From: King, Justin <JKing@trccompanies.com>
Sent: Tuesday, July 14, 2020 9:11 AM
To: Spellman, John (DEC)
Cc: LaRock, Jeffrey; 'Workman, Greg'
Subject: Former Chromalloy Facility (NYSDEC Site No. 344039) - 2020 SVI Assessment Report
Attachments: 2020 SVI Assessment Report, Former Chromalloy Facility, West Nyack, NY (344039).pdf

John,

Good morning. For your use, please find the attached 2020 Soil Vapor Intrusion Assessment Report, which summarizes TRC's activities performed during this past 2019-2020 heating season, 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

10 Maxwell Drive, Suite 200, Clifton Park, NY 12065
T 518.348.1192 | **F** 518.348.1194 | **C** 518.860.7656
LinkedIn | Twitter | Blog | TRCcompanies.com

10 Maxwell Dr., Suite 200
Clifton Park, NY 12065

T 518.348.1190
TRCcompanies.com

July 14, 2020

John Spellman, P.E.
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233

Re: Soil Vapor Intrusion Assessment Letter Report – 2019-2020 Heating Season
Former Chromalloy Facility (NYSDEC Site No. 344039)
169 Western Highway
West Nyack, New York 10994

Dear Mr. Spellman:

TRC Engineers, Inc. (TRC), on behalf of Sequa Corporation (Sequa), has prepared this letter report to discuss recent soil vapor intrusion (SVI) sampling activities completed in association with the former Chromalloy facility located at 169 Western Highway, West Nyack, New York (the Site). All activities were completed in accordance with the NYSDEC approved *January 2020 Permanent Sub-Slab Vapor Point Installation Workplan (Workplan)*.

Pursuant to the NYSDEC approved *July 2018 SVI Assessment Report,* biennial SVI assessments within the former Chromalloy building were incorporated into the Site's routine monitoring program. For the most recent heating season, TRC completed these SVI assessment activities on February 10 and 11, 2020. A summary of the completed field activities, air sample analytical results, and recommendations are detailed below. A photographic log of TRC's field activities is provided in **Attachment 1**.

2020 Soil Vapor Intrusion Field Activities

Permanent Sub-Slab Vapor Point Installation

On February 10, 2020, TRC installed six permanent sub-slab vapor points (SS-13 through SS-18) within the former Chromalloy facility building. All six permanent sub-slab vapor points were installed adjacent to their 2016 and 2018 temporary counterparts. Five of the sub slab vapor points (SS-14 through SS-18) were installed throughout the main warehouse area and one (SS-13) was installed in the northern kitchen closet space (**Figure 1**).

Each permanent sub-slab vapor point was installed through the building's concrete slab via a 5/8-inch hole, drilled utilizing a hammer drill. The slab thickness was measured and a Vapor Pin® device was installed to the concrete slab's lower depth. Volatile organic compound (VOC)-free silicone sleeves, installed on the barbed ends of the Vapor Pin® device, were used to seal each sub-slab point in place. Following installation, each permanent sub-slab point was completed at the surface with a tamper resistant flush mount cover.

Building Inspection and Chemical Inventory

The main Site building is currently utilized by Paragon Honda Acura of West Nyack, New York to store and prepare new vehicles for sale. Vehicle cleaning and detailing operations are completed on the southern portion of the building. Vehicle maintenance is performed on hydraulic lifts located in the central and western portions of the building. The main office space is in the northern portion of the building. Other than the aforementioned areas, the main building is largely an open warehouse utilized for vehicle storage. Overhead entry doors, located throughout the warehouse, are either continually open or periodically opened/closed throughout the work day to allow entry/exit of vehicles.

Prior to SVI sampling and in accordance with NYSDEC/New York State Department of Health (NYSDOH) guidance, all air sampling locations and their adjacent vicinities were inspected/screened for the presence of volatile organic vapor with a photo-ionization detector (PID), capable of reading in the parts per billion (ppb) range. The NYSDEC form entitled *Structure Sampling Questionnaire and Building Inventory* was completed before and during vapor sampling (further discussed below) and is provided in **Attachment 2**.

Soil Vapor Intrusion Sample Collection

On February 11, 2020 all six sub-slab vapor points were helium leak tested in accordance with NYSDOH methods to ensure that each location was capturing sub-slab vapors, rather than short circuiting ambient indoor air from the surface. In addition to the six sub-slab vapor samples, six co-located indoor air samples (IA-13 through IA-18) and one outdoor ambient air sample (AA-03) was collected for analysis. For quality control/quality assurance (QA/QC) purposes, a single duplicate sample (IA-DUP) was collected in tandem with the IA-13 utilizing a laboratory supplied splitter. A map showing the approximate air sampling locations is provided on **Figure 1**. Record of Vapor Sampling forms, detailing the helium leak tests results, vapor sample PID readings, and sample times, can be found in **Attachment 3**.

All 14 air samples were collected utilizing batch certified 6-liter Summa® canisters equipped with 8-hour flow controllers, and submitted to Alpha Analytical of Mansfield, Massachusetts (Alpha) for analysis of VOCs by United States Protection Agency (USEPA) Method TO-15. Laboratory deliverables are in accordance with NYSDEC Analytical Services Protocol (ASP) Category B and were subjected to data validation by SGD Environmental Services of Cazenovia, New York (SGD).

2020 Soil Vapor Intrusion Results

Building Inspection and Chemical Inventory

During the building inspection, elevated PID readings were noted in the indoor air space and were primarily due to the presence of stored/used petroleum products and vehicle detailing chemicals, in addition to on-going facility operations. PID readings recorded during the pre-sampling building inspection ranged from 14.56 ppb to 20,520 ppb. Interfering conditions at the time of SVI sampling were noted at all six locations and included vehicle exhaust and the active use of petroleum, solvent, and vehicle detailing/cleaning products. Additionally, it should be noted that active use of the overhead garage bay doors occurred throughout the time of SVI sampling.

The integrity of the floor slab was assessed in the vicinity of each SVI sample location and throughout the building. This was completed by inspecting the slab for cracks, penetrations, and other preferential pathways, by way of building utilities, for potential SVI. Cracks/gaps in the slab were observed throughout the building mainly in along the floor joints and surrounding the building support pillars.

Soil Vapor Intrusion Analytical Results

SVI analytical results within the main building indicated the presence of the Site contaminants of concern (COCs) tetrachloroethene (PCE), trichloroethene (TCE), and/or cis-1,2-dichloroethene (c12-DCE) in the sub-slab vapor points. The concentration ranges for these chlorinated VOCs (cVOCs) in the sub-slab points were detected at the following ranges:

- PCE – 13.5 micrograms per cubic meter (µg/m^3) (SS-17) to 441 µg/m^3 (SS-15)
- TCE – 13.1 µg/m^3 (SS-13) to 21,800 µg/m^3 (SS-15).
- c12-DCE – 5.0 µg/m^3 (SS-17) to 1,110 µg/m^3 (SS-15). c12-DCE was not detected above the laboratory reporting limit (RL) in samples collected from SS-13, SS-14, SS-16, and SS-18.

The concentration ranges for each of the above compounds for the co-located indoor air samples included the following:

- PCE – 0.19 µg/m^3 (IA-13 and IA-16) to 0.251 µg/m^3 (IA-15).
- TCE – 0.425 µg/m^3 (IA-13) to 0.967 µg/m^3 (IA-15).
- c12-DCE – Not detected above laboratory RLs in any indoor air sample submitted for analysis.

A comparison of the sub-slab PCE detections to their respective co-located indoor air sample analytical results and Matrix A of the *October 2006 NYSDOH SVI Guidance* (amended May 2017) indicate that all locations require “no further action”. A comparison of the sub-slab TCE detections to their respective co-located indoor air sample analytical results and Matrix A of the *October 2006 NYSDOH SVI Guidance* indicate that all locations either require “monitoring” (SS-13 and SS-14) or “mitigation” (SS-15, SS-16, SS-17, and SS-18). Only the detected concentration of c12-DCE in SS-15 requires “mitigation”, per Matrix A of the *October 2006 NYSDOH SVI Guidance*.

A summary of the SVI analytical results can be found in **Table 1**. The summary laboratory analytical report and associated data usability summary report (DUSR) can be found in **Attachments 4** and **5**, respectively.

Conclusions and Recommendations

Analytical results from all six sub-slab vapor points within the former Chromalloy building show elevated concentrations of TCE, a primary Site COC, warranting either “monitoring” or “mitigation” per the NYSDOH Guidance. When compared to the historical 2016 and 2018 SVI analytical results, TCE concentrations at all locations have either remained stable or decreased over time. Additionally, the detected c12-DCE concentration in SS-15 requiring “mitigation” has shown a consistent decrease over time since 2016. A summary of the historical and current sub-slab analytical results, with respect to the NYSDOH Matrix analytes only, is provided in **Table 2**.

As noted above, the building is currently used to store, clean, and perform minor maintenance on new vehicles for sale. During typical operations, the overhead bay doors are either left open or open/closed while the building is occupied to allow movement of vehicles in and out of the facility, thereby providing an air flow exchange throughout the warehouse. Based on TRC's review, there are limited regular occupancies in any of the northern office areas. Given the current building usage and low cVOC concentrations in indoor air, it does not appear that sub-slab soil impacts are significantly impacting interior air quality of the main building.

Sequa will continue to complete SVI building inspection and sampling activities on a biennial basis. The next event is scheduled during the 2021-2022 heating season. Additionally, the building use and occupancy will be evaluated on an annual basis. Should the building use and occupancy change during future evaluations, the NYSDEC will be notified of the change within 30 days of the inspection. If the annual building use and occupancy remains the same or similar to prior years, the inspection results will be summarized in that year's *Operational Unit 1 (OU-1) Annual Monitoring Report*.

If you have any comments, questions, or concerns regarding this letter, please do not hesitate to contact me at (518) 688-3109.

Sincerely,

Justin King
Project Manager

Jeffrey LaRock
Office Practice Leader

CC: Greg Workman – Sequa Corporation

Attachments

Table 1	Summary of Analytical results for SVI Air Samples – February 2020
Table 2	Summary of Historical NYSDOH SVI Matrix Criteria Analytical Results
Figure 1	SVI Sampling Locations – 2019-2020 Heating Season
Attachment 1	Photographic Log
Attachment 2	NYSDEC *Structure Sampling Questionnaire and Building Inventory* Form
Attachment 3	Record of Vapor Sampling Forms
Attachment 4	Summary Laboratory Analytical Report
Attachment 5	DUSR

TABLES

Table 1
Summary of Analytical Results for Soil Vapor Intrusion Air Samples - February 2020
Former Chromalloy Site
West Nyack, New York

		Co-Located			Co-Located		Co-Located	
Sample Location:		SS-13	IA-13	IA-13 (DUP)	SS-14	IA-14	SS-15	IA-15
Sample Type:		Sub-Slab	Indoor Air	Indoor Air	Sub-Slab	Indoor Air	Sub-Slab	Indoor Air
Sample Date:		02/12/2020	02/12/2020	02/12/2020	02/12/2020	02/12/2020	02/12/2020	02/12/2020
PID Reading (ppb):		916	569	569	1,125	1,096	9,555	1,400
NYSDOH Matrix	**TO-15 Analysis - VOCs**	**Results (µg/m³)**						
	Dichlorodifluoromethane (Freon 12)	1.91	1.9	1.78	3.69	1.78	61.8 U	1.7
	Chloromethane	0.413 U	1.05	0.989	0.413 U	0.913	25.8 U	0.865
	Freon 114	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	87.4 U	1.4 U
C	Vinyl chloride	0.511 U	0.051 U	0.051 U	0.511 U	0.051 U	**32 U**	**0.051 U**
	1,3-Butadiene	0.442 U	0.442 U	0.442 U	0.442 U	0.465	27.7 U	0.442 U
	Bromomethane	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	48.5 U	0.777 U
	Chloroethane	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	33 U	0.528 U
	Ethanol	49.7	102	106	108	69.2	588 U	77.3
	Vinyl bromide	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	54.7 U	0.874 U
	Acetone	17.4	40.1	38.7	105	28	148 U	30.2
	Trichlorofluoromethane (Freon 11)	1.12 U	1.12 U	1.12 U	1.12 U	1.12 U	70.2 U	1.12 U
	Isopropanol	5.85	9.98	9.73	9.32	5.65	76.7 U	6.64
A	1,1-Dichloroethene	0.793 U	0.079 U	0.079 U	0.793 U	0.079 U	49.6 U	0.079 U
B	Methylene chloride	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	**108 U**	**1.74 U**
	3-Chloropropene	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	39.1 U	0.626 U
	Carbon disulfide	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	38.9 U	0.623 U
	Freon 113	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	95.8 U	1.53 U
	trans-1,2-Dichloroethene	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	110	0.793 U
	1,1-Dichloroethane	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	50.6 U	0.809 U
	Methyl tert-Butyl Ether (MTBE)	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	45.1 U	0.721 U
	2-Butanone (MEK)	8.32	6.37	6.78	11.4	1.9	92 U	2.1
A	cis-1,2-Dichloroethene	0.793 U	0.079 U	0.079 U	0.793 U	0.079 U	**1,110**	**0.079 U**
	Ethyl acetate	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	112 U	1.8 U
	Chloroform	0.977 U	2.46	2.46	0.977 U	0.977 U	338	0.977 U
	Tetrahydrofuran	13.6	8.91	9.17	7.61	1.47 U	92 U	1.47 U
	1,2-Dichloroethane	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	50.6 U	0.809 U
	n-Hexane	0.705 U	28	27.9	0.705 U	44.1	44.1 U	55.3
B	1,1,1-Trichloroethane	1.09 U	0.109 U	0.109 U	1.3	0.109 U	68.2 U	0.109 U
	Benzene	0.639 U	5.08	5.05	7.8	8.59	39.9 U	9.71
A	Carbon tetrachloride	1.26 U	0.66	0.66	1.26 U	0.352	**78.6 U**	**0.365**
	Cyclohexane	0.688 U	17.7	17.8	0.688 U	30.6	43 U	38.6
	1,2-Dichloropropane	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	57.8 U	0.924 U
	Bromodichloromethane	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	83.7 U	1.34 U
	1,4-Dioxane	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	45 U	0.721 U
A	Trichloroethene	**13.1**	**0.425**	**0.398**	**59.1**	**0.462**	**21,800**	**0.967**
	2,2,4-Trimethylpentane	0.934 U	2.97	2.93	0.934 U	3.83	58.4 U	4.81
	Heptane	0.82 U	7.13	7.05	0.852	9.55	51.2 U	12.3
	cis-1,3-Dichloropropene	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	56.7 U	0.908 U
	4-Methyl-2-pentanone (MIBK)	2.05 U	3.61	3.49	2.05 U	3.58	128 U	4.07
	trans-1,3-Dichloropropene	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	56.7 U	0.908 U
	1,1,2-Trichloroethane	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	68.2 U	1.09 U
	Toluene	1.24	38.4	37.6	18.1	42.6	47.1 U	49.7
	2-Hexanone (MBK)	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	51.2 U	0.82 U
	Dibromochloromethane	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	106 U	1.7 U
	1,2-Dibromoethane (Ethylene dibromide)	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	96.1 U	1.54 U
B	Tetrachloroethene	15.7	0.19	0.197	30.6	0.203	411	0.251
	Chlorobenzene	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	57.6 U	0.921 U
	Ethylbenzene	0.869 U	34.4	34.4	40.2	66	54.3 U	92.1
	m,p-Xylene	2.2	123	124	29.4	232	108 U	318
	Bromoform	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	129 U	2.07 U
	Styrene	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	53.2 U	0.852 U
	1,1,2,2-Tetrachloroethane	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	85.8 U	1.37 U
	o-Xylene	0.869 U	30.2	30.4	12.4	59.9	54.3 U	83.4
	p-Ethyltoluene	0.983 U	0.983 U	0.983 U	6.83	1.1	61.5 U	1.74
	1,3,5-Trimethylbenzene	0.983 U	1.01	1.04	9.54	1.72	61.5 U	2.09
	1,2,4-Trimethylbenzene	0.983 U	3.02	3.16	15.3	5.51	61.5 U	6.59

Table 1
Summary of Analytical Results for Soil Vapor Intrusion Air Samples - February 2020
Former Chromalloy Site
West Nyack, New York

		Co-Located						
	Sample Location:	SS-13	IA-13	IA-13 (DUP)	SS-14	IA-14	SS-15	IA-15
	Sample Type:	Sub-Slab	Indoor Air	Indoor Air	Sub-Slab	Indoor Air	Sub-Slab	Indoor Air
	Sample Date:	02/12/2020	02/12/2020	02/12/2020	02/12/2020	02/12/2020	02/12/2020	02/12/2020
	PID Reading (ppb):	916	569	569	1,125	1,096	9,555	1,400
NYSDOH Matrix	**TO-15 Analysis - VOCs**	**Results (µg/m^3)**						
	Benzyl Chloride	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	64.7 U	1.04 U
	1,3-Dichlorobenzene	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	75.2 U	1.2 U
	1,4-Dichlorobenzene	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	75.2 U	1.27
	1,2-Dichlorobenzene	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	75.2 U	1.2 U
	1,2,4-Trichlorobenzene	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	92.8 U	1.48 U
	Hexachlorobutadiene	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	133 U	2.13 U
	tert-Butyl alcohol	1.52 U	1.52 U	1.52 U	2.15	1.52 U	94.6 U	1.52 U

Notes:

µg/m3	: micrograms per cubic meter
U	: Analyte was not detected at specified quantitation limit
TO	: Toxic organics
PID	: Photo-ionization detector
ppb	: parts per billion
VOCs	: Volatile organic compounds
NYSDOH Matrix	: New York State Departmet of Health Soil Vapor/Indoor Air Decision Matrices, May 2017
Bold	: Indicates the result is within the applicable "Monitor" or "Mitigate" NYSDOH Matrix criteria
Green Shading	: Indicates the result requires "No Further Action" per the applicable NYSDEC Matrix
Orange Shading	: Indicates the results require "Monitoring" per the applicable NYSDEC Matrix
Red Shading	: Indicates the result requires "Mitigation" per the applicable NYSDEC Matrix

Table 1
Summary of Analytical Results for Soil Vapor Intrusion Air Samples - February 2020
Former Chromalloy Site
West Nyack, New York

		Co-Located		Co-Located		Co-Located		
Sample Location:		SS-16	IA-16	SS-17	IA-17	SS-18	IA-18	AA-3
Sample Type:		Sub-Slab	Indoor Air	Sub-Slab	Indoor Air	Sub-Slab	Indoor Air	Ambient Air
Sample Date:		02/12/2020	02/12/2020	02/12/2020	02/12/2020	02/12/2020	02/12/2020	02/12/2020
PID Reading (ppb):		1,060	652	1,902	1,001	6,027	3,161	191
NYSDOH Matrix	**TO-15 Analysis - VOCs**	**Results (µg/m^3)**						
	Dichlorodifluoromethane (Freon 12)	1.93	1.62	2.75 U	1.64	1.99	1.67	1.96
	Chloromethane	0.413 U	0.857	1.15 U	0.865	0.413 U	0.876	0.962
	Freon 114	1.4 U	1.4 U	3.89 U	1.4 U	1.4 U	1.4 U	1.4 U
C	Vinyl chloride	0.511 U	0.051 U	1.42 U	0.051 U	0.511 U	0.051 U	0.051 U
	1,3-Butadiene	0.442 U	0.442 U	1.23 U	0.442 U	0.442 U	0.442 U	0.442 U
	Bromomethane	0.777 U	0.777 U	2.16 U	0.777 U	0.777 U	0.777 U	0.777 U
	Chloroethane	0.528 U	0.528 U	1.47 U	0.528 U	0.528 U	0.528 U	0.528 U
	Ethanol	26	79.3	56.7	66.9	57.8	79.5	9.42 U
	Vinyl bromide	0.874 U	0.874 U	2.43 U	0.874 U	0.874 U	0.874 U	0.874 U
	Acetone	7.06	32.1	83.4	30.4	6.03	38.5	2.87
	Trichlorofluoromethane (Freon 11)	1.12 U	1.12 U	3.12 U	1.12 U	1.12 U	1.12 U	1.12 U
	Isopropanol	3.15	6.34	10.1	5.51	4.08	9.05	1.23 U
A	1,1-Dichloroethene	0.793 U	0.079 U	2.2 U	0.079 U	0.793 U	0.079 U	0.079 U
B	Methylene chloride	1.74 U	1.74 U	4.83 U	1.74 U	1.74 U	1.74 U	1.74 U
	3-Chloropropene	0.626 U	0.626 U	1.74 U	0.626 U	0.626 U	0.626 U	0.626 U
	Carbon disulfide	0.623 U	0.623 U	1.73 U	0.623 U	0.623 U	0.623 U	0.623 U
	Freon 113	1.53 U	1.53 U	4.26 U	1.53 U	1.53 U	1.53 U	1.53 U
	trans-1,2-Dichloroethene	0.793 U	0.793 U	2.2 U	0.793 U	0.793 U	0.793 U	0.793 U
	1,1-Dichloroethane	0.809 U	0.809 U	2.25 U	0.809 U	0.809 U	0.809 U	0.809 U
	Methyl tert-Butyl Ether (MTBE)	0.721 U	0.721 U	2 U	0.721 U	0.721 U	0.721 U	0.721 U
	2-Butanone (MEK)	4.19	2.74	18	2.03	3.54	2.42	1.47 U
A	cis-1,2-Dichloroethene	0.793 U	0.079 U	5.0	0.079 U	0.793 U	0.079 U	0.079 U
	Ethyl acetate	1.8 U	1.8 U	5.01 U	1.8 U	1.8 U	1.97	1.8 U
	Chloroform	1.12	0.977 U	16.1	0.977 U	1.42	0.977 U	0.977 U
	Tetrahydrofuran	6.67	1.47 U	15.9	1.47 U	4.9	1.47 U	1.47 U
	1,2-Dichloroethane	0.809 U	0.809 U	2.25 U	0.809 U	0.809 U	0.809 U	0.809 U
	n-Hexane	0.705 U	43.7	1.96 U	52.2	1.09	342	0.705 U
B	1,1,1-Trichloroethane	1.09 U	0.109 U	3.03 U	0.109 U	1.32	0.109 U	0.109 U
	Benzene	0.639 U	7.6	4.34	8.88	0.639 U	13.7	0.639 U
A	Carbon tetrachloride	1.26 U	0.365	3.5 U	0.365	1.26 U	0.34	0.403
	Cyclohexane	1.2	31.3	2.24	36.8	2.12	225	0.688 U
	1,2-Dichloropropane	0.924 U	0.924 U	2.57 U	0.924 U	0.924 U	0.924 U	0.924 U
	Bromodichloromethane	1.34 U	1.34 U	3.72 U	1.34 U	1.34 U	1.34 U	1.34 U
	1,4-Dioxane	0.721 U	0.721 U	2 U	0.721 U	0.721 U	0.721 U	0.721 U
A	Trichloroethene	**87.6**	**0.494**	**1,010**	**0.446**	**427**	**0.919**	0.107 U
	2,2,4-Trimethylpentane	0.934 U	3.87	10.7	4.26	0.934 U	5.84	0.934 U
	Heptane	0.82 U	10	2.28 U	10.9	0.82 U	33.5	0.82 U
	cis-1,3-Dichloropropene	0.908 U	0.908 U	2.52 U	0.908 U	0.908 U	0.908 U	0.908 U
	4-Methyl-2-pentanone (MIBK)	2.05 U	4	5.7 U	4.18	2.05 U	5.12	2.05 U
	trans-1,3-Dichloropropene	0.908 U	0.908 U	2.52 U	0.908 U	0.908 U	0.908 U	0.908 U
	1,1,2-Trichloroethane	1.09 U	1.09 U	3.03 U	1.09 U	1.09 U	1.09 U	1.09 U
	Toluene	0.754 U	47.1	19	47.5	1.23	72.7	2.14
	2-Hexanone (MBK)	0.82 U	0.82 U	2.28 U	0.82 U	0.82 U	0.82 U	0.82 U
	Dibromochloromethane	1.7 U	1.7 U	4.74 U	1.7 U	1.7 U	1.7 U	1.7 U
	1,2-Dibromoethane (Ethylene dibromide)	1.54 U	1.54 U	4.27 U	1.54 U	1.54 U	1.54 U	1.54 U
B	Tetrachloroethene	51.5	0.19	13.5	0.224	143	0.224	0.176
	Chlorobenzene	0.921 U	0.921 U	2.56 U	0.921 U	0.921 U	0.921 U	0.921 U
	Ethylbenzene	0.869 U	63	9.95	70.4	0.869 U	155	0.869 U
	m,p-Xylene	1.95	224	19.8	248	2.41	504	1.74 U
	Bromoform	2.07 U	2.07 U	5.75 U	2.07 U	2.07 U	2.07 U	2.07 U
	Styrene	0.852 U	0.852 U	2.37 U	0.852 U	0.852 U	0.852 U	0.852 U
	1,1,2,2-Tetrachloroethane	1.37 U	1.37 U	3.82 U	1.37 U	1.37 U	1.37 U	1.37 U
	o-Xylene	0.869 U	57.3	5.6	63.9	0.869 U	141	0.869 U
	p-Ethyltoluene	0.983 U	1.37	2.73 U	1.48	0.983 U	1.76	0.983 U
	1,3,5-Trimethylbenzene	0.983 U	1.68	2.73 U	1.85	0.983 U	2.32	0.983 U
	1,2,4-Trimethylbenzene	0.983 U	5.26	2.73 U	5.8	0.983 U	7.42	0.983 U

Table 1
Summary of Analytical Results for Soil Vapor Intrusion Air Samples - February 2020
Former Chromalloy Site
West Nyack, New York

		Co-Located		Co-Located		Co-Located		
Sample Location:		SS-16	IA-16	SS-17	IA-17	SS-18	IA-18	AA-3
Sample Type:		Sub-Slab	Indoor Air	Sub-Slab	Indoor Air	Sub-Slab	Indoor Air	Ambient Air
Sample Date:		02/12/2020	02/12/2020	02/12/2020	02/12/2020	02/12/2020	02/12/2020	02/12/2020
PID Reading (ppb):		1,060	652	1,902	1,001	6,027	3,161	191
NYSDOH Matrix	**TO-15 Analysis - VOCs**	**Results (µg/m^3)**						
	Benzyl Chloride	1.04 U	1.04 U	2.88 U	1.04 U	1.04 U	1.04 U	1.04 U
	1,3-Dichlorobenzene	1.2 U	1.2 U	3.34 U	1.2 U	1.2 U	1.2 U	1.2 U
	1,4-Dichlorobenzene	1.2 U	1.2 U	3.34 U	1.2 U	1.2 U	1.2 U	1.2 U
	1,2-Dichlorobenzene	1.2 U	1.2 U	3.34 U	1.2 U	1.2 U	1.2 U	1.2 U
	1,2,4-Trichlorobenzene	1.48 U	1.48 U	4.13 U	1.48 U	1.48 U	1.48 U	1.48 U
	Hexachlorobutadiene	2.13 U	2.13 U	5.93 U	2.13 U	2.13 U	2.13 U	2.13 U
	tert-Butyl alcohol	1.52 U	1.52 U	5.88	1.52 U	1.52 U	1.52 U	1.52 U

Notes:

µg/m3	: micrograms per cubic meter
U	: Analyte was not detected at specified quantitation limit
TO	: Toxic organics
PID	: Photo-ionization detector
ppb	: parts per billion
VOCs	: Volatile organic compounds
NYSDOH Matrix	: New York State Departmet of Health Soil Vapor/Indoor Air Decision Matrices, May 2017
Bold	: Indicates the result is within the applicable "Monitor" or "Mitigate" NYSDOH Matrix criteria
Green Shading	: Indicates the result requires "No Further Action" per the applicable NYSDEC Matrix
Orange Shading	: Indicates the results require "Monitoring" per the applicable NYSDEC Matrix
Red Shading	: Indicates the result requires "Mitigation" per the applicable NYSDEC Matrix

Table 2
Summary of Historical NYSDOH SVI Matrix Criteria Analytical Results
Former Chromalloy Site
West Nyack, New York

		Co-Located			Co-Located			Co-Located		
Sample Location:		SS-01	SS-07	SS-13	SS-02	SS-08	SS-14	SS-06	SS-11	SS-15
Sample Date:		12/20/2016	3/30/2018	02/12/2020	12/20/2016	3/30/2018	02/12/2020	12/20/2016	3/30/2018	02/12/2020
PID Reading (ppb):		460	3,432	916	1,267	3,062	1,125	13,510	15,400	9,555
NYSDOH Matrix	**TO-15 Analysis - VOCs**	**Results (µg/m^3)**								
A	Carbon tetrachloride	**1.3 U**	**2 U**	1.26 U	**5 U**	0.25	1.26 U	**120 U**	**130 U**	**78.6 U**
A	Trichloroethene	**7.5**	**7.1**	**13.1**	**7.4**	**44**	**59.1**	**54,000 E**	**31,000**	**21,800**
A	1,1-Dichloroethene	0.79 U	**1.3 U**	0.793 U	3.2 U	0.14 U	0.793 U	**73 U**	**81 U**	49.6 U
A	cis-1,2-Dichloroethene	0.79 U	**1.3 U**	0.793 U	3.2 U	0.14 U	0.793 U	**4,100**	**1,800**	**1,110**
B	Methylene chloride	1.7 U	**2.9 J**	1.74 U	6.9 U	3.1	1.74 U	160 U	**1,000 U**	**108 U**
B	1,1,1-Trichloroethane	1.1 U	9.9 U	1.09 U	4.4 U	1.1	1.3	100 U	**630 U**	68.2 U
B	Tetrachloroethene	9.6	**6.6 J**	15.7	29	39	30.6	170	**550 J**	411
C	Vinyl chloride	**0.51 U**	**0.81 U**	0.511 U	**2 U**	0.089 U	0.511 U	**47 U**	**52 U**	**32 U**

Notes:

µg/m3 : micrograms per cubic meter
U : Analyte was not detected at specified quantitation limit
TO : Toxic organics
PID : Photo-ionization detector
ppb : parts per billion
J : Estimated Value
D : Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples
E : Result exceeded calibration range
NYSDOH Matrix : New York State Departmet of Health Soil Vapor/Indoor Air Decision Matrices, May 2017
Bold : Indicates the result is within the applicable "Monitor" or "Mitigate" NYSDOH Matrix criteria when compared to it's respective indoor air sample
Green Shading : Indicates the detected result requires "No Further Action" per the applicable NYSDEC Matrix, when compared with it's co-located indoor air sample (not shown)
Orange Shading : Indicates the detected result requires "Monitoring" per the applicable NYSDEC Matrix, when compared with it's co-located indoor air sample (not shown)
Red Shading : Indicates the detected result requires "Mitigation" per the applicable NYSDEC Matrix, when compared with it's co-located indoor sample (not shown)

Table 2
Summary of Historical NYSDOH SVI Matrix Criteria Analytical Results
Former Chromalloy Site
West Nyack, New York

		Single Location	Co-Located			Co-Located			Co-Located	
Sample Location:		SS-03	SS-04	SS-09	SS-16	SS-05	SS-10	SS-17	SS-12	SS-18
Sample Date:		12/20/2016	12/20/2016	3/30/2018	02/12/2020	12/20/2016	3/30/2018	02/12/2020	3/30/2018	02/12/2020
PID Reading (ppb):		2,510	720	2,941	1,060	1,450	4,497	1,902	3,818	6,027
NYSDOH Matrix	**TO-15 Analysis - VOCs**	**Results (µg/m^3)**								
A	Carbon tetrachloride	**1.3 U**	**1.3 U**	**0.24**	1.26 U	**1.3 U**	4 U	3.5 U	0.88 U	1.26 U
A	Trichloroethene	**50**	**71**	**92**	**87.6**	**1,400 D**	**1,800**	**1,010**	**480**	**427**
A	1,1-Dichloroethene	0.79 U	0.79 U	0.14 U	0.793 U	0.79 U	2.5 U	2.2 U	0.56 U	0.793 U
A	cis-1,2-Dichloroethene	2.6	0.79 U	0.14 U	0.793 U	**27 D**	**9.1**	5.0	1.2	0.793 U
B	Methylene chloride	1.7 U	1.7 U	0.56 J	1.74 U	1.7 U	31 U	4.83 U	6.9 U	1.74 U
B	1,1,1-Trichloroethane	1.1 U	5	2.9	1.09 U	1.1 U	20 U	3.03 U	2.9 J	1.32
B	Tetrachloroethene	2.5	200	130	51.5	2.5	29	13.5	**190**	143
C	Vinyl chloride	**0.51 U**	**0.51 U**	**0.089 U**	0.511 U	**12 U**	1.6 U	1.42 U	0.36 U	0.511 U

Notes:

µg/m3 : micrograms per cubic meter
U : Analyte was not detected at specified quantitation limit
TO : Toxic organics
PID : Photo-ionization detector
ppb : parts per billion
J : Estimated Value
D : Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples
E : Result exceeded calibration range
NYSDOH Matrix : New York State Departmet of Health Soil Vapor/Indoor Air Decision Matrices, May 2017
Bold : Indicates the result is within the applicable "Monitor" or "Mitigate" NYSDOH Matrix criteria when compared to it's respective indoor air results
Green Shading : Indicates the detected result requires "No Further Action" per the applicable NYSDEC Matrix, when compared with it's co-located indoor air sample (not shown)
Orange Shading : Indicates the detected result requires "Monitoring" per the applicable NYSDEC Matrix, when compared with it's co-located indoor air sample (not shown)
Red Shading : Indicates the detected result requires "Mitigation" per the applicable NYSDEC Matrix, when compared with it's co-located indoor sample (not shown)

FIGURES

LEGEND (SYMBOLS NOT TO SCALE):

- APPROXIMATE 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
- SSX / IAX — PERMANENT 2020 SUB-SLAB SOIL VAPOR AND INDOOR AIR SAMPLING LOCATION AND IDENTIFICATION NUMBER
- AA3 — PERMANENT 2020 AMBIENT AIR SAMPLING LOCATION AND IDENTIFICATION NUMBER

NOTE:

1. 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 CHROMALLOY FACILITY (NYSDEC SITE NO. 344039)
169 WESTERN HIGHWAY
WEST NYACK, NEW YORK 10994

TITLE:
SOIL VAPOR INTRUSION SAMPLING LOCATIONS - 2019-2020 HEATING SEASON

DRAWN BY:	H. DELGADO	PROJ NO.:	190273.2015.0000
CHECKED BY:	J. KING		
APPROVED BY:	J. LAROCK		**FIGURE 1**
DATE:	OCTOBER 2019		

TRC
10 Maxwell Drive, Suite 200
Clifton Park, NY 12065
Phone: 518.348.1190
www.TRCcompanies.com

FILE NO.: Figure 1 - Prop. SVI Samp. Loc. - 2020 Heat. Season.dwg

ATTACHMENT 1

PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

Photo 1 **Date:** 2/12/2020 **Direction:** S **Photographer:** JK **Description:** View of current operations in the main building.	

Photo 2 **Date:** 2/12/2020 **Direction:** W **Photographer:** JK **Description:** Apparent cracks in the concrete slab and gaps between slab panels. Photo taken adjacent to vehicle detailing area (left hand side).	

PHOTOGRAPHIC LOG

Photo 3 **Date:** 2/11/2020 **Direction:** N **Photographer:** JK **Description:** View of petroleum and car detailing chemical storage area.	

Photo 4 **Date:** 2/11/2020 **Direction:** S **Photographer:** JK **Description:** View of wash bay.	

PHOTOGRAPHIC LOG

Photo 5 **Date:** 2/11/2020 **Direction:** NA **Photographer:** JK **Description:** TRC drilling through building slab to install the Vapor Pin® device. Location is SS-15.	

Photo 6 **Date:** 2/11/2020 **Direction:** NA **Photographer:** JK **Description:** Photo of Vapor Pin® device prior to installation at SS-14 within the building slab (hole on right). Slab thickness at SS-14 measured to be 8 inches.	

PHOTOGRAPHIC LOG

Photo 7 **Date:** 2/12/2020 **Direction:** NA **Photographer:** JK **Description:** View of helium leak test setup over SS-13.	

Photo 8 **Date:** 2/12/2020 **Direction:** SW **Photographer:** JK **Description:** View of co-located sub-slab (SS-18) and indoor air samples (IA-18).	

ATTACHMENT 2

NYSDEC FORM

STRUCTURE SAMPLING QUESTIONNAIRE AND BUILDING INVENTORY

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Former Chromalloy Facility Site Code: 344039 Operable Unit: 1

Building Code: Commercial Building Name: Paragon Honda Acura

Address: 169 Western Highway Apt/Suite No:

City: West Nyack State: NY Zip: 10994 County: Rockland

Contact Information

Preparer's Name: Justin King Phone No: (518) 348-1192

Preparer's Affiliation: TRC Engineers Company Code: TRC

Purpose of Investigation: Biennial soil vapor intrusion assessment Date of Inspection: Feb 12, 2020

Contact Name: Ken Zimmons Affiliation: TENANT

Phone No: (845) 420-4044 Alt. Phone No: Email: paragonthesuperstore@

Number of Occupants (total): 10-20 Number of Children:

☒ Occupant Interviewed? ☐ Owner Occupied? ☐ Owner Interviewed?

Owner Name (if different): Kerry Kartsonis Owner Phone: (212) 692-7937

Owner Mailing Address: 245 Park Ave., New York, NY 10167

Building Details

Bldg Type (Res/Com/Ind/Mixed): COMMERCIAL/MIXED Bldg Size (S/M/L): LARGE

If Commercial or Industrial Facility, Select Operations: AUTO SALES/REPAIR

If Residential Select Structure Type:

Number of Floors: 1 Approx. Year Construction: 1960 ☐ Building Insulated? ☐ Attached Garage?

Describe Overall Building 'Tightness' and Airflows(e.g., results of smoke tests):

Warehouse contains multiple garage bay doors. Doors opened/closed throughout day to allow vehicles in and out. Outside air continually moving through warehouse building.

Foundation Description

Foundation Type: NO BASEMENT/SLAB Foundation Depth (bgs): 1 Unit: FEET

Foundation Floor Material: POURED CONCRETE

Foundation Wall Material: CONCRETE BLOCK

Foundation Floor Thickness: 12

Foundation Wall Thickness: 12

Unit: INCHES

☒ Floor penetrations? Describe Floor Penetrations: Floor drains in car wash area. Roof drain pipes

☒ Wall penetrations? Describe Wall Penetrations: Various utilities and fire suppression system

Basement is: Basement is: ☒ Sumps/Drains? Water In Sump?:

Describe Foundation Condition (cracks, seepage, etc.) : Various cracks, seams between select slab panels are

☐ Radon Mitigation System Installed? ☐ VOC Mitigation System Installed? ☐ Mitigation System On?

Heating/Cooling/Ventilation Systems

Heating System: RADIANT HEATING Heat Fuel Type: GAS ☒ Central A/C Present?

Vented Appliances

Water Heater Fuel Type: GAS Clothes Dryer Fuel Type: ELECTRIC

Water Htr Vent Location: OUTSIDE Dryer Vent Location: OUTSIDE

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: Paragon Honda Acura Bldg Code: Commercial Date: Feb 12, 2020

Bldg Address: 169 Western Highway Apt/Suite No:

Bldg City/State/Zip: West Nyack NY, 10994

Make and Model of PID: Honeywell ppbRAE 3000 PID 10.6 eV Date of Calibration: Feb 6, 2020

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
W Car Lift Area	Synthetic Oil	200 G	U	Petroleum	600 ppb	☐
W Car Lift Area	Wet Look - Dressing Cleaner	250 G	U		600 ppb	☐
W Car Lift Area	Waste Oil	500 G	U	Waste Oil	850 ppb	☐
W Car Lift Area	#2/#1 Motor Oil	1000 G	U	Petroleum	900 ppb	☐
Wash Bay	Wash and Shine - Car wash soa	110 G	U		950 ppb	☐
Wash Bay	Car Brite M50 - Cleaner/degrea	25 G	U	Sodium metasilicate, trisodium phosphate	1200 ppb	☐
Laundry Area	Phase 1 - Liquid clothing soap	10 G	U		900 ppb	☐
NE Wall	Crystal Pinnacle NF - Windshiel	200 G	U		**200 ppb**	☐
W Car Lift Area	Various vehicle oils and fluids	8 G	UO		700 ppb	☐
NE Corner	Gasoline	15 G	U	BTEX, MTBE, TAME, ethanol, n-hexane, n-butane, ethyl benzene, 1,2,4-Trimethylbenzene	20520 ppb	☐
Wash Bay	Body Prep Solvent	5 G	U		14.56 ppb	☒
Wash Bay	Blue Marvel - Car truck wash	1 G	U		14.56 ppb	☐
Wash Bay	Premium Thinner - Paint thinne	1 G	U		1967 ppb	☒
Laundry Area	Adhesive Remover - Surface so	5 G	U		1885 ppb	☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? Yes Were there any elevated PID readings taken on site? Yes ☒ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Former Chromalloy Facility Site Code: 344039 Operable Unit: 1

Building Code: Commercial Building Name: Paragon Honda Acura

Address: 169 Western Highway Apt/Suite No:

City: West Nyack State: NY Zip: 10994 County: Rockland

Factors Affecting Indoor Air Quailty

Frequency Basement/Lowest Level is Occupied?: FULL TIME Floor Material: CEMENT

☐ Inhabited? ☒ HVAC System On? ☒ Bathroom Exhaust Fan? ☐ Kitchen Exhaust Fan?

Alternate Heat Source: ☐ Is there smoking in the building?

☐ Air Fresheners? Description/Location of Air Freshener:

☒ Cleaning Products Used Recently?: Description of Cleaning Products: Car cleaning products

☐ Cosmetic Products Used Recently?: Description of Cosmetic Products:

☐ New Carpet or Furniture? Location of New Carpet/Furniture:

☐ Recent Dry Cleaning? Location of Recently Dry Cleaned Fabrics:

☐ Recent Painting/Staining? Location of New Painting:

☒ Solvent or Chemical Odors? Describe Odors (if any): Car cleaning products, car exhaust

☒ Do Any Occupants Use Solvents At Work? If So, List Solvents Used: Body prep solvent, thinners, adhesive

☐ Recent Pesticide/Rodenticide? Description of Last Use:

Describe Any Household Activities (chemical use,/storage, unvented appliances, hobbies, etc.) That May Affect Indoor Air Quality:

Active use of vehicles moving throughout warehouse area, indoor exhaust emissions result. Other factors affecting indoor air quality include the storage and use of gasoline, bulk storage and use of oil/waste oil, and active use of car cleaning agents in the Wash Bay.

☐ Any Prior Testing For Radon? If So, When?:

☒ Any Prior Testing For VOCs? If So, When?: Mar 30, 2018

Sampling Conditions

Weather Conditions: SUNNY Outdoor Temperature: 40 °F

Current Building Use: AUTO SALES/REPAIR Barometric Pressure: 30.20 in(hg)

Product Inventory Complete? Yes ☒ Building Questionnaire Completed?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Building Code: Commercial Address: 169 Western Highway West Nyack, NY 10994

Sampling Information

Sampler Name(s): Justin King Sampler Company Code: TRC

Sample Collection Date: Feb 12, 2020 Date Samples Sent To Lab: Feb 12, 2020

Sample Chain of Custody Number: See Sample Logs Outdoor Air Sample Location ID: AA-03

SUMMA Canister Information

Sample ID:	IA-13	IA-DUP	SS-13	IA-14	SS-14
Location Code:	IA-13	IA-13	SS-13	IA-14	SS-14
Location Type:	FIRST FLOOR	FIRST FLOOR	SUBSLAB	FIRST FLOOR	SUBSLAB
Canister ID:	3371	1798	2921	1583	2785
Regulator ID:	973	1813	401	1797	1562
Matrix:	Indoor Air	Indoor Air	Subslab Soil	Indoor Air	Subslab Soil
Sampling Method:	SUMMA AIR SAMPLI	SUMMA AIR SA	SUMMA AIR SA	SUMMA AIR SA	SUMMA AIR SA

Sampling Area Info

Slab Thickness (inches):			7		8
Sub-Slab Material:			DIRT		DIRT
Sub-Slab Moisture:			DRY		DRY
Seal Type:			MECHANICAL		MECHANICAL
Seal Adequate?:	☐	☐	☒	☐	☒

Sample Times and Vacuum Readings

Sample Start Date/Time:	02/12/2020 7:56	02/12/2020	02/12/2020	02/12/2020	02/20/2020
Vacuum Gauge Start:	-30.75	-30.39	-30.07	-30.26	-30.3
Sample End Date/Time:	02/12/2020 15:	02/12/2020	02/12/2020	02/12/2020	02/12/2020
Vacuum Gauge End:	-6.39	-6.32	-6.90	-7.25	-8.57
Sample Duration (hrs):	7.5	7.5	7.5	8	8
Vacuum Gauge Unit:	in(hg)	in(hg)	in(hg)	in(hg)	in(hg)

Sample QA/QC Readings

Vapor Port Purge:	☐	☐	☒	☐	☒
Purge PID Reading:			916		1,125
Purge PID Unit:			ppb		ppb
Tracer Test Pass:	☐	☐	☒	☐	☒

Sample start and end times should be entered using the following format: MM/DD/YYYY HH:MM

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Building Code: Commercial Address: 169 Western Highway West Nyack, NY 10994

Sampling Information

Sampler Name(s): Justin King Sampler Company Code: TRC

Sample Collection Date: Feb 12, 2020 Date Samples Sent To Lab: Feb 12, 2020

Sample Chain of Custody Number: See Sample Logs for info Outdoor Air Sample Location ID: AA-03

SUMMA Canister Information

Sample ID:	IA-15	SS-15	IA-16	SS-16	IA-17
Location Code:	IA-15	SS-15	IA-16	SS-16	IA-17
Location Type:	FIRST FLOOR	SUBSLAB	FIRST FLOOR	SUBSLAB	FIRST FLOOR
Canister ID:	1826	2984	1897	897	3376
Regulator ID:	1622	876	1491	1484	1616
Matrix:	Indoor Air	Subslab Soil	Indoor Air	Subslab Soil	Indoor Air
Sampling Method:	SUMMA AIR SAMPLIN	SUMMA AIR SAM	SUMMA AIR SAM	SUMMA AIR SAM	SUMMA AIR SAM

Sampling Area Info

Slab Thickness (inches):		6		7	
Sub-Slab Material:		DIRT		DIRT	
Sub-Slab Moisture:		DRY		DRY	
Seal Type:		MECHANICAL		MECHANICAL	
Seal Adequate?:	☐	☒	☐	☐	☐

Sample Times and Vacuum Readings

Sample Start Date/Time:	02/12/2020 07:21	02/12/2020 07	02/12/2020 07	02/12/2020 07	02/22/2020 07
Vacuum Gauge Start:	-30.26	-30.52	-30.37	-30.57	-29.75
Sample End Date/Time:	02/12/2020 15:22	02/12/2020 15	02/12/2020 07	02/12/2020 07	02/12/2020 15
Vacuum Gauge End:	-6.98	-6.10	-1.94	-7.64	-6.14
Sample Duration (hrs):	8	8	6	8	8
Vacuum Gauge Unit:	in(hg)	in(hg)	in(hg)	in(hg)	in(hg)

Sample QA/QC Readings

Vapor Port Purge:	☐	☒	☐	☒	☐
Purge PID Reading:		9,555		1,090	
Purge PID Unit:		ppb		ppb	
Tracer Test Pass:	☐	☒	☐	☒	☐

Sample start and end times should be entered using the following format: MM/DD/YYYY HH:MM

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Building Code: Commercial Address: 169 Western Highway West Nyack, NY 10994

Sampling Information

Sampler Name(s): Justin King Sampler Company Code: TRC

Sample Collection Date: Feb 12, 2020 Date Samples Sent To Lab: Feb 12, 2020

Sample Chain of Custody Number: See Sample Logs for info Outdoor Air Sample Location ID: AA-03

SUMMA Canister Information

Sample ID:	SS-17	IA-18	SS-18	AA-03	
Location Code:	SS-17	IA-18	SS-18	AA-03	
Location Type:	SUBSLAB	FIRST FLOOR	SUBSLAB	OUTDOOR	
Canister ID:	1611	2977	2959	2654	
Regulator ID:	1420	1576	1384	971	
Matrix:	Subslab Soil Vapo	Indoor Air	Subslab Soil	Ambient Outdo	
Sampling Method:	SUMMA AIR SAMPLIN	SUMMA AIR SAM	SUMMA AIR SAM	SUMMA AIR SAM	

Sampling Area Info

Slab Thickness (inches):	5		12.5		
Sub-Slab Material:	DIRT		DIRT		
Sub-Slab Moisture:	DRY		DRY		
Seal Type:	MECHANICAL		MECHANICAL		
Seal Adequate?:	☒	☐	☒	☐	☐

Sample Times and Vacuum Readings

Sample Start Date/Time:	02/12/2020 07:35	02/12/2020 07	02/12/2020 07	02/12/2020 08	
Vacuum Gauge Start:	-30.27	-30.38	-30.43	-30.39	
Sample End Date/Time:	02/12/2020 15:30	02/12/2020 15	02/12/2020 15	02/12/2020 15	
Vacuum Gauge End:	-4.27	-6.40	-6.64	-2.31	
Sample Duration (hrs):	8	8	8	7.5	
Vacuum Gauge Unit:	in(hg)	in(hg)	in(hg)	in(hg)	

Sample QA/QC Readings

Vapor Port Purge:	☒	☐	☒	☐	☐
Purge PID Reading:	1,902		6,027		
Purge PID Unit:	ppb		ppb		
Tracer Test Pass:	☒	☐	☒	☐	☐

Sample start and end times should be entered using the following format: MM/DD/YYYY HH:MM

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

LOWEST BUILDING LEVEL LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the lowest building level .
The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image

Design Sketch

Design Sketch Guidelines and Recommended Symbology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sket
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or **F**	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	**xxxxxxx**	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	**######**	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.

Structure Sampling Questionnaire and Building Inventory

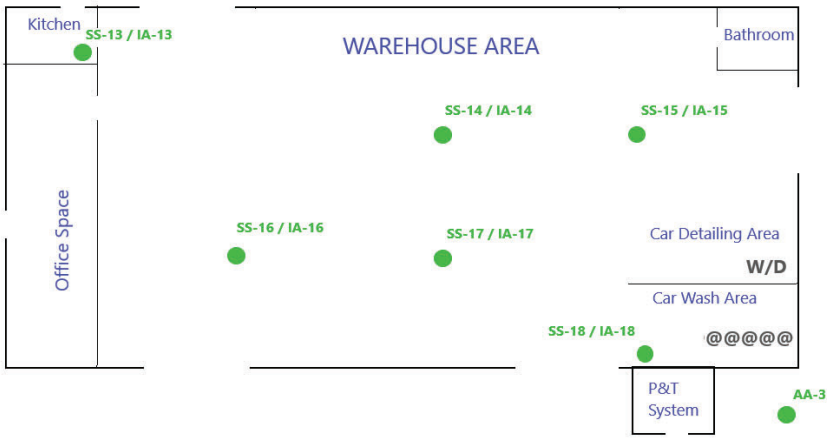
New York State Department of Environmental Conservation

FIRST FLOOR BUILDING LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the first floor of the building.
The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image

Former Chromalloy Site
NYSDEC Site No. 344039
Building Sketch



*Building sketch not to scale

Design Sketch

Design Sketch Guidelines and Recommended Symbology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sket
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or **F**	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	**xxxxxxx**	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	**######**	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.

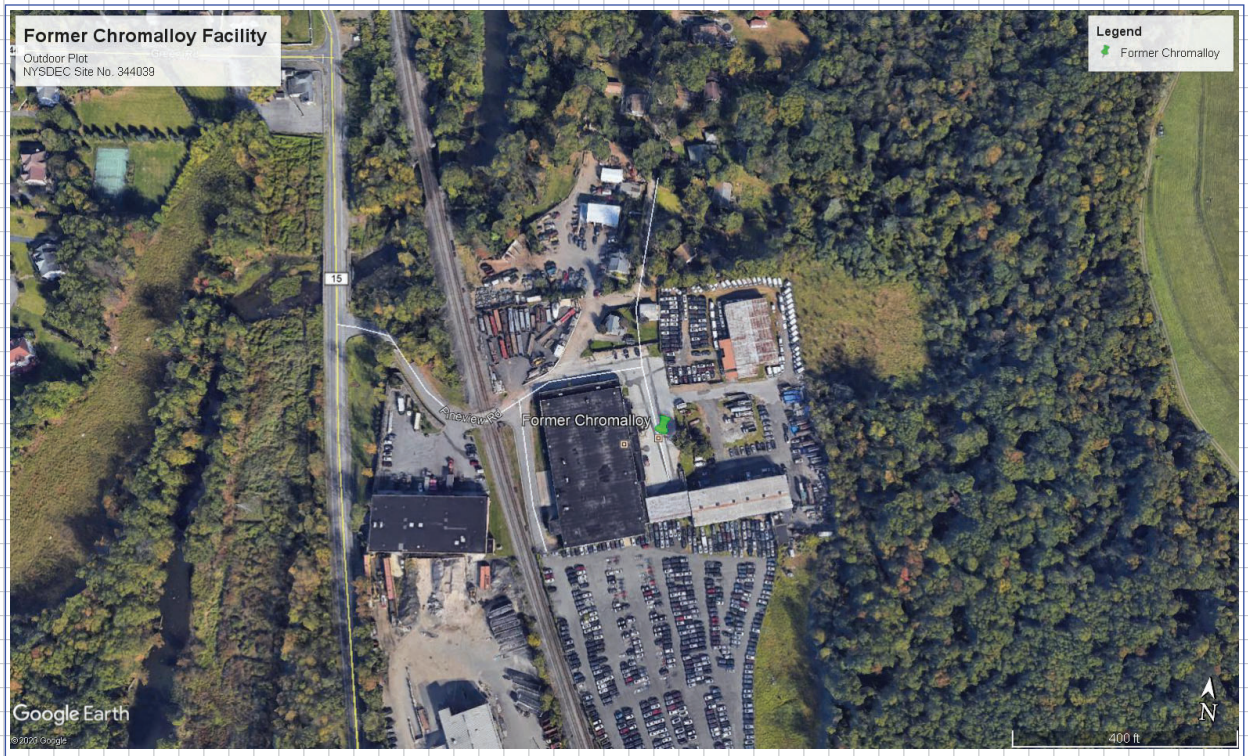
Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

OUTDOOR PLOT LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the outdoor plot of the building as well as the surrounding area. The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image



Design Sketch

Design Sketch Guidelines and Recommended Symbology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sket
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or **F**	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	**xxxxxxx**	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	**######**	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.

ATTACHMENT 3

RECORD OF VAPOR SAMPLING FORMS

RECORD OF VAPOR SAMPLING

Date: 2/12/2020 **TRC Project Number** 190270.2015.0000

Project Name: Former Chromalloy Facility **Field Personnel:** Justin King, Andrew Fishman

Weather: ~40 F Clear ; Barometric pressure: 30.20" Hg

HELIUM TRACER TEST (shroud)

Test	Time	Helium Concentration	Units (% or ppm_v)	Notes
Shroud Atmosphere	7:55	12.4	%	
Sampling Train	7:58	0	ppm	PASS

Helium concentration within sampling train should be less than 5% of shroud atmosphere concentration. If seal or probe needs to be reset then record 2nd attempt below.

Retest (if applicable)	Time	Helium Concentration	Units (% or ppm_v)	Notes
Shroud Atmosphere	NA	NA	NA	NA
Sampling Train	NA	NA	NA	NA

VAPOR PURGING

ONE PURGE VOLUME (ML) = VT + VP

VT = TUBING LENGTH (FT) * 5.4 ML/FT

VP = (3.14 * R2 * H) * 16.387 ML/IN3

VT – Total tubing volume in mL (1/4–inch OD, 3/16-inch ID tubing)

VP – Volume of air in entire length of vapor point in mL

R – Radius of inner diameter of vapor point (inches)

H – Length of vapor point (inches)

Purge Rate (mL/min): Purged via break fluid bleeder hand pump **One Purge Volume (mL):** NA

Purge Time (min): 1 **Total Volume Purged (mL):** NA

Purging two to five purge volumes while collecting inert gas readings prior to sample collection is ideal.

SUB-SLAB VAPOR SAMPLING

Canister I.D.: 2921 **Flow Controller I.D.:** 401

Start Time: 7:55 **Initial Vacuum Pressure in Sample Canister:** -30.07 in Hg

Stop Time: 15:45 **Final Vacuum Pressure in Sample Canister:** -6.9 in Hg

Sample I.D.: SS-13 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 916 ppb **Slab Thickness:** 7 inches

INDOOR AMBIENT AIR SAMPLING

Canister I.D.: 3371 **Flow Controller I.D.:** 973

Start Time: 7:56 **Initial Vacuum Pressure in Sample Canister:** -30.75 in Hg

Stop Time: 15:46 **Final Vacuum Pressure in Sample Canister:** -6.39 in Hg

Sample I.D.: IA-13 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 569 ppb **Sample Intake Height:** 46 inches

DUPLICATE AIR SAMPLING

Canister I.D.: 1798 **Flow Controller I.D.:** 1813

Start Time: 7:57 **Initial Vacuum Pressure in Sample Canister:** -30.39 in Hg

Stop Time: 15:47 **Final Vacuum Pressure in Sample Canister:** -6.32 in Hg

Sample I.D.: IA-DUP (IA-13) **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 569 ppb **Sample Intake Height:** 46 inches

RECORD OF VAPOR SAMPLING

Date: 2/12/2020 **TRC Project Number** 190270.2015.0000

Project Name: Former Chromalloy Facility **Field Personnel:** Justin King, Andrew Fishman

Weather: ~40 F Clear ; Barometric pressure: 30.20" Hg

HELIUM TRACER TEST (shroud)

Test	Time	Helium Concentration	Units (% or ppm_v)	Notes
Shroud Atmosphere	7:25	12.6	%	
Sampling Train	7:28	50	ppm	PASS

Helium concentration within sampling train should be less than 5% of shroud atmosphere concentration. If seal or probe needs to be reset then record 2nd attempt below.

Retest (if applicable)	Time	Helium Concentration	Units (% or ppm_v)	Notes
Shroud Atmosphere	NA	NA	NA	NA
Sampling Train	NA	NA	NA	NA

VAPOR PURGING

ONE PURGE VOLUME (ML) = VT + VP

VT = TUBING LENGTH (FT) * 5.4 ML/FT

VP = (3.14 * R2 * H) * 16.387 ML/IN3

VT – Total tubing volume in mL (1/4–inch OD, 3/16-inch ID tubing)

VP – Volume of air in entire length of vapor point in mL

R – Radius of inner diameter of vapor point (inches)

H – Length of vapor point (inches)

Purge Rate (mL/min): Purged via break fluid bleeder hand pump **One Purge Volume (mL):** NA

Purge Time (min): 1 **Total Volume Purged (mL):** NA

Purging two to five purge volumes while collecting inert gas readings prior to sample collection is ideal.

SUB-SLAB VAPOR SAMPLING

Canister I.D.: 2785 **Flow Controller I.D.:** 1562

Start Time: 7:30 **Initial Vacuum Pressure in Sample Canister:** -30.26 in Hg

Stop Time: 15:24 **Final Vacuum Pressure in Sample Canister:** -8.57 in Hg

Sample I.D.: SS-14 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 1,125 ppb **Slab Thickness:** 8 inches

INDOOR AMBIENT AIR SAMPLING

Canister I.D.: 1583 **Flow Controller I.D.:** 1797

Start Time: 7:31 **Initial Vacuum Pressure in Sample Canister:** -30.30 in Hg

Stop Time: 15:25 **Final Vacuum Pressure in Sample Canister:** -7.25 in Hg

Sample I.D.: IA-14 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 1,096 ppb **Sample Intake Height:** 40 inches

AMBIENT AIR SAMPLING

Canister I.D.: 2654 **Flow Controller I.D.:** 971

Start Time: 8:00 **Initial Vacuum Pressure in Sample Canister:** -30.39 in Hg

Stop Time: 15:40 **Final Vacuum Pressure in Sample Canister:** -2.31 in Hg

Sample I.D.: AA-3 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 191 ppb **Sample Intake Height:** 53 inches

RECORD OF VAPOR SAMPLING

Date: 2/12/2020 **TRC Project Number** 190270.2015.0000

Project Name: Former Chromalloy Facility **Field Personnel:** Justin King, Andrew Fishman

Weather: ~40 F Clear ; Barometric pressure: 30.20" Hg

HELIUM TRACER TEST (shroud)

Test	Time	Helium Concentration	Units (% or ppm_v)	Notes
Shroud Atmosphere	7:15	10.1	%	
Sampling Train	7:18	0	ppm	PASS

Helium concentration within sampling train should be less than 5% of shroud atmosphere concentration. If seal or probe needs to be reset then record 2nd attempt below.

Retest (if applicable)	Time	Helium Concentration	Units (% or ppm_v)	Notes
Shroud Atmosphere	NA	NA	NA	NA
Sampling Train	NA	NA	NA	NA

VAPOR PURGING

ONE PURGE VOLUME (ML) = VT + VP

VT = TUBING LENGTH (FT) * 5.4 ML/FT

VP = (3.14 * R2 * H) * 16.387 ML/IN3

VT – Total tubing volume in mL (1/4–inch OD, 3/16-inch ID tubing)

VP – Volume of air in entire length of vapor point in mL

R – Radius of inner diameter of vapor point (inches)

H – Length of vapor point (inches)

Purge Rate (mL/min): Purged via break fluid bleeder hand pump **One Purge Volume (mL):** NA

Purge Time (min): 1 **Total Volume Purged (mL):** NA

Purging two to five purge volumes while collecting inert gas readings prior to sample collection is ideal.

SUB-SLAB VAPOR SAMPLING

Canister I.D.: 2984 **Flow Controller I.D.:** 876

Start Time: 7:20 **Initial Vacuum Pressure in Sample Canister:** -30.26 in Hg

Stop Time: 15:21 **Final Vacuum Pressure in Sample Canister:** -6.10 in Hg

Sample I.D.: SS-15 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 9,555 ppb **Slab Thickness:** 6 inches

INDOOR AMBIENT AIR SAMPLING

Canister I.D.: 1826 **Flow Controller I.D.:** 1622

Start Time: 7:21 **Initial Vacuum Pressure in Sample Canister:** -30.52 in Hg

Stop Time: 15:22 **Final Vacuum Pressure in Sample Canister:** -6.98 in Hg

Sample I.D.: IA-15 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 1,400 ppb **Sample Intake Height:** 40 inches

AMBIENT AIR SAMPLING

Canister I.D.: 2654 **Flow Controller I.D.:** 971

Start Time: 8:00 **Initial Vacuum Pressure in Sample Canister:** -30.39 in Hg

Stop Time: 15:40 **Final Vacuum Pressure in Sample Canister:** -2.31 in Hg

Sample I.D.: AA-3 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 191 ppb **Sample Intake Height:** 53 inches

RECORD OF VAPOR SAMPLING

Date: 2/12/2020 **TRC Project Number** 190270.2015.0000

Project Name: Former Chromalloy Facility **Field Personnel:** Justin King, Andrew Fishman

Weather: ~40 F Clear ; Barometric pressure: 30.20" Hg

HELIUM TRACER TEST (shroud)

Test	Time	Helium Concentration	Units (% or ppm_v)	Notes
Shroud Atmosphere	7:15	11.7	%	
Sampling Train	7:18	475	ppm	PASS

Helium concentration within sampling train should be less than 5% of shroud atmosphere concentration. If seal or probe needs to be reset then record 2nd attempt below.

Retest (if applicable)	Time	Helium Concentration	Units (% or ppm_v)	Notes
Shroud Atmosphere	NA	NA	NA	NA
Sampling Train	NA	NA	NA	NA

VAPOR PURGING

ONE PURGE VOLUME (ML) = VT + VP

VT = TUBING LENGTH (FT) * 5.4 ML/FT

VP = (3.14 * R2 * H) * 16.387 ML/IN3

VT – Total tubing volume in mL (1/4–inch OD, 3/16-inch ID tubing)

VP – Volume of air in entire length of vapor point in mL

R – Radius of inner diameter of vapor point (inches)

H – Length of vapor point (inches)

Purge Rate (mL/min): Purged via break fluid bleeder hand pump **One Purge Volume (mL):** NA

Purge Time (min): 1 **Total Volume Purged (mL):** NA

Purging two to five purge volumes while collecting inert gas readings prior to sample collection is ideal.

SUB-SLAB VAPOR SAMPLING

Canister I.D.: 897 **Flow Controller I.D.:** 1484

Start Time: 7:45 **Initial Vacuum Pressure in Sample Canister:** -30.57 in Hg

Stop Time: 15:35 **Final Vacuum Pressure in Sample Canister:** -7.64 in Hg

Sample I.D.: SS-16 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 1,090 ppb **Slab Thickness:** 7 inches

INDOOR AMBIENT AIR SAMPLING

Canister I.D.: 1897 **Flow Controller I.D.:** 1491

Start Time: 7:46 **Initial Vacuum Pressure in Sample Canister:** -30.37 in Hg

Stop Time: 13:30 **Final Vacuum Pressure in Sample Canister:** -1.94 in Hg

Sample I.D.: IA-16 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 652 ppb **Sample Intake Height:** 40 inches

AMBIENT AIR SAMPLING

Canister I.D.: 2654 **Flow Controller I.D.:** 971

Start Time: 8:00 **Initial Vacuum Pressure in Sample Canister:** -30.39 in Hg

Stop Time: 15:40 **Final Vacuum Pressure in Sample Canister:** -2.31 in Hg

Sample I.D.: AA-3 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 191 ppb **Sample Intake Height:** 53 inches

RECORD OF VAPOR SAMPLING

Date: 2/12/2020 **TRC Project Number** 190270.2015.0000

Project Name: Former Chromalloy Facility **Field Personnel:** Justin King, Andrew Fishman

Weather: ~40 F Clear ; Barometric pressure: 30.20" Hg

HELIUM TRACER TEST (shroud)

Test	Time	Helium Concentration	Units (% or ppm_v)	Notes
Shroud Atmosphere	7:30	11.7	%	
Sampling Train	7:33	0	ppm	PASS

Helium concentration within sampling train should be less than 5% of shroud atmosphere concentration. If seal or probe needs to be reset then record 2nd attempt below.

Retest (if applicable)	Time	Helium Concentration	Units (% or ppm_v)	Notes
Shroud Atmosphere	NA	NA	NA	NA
Sampling Train	NA	NA	NA	NA

VAPOR PURGING

ONE PURGE VOLUME (ML) = VT + VP

VT = TUBING LENGTH (FT) * 5.4 ML/FT

VP = (3.14 * R2 * H) * 16.387 ML/IN3

VT – Total tubing volume in mL (1/4–inch OD, 3/16-inch ID tubing)

VP – Volume of air in entire length of vapor point in mL

R – Radius of inner diameter of vapor point (inches)

H – Length of vapor point (inches)

Purge Rate (mL/min): Purged via break fluid bleeder hand pump **One Purge Volume (mL):** NA

Purge Time (min): 1 **Total Volume Purged (mL):** NA

Purging two to five purge volumes while collecting inert gas readings prior to sample collection is ideal.

SUB-SLAB VAPOR SAMPLING

Canister I.D.: 1611 **Flow Controller I.D.:** 1420

Start Time: 7:35 **Initial Vacuum Pressure in Sample Canister:** -30.27 in Hg

Stop Time: 15:30 **Final Vacuum Pressure in Sample Canister:** -4.27 in Hg

Sample I.D.: SS-17 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 1,902 ppb **Slab Thickness:** 5 inches

INDOOR AMBIENT AIR SAMPLING

Canister I.D.: 3376 **Flow Controller I.D.:** 1616

Start Time: 7:36 **Initial Vacuum Pressure in Sample Canister:** -29.75 in Hg

Stop Time: 15:31 **Final Vacuum Pressure in Sample Canister:** -6.14 in Hg

Sample I.D.: IA-17 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 1,001 ppb **Sample Intake Height:** 40 inches

AMBIENT AIR SAMPLING

Canister I.D.: 2654 **Flow Controller I.D.:** 971

Start Time: 8:00 **Initial Vacuum Pressure in Sample Canister:** -30.39 in Hg

Stop Time: 15:40 **Final Vacuum Pressure in Sample Canister:** -2.31 in Hg

Sample I.D.: AA-3 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 191 ppb **Sample Intake Height:** 53 inches

RECORD OF VAPOR SAMPLING

Date: 2/12/2020 **TRC Project Number** 190270.2015.0000

Project Name: Former Chromalloy Facility **Field Personnel:** Justin King, Andrew Fishman

Weather: ~40 F Clear ; Barometric pressure: 30.20" Hg

HELIUM TRACER TEST (shroud)

Test	Time	Helium Concentration	Units (% or ppm_v)	Notes
Shroud Atmosphere	7:15	12	%	
Sampling Train	7:18	0	ppm	PASS

Helium concentration within sampling train should be less than 5% of shroud atmosphere concentration. If seal or probe needs to be reset then record 2nd attempt below.

Retest (if applicable)	Time	Helium Concentration	Units (% or ppm_v)	Notes
Shroud Atmosphere	NA	NA	NA	NA
Sampling Train	NA	NA	NA	NA

VAPOR PURGING

ONE PURGE VOLUME (ML) = VT + VP

VT = TUBING LENGTH (FT) * 5.4 ML/FT

VP = (3.14 * R2 * H) * 16.387 ML/IN3

VT – Total tubing volume in mL (1/4–inch OD, 3/16-inch ID tubing)

VP – Volume of air in entire length of vapor point in mL

R – Radius of inner diameter of vapor point (inches)

H – Length of vapor point (inches)

Purge Rate (mL/min): Purged via break fluid bleeder hand pump **One Purge Volume (mL):** NA

Purge Time (min): 1 **Total Volume Purged (mL):** NA

Purging two to five purge volumes while collecting inert gas readings prior to sample collection is ideal.

SUB-SLAB VAPOR SAMPLING

Canister I.D.: 2959 **Flow Controller I.D.:** 1384

Start Time: 7:00 **Initial Vacuum Pressure in Sample Canister:** -30.43 in Hg

Stop Time: 15:00 **Final Vacuum Pressure in Sample Canister:** -6.64 in Hg

Sample I.D.: SS-18 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 6,027 ppb **Slab Thickness:** 12.5 inches

INDOOR AMBIENT AIR SAMPLING

Canister I.D.: 2977 **Flow Controller I.D.:** 1576

Start Time: 7:01 **Initial Vacuum Pressure in Sample Canister:** -30.38 in Hg

Stop Time: 15:01 **Final Vacuum Pressure in Sample Canister:** -6.40 in Hg

Sample I.D.: IA-18 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 3,161 ppb **Sample Intake Height:** 40 inches

AMBIENT AIR SAMPLING

Canister I.D.: 2654 **Flow Controller I.D.:** 971

Start Time: 8:00 **Initial Vacuum Pressure in Sample Canister:** -30.39 in Hg

Stop Time: 15:40 **Final Vacuum Pressure in Sample Canister:** -2.31 in Hg

Sample I.D.: AA-3 **Laboratory:** Alpha Analytical

PID Reading (Sample Train): 191 ppb **Sample Intake Height:** 53 inches

ATTACHMENT 4

SUMMARY LABORATORY ANALYTICAL REPORT

ANALYTICAL REPORT

Lab Number:	L2006467
Client:	TRC Solutions 10 Maxwell Drive Suite 200 Clifton Park, NY 12065
ATTN:	Jeffrey LaRock
Phone:	(518) 688-3109
Project Name:	FORMER CHROMALLOY
Project Number:	190270.2015.0000
Report Date:	02/20/20

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2006467-01	SS-13	SOIL_VAPOR	WEST NYACK, NY	02/12/20 15:45	02/12/20
L2006467-02	IA-13	AIR	WEST NYACK, NY	02/12/20 15:46	02/12/20
L2006467-03	IA-DUP	AIR	WEST NYACK, NY	02/12/20 15:47	02/12/20
L2006467-04	SS-14	SOIL_VAPOR	WEST NYACK, NY	02/12/20 15:24	02/12/20
L2006467-05	IA-14	AIR	WEST NYACK, NY	02/12/20 15:25	02/12/20
L2006467-06	SS-15	SOIL_VAPOR	WEST NYACK, NY	02/12/20 15:21	02/12/20
L2006467-07	IA-15	AIR	WEST NYACK, NY	02/12/20 15:22	02/12/20
L2006467-08	SS-16	SOIL_VAPOR	WEST NYACK, NY	02/12/20 15:35	02/12/20
L2006467-09	IA-16	AIR	WEST NYACK, NY	02/12/20 13:30	02/12/20
L2006467-10	AA-3	AIR	WEST NYACK, NY	02/12/20 15:40	02/12/20
L2006467-11	SS-17	SOIL_VAPOR	WEST NYACK, NY	02/12/20 15:30	02/12/20
L2006467-12	IA-17	AIR	WEST NYACK, NY	02/12/20 15:31	02/12/20
L2006467-13	SS-18	SOIL_VAPOR	WEST NYACK, NY	02/12/20 15:00	02/12/20
L2006467-14	IA-18	AIR	WEST NYACK, NY	02/12/20 15:01	02/12/20
L2006467-15	UNUSED CAN #2711	AIR	WEST NYACK, NY		02/12/20

Project Name:	FORMER CHROMALLOY	**Lab Number:**	L2006467
Project Number:	190270.2015.0000	**Report Date:**	02/20/20

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	**Lab Number:**	L2006467
Project Number:	190270.2015.0000	**Report Date:**	02/20/20

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on February 4, 2020. The canister certification results are provided as an addendum.

L2006467-06, 11: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

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: Christopher J. Anderson

Title: Technical Director/Representative Date: 02/20/20

AIR

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-01
Client ID: SS-13
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:45
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/20/20 03:15
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.387	0.200	--	1.91	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	26.4	5.00	--	49.7	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.32	1.00	--	17.4	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	2.38	0.500	--	5.85	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.82	0.500	--	8.32	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-01
Client ID: SS-13
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:45
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	4.62	0.500	--	13.6	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	2.43	0.200	--	13.1	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.329	0.200	--	1.24	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	2.32	0.200	--	15.7	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.507	0.400	--	2.20	1.74	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-01
Client ID: SS-13
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:45
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	91		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-01
Client ID: SS-13
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:45
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/20/20 03:15
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	94		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	91		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-02
Client ID: IA-13
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:46
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/19/20 18:02
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.385	0.200	--	1.90	0.989	--		1
Chloromethane	0.509	0.200	--	1.05	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	54.0	5.00	--	102	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	16.9	1.00	--	40.1	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	4.06	0.500	--	9.98	1.23	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.16	0.500	--	6.37	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.503	0.200	--	2.46	0.977	--		1
Tetrahydrofuran	3.02	0.500	--	8.91	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-02
Client ID: IA-13
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:46
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
n-Hexane	7.95	0.200	--	28.0	0.705	--		1
Benzene	1.59	0.200	--	5.08	0.639	--		1
Cyclohexane	5.13	0.200	--	17.7	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	0.636	0.200	--	2.97	0.934	--		1
Heptane	1.74	0.200	--	7.13	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.881	0.500	--	3.61	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	10.2	0.200	--	38.4	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	7.93	0.200	--	34.4	0.869	--		1
p/m-Xylene	28.4	0.400	--	123	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	6.96	0.200	--	30.2	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.206	0.200	--	1.01	0.983	--		1
1,2,4-Trimethylbenzene	0.615	0.200	--	3.02	0.983	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-02
Client ID: IA-13
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:46
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	94		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-02
Client ID: IA-13
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:46
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/19/20 18:02
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.105	0.020	--	0.660	0.126	--		1
Trichloroethene	0.079	0.020	--	0.425	0.107	--		1
Tetrachloroethene	0.028	0.020	--	0.190	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	96		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	95		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-03
Client ID: IA-DUP
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:47
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/19/20 19:21
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.359	0.200	--	1.78	0.989	--		1
Chloromethane	0.479	0.200	--	0.989	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	56.3	5.00	--	106	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	16.3	1.00	--	38.7	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	3.96	0.500	--	9.73	1.23	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.30	0.500	--	6.78	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.504	0.200	--	2.46	0.977	--		1
Tetrahydrofuran	3.11	0.500	--	9.17	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-03
Client ID: IA-DUP
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:47
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
n-Hexane	7.92	0.200	--	27.9	0.705	--		1
Benzene	1.58	0.200	--	5.05	0.639	--		1
Cyclohexane	5.16	0.200	--	17.8	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	0.628	0.200	--	2.93	0.934	--		1
Heptane	1.72	0.200	--	7.05	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.851	0.500	--	3.49	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	9.97	0.200	--	37.6	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	7.91	0.200	--	34.4	0.869	--		1
p/m-Xylene	28.6	0.400	--	124	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	7.00	0.200	--	30.4	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.212	0.200	--	1.04	0.983	--		1
1,2,4-Trimethylbenzene	0.643	0.200	--	3.16	0.983	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-03
Client ID: IA-DUP
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:47
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	96		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-03
Client ID: IA-DUP
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:47
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/19/20 19:21
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.105	0.020	--	0.660	0.126	--		1
Trichloroethene	0.074	0.020	--	0.398	0.107	--		1
Tetrachloroethene	0.029	0.020	--	0.197	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	97		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	97		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-04
Client ID: SS-14
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:24
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/20/20 03:54
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.746	0.200	--	3.69	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	57.4	5.00	--	108	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	44.4	1.00	--	105	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	3.79	0.500	--	9.32	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	3.86	0.500	--	11.4	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-04
Client ID: SS-14
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:24
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	2.58	0.500	--	7.61	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	0.239	0.200	--	1.30	1.09	--		1
Benzene	2.44	0.200	--	7.80	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	11.0	0.200	--	59.1	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.208	0.200	--	0.852	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	4.81	0.200	--	18.1	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	4.51	0.200	--	30.6	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	9.25	0.200	--	40.2	0.869	--		1
p/m-Xylene	6.77	0.400	--	29.4	1.74	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-04
Client ID: SS-14
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:24
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	2.86	0.200	--	12.4	0.869	--		1
4-Ethyltoluene	1.39	0.200	--	6.83	0.983	--		1
1,3,5-Trimethylbenzene	1.94	0.200	--	9.54	0.983	--		1
1,2,4-Trimethylbenzene	3.12	0.200	--	15.3	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	93		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-04
Client ID: SS-14
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:24
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/20/20 03:54
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Tertiary butyl Alcohol	0.709	0.500	--	2.15	1.52	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	95		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	93		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-05
Client ID: IA-14
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:25
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/19/20 20:01
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.359	0.200	--	1.78	0.989	--		1
Chloromethane	0.442	0.200	--	0.913	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.210	0.200	--	0.465	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	36.7	5.00	--	69.2	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	11.8	1.00	--	28.0	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	2.30	0.500	--	5.65	1.23	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.643	0.500	--	1.90	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-05
Client ID: IA-14
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:25
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
n-Hexane	12.5	0.200	--	44.1	0.705	--		1
Benzene	2.69	0.200	--	8.59	0.639	--		1
Cyclohexane	8.90	0.200	--	30.6	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	0.821	0.200	--	3.83	0.934	--		1
Heptane	2.33	0.200	--	9.55	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.874	0.500	--	3.58	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	11.3	0.200	--	42.6	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	15.2	0.200	--	66.0	0.869	--		1
p/m-Xylene	53.5	0.400	--	232	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	13.8	0.200	--	59.9	0.869	--		1
4-Ethyltoluene	0.223	0.200	--	1.10	0.983	--		1
1,3,5-Trimethylbenzene	0.349	0.200	--	1.72	0.983	--		1
1,2,4-Trimethylbenzene	1.12	0.200	--	5.51	0.983	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-05
Client ID: IA-14
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:25
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	97		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-05
Client ID: IA-14
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:25
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/19/20 20:01
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.056	0.020	--	0.352	0.126	--		1
Trichloroethene	0.086	0.020	--	0.462	0.107	--		1
Tetrachloroethene	0.030	0.020	--	0.203	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	96		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	98		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-06 D
Client ID: SS-15
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:21
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/20/20 04:31
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	12.5	--	ND	61.8	--		62.34
Chloromethane	ND	12.5	--	ND	25.8	--		62.34
Freon-114	ND	12.5	--	ND	87.4	--		62.34
Vinyl chloride	ND	12.5	--	ND	32.0	--		62.34
1,3-Butadiene	ND	12.5	--	ND	27.7	--		62.34
Bromomethane	ND	12.5	--	ND	48.5	--		62.34
Chloroethane	ND	12.5	--	ND	33.0	--		62.34
Ethanol	ND	312	--	ND	588	--		62.34
Vinyl bromide	ND	12.5	--	ND	54.7	--		62.34
Acetone	ND	62.3	--	ND	148	--		62.34
Trichlorofluoromethane	ND	12.5	--	ND	70.2	--		62.34
Isopropanol	ND	31.2	--	ND	76.7	--		62.34
1,1-Dichloroethene	ND	12.5	--	ND	49.6	--		62.34
Methylene chloride	ND	31.2	--	ND	108	--		62.34
3-Chloropropene	ND	12.5	--	ND	39.1	--		62.34
Carbon disulfide	ND	12.5	--	ND	38.9	--		62.34
Freon-113	ND	12.5	--	ND	95.8	--		62.34
trans-1,2-Dichloroethene	27.7	12.5	--	110	49.6	--		62.34
1,1-Dichloroethane	ND	12.5	--	ND	50.6	--		62.34
Methyl tert butyl ether	ND	12.5	--	ND	45.1	--		62.34
2-Butanone	ND	31.2	--	ND	92.0	--		62.34
cis-1,2-Dichloroethene	280	12.5	--	1110	49.6	--		62.34
Ethyl Acetate	ND	31.2	--	ND	112	--		62.34

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-06 D
Client ID: SS-15
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:21
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	69.2	12.5	--	338	61.0	--		62.34
Tetrahydrofuran	ND	31.2	--	ND	92.0	--		62.34
1,2-Dichloroethane	ND	12.5	--	ND	50.6	--		62.34
n-Hexane	ND	12.5	--	ND	44.1	--		62.34
1,1,1-Trichloroethane	ND	12.5	--	ND	68.2	--		62.34
Benzene	ND	12.5	--	ND	39.9	--		62.34
Carbon tetrachloride	ND	12.5	--	ND	78.6	--		62.34
Cyclohexane	ND	12.5	--	ND	43.0	--		62.34
1,2-Dichloropropane	ND	12.5	--	ND	57.8	--		62.34
Bromodichloromethane	ND	12.5	--	ND	83.7	--		62.34
1,4-Dioxane	ND	12.5	--	ND	45.0	--		62.34
Trichloroethene	4060	12.5	--	21800	67.2	--		62.34
2,2,4-Trimethylpentane	ND	12.5	--	ND	58.4	--		62.34
Heptane	ND	12.5	--	ND	51.2	--		62.34
cis-1,3-Dichloropropene	ND	12.5	--	ND	56.7	--		62.34
4-Methyl-2-pentanone	ND	31.2	--	ND	128	--		62.34
trans-1,3-Dichloropropene	ND	12.5	--	ND	56.7	--		62.34
1,1,2-Trichloroethane	ND	12.5	--	ND	68.2	--		62.34
Toluene	ND	12.5	--	ND	47.1	--		62.34
2-Hexanone	ND	12.5	--	ND	51.2	--		62.34
Dibromochloromethane	ND	12.5	--	ND	106	--		62.34
1,2-Dibromoethane	ND	12.5	--	ND	96.1	--		62.34
Tetrachloroethene	60.6	12.5	--	411	84.8	--		62.34
Chlorobenzene	ND	12.5	--	ND	57.6	--		62.34
Ethylbenzene	ND	12.5	--	ND	54.3	--		62.34
p/m-Xylene	ND	24.9	--	ND	108	--		62.34

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-06 D
Client ID: SS-15
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:21
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromoform	ND	12.5	--	ND	129	--		62.34
Styrene	ND	12.5	--	ND	53.2	--		62.34
1,1,2,2-Tetrachloroethane	ND	12.5	--	ND	85.8	--		62.34
o-Xylene	ND	12.5	--	ND	54.3	--		62.34
4-Ethyltoluene	ND	12.5	--	ND	61.5	--		62.34
1,3,5-Trimethylbenzene	ND	12.5	--	ND	61.5	--		62.34
1,2,4-Trimethylbenzene	ND	12.5	--	ND	61.5	--		62.34
Benzyl chloride	ND	12.5	--	ND	64.7	--		62.34
1,3-Dichlorobenzene	ND	12.5	--	ND	75.2	--		62.34
1,4-Dichlorobenzene	ND	12.5	--	ND	75.2	--		62.34
1,2-Dichlorobenzene	ND	12.5	--	ND	75.2	--		62.34
1,2,4-Trichlorobenzene	ND	12.5	--	ND	92.8	--		62.34
Hexachlorobutadiene	ND	12.5	--	ND	133	--		62.34

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	90		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-06 D
Client ID: SS-15
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:21
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/20/20 04:31
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Tertiary butyl Alcohol	ND	31.2	--	ND	94.6	--		62.34

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	96		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	91		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-07
Client ID: IA-15
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:22
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/19/20 20:40
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.344	0.200	--	1.70	0.989	--		1
Chloromethane	0.419	0.200	--	0.865	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	41.0	5.00	--	77.3	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	12.7	1.00	--	30.2	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	2.70	0.500	--	6.64	1.23	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.712	0.500	--	2.10	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-07
Client ID: IA-15
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:22
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
n-Hexane	15.7	0.200	--	55.3	0.705	--		1
Benzene	3.04	0.200	--	9.71	0.639	--		1
Cyclohexane	11.2	0.200	--	38.6	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	1.03	0.200	--	4.81	0.934	--		1
Heptane	3.01	0.200	--	12.3	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.993	0.500	--	4.07	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	13.2	0.200	--	49.7	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	21.2	0.200	--	92.1	0.869	--		1
p/m-Xylene	73.2	0.400	--	318	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	19.2	0.200	--	83.4	0.869	--		1
4-Ethyltoluene	0.354	0.200	--	1.74	0.983	--		1
1,3,5-Trimethylbenzene	0.425	0.200	--	2.09	0.983	--		1
1,2,4-Trimethylbenzene	1.34	0.200	--	6.59	0.983	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-07
Client ID: IA-15
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:22
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	0.211	0.200	--	1.27	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	98		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-07
Client ID: IA-15
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:22
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/19/20 20:40
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.058	0.020	--	0.365	0.126	--		1
Trichloroethene	0.180	0.020	--	0.967	0.107	--		1
Tetrachloroethene	0.037	0.020	--	0.251	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	95		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	99		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-08
Client ID: SS-16
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:35
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/20/20 05:44
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.390	0.200	--	1.93	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	13.8	5.00	--	26.0	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.97	1.00	--	7.06	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	1.28	0.500	--	3.15	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.42	0.500	--	4.19	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-08
Client ID: SS-16
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:35
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	0.229	0.200	--	1.12	0.977	--		1
Tetrahydrofuran	2.26	0.500	--	6.67	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.350	0.200	--	1.20	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	16.3	0.200	--	87.6	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	7.60	0.200	--	51.5	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.448	0.400	--	1.95	1.74	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-08
Client ID: SS-16
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:35
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	94		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-08
Client ID: SS-16
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:35
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/20/20 05:44
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	98		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	95		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-09
Client ID: IA-16
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 13:30
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/19/20 21:20
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.327	0.200	--	1.62	0.989	--		1
Chloromethane	0.415	0.200	--	0.857	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	42.1	5.00	--	79.3	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	13.5	1.00	--	32.1	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	2.58	0.500	--	6.34	1.23	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.928	0.500	--	2.74	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-09
Client ID: IA-16
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 13:30
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
n-Hexane	12.4	0.200	--	43.7	0.705	--		1
Benzene	2.38	0.200	--	7.60	0.639	--		1
Cyclohexane	9.08	0.200	--	31.3	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	0.829	0.200	--	3.87	0.934	--		1
Heptane	2.44	0.200	--	10.0	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.976	0.500	--	4.00	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	12.5	0.200	--	47.1	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	14.5	0.200	--	63.0	0.869	--		1
p/m-Xylene	51.5	0.400	--	224	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	13.2	0.200	--	57.3	0.869	--		1
4-Ethyltoluene	0.279	0.200	--	1.37	0.983	--		1
1,3,5-Trimethylbenzene	0.342	0.200	--	1.68	0.983	--		1
1,2,4-Trimethylbenzene	1.07	0.200	--	5.26	0.983	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-09
Client ID: IA-16
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 13:30
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	97		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-09
Client ID: IA-16
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 13:30
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/19/20 21:20
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.058	0.020	--	0.365	0.126	--		1
Trichloroethene	0.092	0.020	--	0.494	0.107	--		1
Tetrachloroethene	0.028	0.020	--	0.190	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	96		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	98		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-10
Client ID: AA-3
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:40
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/19/20 17:22
Analyst: TS

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.397	0.200	--	1.96	0.989	--		1
Chloromethane	0.466	0.200	--	0.962	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	1.21	1.00	--	2.87	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-10
Client ID: AA-3
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:40
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.567	0.200	--	2.14	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-10
Client ID: AA-3
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:40
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	91		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-10
Client ID: AA-3
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:40
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/19/20 17:22
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.064	0.020	--	0.403	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.026	0.020	--	0.176	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	95		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	92		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-11 D
Client ID: SS-17
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:30
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/20/20 06:21
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.556	--	ND	2.75	--		2.778
Chloromethane	ND	0.556	--	ND	1.15	--		2.778
Freon-114	ND	0.556	--	ND	3.89	--		2.778
Vinyl chloride	ND	0.556	--	ND	1.42	--		2.778
1,3-Butadiene	ND	0.556	--	ND	1.23	--		2.778
Bromomethane	ND	0.556	--	ND	2.16	--		2.778
Chloroethane	ND	0.556	--	ND	1.47	--		2.778
Ethanol	30.1	13.9	--	56.7	26.2	--		2.778
Vinyl bromide	ND	0.556	--	ND	2.43	--		2.778
Acetone	35.1	2.78	--	83.4	6.60	--		2.778
Trichlorofluoromethane	ND	0.556	--	ND	3.12	--		2.778
Isopropanol	4.11	1.39	--	10.1	3.42	--		2.778
1,1-Dichloroethene	ND	0.556	--	ND	2.20	--		2.778
Methylene chloride	ND	1.39	--	ND	4.83	--		2.778
3-Chloropropene	ND	0.556	--	ND	1.74	--		2.778
Carbon disulfide	ND	0.556	--	ND	1.73	--		2.778
Freon-113	ND	0.556	--	ND	4.26	--		2.778
trans-1,2-Dichloroethene	ND	0.556	--	ND	2.20	--		2.778
1,1-Dichloroethane	ND	0.556	--	ND	2.25	--		2.778
Methyl tert butyl ether	ND	0.556	--	ND	2.00	--		2.778
2-Butanone	6.10	1.39	--	18.0	4.10	--		2.778
cis-1,2-Dichloroethene	1.26	0.556	--	5.00	2.20	--		2.778
Ethyl Acetate	ND	1.39	--	ND	5.01	--		2.778

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-11 D
Client ID: SS-17
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:30
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	3.29	0.556	--	16.1	2.72	--		2.778
Tetrahydrofuran	5.40	1.39	--	15.9	4.10	--		2.778
1,2-Dichloroethane	ND	0.556	--	ND	2.25	--		2.778
n-Hexane	ND	0.556	--	ND	1.96	--		2.778
1,1,1-Trichloroethane	ND	0.556	--	ND	3.03	--		2.778
Benzene	1.36	0.556	--	4.34	1.78	--		2.778
Carbon tetrachloride	ND	0.556	--	ND	3.50	--		2.778
Cyclohexane	0.650	0.556	--	2.24	1.91	--		2.778
1,2-Dichloropropane	ND	0.556	--	ND	2.57	--		2.778
Bromodichloromethane	ND	0.556	--	ND	3.72	--		2.778
1,4-Dioxane	ND	0.556	--	ND	2.00	--		2.778
Trichloroethene	188	0.556	--	1010	2.99	--		2.778
2,2,4-Trimethylpentane	2.29	0.556	--	10.7	2.60	--		2.778
Heptane	ND	0.556	--	ND	2.28	--		2.778
cis-1,3-Dichloropropene	ND	0.556	--	ND	2.52	--		2.778
4-Methyl-2-pentanone	ND	1.39	--	ND	5.70	--		2.778
trans-1,3-Dichloropropene	ND	0.556	--	ND	2.52	--		2.778
1,1,2-Trichloroethane	ND	0.556	--	ND	3.03	--		2.778
Toluene	5.05	0.556	--	19.0	2.10	--		2.778
2-Hexanone	ND	0.556	--	ND	2.28	--		2.778
Dibromochloromethane	ND	0.556	--	ND	4.74	--		2.778
1,2-Dibromoethane	ND	0.556	--	ND	4.27	--		2.778
Tetrachloroethene	1.99	0.556	--	13.5	3.77	--		2.778
Chlorobenzene	ND	0.556	--	ND	2.56	--		2.778
Ethylbenzene	2.29	0.556	--	9.95	2.42	--		2.778
p/m-Xylene	4.56	1.11	--	19.8	4.82	--		2.778

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-11 D
Client ID: SS-17
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:30
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromoform	ND	0.556	--	ND	5.75	--		2.778
Styrene	ND	0.556	--	ND	2.37	--		2.778
1,1,2,2-Tetrachloroethane	ND	0.556	--	ND	3.82	--		2.778
o-Xylene	1.29	0.556	--	5.60	2.42	--		2.778
4-Ethyltoluene	ND	0.556	--	ND	2.73	--		2.778
1,3,5-Trimethylbenzene	ND	0.556	--	ND	2.73	--		2.778
1,2,4-Trimethylbenzene	ND	0.556	--	ND	2.73	--		2.778
Benzyl chloride	ND	0.556	--	ND	2.88	--		2.778
1,3-Dichlorobenzene	ND	0.556	--	ND	3.34	--		2.778
1,4-Dichlorobenzene	ND	0.556	--	ND	3.34	--		2.778
1,2-Dichlorobenzene	ND	0.556	--	ND	3.34	--		2.778
1,2,4-Trichlorobenzene	ND	0.556	--	ND	4.13	--		2.778
Hexachlorobutadiene	ND	0.556	--	ND	5.93	--		2.778

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	94		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-11 D
Client ID: SS-17
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:30
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/20/20 06:21
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Tertiary butyl Alcohol	1.94	1.39	--	5.88	4.21	--		2.778

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	99		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	96		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-12
Client ID: IA-17
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:31
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/19/20 22:00
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.332	0.200	--	1.64	0.989	--		1
Chloromethane	0.419	0.200	--	0.865	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	35.5	5.00	--	66.9	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	12.8	1.00	--	30.4	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	2.24	0.500	--	5.51	1.23	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.688	0.500	--	2.03	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-12
Client ID: IA-17
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:31
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
n-Hexane	14.8	0.200	--	52.2	0.705	--		1
Benzene	2.78	0.200	--	8.88	0.639	--		1
Cyclohexane	10.7	0.200	--	36.8	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	0.911	0.200	--	4.26	0.934	--		1
Heptane	2.67	0.200	--	10.9	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	1.02	0.500	--	4.18	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	12.6	0.200	--	47.5	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	16.2	0.200	--	70.4	0.869	--		1
p/m-Xylene	57.0	0.400	--	248	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	14.7	0.200	--	63.9	0.869	--		1
4-Ethyltoluene	0.301	0.200	--	1.48	0.983	--		1
1,3,5-Trimethylbenzene	0.376	0.200	--	1.85	0.983	--		1
1,2,4-Trimethylbenzene	1.18	0.200	--	5.80	0.983	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-12
Client ID: IA-17
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:31
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	95		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-12
Client ID: IA-17
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:31
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/19/20 22:00
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.058	0.020	--	0.365	0.126	--		1
Trichloroethene	0.083	0.020	--	0.446	0.107	--		1
Tetrachloroethene	0.033	0.020	--	0.224	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	94		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	96		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-13
Client ID: SS-18
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:00
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/20/20 07:00
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.402	0.200	--	1.99	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	30.7	5.00	--	57.8	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.54	1.00	--	6.03	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	1.66	0.500	--	4.08	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.20	0.500	--	3.54	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-13
Client ID: SS-18
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:00
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	0.290	0.200	--	1.42	0.977	--		1
Tetrahydrofuran	1.66	0.500	--	4.90	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.309	0.200	--	1.09	0.705	--		1
1,1,1-Trichloroethane	0.242	0.200	--	1.32	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.615	0.200	--	2.12	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	79.4	0.200	--	427	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.327	0.200	--	1.23	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	21.1	0.200	--	143	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.555	0.400	--	2.41	1.74	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-13
Client ID: SS-18
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:00
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	93		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-13
Client ID: SS-18
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:00
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/20/20 07:00
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	97		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	95		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-14
Client ID: IA-18
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:01
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/19/20 22:39
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.338	0.200	--	1.67	0.989	--		1
Chloromethane	0.424	0.200	--	0.876	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	42.2	5.00	--	79.5	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	16.2	1.00	--	38.5	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	3.68	0.500	--	9.05	1.23	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.822	0.500	--	2.42	1.47	--		1
Ethyl Acetate	0.547	0.500	--	1.97	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-14
Client ID: IA-18
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:01
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
n-Hexane	97.1	0.200	--	342	0.705	--		1
Benzene	4.29	0.200	--	13.7	0.639	--		1
Cyclohexane	65.4	0.200	--	225	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	1.25	0.200	--	5.84	0.934	--		1
Heptane	8.17	0.200	--	33.5	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	1.25	0.500	--	5.12	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	19.3	0.200	--	72.7	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	35.7	0.200	--	155	0.869	--		1
p/m-Xylene	116	0.400	--	504	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	32.4	0.200	--	141	0.869	--		1
4-Ethyltoluene	0.358	0.200	--	1.76	0.983	--		1
1,3,5-Trimethylbenzene	0.471	0.200	--	2.32	0.983	--		1
1,2,4-Trimethylbenzene	1.51	0.200	--	7.42	0.983	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-14
Client ID: IA-18
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:01
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	97		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

SAMPLE RESULTS

Lab ID: L2006467-14
Client ID: IA-18
Sample Location: WEST NYACK, NY

Date Collected: 02/12/20 15:01
Date Received: 02/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/19/20 22:39
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.054	0.020	--	0.340	0.126	--		1
Trichloroethene	0.171	0.020	--	0.919	0.107	--		1
Tetrachloroethene	0.033	0.020	--	0.224	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	94		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	99		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/19/20 15:03

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-14 Batch: WG1342325-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/19/20 15:03

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-14 Batch: WG1342325-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/19/20 15:03

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-14 Batch: WG1342325-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000
Lab Number: L2006467
Report Date: 02/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 02/19/20 15:42

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-14 Batch: WG1342327-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER CHROMALLOY

Project Number: 190270.2015.0000

Lab Number: L2006467

Report Date: 02/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-14 Batch: WG1342325-3								
Dichlorodifluoromethane	78		-		70-130	-		
Chloromethane	87		-		70-130	-		
Freon-114	84		-		70-130	-		
Vinyl chloride	77		-		70-130	-		
1,3-Butadiene	84		-		70-130	-		
Bromomethane	80		-		70-130	-		
Chloroethane	72		-		70-130	-		
Ethanol	76		-		40-160	-		
Vinyl bromide	78		-		70-130	-		
Acetone	70		-		40-160	-		
Trichlorofluoromethane	72		-		70-130	-		
Isopropanol	76		-		40-160	-		
1,1-Dichloroethene	76		-		70-130	-		
Tertiary butyl Alcohol	**67**	Q	-		70-130	-		
Methylene chloride	93		-		70-130	-		
3-Chloropropene	89		-		70-130	-		
Carbon disulfide	84		-		70-130	-		
Freon-113	87		-		70-130	-		
trans-1,2-Dichloroethene	86		-		70-130	-		
1,1-Dichloroethane	90		-		70-130	-		
Methyl tert butyl ether	89		-		70-130	-		
2-Butanone	105		-		70-130	-		
cis-1,2-Dichloroethene	89		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER CHROMALLOY

Project Number: 190270.2015.0000

Lab Number: L2006467

Report Date: 02/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-14 Batch: WG1342325-3								
Ethyl Acetate	89		-		70-130	-		
Chloroform	93		-		70-130	-		
Tetrahydrofuran	100		-		70-130	-		
1,2-Dichloroethane	84		-		70-130	-		
n-Hexane	86		-		70-130	-		
1,1,1-Trichloroethane	94		-		70-130	-		
Benzene	95		-		70-130	-		
Carbon tetrachloride	102		-		70-130	-		
Cyclohexane	87		-		70-130	-		
1,2-Dichloropropane	95		-		70-130	-		
Bromodichloromethane	97		-		70-130	-		
1,4-Dioxane	95		-		70-130	-		
Trichloroethene	98		-		70-130	-		
2,2,4-Trimethylpentane	90		-		70-130	-		
Heptane	107		-		70-130	-		
cis-1,3-Dichloropropene	104		-		70-130	-		
4-Methyl-2-pentanone	112		-		70-130	-		
trans-1,3-Dichloropropene	88		-		70-130	-		
1,1,2-Trichloroethane	101		-		70-130	-		
Toluene	111		-		70-130	-		
2-Hexanone	129		-		70-130	-		
Dibromochloromethane	126		-		70-130	-		
1,2-Dibromoethane	123		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER CHROMALLOY

Project Number: 190270.2015.0000

Lab Number: L2006467

Report Date: 02/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-14 Batch: WG1342325-3								
Tetrachloroethene	117		-		70-130	-		
Chlorobenzene	123		-		70-130	-		
Ethylbenzene	118		-		70-130	-		
p/m-Xylene	116		-		70-130	-		
Bromoform	124		-		70-130	-		
Styrene	124		-		70-130	-		
1,1,2,2-Tetrachloroethane	125		-		70-130	-		
o-Xylene	121		-		70-130	-		
4-Ethyltoluene	125		-		70-130	-		
1,3,5-Trimethylbenzene	126		-		70-130	-		
1,2,4-Trimethylbenzene	128		-		70-130	-		
Benzyl chloride	110		-		70-130	-		
1,3-Dichlorobenzene	116		-		70-130	-		
1,4-Dichlorobenzene	111		-		70-130	-		
1,2-Dichlorobenzene	124		-		70-130	-		
1,2,4-Trichlorobenzene	81		-		70-130	-		
Hexachlorobutadiene	124		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER CHROMALLOY

Project Number: 190270.2015.0000

Lab Number: L2006467

Report Date: 02/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-14 Batch: WG1342327-3								
Vinyl chloride	79		-		70-130	-		25
1,1-Dichloroethene	77		-		70-130	-		25
Tertiary butyl Alcohol[1]	70		-		70-130	-		25
cis-1,2-Dichloroethene	92		-		70-130	-		25
1,1,1-Trichloroethane	94		-		70-130	-		25
Carbon tetrachloride	99		-		70-130	-		25
Trichloroethene	96		-		70-130	-		25
Tetrachloroethene	113		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-14 QC Batch ID: WG1342325-5 QC Sample: L2006467-02 Client ID: IA-13						
Dichlorodifluoromethane	0.385	0.359	ppbV	7		25
Chloromethane	0.509	0.493	ppbV	3		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	54.0	62.2	ppbV	14		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	16.9	16.3	ppbV	4		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
Isopropanol	4.06	4.08	ppbV	0		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	2.16	2.16	ppbV	0		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Chloroform	0.503	0.521	ppbV	4		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-14 QC Batch ID: WG1342325-5 QC Sample: L2006467-02 Client ID: IA-13						
Tetrahydrofuran	3.02	2.99	ppbV	1		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	7.95	8.03	ppbV	1		25
Benzene	1.59	1.59	ppbV	0		25
Cyclohexane	5.13	5.22	ppbV	2		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	0.636	0.640	ppbV	1		25
Heptane	1.74	1.74	ppbV	0		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	0.881	0.867	ppbV	2		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	10.2	10.1	ppbV	1		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	7.93	7.91	ppbV	0		25
p/m-Xylene	28.4	28.3	ppbV	0		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-14 QC Batch ID: WG1342325-5 QC Sample: L2006467-02 Client ID: IA-13						
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	6.96	6.98	ppbV	0		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	0.206	0.210	ppbV	2		25
1,2,4-Trimethylbenzene	0.615	0.619	ppbV	1		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-14 QC Batch ID: WG1342327-5 QC Sample: L2006467-02 Client ID: IA-13						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Tertiary butyl Alcohol[1]	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.105	0.115	ppbV	9		25
Trichloroethene	0.079	0.080	ppbV	1		25
Tetrachloroethene	0.028	0.027	ppbV	4		25

Project Name: FORMER CHROMALLOY

Project Number: 190270.2015.0000

Lab Number: L2006467

Report Date: 02/20/20

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2006467-01	SS-13	0401	Flow 3	02/04/20	313158		-	-	-	Pass	10.0	10.2	2
L2006467-01	SS-13	2921	6.0L Can	02/04/20	313158	L2004009-01	Pass	-29.3	-6.3	-	-	-	-
L2006467-02	IA-13	0973	Flow 4	02/04/20	313158		-	-	-	Pass	10.0	8.5	16
L2006467-02	IA-13	3371	6.0L Can	02/04/20	313158	L2004009-07	Pass	-29.3	-5.5	-	-	-	-
L2006467-03	IA-DUP	01813	Flow 4	02/04/20	313158		-	-	-	Pass	10.0	8.6	15
L2006467-03	IA-DUP	1798	6.0L Can	02/04/20	313158	L2004009-07	Pass	-29.3	-5.5	-	-	-	-
L2006467-04	SS-14	01562	Flow 3	02/04/20	313158		-	-	-	Pass	10.0	10.8	8
L2006467-04	SS-14	2785	6.0L Can	02/04/20	313158	L2004009-01	Pass	-29.3	-7.7	-	-	-	-
L2006467-05	IA-14	01797	Flow 3	02/04/20	313158		-	-	-	Pass	10.0	10.4	4
L2006467-05	IA-14	1583	6.0L Can	02/04/20	313158	L2004009-07	Pass	-29.3	-6.0	-	-	-	-
L2006467-06	SS-15	0876	Flow 4	02/04/20	313158		-	-	-	Pass	10.0	10.6	6
L2006467-06	SS-15	2984	6.0L Can	02/04/20	313158	L2004009-01	Pass	-29.4	-5.0	-	-	-	-
L2006467-07	IA-15	01622	Flow 4	02/04/20	313158		-	-	-	Pass	10.0	8.7	14
L2006467-07	IA-15	1826	6.0L Can	02/04/20	313158	L2004009-07	Pass	-29.3	-5.5	-	-	-	-
L2006467-08	SS-16	01484	Flow 3	02/04/20	313158		-	-	-	Pass	10.0	10.8	8

Project Name: FORMER CHROMALLOY

Project Number: 190270.2015.0000

Lab Number: L2006467

Report Date: 02/20/20

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2006467-08	SS-16	897	6.0L Can	02/04/20	313158	L2004009-01	Pass	-29.3	-6.5	-	-	-	-
L2006467-09	IA-16	01491	Flow 3	02/04/20	313158		-	-	-	Pass	10.0	17.4	54
L2006467-09	IA-16	1897	6.0L Can	02/04/20	313158	L2004009-07	Pass	-29.3	0.0	-	-	-	-
L2006467-10	AA-3	0971	Flow 3	02/04/20	313158		-	-	-	Pass	10.0	13.1	27
L2006467-10	AA-3	2654	6.0L Can	02/04/20	313158	L2004009-07	Pass	-29.3	0.0	-	-	-	-
L2006467-11	SS-17	01420	Flow 3	02/04/20	313158		-	-	-	Pass	10.0	12.3	21
L2006467-11	SS-17	1611	6.0L Can	02/04/20	313158	L2004009-07	Pass	-29.3	-3.5	-	-	-	-
L2006467-12	IA-17	01616	Flow 4	02/04/20	313158		-	-	-	Pass	10.0	8.8	13
L2006467-12	IA-17	3376	6.0L Can	02/04/20	313158	L2004009-07	Pass	-29.3	-5.1	-	-	-	-
L2006467-13	SS-18	01384	Flow 3	02/04/20	313158		-	-	-	Pass	10.0	10.8	8
L2006467-13	SS-18	2959	6.0L Can	02/04/20	313158	L2004009-01	Pass	-29.3	-5.9	-	-	-	-
L2006467-14	IA-18	01576	Flow 4	02/04/20	313158		-	-	-	Pass	10.0	9.0	11
L2006467-14	IA-18	2977	6.0L Can	02/04/20	313158	L2004009-07	Pass	-29.3	-5.2	-	-	-	-
L2006467-15	UNUSED CAN #2711	0038	Flow 4	02/04/20	313158		-	-	-	Pass	10.0	7.7	26
L2006467-15	UNUSED CAN #2711	2711	6.0L Can	02/04/20	313158	L2004009-01	Pass	-29.3	-29.0	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-01
Client ID: CAN 3370 SHELF 42
Sample Location:

Date Collected: 01/28/20 16:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/29/20 17:30
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-01
Client ID: CAN 3370 SHELF 42
Sample Location:

Date Collected: 01/28/20 16:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-01
Client ID: CAN 3370 SHELF 42
Sample Location:

Date Collected: 01/28/20 16:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-01
Client ID: CAN 3370 SHELF 42
Sample Location:

Date Collected: 01/28/20 16:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-01
Client ID: CAN 3370 SHELF 42
Sample Location:

Date Collected: 01/28/20 16:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

	Results	**Qualifier**	**Units**	**RDL**	**Dilution Factor**
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	97		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	95		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-01
Client ID: CAN 3370 SHELF 42
Sample Location:

Date Collected: 01/28/20 16:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/29/20 17:30
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-01
Client ID: CAN 3370 SHELF 42
Sample Location:

Date Collected: 01/28/20 16:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2004009

Project Number: CANISTER QC BAT **Report Date:** 02/20/20

Air Canister Certification Results

Lab ID: L2004009-01
Client ID: CAN 3370 SHELF 42
Sample Location:

Date Collected: 01/28/20 16:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-07
Client ID: CAN 2121 SHELF 50
Sample Location:

Date Collected: 01/29/20 09:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/29/20 21:30
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-07
Client ID: CAN 2121 SHELF 50
Sample Location:

Date Collected: 01/29/20 09:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-07
Client ID: CAN 2121 SHELF 50
Sample Location:

Date Collected: 01/29/20 09:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-07
Client ID: CAN 2121 SHELF 50
Sample Location:

Date Collected: 01/29/20 09:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-07
Client ID: CAN 2121 SHELF 50
Sample Location:

Date Collected: 01/29/20 09:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

	Results	**Qualifier**	**Units**	**RDL**	**Dilution Factor**
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	97		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	95		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-07
Client ID: CAN 2121 SHELF 50
Sample Location:

Date Collected: 01/29/20 09:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/29/20 21:30
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-07
Client ID: CAN 2121 SHELF 50
Sample Location:

Date Collected: 01/29/20 09:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2004009
Report Date: 02/20/20

Air Canister Certification Results

Lab ID: L2004009-07
Client ID: CAN 2121 SHELF 50
Sample Location:

Date Collected: 01/29/20 09:00
Date Received: 01/29/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	93		60-140

Project Name: FORMER CHROMALLOY
Project Number: 190270.2015.0000

Lab Number: L2006467
Report Date: 02/20/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2006467-01A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2006467-02A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2006467-03A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2006467-04A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2006467-05A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2006467-06A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2006467-07A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2006467-08A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2006467-09A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2006467-10A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2006467-11A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2006467-12A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2006467-13A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2006467-14A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2006467-15A	Canister - 6 Liter	NA	NA			Y	Absent		CLEAN-FEE()

*Values in parentheses indicate holding time in days

Project Name:	FORMER CHROMALLOY	**Lab Number:**	L2006467
Project Number:	190270.2015.0000	**Report Date:**	02/20/20

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: Data Usability Report

Project Name:	FORMER CHROMALLOY	**Lab Number:**	L2006467
Project Number:	190270.2015.0000	**Report Date:**	02/20/20

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

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.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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 acetone is introduced in the process.

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. 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 reporting limit (RL) for the sample.

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

Report Format: Data Usability Report

Project Name:	FORMER CHROMALLOY	**Lab Number:**	L2006467
Project Number:	190270.2015.0000	**Report Date:**	02/20/20

Data Qualifiers

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: Data Usability Report

Project Name:	FORMER CHROMALLOY	**Lab Number:**	L2006467
Project Number:	190270.2015.0000	**Report Date:**	02/20/20

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

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.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
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.

AIR ANALYSIS

ALPHA ANALYTICAL

CHAIN OF CUSTODY

PAGE 1 OF 2

Date Rec'd in Lab: 2/13/20

ALPHA Job #: L2006467

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: TRC Engineers Inc.
Address: 10 Maxwell Drive, Ste 200
Clifton Park, NY 12065
Phone: 518-348-1190.
Fax:
Email: jking@trccompanies.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Former Chromalloy
Project Location: West Nyack, NY
Project #: 190270.2015.0000
Project Manager: Jeff LaRock
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☒ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats: NYSDEC EQuIS EDD
☒ EMAIL (standard pdf report)
☒ Additional Deliverables: ASP-B
Report to: (if different than Project Manager)
jlarock@trccompanies.com
jking@trccompanies.com

Billing Information

☒ Same as Client info PO #: 143911

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments: Do not analyze Summa can # 2711. / Reg # 0038 - Unused, ordered as backup

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
06467-01	SS-13	2/12/2020	0755	1545	-30.07	-6.90	SV	JK	6L	2921	0401	X					
-02	IA-13	2/12/2020	0756	~~1330~~ 1546	-30.75	-6.39	~~JK~~ AA/I	~~AA/I~~ JK	6L	3371	0973	X					
-03	IA-DUP	2/12/2020	0757	1547	-30.39	-6.32	AA/I	JK	6L	1798	01813	X					
-04	SS-14	2/12/2020	0730	1524	-30.26	-8.57	SV	JK	6L	2785	01562	X					
-05	IA-14	2/12/2020	0731	1525	-30.30	-7.25	AA/I	JK	6L	1583	01797	X					
-06	SS-15	2/12/2020	0720	1521	-30.26	-6.10	SV	JK	6L	2984	0876	X					
-07	IA-15	2/12/2020	0721	1522	-30.52	-6.98	AA/I	JK	6L	1826	01622	X					
-08	SS-16	2/12/2020	0745	1535	-30.57	-7.69	SV	JK	6L	897	01454	X					
-09	IA-16	2/12/2020	0746	1330	-30.37	-1.94	AA/I	JK	6L	1597	01491	X					
-10	AA-3	2/12/2020	0800	1540	-30.39	-2.31	AA/O	JK	6L	2654	0971	X					

***SAMPLE MATRIX CODES**
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
[signature]	2/12/2020 1825	Robert Haines AAL	2-12-20 18:25
Robert Haines	2-12-20 18:25	[signature]	2/13/20 02:40
T. [signature]	2/13/20 0400	[signature]	2/13/20 0400

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No: 101-02 Rev: (25-Sep-15)

AIR ANALYSIS

PAGE 2 OF 2

ALPHA ANALYTICAL — CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 2/13/20

ALPHA Job #: L2006467

Client Information

Client: TRC Engineers
Address: 10 Maxwell Dr., Suite 200
Clifton Park, NY 12065
Phone: 518-348-1190
Fax:
Email: jking@trccompanies.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Former Chromalloy
Project Location: West Nyack, NY
Project #: 190270.2015.0000
Project Manager: Jeff LaRock
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☒ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats: NYSDEC EQuIS EDD
☒ EMAIL (standard pdf report)
☒ Additional Deliverables: ASP-B
Report to: (if different than Project Manager)
jlarock@trccompanies.com
jking@trccompanies.com

Billing Information

☒ Same as Client info PO #: 148911

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments: Do not analyze Summa can # 2711/Reg # 0038 -unused, ordered as backup

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH (Subject Non-petroleum HCs ☐)	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
06467-11	SS-17	2/12/2020	0735	1530	-30.27	-4.27	SV	JK	6L	1611	01420	X					
-12	IA-17	2/12/2020	0736	1531	-29.75	-6.14	AA/1	JK	6L	3376	01616	X					
-13	SS-18	2/12/2020	0700	1500	-30.43	-6.64	SV	JK	6L	2959	01384	X					
-14	IA-18	2/12/2020	0701	1501	-30.35	-6.40	AA/1	JK	6L	2977	01576	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
T. Hamilton	2/12/2020 1805	Robert Haines ATL	2-12-20 18:25
Robert Haines	2-12-20 18:25		2/13/20 02:40
	2/13/20 0400		2/13/20 0400

Form No: 101-02 Rev: (25-Sep-15)

ATTACHMENT 5

DATA USABILITY SUMMARY REPORT

SGD ENVIRONMENTAL SERVICES

Certified New York State WBE
2063 STANLEY ROAD
CAZENOVIA, NEW YORK 13035
Tel/Fax: (315) 655-2733
www.sgdenvironmental.com

March 25, 2020 *Electronic deliverable only*

Mr. Justin King, Project Manager
TRC Companies, Inc.
10 Maxwell Drive, Suite 200
Clifton Park, New York 12065

Re: Former Chromalloy
File: 2200.001

Dear Mr. King:

SGD Environmental Services (SGD Environmental) has completed the review of volatile organic compound (VOC) data generated by Alpha Analytical, Inc. (Mansfield, Massachusetts) for the purpose of preparing this Data Usability Summary Report (DUSR) for the TRC Companies, Inc. (TRC) (Clifton Park, New York). The air samples were collected by TRC representatives at the Former Chromalloy Site located in West Nyack, New York on February 12, 2020. The following table summarizes the samples collected by TRC for VOC analyses using Method TO-15.

TRC Sample ID	***Laboratory ID***	***Comments***
SS-13	L2006467-01	
AI-13	L2006467-02	Parent sample to AI-Dup
AI-DUP	L2006467-03	Field duplicate
SS-14	L2006467-04	
AI-14	L2006467-05	
SS-15	L2006467-06	
AI-15	L2006467-07	
SS-16	L2006467-08	
IA-16	L2006467-09	
AA-3	L2006467-10	
SS-17	L2006467-11	
AI-17	L2006467-12	
SS-18	L2006467-13	
IA-18	L2006467-14	
Unused Can #2711	L2006467-15	Canister not used.

This DUSR has been prepared consistent with New York State Department of Environmental Conservation (NYSDEC) *DER-10/Technical Guidance for Site Investigation and Remediation* (May 2010), with consideration given for established criteria:

- *USEPA Hazardous Waste Support Section SOP No. HW-31, Revision 6. Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15. June 2014.*

- *Compendium Method TO-15 Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)*. January 1999.

The sample delivery group (SDG) as prepared by the laboratory and identified in the above table, is incorporated herein by reference. The data were reviewed for completeness, chain-of-custody, holding times, preservation, quantitation of sample results, preparation blanks, initial and continuing calibrations, and detection limits (as applicable). In addition, sample precision and accuracy were evaluated using laboratory control blanks. The summary of this review is presented in the following sections.

Data usability summary:

- Based on the validation efforts as described herein, the data associated with the SDG #L2006467 were complete and deemed useable and no data were rejected.

General review findings:

- The chain-of-custody requested sample analysis using Method TO-15. In an effort to obtain lower report limits, the laboratory analyzed several VOCs using Method TO-15 SIM (Selective Ion Monitoring) (see table below). This data was validated consistent with the above validation standard operating methods.

TO-15 SIM Compound	*Associated samples*
- Tertiary butyl-Alcohol	L2006467-01, -04, -06, -08, -11, and -13
- 1,1,1-Trichloroethene - 1,1-Dichloroethene - Carbon tetrachloride - Tertiary butyl-Alcohol - Trichloroethene - Vinyl chloride - cis-1,2-Dichloroethene	L2006467-02, -03, -05, -07, -09, -10, -12, and -14

VOCs by Method TO-15/TO-15 SIM

- *Holding times*. The TO-15 samples were analyzed by the laboratory within the required holding times (within 30 days from sample collection) and, therefore, no qualification of the data was required.

- *Leak test evaluation*. Collective review of the chain-of-custody and the *Canister and Flow Controller Information* forms prepared by the laboratory indicated acceptable pressure test variations and, therefore no qualification of the data was required.

VOCs by Method TO-15/TO-15 SIM (continued):

- *Canister blank certification.* Review of the *Air Canister Certification Results* form associated with the clean canisters used for this project did not indicate reportable concentrations of target compounds in the cleaned canisters. As such, no qualification of the data was required.

- *Laboratory duplicate*. The laboratory duplicate sample appears to have been analyzed and reported consistent with method requirements. No transcription and/or calculation errors were identified in the sample data reviewed. The individual duplicate compound data met the relative percent difference (RPD) precision criteria of 25%. As such, no qualification of the data was required.

- *Laboratory control sample (LCS)*.
  The LCSs appear to have been analyzed and reported consistent with method requirements. No transcription and/or calculation errors were identified in the sample data reviewed. The individual LCS compound data met percent recovery (%R) criteria (70-130%[1]). As such, no qualification of the data relative to the LCS was required.

- *Method blank*. Blank raw data reviews (*e.g*., chromatograms and quantification reports) were acceptable relative to chromatographic performance. No method blank contamination was identified in the method blanks associated with the sampling group. As such, no qualification of the data relative to the method blanks was required.

- *Instrument performance check*. The instrument performance check standards (Bromofluorobenzene) appear to have been analyzed and reported consistent with method requirements. No transcription and/or calculation errors between the raw data and the reported data were identified in the instrument checks reviewed and the spectra of the mass calibration compounds were acceptable. Therefore, qualification of the data with respect to instrument performance checks was not required.

- *Instrument calibration and system performance*. Reporting forms, quantitation reports, chromatograms, and mass spectra for the initial calibrations (ICs) and continuing calibration verifications (CCVs) appear to have been prepared and analyzed consistent with method requirements. The percent relative standard deviation (%RSD) for IC analytes met established criteria. In addition, the percent difference (%D) between the ICs and corresponding continuing calibrations (CCVs) met the established 30% criteria. As such, qualification of the data relative to ICs and CCVs was not required.

- *Internal standards*. Based on review of the *Form 8a Internal Standard Area and RT Summary Air Volatiles* report in comparison to established method criteria, qualification of the data relative to internal standards was not required.

[1] The %R criteria for Ethanol, Acetone, and Isopropyl alcohol is 40-160%.

VOCs by Method TO-15/TO-15 SIM (continued):

- *Chromatogram performance*. Sample and QA/QC chromatogram baselines were identified by the validator as stable with acceptable resolution and peak shape; no negative peaks were identified. As such, qualification of the data relative to chromatogram quality was not required.

- *Compound quantitation and reported detection limits (target analytes)*. Report forms for sample and quality assurance and quality control (QA/QC) data, data system reports (quantitation reports), chromatograms, and mass spectra for identified analytes appear to have been prepared and analyzed consistent with method requirements. Transcription and/or calculation errors were not identified between the raw data and QA/QC data (including initial calibrations and CCVs) for the samples reviewed.

  Collective review of relative retention times (RRTs), standard and sample mass spectra, as well as the relative intensities of the characteristic ions for both the sample and reference spectra, appears to support the majority of the laboratory reported analytes. Where the relative intensity of the characteristic ions exceeded the 20% relative intensity of the reference spectra, and/or the ions present in the reference spectra at greater than 10% relative intensity were missing in the spectrum, it is the validator's opinion that the laboratory correctly reported the detected analytes. As such, qualification of the data is not required.

- *Field duplicates*. The parent sample associated with the blind field duplicate was provided by TRC: L2006467-03 (field duplicate) and L2006467-02 (parent sample). Given the differences between the reported parent sample and field duplicate concentrations were not significant (RPD <50%), qualification of the data was not required.

We appreciate the opportunity to assist TRC on this project. Should you have any questions regarding the information as presented herein, please do not hesitate to contact me.

Respectfully submitted,

SGD ENVIRONMENTAL SERVICES

Linda M. Yates
President