, -16B, -16C, -18B, -18C, -19A, -19B,-19C TRC-MW-12A

7) Are samples within holding time for requested analysis? YES

8) All sampling equipment returned? NA

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client? NO

Calibration Verification Summary
Form 7
Volatiles

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Instrument ID	: VOA105	Calibration Date	: 08/19/19 07:05
Lab File ID	: V05190819A02	Init. Calib. Date(s)	: 08/12/19 08/12/19
Sample No	: WG1274207-2	Init. Calib. Times	: 18:19 22:08
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	76	0
Dichlorodifluoromethane	0.178	0.189	-	-6.2	20	72	0
Chloromethane	0.271	0.32	-	-18.1	20	84	0
Vinyl chloride	0.191	0.228	-	-19.4	20	80	0
Bromomethane	0.076	0.049*	-	35.5*	20	53	0
Chloroethane	0.066	0.105	-	-59.1*	20	106	0
Trichlorofluoromethane	0.215	0.289	-	-34.4*	20	92	0
Ethyl ether	0.054	0.066	-	-22.2* n/a	20	93	0
1,1-Dichloroethene	0.169	0.176	-	-4.1	20	72	0
Carbon disulfide	0.49	0.473	-	3.5	20	69	0
Freon-113	0.174	0.191	-	-9.8	20	75	0
Acrolein	0.03	0.032*	-	-6.7	20	83	0
Methylene chloride	0.196	0.196	-	0	20	78	0
Acetone	10	13.685	-	-36.9*	20	102	0
trans-1,2-Dichloroethene	0.188	0.197	-	-4.8	20	73	0
Methyl acetate	0.101	0.119	-	-17.8	20	91	0
Methyl tert-butyl ether	0.382	0.368	-	3.7	20	70	0
tert-Butyl alcohol	0.01142	0.00903* n/a	-	20.9* n/a	20	60	0
Diisopropyl ether	0.683	0.873	-	-27.8* n/a	20	91	0
1,1-Dichloroethane	0.35	0.397	-	-13.4	20	80	0
Halothane	0.154	0.148	-	3.9	20	68	0
Acrylonitrile	0.046	0.052	-	-13	20	84	0
Ethyl tert-butyl ether	0.564	0.582	-	-3.2	20	74	0
Vinyl acetate	0.425	0.494	-	-16.2	20	83	0
cis-1,2-Dichloroethene	0.202	0.209	-	-3.5	20	74	0
2,2-Dichloropropane	0.271	0.238	-	12.2	20	62	0
Bromochloromethane	0.095	0.094	-	1.1	20	71	0
Cyclohexane	0.387	0.452	-	-16.8	20	80	0
Chloroform	0.306	0.334	-	-9.2	20	79	0
Ethyl acetate	0.138	0.239	-	-73.2* n/a	20	129	0
Carbon tetrachloride	0.26	0.246	-	5.4	20	66	0
Tetrahydrofuran	0.047	0.051	-	-8.5	20	81	0
Dibromofluoromethane	0.261	0.264	-	-1.1	20	77	0
1,1,1-Trichloroethane	0.297	0.306	-	-3	20	72	0
2-Butanone	0.06	0.069* n/a	-	-15	20	87	0
1,1-Dichloropropene	0.248	0.273	-	-10.1	20	77	0
Benzene	0.744	0.783	-	-5.2	20	75	0
tert-Amyl methyl ether	0.427	0.371	-	13.1	20	63	0
1,2-Dichloroethane-d4	0.268	0.328	-	-22.4* n/a	20	90	0
1,2-Dichloroethane	0.223	0.268	-	-20.2*	20	88	0
Methyl cyclohexane	0.34	0.36	-	-5.9	20	72	0
Trichloroethene	0.209	0.203	-	2.9	20	73	0
Dibromomethane	0.099	0.097	-	2	20	73	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: TRC Solutions		Lab Number	: L1935705	
Project Name	: CHROMALLOY		Project Number	:	
Instrument ID	: VOA105		Calibration Date	: 08/19/19 07:05	
Lab File ID	: V05190819A02		Init. Calib. Date(s)	: 08/12/19	08/12/19
Sample No	: WG1274207-2		Init. Calib. Times	: 18:19	22:08
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.196	0.214	-	-9.2	20	79	0
Bromodichloromethane	0.227	0.215	-	5.3	20	71	0
1,4-Dioxane	0.00135	0.0014*	-	-3.7	20	76	0
cis-1,3-Dichloropropene	0.28	0.257	-	8.2	20	66	0
Chlorobenzene-d5	1	1	-	0	20	74	0
Toluene-d8	1.269	1.312	-	-3.4	20	77	0
Toluene	0.603	0.631	-	-4.6	20	72	0
4-Methyl-2-pentanone	0.06	0.061	-	-1.7	20	71	0
Tetrachloroethene	0.284	0.271	-	4.6	20	65	0
trans-1,3-Dichloropropene	0.298	0.258	-	13.4	20	62	0
Ethyl methacrylate	0.217	0.215	-	0.9	20	71	0
1,1,2-Trichloroethane	0.141	0.154	-	-9.2	20	77	0
Chlorodibromomethane	0.196	0.172	-	12.2	20	64	0
1,3-Dichloropropane	0.292	0.316	-	-8.2	20	77	0
1,2-Dibromoethane	0.177	0.171	-	3.4	20	70	0
2-Hexanone	0.112	0.122	-	-8.9	20	81	0
Chlorobenzene	0.678	0.694	-	-2.4	20	71	0
Ethylbenzene	1.141	1.209	-	-6	20	73	0
1,1,1,2-Tetrachloroethane	0.238	0.214	-	10.1	20	64	0
p/m Xylene	0.447	0.473	-	-5.8	20	71	0
o Xylene	0.414	0.439	-	-6	20	71	0
Styrene	0.663	0.702	-	-5.9	20	71	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	71	0
Bromoform	0.224	0.16	-	28.6*	20	53	0
Isopropylbenzene	2.228	2.424	-	-8.8	20	71	0
4-Bromofluorobenzene	0.925	1.001	-	-8.2	20	78	0
Bromobenzene	0.536	0.52	-	3	20	67	0
n-Propylbenzene	2.459	2.807	-	-14.2	20	74	0
1,4-Dichlorobutane	0.577	0.697	-	-20.8*	20	83	0
1,1,2,2-Tetrachloroethane	0.329	0.356	-	-8.2	20	75	0
4-Ethyltoluene	2.097	2.282	-	-8.8	20	71	0
2-Chlorotoluene	1.615	1.604	-	0.7	20	68	0
1,3,5-Trimethylbenzene	1.816	1.958	-	-7.8	20	71	0
1,2,3-Trichloropropane	0.269	0.308	-	-14.5	20	81	0
trans-1,4-Dichloro-2-buten	0.104	0.083	-	20.2*	20	56	0
4-Chlorotoluene	1.512	1.656	-	-9.5	20	75	0
tert-Butylbenzene	1.642	1.725	-	-5.1	20	69	0
1,2,4-Trimethylbenzene	1.776	1.893	-	-6.6	20	71	0
sec-Butylbenzene	2.121	2.329	-	-9.8	20	70	0
p-Isopropyltoluene	1.984	2.112	-	-6.5	20	68	0
1,3-Dichlorobenzene	1.028	1.002	-	2.5	20	66	0
1,4-Dichlorobenzene	1.048	1.021	-	2.6	20	66	0
p-Diethylbenzene	1.163	1.18	-	-1.5	20	67	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Instrument ID	: VOA105	Calibration Date	: 08/19/19 07:05
Lab File ID	: V05190819A02	Init. Calib. Date(s)	: 08/12/19 08/12/19
Sample No	: WG1274207-2	Init. Calib. Times	: 18:19 22:08
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
n-Butylbenzene	1.63	1.808	-	-10.9	20	73	0
1,2-Dichlorobenzene	0.915	0.891	-	2.6	20	66	0
1,2,4,5-Tetramethylbenzene	1.662	1.633	-	1.7	20	65	0
1,2-Dibromo-3-chloropropan	0.048	0.036	-	25*	20	54	0
1,3,5-Trichlorobenzene	0.666	0.613	-	8	20	63	0
Hexachlorobutadiene	0.251	0.226	-	10	20	63	0
1,2,4-Trichlorobenzene	0.563	0.511	-	9.2	20	62	0
Naphthalene	1.05	1	-	4.8	20	68	0
1,2,3-Trichlorobenzene	0.436	0.41	-	6	20	66	0

* Value outside of QC limits.

ALPHA ANALYTICAL

Calibration Verification Summary
Form 7
Volatiles

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Instrument ID	: GONZO	Calibration Date	: 08/19/19 07:06
Lab File ID	: VG190819A02	Init. Calib. Date(s)	: 08/05/19 08/05/19
Sample No	: WG1274159-2	Init. Calib. Times	: 16:10 19:59
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	94	0
Dichlorodifluoromethane	0.204	0.183	-	10.3	20	75	0
Chloromethane	0.232	0.219	-	5.6	20	84	0
Vinyl chloride	0.222	0.21	-	5.4	20	83	0
Bromomethane	10	12.063	-	-20.6*	20	129	0
Chloroethane	0.144	0.13	-	9.7	20	84	0
Trichlorofluoromethane	0.327	0.324	-	0.9	20	85	0
Ethyl ether	0.083	0.08	-	3.6	20	88	0
1,1-Dichloroethene	0.178	0.17	-	4.5	20	86	0
Carbon disulfide	0.541	0.5	-	7.6	20	85	0
Freon-113	0.184	0.191	-	-3.8	20	88	0
Acrolein	10	9.258	-	7.4	20	96	0
Methylene chloride	0.193	0.179	-	7.3	20	88	0
Acetone	0.031	0.036	-	-16.1	20	106	0
trans-1,2-Dichloroethene	0.198	0.184	-	7.1	20	88	0
Methyl acetate	0.089	0.092	-	-3.4	20	93	0
Methyl tert-butyl ether	0.423	0.398	-	5.9	20	88	0
tert-Butyl alcohol	0.00803	0.01157	-	-44.1*	20	159	0
Diisopropyl ether	0.74	0.679	-	8.2	20	85	0
1,1-Dichloroethane	0.403	0.376	-	6.7	20	85	0
Halothane	0.169	0.16	-	5.3	20	86	0
Acrylonitrile	0.038	0.037	-	2.6	20	94	0
Ethyl tert-butyl ether	0.583	0.543	-	6.9	20	87	0
Vinyl acetate	0.455	0.436	-	4.2	20	88	0
cis-1,2-Dichloroethene	0.214	0.2	-	6.5	20	87	0
2,2-Dichloropropane	0.309	0.31	-	-0.3	20	95	0
Bromochloromethane	0.095	0.095	-	0	20	91	0
Cyclohexane	0.381	0.364	-	4.5	20	86	0
Chloroform	0.367	0.336	-	8.4	20	85	0
Ethyl acetate	0.129	0.188	-	-45.7*	20	127	0
Carbon tetrachloride	0.298	0.29	-	2.7	20	84	0
Tetrahydrofuran	0.035	0.036	-	-2.9	20	91	0
Dibromofluoromethane	0.262	0.251	-	4.2	20	90	0
1,1,1-Trichloroethane	0.352	0.328	-	6.8	20	85	0
2-Butanone	0.051	0.059	-	-15.7	20	106	0
1,1-Dichloropropene	0.286	0.276	-	3.5	20	87	0
Benzene	0.815	0.781	-	4.2	20	86	0
tert-Amyl methyl ether	0.454	0.434	-	4.4	20	89	0
1,2-Dichloroethane-d4	0.282	0.278	-	1.4	20	88	0
1,2-Dichloroethane	0.266	0.249	-	6.4	20	85	0
Methyl cyclohexane	0.365	0.352	-	3.6	20	86	0
Trichloroethene	0.218	0.205	-	6	20	85	0
Dibromomethane	0.102	0.098	-	3.9	20	89	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: TRC Solutions		Lab Number	: L1935705	
Project Name	: CHROMALLOY		Project Number	: 190273.2015.0000	
Instrument ID	: VOA108		Calibration Date	: 08/21/19 18:27	
Lab File ID	: V08190821N01		Init. Calib. Date(s)	: 08/15/19	08/15/19
Sample No	: WG1275562-2		Init. Calib. Times	: 16:06	19:23
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	87	0
Dichlorodifluoromethane	0.254	0.22	-	13.4	20	71	0
Chloromethane	0.49	0.455	-	7.1	20	77	0
Vinyl chloride	0.302	0.284	-	6	20	77	0
Bromomethane	0.143	0.124	-	13.3	20	78	0
Chloroethane	0.146	0.152	-	-4.1	20	85	0
Trichlorofluoromethane	0.39	0.365	-	6.4	20	79	0
Ethyl ether	0.112	0.104	-	7.1	20	83	0
1,1-Dichloroethene	0.187	0.169	-	9.6	20	76	0
Carbon disulfide	0.66	0.606	-	8.2	20	81	0
Freon-113	0.202	0.161	-	20.3*	20	62	0
Iodomethane	10	4.582	-	54.2* n/a	20	41	0
Acrolein	0.057	0.062	-	-8.8	20	87	0
Methylene chloride	0.246	0.22	-	10.6	20	78	0
Acetone	0.087	0.084*	-	3.4	20	84	0
trans-1,2-Dichloroethene	0.211	0.187	-	11.4	20	78	0
Methyl acetate	0.209	0.21	-	-0.5	20	87	0
Methyl tert-butyl ether	0.614	0.572	-	6.8	20	80	0
tert-Butyl alcohol	0.025	0.024*	-	4	20	83	0
Diisopropyl ether	1.337	1.27	-	5	20	81	0
1,1-Dichloroethane	0.556	0.535	-	3.8	20	80	0
Halothane	0.165	0.146	-	11.5	20	72	0
Acrylonitrile	0.102	0.096	-	5.9	20	74	0
Ethyl tert-butyl ether	1.01	0.961	-	4.9	20	81	0
Vinyl acetate	0.829	0.827	-	0.2	20	84	0
cis-1,2-Dichloroethene	0.235	0.238	-	-1.3	20	92	0
2,2-Dichloropropane	0.358	0.37	-	-3.4	20	85	0
Bromochloromethane	0.108	0.11	-	-1.9	20	83	0
Cyclohexane	0.586	0.459	-	21.7*	20	63	0
Chloroform	0.489	0.467	-	4.5	20	81	0
Ethyl acetate	0.326	0.27	-	17.2	20	70	0
Carbon tetrachloride	0.297	0.318	-	-7.1	20	82	0
Tetrahydrofuran	0.079	0.084	-	-6.3	20	86	0
Dibromofluoromethane	0.266	0.275	-	-3.4	20	94	0
1,1,1-Trichloroethane	0.421	0.404	-	4	20	80	0
2-Butanone	0.141	0.128	-	9.2	20	91	0
1,1-Dichloropropene	0.332	0.301	-	9.3	20	78	0
Benzene	0.928	0.918	-	1.1	20	82	0
tert-Amyl methyl ether	0.637	0.602	-	5.5	20	83	0
1,2-Dichloroethane-d4	0.416	0.486	-	-16.8	20	104	0
1,2-Dichloroethane	0.45	0.48	-	-6.7	20	89	0
Methyl cyclohexane	0.384	0.316	-	17.7	20	72	0
Trichloroethene	0.253	0.255	-	-0.8	20	87	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: TRC Solutions	Lab Number	: L1936742	
Project Name	: FORMER CHROMALLOY FACILITY	Project Number	: 190273.2015.0000	
Instrument ID	: GONZO	Calibration Date	: 08/20/19 10:21	
Lab File ID	: VG190820A02	Init. Calib. Date(s)	: 08/05/19	08/05/19
Sample No	: WG1274785-2	Init. Calib. Times	: 16:10	19:59
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	94	0
Dichlorodifluoromethane	0.204	0.166	-	18.6	20	68	0
Chloromethane	0.232	0.196	-	15.5	20	76	0
Vinyl chloride	0.222	0.201	-	9.5	20	79	0
Bromomethane	10	9.264	-	7.4	20	97	0
Chloroethane	0.144	0.13	-	9.7	20	84	0
Trichlorofluoromethane	0.327	0.316	-	3.4	20	83	0
Ethyl ether	0.083	0.082	-	1.2	20	91	0
1,1-Dichloroethene	0.178	0.168	-	5.6	20	85	0
Carbon disulfide	0.541	0.495	-	8.5	20	84	0
Freon-113	0.184	0.178	-	3.3	20	82	0
Acrolein	10	8.532	-	14.7	20	88	0
Methylene chloride	0.193	0.186	-	3.6	20	91	0
Acetone	0.031	0.04	-	-29*	20	116	0
trans-1,2-Dichloroethene	0.198	0.183	-	7.6	20	87	0
Methyl acetate	0.089	0.095	-	-6.7	20	96	0
Methyl tert-butyl ether	0.423	0.418	-	1.2	20	93	0
tert-Butyl alcohol	0.00803	0.01156	-	-44* n/a	20	159	0
Diisopropyl ether	0.74	0.691	-	6.6	20	86	0
1,1-Dichloroethane	0.403	0.377	-	6.5	20	86	0
Halothane	0.169	0.159	-	5.9	20	86	0
Acrylonitrile	0.038	0.037	-	2.6	20	94	0
Ethyl tert-butyl ether	0.583	0.568	-	2.6	20	91	0
Vinyl acetate	0.455	0.443	-	2.6	20	90	0
cis-1,2-Dichloroethene	0.214	0.203	-	5.1	20	89	0
2,2-Dichloropropane	0.309	0.28	-	9.4	20	86	0
Bromochloromethane	0.095	0.096	-	-1.1	20	93	0
Cyclohexane	0.381	0.345	-	9.4	20	81	0
Chloroform	0.367	0.343	-	6.5	20	87	0
Ethyl acetate	0.129	0.213	-	-65.1* n/a	20	145	0
Carbon tetrachloride	0.298	0.28	-	6	20	81	0
Tetrahydrofuran	0.035	0.036	-	-2.9	20	90	0
Dibromofluoromethane	0.262	0.26	-	0.8	20	93	0
1,1,1-Trichloroethane	0.352	0.323	-	8.2	20	83	0
2-Butanone	0.051	0.063	-	-23.5*	20	113	0
1,1-Dichloropropene	0.286	0.27	-	5.6	20	85	0
Benzene	0.815	0.791	-	2.9	20	88	0
tert-Amyl methyl ether	0.454	0.462	-	-1.8	20	95	0
1,2-Dichloroethane-d4	0.282	0.269	-	4.6	20	85	0
1,2-Dichloroethane	0.266	0.251	-	5.6	20	86	0
Methyl cyclohexane	0.365	0.336	-	7.9	20	82	0
Trichloroethene	0.218	0.21	-	3.7	20	88	0
Dibromomethane	0.102	0.101	-	1	20	92	0

* Value outside of QC limits.

Matrix Spike Sample Summary
Form 3
Volatiles

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Client Sample ID	: TRC-MW-1B	Matrix	: WATER
Lab Sample ID	: L1935705-03	Analysis Date	: 08/19/19 13:01
Matrix Spike	: WG1274159-6	MS Analysis Date	: 08/19/19 17:17
Matrix Spike Dup	: WG1274159-7	MSD Analysis Date	: 08/19/19 17:42

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	ND	1000	1000	100	1000	1100	110	10	70-130	20
1,1-Dichloroethane	ND	1000	1100	110	1000	1100	110	0	70-130	20
Chloroform	ND	1000	1000	100	1000	1100	110	10	70-130	20
Carbon tetrachloride	ND	1000	1100	110	1000	1100	110	0	63-132	20
1,2-Dichloropropane	ND	1000	1100	110	1000	1100	110	0	70-130	20
Dibromochloromethane	ND	1000	960	96	1000	1000	100	4	63-130	20
1,1,2-Trichloroethane	ND	1000	1000	100	1000	1100	110	10	70-130	20
Tetrachloroethene	18J	1000	1000	100	1000	1100	110	10	70-130	20
Chlorobenzene	ND	1000	970	97	1000	1000	100	3	75-130	20
Trichlorofluoromethane	ND	1000	1100	110	1000	1200	120	9	62-150	20
1,2-Dichloroethane	ND	1000	1000	100	1000	1100	110	10	70-130	20
1,1,1-Trichloroethane	ND	1000	1000	100	1000	1100	110	10	67-130	20
Bromodichloromethane	ND	1000	1000	100	1000	1100	110	10	67-130	20
trans-1,3-Dichloropropene	ND	1000	950	95	1000	1000	100	5	70-130	20
cis-1,3-Dichloropropene	ND	1000	970	97	1000	1000	100	3	70-130	20
Bromoform	ND	1000	980	98	1000	1000	100	2	54-136	20
1,1,2,2-Tetrachloroethane	ND	1000	1000	100	1000	1100	110	10	67-130	20
Benzene	ND	1000	1100	110	1000	1100	110	0	70-130	20
Toluene	ND	1000	990	99	1000	1000	100	1	70-130	20
Ethylbenzene	ND	1000	970	97	1000	1000	100	3	70-130	20
Chloromethane	ND	1000	1100	110	1000	1100	110	0	64-130	20
Bromomethane	ND	1000	490	49	1000	640	64	27 Q	39-139	20

Matrix Spike Sample Summary
Form 3
Volatiles

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Client Sample ID	: TRC-MW-1B	Matrix	: WATER
Lab Sample ID	: L1935705-03	Analysis Date	: 08/19/19 13:01
Matrix Spike	: WG1274159-6	MS Analysis Date	: 08/19/19 17:17
Matrix Spike Dup	: WG1274159-7	MSD Analysis Date	: 08/19/19 17:42

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Vinyl chloride	ND	1000	1100	110	1000	1200	120	9	55-140	20
Chloroethane	ND	1000	1100	110	1000	1100	110	0	55-138	20
1,1-Dichloroethene	ND	1000	1000	100	1000	1100	110	10	61-145	20
trans-1,2-Dichloroethene	ND	1000	1000	100	1000	1100	110	10	70-130	20
Trichloroethene	13000	1000	13000	0 Q	1000	13000	0 Q	0	70-130	20
1,2-Dichlorobenzene	ND	1000	960	96	1000	1000	100	4	70-130	20
1,3-Dichlorobenzene	ND	1000	930	93	1000	990	99	6	70-130	20
1,4-Dichlorobenzene	ND	1000	940	94	1000	1000	100	6	70-130	20
Methyl tert butyl ether	ND	1000	1000	100	1000	1100	110	10	63-130	20
p/m-Xylene	ND	2000	1900	95	2000	2000	100	5	70-130	20
o-Xylene	ND	2000	1900	95	2000	2000	100	5	70-130	20
cis-1,2-Dichloroethene	470	1000	1500	103	1000	1600	113	6	70-130	20
Styrene	ND	2000	1900	95	2000	2000	100	5	70-130	20
Dichlorodifluoromethane	ND	1000	1000	100	1000	1100	110	10	36-147	20
Acetone	ND	1000	1500	150 Q	1000	1600	160 Q	6	58-148	20
Carbon disulfide	ND	1000	1000	100	1000	1000	100	0	51-130	20
2-Butanone	ND	1000	1200	120	1000	1300	130	8	63-138	20
4-Methyl-2-pentanone	ND	1000	1000	100	1000	1100	110	10	59-130	20
2-Hexanone	ND	1000	1000	100	1000	1200	120	18	57-130	20
Bromochloromethane	ND	1000	1100	110	1000	1100	110	0	70-130	20
1,2-Dibromoethane	ND	1000	1000	100	1000	1100	110	10	70-130	20
n-Butylbenzene	ND	1000	960	96	1000	1000	100	4	53-136	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client : TRC Solutions
Project Name : CHROMALLOY
Matrix : WATER
LCS Sample ID : WG1274207-3 Analysis Date : 08/19/19 07:05 File ID : V05190819A02
LCSD Sample ID : WG1274207-4 Analysis Date : 08/19/19 07:30 File ID : V05190819A03
Lab Number : L1935705
Project Number :

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	10	10	100	10	9.8	98	2	70-130	20
1,1-Dichloroethane	10	11	110	10	11	110	0	70-130	20
Chloroform	10	11	110	10	11	110	0	70-130	20
Carbon tetrachloride	10	9.5	95	10	9.2	92	3	63-132	20
1,2-Dichloropropane	10	11	110	10	11	110	0	70-130	20
Dibromochloromethane	10	8.8	88	10	8.6	86	2	63-130	20
1,1,2-Trichloroethane	10	11	110	10	11	110	0	70-130	20
Tetrachloroethene	10	9.6	96	10	9.4	94	2	70-130	20
Chlorobenzene	10	10	100	10	9.9	99	1	75-130	20
Trichlorofluoromethane	10	13	130	10	13	130	0	62-150	20
1,2-Dichloroethane	10	12	120	10	12	120	0	70-130	20
1,1,1-Trichloroethane	10	10	100	10	10	100	0	67-130	20
Bromodichloromethane	10	9.5	95	10	9.6	96	1	67-130	20
trans-1,3-Dichloropropene	10	8.6	86	10	8.5	85	1	70-130	20
cis-1,3-Dichloropropene	10	9.2	92	10	8.9	89	3	70-130	20
Bromoform	10	7.2	72	10	7.0	70	3	54-136	20
1,1,2,2-Tetrachloroethane	10	11	110	10	11	110	0	67-130	20
Benzene	10	10	100	10	10	100	0	70-130	20
Toluene	10	10	100	10	10	100	0	70-130	20
Ethylbenzene	10	10	100	10	10	100	0	70-130	20
Chloromethane	10	12	120	10	11	110	9	64-130	20
Bromomethane	10	6.5	65	10	6.8	68	5	39-139	20
Vinyl chloride	10	12	120	10	12	120	0	55-140	20
Chloroethane	10	16	160 Q	10	16	160 Q	0	55-138	20
1,1-Dichloroethene	10	10	100	10	10	100	0	61-145	20
trans-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20

Data Usability Summary Report

Site: Former Chromalloy, West Nyack, NY
Laboratory: Alpha Analytical Laboratory – Mansfield, MA
SDG No.: L1935705
Parameters: Per- and Poly-fluoroalkyl Substances
Data Reviewer: Kristen Morin/TRC
Peer Reviewer: Elizabeth Denly/TRC
Date: October 8, 2019

Samples Reviewed and Evaluation Summary

7 Groundwater Samples	TRC-MW-1A, TRC-MW-1B, TRC-MW-5B, TRC-MW-9B, TRC-MW-12A, TRC-MW-12B, TRC-DUP-1[1]
1 Equipment Blank Sample:	TRC-EB-1

[1] Field duplicate of TRC-MW-5B

The above-listed groundwater and equipment blank samples were collected on August 7 and 8, 2019 and were analyzed for Per- and Poly-fluoroalkyl substances (PFAS) (21 target analytes) based on EPA Method 537.1, version 1 (modified), using Alpha Analytical Laboratory – Mansfield, MA standard operating procedure (SOP) ID number 23528, revision 12, 2/22/2019.

The data validation was performed in accordance with the following USEPA guidance, modified for the methodologies utilized:

- USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-2017-002), January 2017
- USEPA National Functional Guidelines for High Resolution Superfund Methods Data Review (EPA-542-B-16-001), April 2016

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
* • Holding Times and Sample Preservation
- Initial and Continuing Calibrations
- Blanks
- Isotopically Labeled Surrogate Results
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
* • Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Results
* • Internal Standards
* • Field Duplicate Results
- Sample Results and Reported Quantitation Limits
* • Target Compound Identification

* - All criteria were met.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. There were no qualifications applied to the data because of sampling error. Qualifications applied to the data because of analytical error are discussed below.

- Potential uncertainty exists for select PFAS results that were below the lowest calibration standard and quantitation limit (QL). These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The nondetect results for 8:2 FTS in all samples in this data set were qualified as estimated (UJ) due to a calibration nonconformance. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect result for FOSA in sample TRC-MW-5B was qualified as estimated (UJ) due to low isotopically labeled surrogate recovery. This result can be used for project objectives as a nondetect with an estimated QL, which may have a minor impact on the data usability.

- The positive results for PFBS and PFHxA in sample TRC-MW-1B were qualified as estimated with a potential low bias (J-) due to low recoveries in the MS/MSD analyses. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level IV data deliverable package with the following exception.

- There were two samples identified as TRC-MW-1A on the chain-of-custody (COC); the sample listed on the COC as collected on 8/7/19 @12:05 should have been listed as TRC-MW-1B. The laboratory logged this sample in as TRC-MW-1B.

Holding Times and Sample Preservation

All holding time and sample preservation criteria were met for the PFAS analyses.

Initial and Continuing Calibrations

The coefficients of determination were within the method acceptance criteria in the initial calibration.

The laboratory reported percent recoveries (%Rs) rather than percent drifts for the PFAS continuing calibration (CC) standards. The following table summarizes the %R that did not meet the laboratory acceptance criteria in one of the CC standards, the associated samples, and the validation actions.

CC ID Date/Time	Compound	%R	CC %R QC Limits	Validation Action
WG1273981-3 8/19/19 @ 16:39	8:2 FTS	29.7	50-150	The nondetect results for 8:2 FTS in the associated samples were qualified as estimated (UJ).

CC ID Date/Time	Compound	%R	CC %R QC Limits	Validation Action
Associated samples: All samples in this data set				

Blanks

Target compounds were not detected in the laboratory method blank.

The following table summarizes the equipment blank contaminant, the concentration detected, and the resulting validation actions.

Blank ID	Analyte	Blank Concentration	Validation Actions
TRC-EB-1	PFHxA	0.375 J ng/L	Qualification was not required since PFHxA was detected in the associated samples at a concentration >2x the blank concentration.
Associated samples: All samples in this data set			

Isotopically Labeled Surrogate Results

Eighteen isotopically labeled surrogates were spiked into the samples prior to extraction for isotope dilution quantitation. The following table summarizes the %R that did not meet the acceptance limits and the resulting validation actions.

Sample ID	Surrogate	%R	Validation Actions
TRC-MW-5B	M8FOSA	7*	The nondetect result for FOSA in sample TRC-MW-5B was qualified as estimated (UJ).
*The laboratory used acceptance limits of 1-87%. During validation, acceptance limits of 10-87% were used.			

MS/MSD Results

MS/MSD analyses were performed on sample TRC-MW-1B for PFAS. The following table summarizes the %Rs that did not meet the laboratory acceptance criteria. Relative percent differences (RPDs) were within the laboratory acceptance criteria.

MS/MSD ID	Compound	MS %R	MSD %R	MS/MSD %R QC Limits	Validation Actions
TRC-MW-1B	PFBS	60	62	65-157	The positive results for PFBS and PFHxA in sample TRC-MW-1B were qualified as estimated with a potential low bias (J-).
	PFHxA	49	52	69-168	
	PFHxS	0	0	69-177	Qualification was not required on this basis since the results for PFHxS and PFOS in sample TRC-MW-1B were >4x the spike concentration.
	PFOS	0	0	52-151	

LCS/LCSD Results

The LCS/LCSD %Rs and RPDs were within the laboratory acceptance criteria for the PFAS analyses.

Internal Standards

Four isotopically labeled internal standards (M3PFBA, M2PFOA, M4PFOS, and M2PFDA) were

added to each sample prior to injection to monitor for ion suppression/enhancement at the instrument level. The %Rs were within the laboratory acceptance limits of 50-200%.

Field Duplicate Results

Samples TRC-MW-5B/TRC-DUP-1 were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected results. One of the RPDs was not calculable (NC) due to a nondetect result in one of the two samples. All criteria were met.

Compound	QLs (ng/L)	TRC-MW-5B (ng/L)	TRC-DUP-1 (ng/L)	RPD (%)	Validation Action
PFBA	1.77/1.78	4.87	4.88	0.2	No validation action was required since all criteria were met.
PFPeA	1.77/1.78	6.07	6.31	3.9	
PFBS	1.77/1.78	4.91	4.85	1.2	
PFHxA	1.77/1.78	10.3	10.3	0.0	
PFHpA	1.77/1.78	5.20	5.24	0.8	No validation action was required since all criteria were met.
PFHxS	1.77/1.78	41.0	39.1	4.7	
PFOA	1.77/1.78	17.5	17.5	0.0	
PFHpS	1.77/1.78	1.88	1.57 J	18.0	
PFNA	1.77/1.78	2.06	2.07	0.5	
PFOS	1.77/1.78	124	121	2.4	
PFDA	1.77/1.78	0.890 J	0.739 J	18.5	
PFDoA	1.77/1.78	0.344 J	1.78 U	NC	
PFOA/PFOS, Total	1.77/1.78	142	139	2.1	

Criteria:

- When both results are $\geq$ 5x the QL, RPDs must be ≤ 30%.
- When one or both results are < 5x the QL, absolute difference must be < the QL.

Sample Results and Reported Quantitation Limits

Sample calculations were spot-checked; there were no errors noted. Select PFAS results were below the lowest calibration standard level and QL. These results were qualified as estimated (J) by the laboratory.

There were no dilutions performed on the samples in this data set.

The laboratory indicated on the preparation log that sample TRC-MW-1A was centrifuged and decanted due to the matrix; no validation action was taken on this basis.

Target Compound Identification

Extracted ion chromatograms were reviewed to verify the target compound identifications. The laboratory manually integrated several peaks to ensure the inclusion of linear and branched isomers for PFOA, PFOS, and/or PFHxS; and/or to ensure proper integration. According to the laboratory's SOP, branched isomers for NEtFOSAA and NMeFOSAA would have also been integrated and the areas totaled, if present in the samples; there were no branched isomers noted for NEtFOSAA and NMeFOSAA in the samples in this data set.

One precursor/product ion transition was used for the identification of all compounds.

QUALIFIED FORM Is

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-01	Date Collected	: 08/07/19 09:55
Client ID	: TRC-MW-9B	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 14:10
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7939	Analyst	: JW
Sample Amount	: 284 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	4.44	1.76	0.359	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	3.82	1.76	0.348	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	1.50	1.76	0.210	J
307-24-4	Perfluorohexanoic Acid (PFHxA)	5.01	1.76	0.289	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	3.16	1.76	0.198	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	1.32	1.76	0.331	J
335-67-1	Perfluorooctanoic Acid (PFOA)	13.3	1.76	0.208	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.76	1.17	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.76	0.606	U
375-95-1	Perfluorononanoic Acid (PFNA)	0.370	1.76	0.275	J
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	1.74	1.76	0.444	J
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.76	0.268	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	~~ND~~	1.76	1.07	U J ✓
2355-31-9	N-Methyl Perfluorooctanesulfonamidoaceti c Acid (NMeFOSAA)	ND	1.76	0.570	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.76	0.229	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.76	0.863	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.76	0.510	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.76	0.708	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-01	Date Collected	: 08/07/19 09:55
Client ID	: TRC-MW-9B	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 14:10
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7939	Analyst	: JW
Sample Amount	: 284 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.76	0.327	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.76	0.288	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.76	0.218	U
NONE	PFOA/PFOS, Total	15.0	1.76	0.208	J

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-02	Date Collected	: 08/07/19 11:05
Client ID	: TRC-MW-1A	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 14:26
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7940	Analyst	: JW
Sample Amount	: 246 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	7.80	2.03	0.415	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	7.56	2.03	0.402	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	6.76	2.03	0.242	
307-24-4	Perfluorohexanoic Acid (PFHxA)	11.4	2.03	0.333	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	5.04	2.03	0.229	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	78.0	2.03	0.382	
335-67-1	Perfluorooctanoic Acid (PFOA)	24.1	2.03	0.240	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	2.03	1.35	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.96	2.03	0.699	J
375-95-1	Perfluorononanoic Acid (PFNA)	3.30	2.03	0.317	
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	256	2.03	0.512	
335-76-2	Perfluorodecanoic Acid (PFDA)	1.21	2.03	0.309	J
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	~~ND~~	2.03	1.23	U J ✓
2355-31-9	N-Methyl Perfluorooctanesulfonamidoaceti c Acid (NMeFOSAA)	ND	2.03	0.658	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	2.03	0.264	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	2.03	0.996	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	2.03	0.589	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	2.03	0.817	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-02	Date Collected	: 08/07/19 11:05
Client ID	: TRC-MW-1A	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 14:26
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7940	Analyst	: JW
Sample Amount	: 246 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	2.03	0.378	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	2.03	0.332	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	2.03	0.252	U
NONE	PFOA/PFOS, Total	280	2.03	0.240	

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-03	Date Collected	: 08/07/19 12:05
Client ID	: TRC-MW-1B	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 14:43
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7941	Analyst	: JW
Sample Amount	: 281 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	23.8	1.78	0.363	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	26.0	1.78	0.352	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	36.8	1.78	0.212	J- ✓
307-24-4	Perfluorohexanoic Acid (PFHxA)	94.3	1.78	0.292	J- ✓
375-85-9	Perfluoroheptanoic Acid (PFHpA)	9.93	1.78	0.200	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	376	1.78	0.334	
335-67-1	Perfluorooctanoic Acid (PFOA)	34.1	1.78	0.210	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.78	1.18	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	14.2	1.78	0.612	
375-95-1	Perfluorononanoic Acid (PFNA)	2.30	1.78	0.278	
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	657	1.78	0.448	
335-76-2	Perfluorodecanoic Acid (PFDA)	0.886	1.78	0.270	J
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	~~ND~~	1.78	1.08	U J ✓
2355-31-9	N-Methyl Perfluorooctanesulfonamidoaceti c Acid (NMeFOSAA)	ND	1.78	0.576	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.78	0.231	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.78	0.872	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.78	0.516	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.872	1.78	0.715	J

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-03	Date Collected	: 08/07/19 12:05
Client ID	: TRC-MW-1B	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 14:43
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7941	Analyst	: JW
Sample Amount	: 281 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.78	0.331	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.78	0.291	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.78	0.221	U
NONE	PFOA/PFOS, Total	691	1.78	0.210	

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-04	Date Collected	: 08/07/19 13:40
Client ID	: TRC-MW-5B	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 15:00
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7942	Analyst	: JW
Sample Amount	: 282 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	4.87	1.77	0.362	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	6.07	1.77	0.351	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	4.91	1.77	0.211	
307-24-4	Perfluorohexanoic Acid (PFHxA)	10.3	1.77	0.291	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	5.20	1.77	0.200	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	41.0	1.77	0.333	
335-67-1	Perfluorooctanoic Acid (PFOA)	17.5	1.77	0.209	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.77	1.18	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.88	1.77	0.610	
375-95-1	Perfluorononanoic Acid (PFNA)	2.06	1.77	0.276	
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	124	1.77	0.447	
335-76-2	Perfluorodecanoic Acid (PFDA)	0.890	1.77	0.270	J
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	~~ND~~	1.77	1.07	U J ✓
2355-31-9	N-Methyl Perfluorooctanesulfonamidoaceti c Acid (NMeFOSAA)	ND	1.77	0.574	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.77	0.230	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.77	0.869	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	~~ND~~	1.77	0.514	U UJ
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.77	0.713	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-04	Date Collected	: 08/07/19 13:40
Client ID	: TRC-MW-5B	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 15:00
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7942	Analyst	: JW
Sample Amount	: 282 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	0.344	1.77	0.330	J
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.77	0.290	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.77	0.220	U
NONE	PFOA/PFOS, Total	142	1.77	0.209	

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-05	Date Collected	: 08/07/19 08:00
Client ID	: TRC-DUP-1	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 15:16
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7943	Analyst	: JW
Sample Amount	: 280 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	4.88	1.78	0.364	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	6.31	1.78	0.354	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	4.85	1.78	0.212	
307-24-4	Perfluorohexanoic Acid (PFHxA)	10.3	1.78	0.293	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	5.24	1.78	0.201	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	39.1	1.78	0.336	
335-67-1	Perfluorooctanoic Acid (PFOA)	17.5	1.78	0.211	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.78	1.19	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.57	1.78	0.614	J
375-95-1	Perfluorononanoic Acid (PFNA)	2.07	1.78	0.278	
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	121	1.78	0.450	
335-76-2	Perfluorodecanoic Acid (PFDA)	0.739	1.78	0.271	J
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	~~ND~~	1.78	1.08	U J ✓
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.78	0.578	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.78	0.232	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.78	0.875	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.78	0.518	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.78	0.718	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-05	Date Collected	: 08/07/19 08:00
Client ID	: TRC-DUP-1	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 15:16
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7943	Analyst	: JW
Sample Amount	: 280 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.78	0.332	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.78	0.292	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.78	0.221	U
NONE	PFOA/PFOS, Total	139	1.78	0.211	

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-06	Date Collected	: 08/07/19 14:00
Client ID	: TRC-EB-1	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 15:33
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7944	Analyst	: JW
Sample Amount	: 285 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	ND	1.75	0.358	U
2706-90-3	Perfluoropentanoic Acid (PFPeA)	ND	1.75	0.347	U
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.75	0.209	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	0.375	1.75	0.288	J
375-85-9	Perfluoroheptanoic Acid (PFHpA)	ND	1.75	0.198	U
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.75	0.330	U
335-67-1	Perfluorooctanoic Acid (PFOA)	ND	1.75	0.207	U
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.75	1.17	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.75	0.604	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.75	0.274	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	ND	1.75	0.442	U
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.75	0.267	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.75	1.06	U J
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.75	0.568	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.75	0.228	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.75	0.860	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.75	0.509	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.75	0.705	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-06	Date Collected	: 08/07/19 14:00
Client ID	: TRC-EB-1	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 15:33
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7944	Analyst	: JW
Sample Amount	: 285 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.75	0.326	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.75	0.287	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.75	0.218	U
NONE	PFOA/PFOS, Total	ND	1.75	0.207	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-15	Date Collected	: 08/08/19 09:50
Client ID	: TRC-MW-12A	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 15:49
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7945	Analyst	: JW
Sample Amount	: 277 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

CAS NO.	Parameter	ng/l Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	1.90	1.80	0.368	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	1.62	1.80	0.357	J
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	3.10	1.80	0.215	
307-24-4	Perfluorohexanoic Acid (PFHxA)	3.90	1.80	0.296	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	1.46	1.80	0.203	J
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	30.5	1.80	0.339	
335-67-1	Perfluorooctanoic Acid (PFOA)	7.30	1.80	0.213	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.80	1.20	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.86	1.80	0.621	
375-95-1	Perfluorononanoic Acid (PFNA)	0.361	1.80	0.282	J
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	59.2	1.80	0.455	
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.80	0.274	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.80	1.09	U J
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.80	0.585	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.80	0.235	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.80	0.884	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.80	0.523	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.80	0.726	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-15	Date Collected	: 08/08/19 09:50
Client ID	: TRC-MW-12A	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 15:49
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7945	Analyst	: JW
Sample Amount	: 277 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.80	0.336	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.80	0.295	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.80	0.224	U
NONE	PFOA/PFOS, Total	66.5	1.80	0.213	

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-16	Date Collected	: 08/08/19 10:30
Client ID	: TRC-MW-12B	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 16:06
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7946	Analyst	: JW
Sample Amount	: 279 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
375-22-4	Perfluorobutanoic Acid (PFBA)	1.65	1.79	0.366	J
2706-90-3	Perfluoropentanoic Acid (PFPeA)	1.48	1.79	0.355	J
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	3.35	1.79	0.213	
307-24-4	Perfluorohexanoic Acid (PFHxA)	3.99	1.79	0.294	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	1.54	1.79	0.202	J
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	32.6	1.79	0.337	
335-67-1	Perfluorooctanoic Acid (PFOA)	7.97	1.79	0.211	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.79	1.19	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.92	1.79	0.616	
375-95-1	Perfluorononanoic Acid (PFNA)	0.358	1.79	0.280	J
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	72.4	1.79	0.452	
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.79	0.272	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.79	1.09	U J
2355-31-9	N-Methyl Perfluorooctanesulfonamidoaceti c Acid (NMeFOSAA)	ND	1.79	0.581	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.79	0.233	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.79	0.878	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.79	0.520	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.79	0.720	U

Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Lab ID	: L1935705-16	Date Collected	: 08/08/19 10:30
Client ID	: TRC-MW-12B	Date Received	: 08/08/19
Sample Location	: WEST NYACK, NY	Date Analyzed	: 08/19/19 16:06
Sample Matrix	: WATER	Date Extracted	: 08/16/19
Analytical Method	: 122,537(M)	Dilution Factor	: 1
Lab File ID	: I7946	Analyst	: JW
Sample Amount	: 279 g	Instrument ID	: LCMS02
Extraction Method	: EPA 537	GC Column	: Acquity UPLC BEH C18
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 3 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.79	0.333	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.79	0.293	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.79	0.222	U
NONE	PFOA/PFOS, Total	80.4	1.79	0.211	

QC NONCONFORMANCE DOCUMENTATION

Surrogate (Extracted Internal Standard) Recovery Summary
Form 2
Semivolatiles

Client: TRC Solutions
Project Name: CHROMALLOY

Lab Number: L1935705
Project Number:
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S15 ()	S16 ()	S17 ()	S18 ()	S19 ()	S20 ()	S21 ()	TOT OUT
TRC-MW-9B (L1935705-01)	20	70	75	78	--	--	--	0
TRC-MW-1A (L1935705-02)	34	77	69	63	--	--	--	0
TRC-MW-1B (L1935705-03)	18	64	71	72	--	--	--	0
TRC-MW-5B (L1935705-04)	7	54	63	71	--	--	--	0
TRC-DUP-1 (L1935705-05)	14	43	53	57	--	--	--	0
TRC-EB-1 (L1935705-06)	13	73	80	96	--	--	--	0
TRC-MW-12A (L1935705-15)	15	56	66	78	--	--	--	0
TRC-MW-12B (L1935705-16)	12	65	77	96	--	--	--	0
WG1273407-1BLANK	36	64	70	73	--	--	--	0
WG1273407-2LCS	48	78	92	97	--	--	--	0
WG1273407-3LCSD	45	81	84	86	--	--	--	0
TRC-MW-1BMS	22	62	73	76	--	--	--	0
TRC-MW-1BMSD	26	77	86	91	--	--	--	0

QC LIMITS

10-87

~~(1-87)~~ S15 = PERFLUORO[13C8]OCTANESULFONAMIDE (M8FOSA)
(23-146) S16 = N-DEUTERIOETHYLPERFLUORO-1-OCTANESULFONAMIDOACETIC ACID (D5-NETFOSAA)
(24-161) S17 = PERFLUORO[1,2-13C2]DODECANOIC ACID (MPFDOA)
(33-143) S18 = PERFLUORO[1,2-13C2]TETRADECANOIC ACID (M2PFTEDA)

* Values outside of QC limits

FORM II A2-NY-537-ISOTOPE (Continued)

Calibration Verification Summary
Form 7
Semivolatiles

Client	: TRC Solutions	Lab Number	: L1935705	
Project Name	: CHROMALLOY	Project Number	:	
Instrument ID	: LCMS02	Calibration Date	: 08/19/19 16:39	
Lab File ID	: I7948	Init. Calib. Date(s)	: 07/01/19	07/01/19
Sample No	: WG1273981-3	Init. Calib. Times	: 17:57	19:53
Channel	:			

Compound	Concentration (ng/ml)	True Value (ng/ml)	% Recovery	QC Limits
Perfluorobutanoic Acid (PFBA)	0.472	0.500	94.3	50-150
Perfluoropentanoic Acid (PFPeA)	0.431	0.500	86.2	50-150
Perfluorobutanesulfonic Acid (PFBS)	0.342	0.440	77.2	50-150
Perfluorohexanoic Acid (PFHxA)	0.541	0.500	108.3	50-150
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	0.494	0.470	105.7	50-150
Perfluoropentanesulfonic Acid (PFPeS)	0.426	0.470	90.6	50-150
Perfluoroheptanoic Acid (PFHpA)	0.503	0.500	100.6	50-150
Perfluorohexanesulfonic Acid-Branched (br-PFHxS)	0.070	0.090	81.9	50-150
Perfluorohexanesulfonic Acid-Linear (L-PFHxS)	0.317	0.370	85.7	50-150
Perfluorohexanesulfonic Acid (PFHxS)	0.387	0.460	-	50-150
Perfluorooctanoic Acid-Branched (br-PFOA)				
Perfluorooctanoic Acid-Linear (L-PFOA)	0.487	0.500	97.3	50-150
Perfluorooctanoic Acid (PFOA)	0.487	0.500	-	50-150
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.340	0.480	71.6	50-150
Perfluoroheptanesulfonic Acid (PFHpS)	0.311	0.480	65.4	50-150
Perfluorononanoic Acid (PFNA)	0.432	0.500	86.5	50-150
Perfluorooctanesulfonic Acid-Branched (br-PFOS)	0.079	0.100	79.3	50-150
Perfluorooctanesulfonic Acid-Linear (L-PFOS)	0.308	0.370	84.5	50-150
Perfluorooctanesulfonic Acid (PFOS)	0.388	0.460	-	50-150
Perfluorodecanoic Acid (PFDA)	0.456	0.500	91.2	50-150
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	0.142	0.480	29.7*	50-150
Perfluorononanesulfonic Acid (PFNS)	0.486	0.480	101.3	50-150
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.459	0.500	91.9	50-150
Perfluoroundecanoic Acid (PFUnA)	0.507	0.500	101.5	50-150
Perfluorodecanesulfonic Acid (PFDS)	0.470	0.480	97.4	50-150
Perfluorooctanesulfonamide (FOSA)	0.346	0.500	69.3	50-150
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.451	0.500	90.1	50-150
Perfluorododecanoic Acid (PFDoA)	0.517	0.500	103.3	50-150
Perfluorotridecanoic Acid (PFTrDA)	0.492	0.500	98.3	50-150
Perfluorotetradecanoic Acid (PFTA)	0.439	0.500	87.7	50-150
Perfluoro[13C4]Butanoic Acid (MPFBA)	9.115	10.000	91.2	50-150
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	10.516	10.000	105.2	50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	7.525	10.000	75.3	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	4.714	10.000	47.1* n/a	50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	8.461	10.000	84.6	50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	8.630	10.000	86.3	50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	8.706	10.000	87.1	50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	9.158	10.000	91.6	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	4.224	10.000	42.2* n/a	50-150
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	9.785	10.000	97.9	50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	8.918	10.000	89.2	50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	9.177	10.000	91.8	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	4.831	10.000	48.3* n/a	50-150

* Value outside of QC limits.

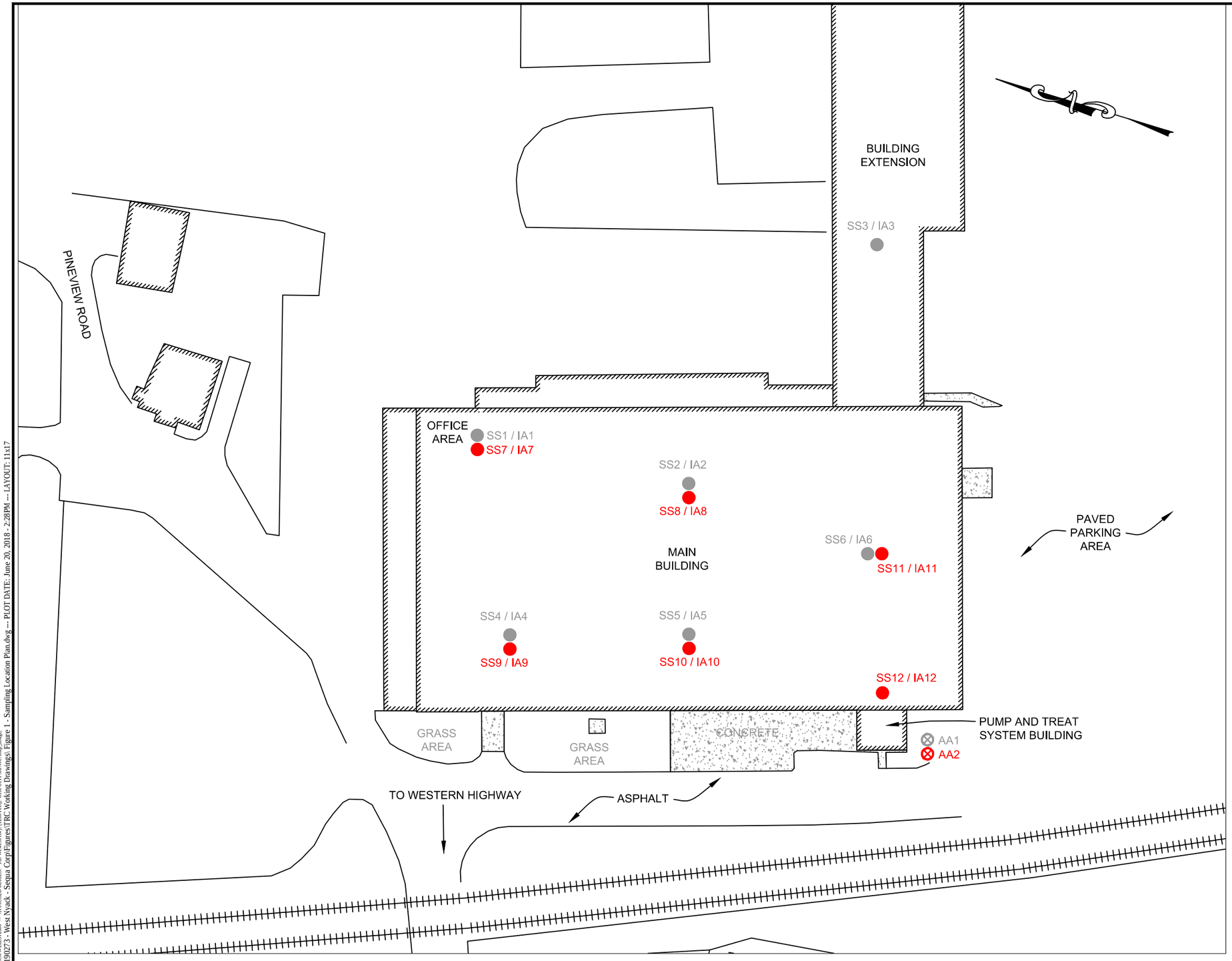
Matrix Spike Sample Summary
Form 3
Semivolatiles

Client	: TRC Solutions	Lab Number	: L1935705
Project Name	: CHROMALLOY	Project Number	:
Client Sample ID	: TRC-MW-1B	Matrix	: WATER
Lab Sample ID	: L1935705-03	Analysis Date	: 08/19/19 14:43
Matrix Spike	: WG1273407-4	MS Analysis Date	: 08/19/19 12:42
Matrix Spike Dup	: WG1273407-5	MSD Analysis Date	: 08/19/19 12:58

Parameter	Sample Conc. (ng/l)	Matrix Spike Sample Spike Added (ng/l)	Spike Conc. (ng/l)	%R	Matrix Spike Duplicate Spike Added (ng/l)	Spike Conc. (ng/l)	%R	RPD	Recovery Limits	RPD Limit
Perfluorobutanoic Acid (PFBA)	23.8	36.1	52.6	80	36.1	52.6	80	0	67-148	30
Perfluoropentanoic Acid (PFPeA)	26.0	36.1	51.0	69	36.1	51.5	71	1	63-161	30
Perfluorobutanesulfonic Acid (PFBS)	36.8	32	56.0	60 Q	32	56.5	62 Q	1	65-157	30
Perfluorohexanoic Acid (PFHxA)	94.3	36.1	112	49 Q	36.1	113	52 Q	1	69-168	30
Perfluoroheptanoic Acid (PFHpA)	9.93	36.1	40.7	85	36.1	41.1	86	1	58-159	30
Perfluorohexanesulfonic Acid (PFHxS)	376 74x Spike	32.9	348	0 Q n/a	32.9	358	0 Q n/a	3	69-177	30
Perfluorooctanoic Acid (PFOA)	34.1	36.1	61.2	75	36.1	61.0	74	0	63-159	30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	34.3	33.2	97	34.3	32.8	96	1	49-187	30
Perfluoroheptanesulfonic Acid (PFHpS)	14.2	34.3	45.8	92	34.3	44.7	89	2	61-179	30
Perfluorononanoic Acid (PFNA)	2.30	36.1	33.8	87	36.1	34.3	89	1	68-171	30
Perfluorooctanesulfonic Acid (PFOS)	557 74x Spike	33.4	593	0 Q n/a	33.4	564	0 Q n/a	5	52-151	30
Perfluorodecanoic Acid (PFDA)	0.386J	36.1	33.9	94	36.1	33.7	93	1	63-171	30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	34.6	26.2	76	34.6	27.9	80	6	56-173	30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	36.1	34.2	95	36.1	29.5	82	15	60-166	30
Perfluoroundecanoic Acid (PFUnA)	ND	36.1	31.9	88	36.1	31.0	86	3	60-163	30

APPENDIX F

MARCH 2018 SOIL VAPOR INTRUSION REPORT DOCUMENTS



LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- BUILDING FOOTPRINT
- RAILROAD TRACKS
- SSX / IAX — 2016 SUB-SLAB SOIL VAPOR AND INDOOR AIR SAMPLING LOCATION AND IDENTIFICATION NUMBER
- AA1 — 2016 AMBIENT AIR SAMPLING LOCATION AND IDENTIFICATION NUMBER
- SSX / IAX — 2018 SUB-SLAB SOIL VAPOR AND INDOOR AIR SAMPLING LOCATION AND IDENTIFICATION NUMBER
- AA2 — 2018 AMBIENT AIR SAMPLING LOCATION AND IDENTIFICATION NUMBER

NOTE:

SOURCE:
WEST-NYACK-WELLv2000.DWG COMBINED WITH GOOGLE EARTH PRO IMAGE.

0 50' 100'

SCALE: 1" = 50'
SHEET SIZE: 11" BY 17"

PROJECT:
SEQUA CORPORATION
FORMER CHROMALLY FACILITY PROPERTY
169 WESTERN HIGHWAY
WEST NYACK, NEW YORK 10994

TITLE:
SAMPLE LOCATION PLAN

DRAWN BY:	H. DELGADO	PROJ NO.:	190273.2015.0000
CHECKED BY:	S. JOHANSSON		
APPROVED BY:	J. LAROCK		**FIGURE 1**
DATE:	JUNE 2018		

TRC
10 Maxwell Drive, Suite 200
Clifton Park, NY 12065
Phone: 518.348.1190
www.trcsolutions.com

FILE NO.: Figure 1 - Sampling Location Plan.dwg

Table 1
Summary of Vapor Intrusion Sampling Results
Former Chromalloy Site - West Nyack, New York
Summary of Analytical Result for Air Samples - March 2018

								Sample Location:	AA-02		IA-07		IA-08		IA-09		IA-10		IA-11		IA-12		SSV-07		SSV-08		SSV-09		SSV-10		SSV-11		SSV-12	
								Lab Sample ID:	200-42939-1		200-42939-3		200-42939-5		200-42939-7		200-42939-9		200-42939-11		200-42939-13		200-42939-2		200-42939-4		200-42939-6		200-42939-8		200-42939-10		200-42939-12	
								Sample Date:	3/30/2018		3/30/2018		3/30/2018		3/30/2018		3/30/2018		3/30/2018		3/30/2018		3/30/2018		3/30/2018		3/30/2018		3/30/2018		3/30/2018		3/30/2018	
								Unit:	ug/m3		ug/m3		ug/m3		ug/m3		ug/m3		ug/m3		ug/m3		ug/m3		ug/m3		ug/m3		ug/m3		ug/m3		ug/m3	
s	Analyte	Sub-Slab Vapor Concentration*			Indoor Air Concentration*																												
TO-15																																	
	Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS		**1.8**	**J**	**3**	**J**	**3**	**J**	**2.2**	**J**	**2.3**	**J**	**2.1**	**J**	**2.3**	**J**	**2.6**	**J**	**7.3**		**2.3**	**J**	45	U	1,400	U	**2.9**	**J**
	Chlorodifluoromethane	NS	NS	NS	NS	NS	NS		**1.2**	**J**	18	U	5.3	U	8.8	U	5.3	U	5.3	U	5.3	U	16	U	1.8	U	**0.79**	**J**	32	U	1,000	U	7.1	U
	1,2-Dichlorotetrafluoroethane	NS	NS	NS	NS	NS	NS		1.4	U	14	U	4.2	U	7	U	4.2	U	4.2	U	4.2	U	13	U	1.4	U	1.4	U	25	U	810	U	5.6	U
	Chloromethane	NS	NS	NS	NS	NS	NS		**1.1**		10	U	**1.6**	**J**	5.2	U	**1.1**	**J**	**1.2**	**J**	**1.1**	**J**	9.4	U	1	U	1	U	19	U	600	U	4.1	U
	Butane	NS	NS	NS	NS	NS	NS		**4.4**		**720**		**220**		**250**		**190**		**200**		**200**		**520**		**3.2**		**2.5**		**4.4**	**J**	690	U	**18**	
	Vinyl chloride	< 6	6 – 60	>= 60	< 0.2	NS	>= 0.2		0.089	U	0.89	U	0.27	U	0.45	U	0.27	U	0.27	U	0.27	U	0.81	U	0.089	U	0.089	U	1.6	U	52	U	0.36	U
	1,3-Butadiene	NS	NS	NS	NS	NS	NS		0.44	U	4.4	U	1.3	U	2.2	U	1.3	U	1.3	U	1.3	U	4	U	0.44	U	0.44	U	8	U	260	U	1.8	U
	Bromomethane	NS	NS	NS	NS	NS	NS		0.78	U	7.8	U	2.3	U	3.9	U	2.3	U	2.3	U	2.3	U	7.1	U	0.78	U	0.78	U	14	U	450	U	3.1	U
	Chloroethane	NS	NS	NS	NS	NS	NS		1.3	U	13	U	3.9	U	6.6	U	3.9	U	3.9	U	3.9	U	12	U	1.3	U	1.3	U	24	U	770	U	5.3	U
	Vinyl bromide	NS	NS	NS	NS	NS	NS		0.87	U	8.7	U	2.6	U	4.4	U	2.6	U	2.6	U	2.6	U	8	U	0.87	U	0.87	U	16	U	510	U	3.5	U
	Trichlorofluoromethane	NS	NS	NS	NS	NS	NS		**1.1**		11	U	**1.3**	**J**	**1**	**J**	**1.1**	**J**	**1.1**	**J**	**1.1**	**J**	10	U	**1.5**		**1.2**		20	U	650	U	**1.4**	**J**
	1,1,2-Trichloro- 1,2,2-trifluoroethane (Fre	NS	NS	NS	NS	NS	NS		**0.49**	**J**	15	U	4.6	U	7.7	U	4.6	U	4.6	U	4.6	U	14	U	**0.57**	**J**	**0.57**	**J**	28	U	890	U	6.1	U
	1,1-Dichloroethene	< 6	6 – 60	>= 60	< 0.2	0.2 – 1	>= 1		0.14	U	1.4	U	0.41	U	0.7	U	0.41	U	0.41	U	0.41	U	1.3	U	0.14	U	0.14	U	2.5	U	81	U	0.56	U
	Acetone	NS	NS	NS	NS	NS	NS		**6.3**	**J**	120	U	**10**	**J**	59	U	**13**	**J**	**12**	**J**	**17**	**J**	**28**	**J**	**62**		**34**		**190**	**J**	6,900	U	**30**	**J**
	Isopropanol	NS	NS	NS	NS	NS	NS		**2.7**	**J**	**3.2**	**J**	**2.7**	**J**	**2.4**	**J**	**3.2**	**J**	**2.8**	**J**	**4.9**	**J**	110	U	**6.5**	**J**	**8.8**	**J**	220	U	7,100	U	49	U
	Carbon disulfide	NS	NS	NS	NS	NS	NS		**0.98**	**J**	16	U	**1.7**	**J**	**0.45**	**J**	4.6	U	**0.77**	**J**	**0.52**	**J**	14	U	**1.1**	**J**	1.6	U	28	U	900	U	6.2	U
	Allyl chloride	NS	NS	NS	NS	NS	NS		1.6	U	16	U	4.7	U	7.8	U	4.7	U	4.7	U	4.7	U	14	U	1.6	U	1.6	U	28	U	910	U	6.3	U
	Methylene chloride	< 100	100 – 1,000	>= 1,000	< 3	3 – 10	>= 10		**0.6**	**J**	17	U	**5.3**		8.7	U	5.2	U	5.2	U	**8.3**		**2.9**	**J**	**3.1**		**0.56**	**J**	31	U	1,000	U	6.9	U
	tert-Butyl alcohol	NS	NS	NS	NS	NS	NS		15	U	150	U	45	U	76	U	45	U	45	U	45	U	140	U	15	U	15	U	270	U	8,800	U	61	U
	Methyl tert-butyl ether	NS	NS	NS	NS	NS	NS		0.72	U	7.2	U	2.1	U	3.6	U	2.1	U	2.1	U	2.1	U	**1.4**	**J**	0.72	U	0.72	U	13	U	420	U	2.9	U
	trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS		0.79	U	7.9	U	2.4	U	4	U	2.4	U	2.4	U	2.4	U	7.2	U	0.79	U	0.79	U	14	U	**240**	**J**	3.2	U
	n-Hexane	NS	NS	NS	NS	NS	NS		**0.97**		**99**		**53**		**55**		**56**		**94**		**340**		**50**		**1.6**		**1**		13	U	410	U	**23**	
	1,1-Dichloroethane	NS	NS	NS	NS	NS	NS		0.81	U	8.1	U	2.4	U	4	U	2.4	U	2.4	U	2.4	U	7.4	U	0.81	U	0.81	U	15	U	470	U	3.2	U
	2-Butanone (MEK)	NS	NS	NS	NS	NS	NS		**0.86**	**J**	15	U	**1.3**	**J**	**1.9**	**J**	**2.7**	**J**	**2.1**	**J**	**2.2**	**J**	13	U	**3**		**4.7**		**38**		860	U	**2.2**	**J**
	cis-1,2-Dichloroethene	< 6	6 – 60	>= 60	< 0.2	0.2 – 1	>= 1		0.14	U	1.4	U	0.41	U	0.7	U	0.41	U	0.41	U	0.41	U	1.3	U	0.14	U	0.14	U	**9.1**		**1,800**		**1.2**	
	Chloroform	NS	NS	NS	NS	NS	NS		0.98	U	9.8	U	2.9	U	4.9	U	2.9	U	2.9	U	**0.76**	**J**	8.9	U	**0.8**	**J**	**0.97**		**33**		**640**		**4.3**	
	Tetrahydrofuran	NS	NS	NS	NS	NS	NS		15	U	150	U	44	U	74	U	44	U	44	U	44	U	130	U	15	U	15	U	270	U	8,600	U	59	U
	1,1,1-Trichloroethane	< 100	100 – 1,000	>= 1,000	< 3	3 – 10	>= 10		1.1	U	11	U	3.3	U	5.5	U	3.3	U	3.3	U	3.3	U	9.9	U	**1.1**		**2.9**		20	U	630	U	**2.9**	**J**
	Cyclohexane	NS	NS	NS	NS	NS	NS		**0.32**	**J**	**39**		**22**		**24**		**27**		**50**		**160**		**17**		**0.34**	**J**	**0.43**	**J**	12	U	400	U	**13**	
	Carbon tetrachloride	< 6	6 – 60	>= 60	< 0.2	0.2 – 1	>= 1		**0.37**		2.2	U	**0.32**	**J**	1.1	U	0.66	U	0.66	U	0.66	U	2	U	**0.25**		**0.24**		4	U	130	U	0.88	U
	2,2,4-Trimethylpentane	NS	NS	NS	NS	NS	NS		**0.31**	**J**	**22**		**5.8**		**8.4**		**6.8**		**6.9**		**6.9**		**12**		**0.21**	**J**	0.93	U	17	U	540	U	3.7	U
	Benzene	NS	NS	NS	NS	NS	NS		**0.73**		**14**		**7.9**		**10**		**9.3**		**10**		**12**		**9.2**		**0.76**		**0.69**		**7.5**	**J**	370	U	**1.4**	**J**
	1,2-Dichloroethane	NS	NS	NS	NS	NS	NS		0.81	U	8.1	U	2.4	U	4	U	2.4	U	2.4	U	2.4	U	7.4	U	0.81	U	0.81	U	15	U	470	U	3.2	U
	Heptane	NS	NS	NS	NS	NS	NS		**0.35**	**J**	**24**		**7.1**		**9.2**		**8**		**9**		**11**		**11**		**0.78**	**J**	**0.66**	**J**	15	U	480	U	**2**	**J**
	Trichloroethene	< 6	6 – 60	>= 60	< 0.2	0.2 – 1	>= 1		0.19	U	1.9	U	**0.45**	**J**	0.94	U	**1.1**		**1.9**		**0.65**		**7.1**		**44**		**92**		**1,800**		**31,000**		**480**	
	Methyl methacrylate	NS	NS	NS	NS	NS	NS		2	U	20	U	6.1	U	10	U	6.1	U	6.1	U	**2**	**J**	19	U	2	U	2	U	37	U	1,200	U	8.2	U
	1,2-Dichloropropane	NS	NS	NS	NS	NS	NS		0.92	U	9.2	U	2.8	U	4.6	U	2.8	U	2.8	U	2.8	U	8.4	U	0.92	U	0.92	U	17	U	540	U	3.7	U
	1,4-Dioxane	NS	NS	NS	NS	NS	NS		18	U	180	U	54	U	90	U	54	U	54	U	54	U	160	U	18	U	18	U	330	U	10,000	U	72	U
	Bromodichloromethane	NS	NS	NS	NS	NS	NS		1.3	U	13	U	4	U	6.7	U	4	U	4	U	4	U	12	U	1.3	U	1.3	U	24	U	780	U	5.4	U
	cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		0.91	U	9.1	U	2.7	U	4.5	U	2.7	U	2.7	U	2.7	U	8.3	U	0.91	U	0.91	U	16	U	530	U	3.6	U
	4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS		2	U	**3.3**	**J**	**1.3**	**J**	**2.8**	**J**	**3.5**	**J**	**4**	**J**	**3.7**	**J**	19	U	**0.64**	**J**	**0.54**	**J**	37	U	1,200	U	8.2	U
	Toluene	NS	NS	NS	NS	NS	NS		**1.2**		**38**		**17**		**25**		**22**		**23**		**28**		**20**		**1.4**		**0.72**	**J**	**3.1**	**J**	440	U	**3.1**	
	trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		0.91	U	9.1	U	2.7	U	4.5	U	2.7	U	2.7	U	2.7	U	8.3	U	0.91	U	0.91	U	16	U	530	U	3.6	U
	1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS		1.1	U	11	U	3.3	U	5.5	U	3.3	U	3.3	U	3.3	U	9.9	U	1.1	U	1.1	U	20	U	630	U	4.4	U
	Tetrachloroethene	< 100	100 – 1,000	>= 1,000	< 3	3 – 10	>= 10		**0.17**	**J**	14	U	4	U	6.8	U	4	U	**3.6**	**J**	4	U	**6.6**	**J**	**39**		**130**		**29**		**550**	**J**	**190**	
	2-Hexanone	NS	NS	NS	NS	NS	NS		2	U	20	U	6.1	U	10	U	6.1	U	6.1	U	6.1	U	19	U	2	U	**0.45**	**J**	**8.5**	**J**	1,200	U	8.2	U
	Dibromochloromethane	NS	NS	NS	NS	NS	NS		1.7	U	17	U	5.1	U	8.5	U	5.1	U	5.1	U	5.1	U	15	U	1.7	U	1.7	U	31	U	990	U	6.8	U
	1,2-Dibromoethane (Ethylene dibromide)	NS	NS	NS	NS	NS	NS		1.5	U	15	U	4.6	U	7.7	U	4.6	U	4.6	U	4.6	U	14	U	1.5	U	1.5	U	28	U	890	U	6.1	U
	Chlorobenzene	NS	NS	NS	NS	NS	NS		0.92	U	9.2	U	2.7	U	4.6	U	2.7	U	2.7	U	2.7	U	8.4	U	0.92	U	0.92	U	17	U	530	U	3.7	U
	Ethylbenzene	NS	NS	NS	NS	NS	NS		**0.69**	**J**	**69**		**44**		**75**		**80**		**100**		**170**		**36**		**1.9**		**0.41**	**J**	**3.3**	**J**	500	U	**10**	
	m,p-Xylene	NS	NS	NS	NS	NS	NS		**2.1**	**J**	**250**		**150**		**270**		**300**		**390**		**650**		**120**		**8.3**		**0.7**	**J**	**6.9**	**J**	1,300	U	**34**	
	o-Xylene	NS	NS	NS	NS	NS	NS		**0.54**	**J**	**60**		**37**		**67**		**72**		**93**		**150**		**32**		**4.2**		**0.3**	**J**	**4.5**	**J**	500	U	**11**	
	Styrene	NS	NS	NS	NS	NS	NS		0.85	U	8.5	U	2.5	U	4.3	U	**0.5**	**J**	2.5	U	2.5	U	7.7	U	0.85	U	0.85	U	15	U	490	U	3.4	U
	Bromoform	NS	NS	NS	NS	NS	NS		2.1	U	21	U	6.2	U	10	U	6.2	U	6.2	U	6.2	U	19	U	2.1	U	2.1	U	37	U	1,200	U	8.3	U
	Isopropylbenzene	NS	NS	NS	NS	NS	NS		0.98	U	9.8	U	2.9	U	4.9	U	**0.88**	**J**	**1**	**J**	**1.5**	**J**	8.9	U	**0.21**	**J**	0.98	U	18	U	570	U	**0.88**	**J**
	1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS		1.4	U	14	U	4.1	U	6.9	U	4.1	U	4.1	U	4.1	U	12	U	1.4	U	1.4	U	25	U	800	U	5.5	U
	n-Propylbenzene	NS	NS	NS	NS	NS	NS		0.98	U	9.8	U	2.9	U	**1**	**J**	**0.97**	**J**	**1**	**J**	**1.1**	**J**	8.9	U	**0.45**	**J**	0.98	U	18	U	570	U	**1.4**	**J**
	p-Ethyltoluene	NS	NS	NS	NS	NS	NS		0.98	U	9.8	U	**0.74**	**J**	**1.6**	**J**	**1.4**	**J**	**1.5**	**J**	**1.6**	**J**	8.9	U	**0.69**	**J**	0.98	U	18	U	570	U	**1.7**	**J**
	1,3,5-Trimethylbenzene	NS	NS	NS	NS	NS	NS		0.98	U	**2.2**	**J**	**0.72**	**J**	**1.7**	**J**	**1.5**	**J**	**1.6**	**J**	**1.7**	**J**	8.9	U	**0.83**	**J**	0.98	U	18	U	570	U	**8.3**	
	2-Chlorotoluene	NS	NS	NS	NS	NS	NS		1	U	10	U	3.1	U	5.2	U	3.1	U	3.1	U	3.1	U	9.4	U	1	U	1	U	19	U	600	U	4.1	U
	tert-Butylbenzene	NS	NS	NS	NS	NS	NS		1.1	U	11	U	3.3	U	5.5	U	3.3	U	3.3	U	3.3	U	10	U	1.1	U	1.1	U	20	U	640	U	4.4	U
	1,2,4-Trimethylbenzene	NS	NS	NS	NS	NS	NS		0.98	U	**6.4**	**J**	**2**	**J**	**5.1**		**4.6**		**4.8**		**5.4**		**3.4**	**J**	**2.6**		0.98	U	18	U	570	U	**11**	
	sec-Butylbenzene	NS	NS	NS	NS	NS	NS		1.1	U	11	U	3.3	U	5.5	U	3.3	U	3.3	U	3.3	U	10	U	1.1	U	1.1	U	20	U	640	U	4.4	U
	4-Isopropyltoluene	NS	NS	NS	NS	NS	NS		1.1	U	11	U	3.3	U	5.5	U	3.3	U	3.3	U	3.3	U	10	U	1.1	U	1.1	U	20	U	640	U	4.4	U
	1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS		1.2	U	12	U	3.6	U	6	U	3.6	U	3.6	U	3.6	U	11	U	1.2	U	1.2	U	22	U	700	U	4.8	U
	1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS		1.2	U	12	U	3.6	U	6	U	3.6	U	3.6	U	3.6	U	11	U	1.2	U	1.2	U	22	U	700	U	4.8	U
	Benzyl Chloride	NS	NS	NS	NS	NS	NS		1	U	10	U	3.1	U	5.2	U	3.1	U	3.1	U	3.1	U	9.4	U	1	U	1	U	19	U	600	U	4.1	U
	n-Butylbenzene	NS	NS	NS	NS	NS	NS		1.1	U	11	U	3.3	U	5.5	U	3.3	U	3.3	U	3.3	U	10	U	1.1	U	1.1	U	20	U	640	U	4.4	U
	1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS		1.2	U	12	U	3.6	U	6	U	3.6	U	3.6	U	3.6	U	11	U	1.2	U	1.2	U	22	U	700	U	4.8	U
	1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS		3.7	U	37	U	11	U	19	U	11	U	11	U	11	U	34	U	3.7	U	3.7	U	67	U	2,200	U	15	U
	Hexachlorobutadiene	NS	NS	NS	NS	NS	NS		2.1	U	21	U	6.4	U	11	U	6.4	U	6.4	U	6.4	U	19	U	2.1	U	2.1	U	39	U	1,200	U	8.5	U
	Naphthalene	NS	NS	NS	NS	NS	NS		**0.65**	**J**	26	U	7.8	U	13	U	**1.7**	**J**	7.8	U	7.8	U	24	U	**0.61**	**J**	2.6	U	47	U	1,500	U	**5**	**J**

Notes:
ug/m³ = micrograms per cubic meter
J - Estimated value.
NS - No NYSDEC standards exist for this analyte.
U - Compound was not detected at specified quantitation limit.
Values in **bold** indicate the compound was detected.
* - NYSDOH AGV - New York State Department of Health Air Guideline Value, May 2017.
Shading indicates result above the applicable criteria.
TO - Toxic organics.