



Leica Microsystems, Inc.

Site Management Plan

Leica Microsystems, Inc.

203 Eggert Road

Erie County

Cheektowaga, New York

NYSDEC Site No. 915156

USEPA ID# NYD002100295

27 August 2020

Project No.: 0484448

Signature Page

27 August 2020

Site Management Plan

Leica Microsystems, Inc.



Joe Fiacco, P.G.
Partner



Michael Nigro, P.G.
Project Manager

ERM Consulting & Engineering, Inc.

5784 Widewaters Parkway
Syracuse, New York 13214

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Certification Page

I, Jaydeep Parikh, certify that I am currently a New York State licensed Professional Engineer and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with New York State Department of Environmental Conservation Division of Environmental Remediation's Technical Guidance for Site Investigation and Remediation (DER-10).



A handwritten signature in black ink that reads "Jaydeep M. Parikh". The signature is fluid and cursive, with the first name "Jaydeep" being more prominent.

Professional Engineer: Jaydeep M. Parikh, P.E.

New York License Number: 088083

Engineering Firm: ERM Consulting & Engineering, Inc.

One Beacon Street, 5th Floor

Boston, MA 02108

Certificate of Authorization: 0014854

Date: 8/27/2020

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Revisions to Final Approved Site Management Plan

Revision #	Revision Type	Submission Date	Author	Summary of Revision	DEC Approval Date
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Acronyms and Abbreviations

BSA	Buffalo Sewer Authority
DCE	dichloroethene
DER	Division of Environmental Remediation
EC	Engineering Control
ERM	ERM Consulting & Engineering, Inc.
GWES	Groundwater Extraction System
HVAC	Heating, Ventilation, and Air Conditioning
IC	Institutional Control
Leica	Leica Microsystems, Inc.
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
Plan	Site Management Plan
PRR	Periodic Review Report
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objective
ROD	Record of Decision
RSO	Remedial System Optimization
SCG	Standards, criteria, and guidance
SCO	Soil Cleanup Objective
Site	203 Egger Road, Cheektowaga, Erie County, New York
SMP	Site Management Plan
SSDS	Sub-slab Depressurization System
TCE	Trichloroethene
USEPA	United States Environmental Protection Agency
VOC	Volatile organic compound

EXECUTIVE SUMMARY

The following table presents a brief summary of the controls implemented for the Site, as well as the inspection, monitoring, operation and maintenance, and reporting activities required by this Site Management Plan.

Table ES-1: Site Summary

Site Identification:	New York State Department of Environmental Conservation (NYSDEC) Site No. 915156—Former Leica Microsystems, Inc. Facility 203 Eggert Road, Cheektowaga, Erie County, New York	
Institutional Controls:	1.	Land use restriction: The property may only be used for commercial and/or industrial use.
	2.	No construction, use, or occupancy that results in a disturbance or excavation which threatens the integrity, operation, or maintenance of the Engineering Controls, or which results in unacceptable human exposure to impacted soils, may occur without prior written approval of NYSDEC.
	3.	The use of groundwater underlying the Site is prohibited.
	4.	Institutional and Engineering Controls required for the remedy will be maintained in a manner as defined in this Site Management Plan, and will not be modified or discontinued without prior permission from NYSDEC.
Engineering Controls:	1.	Groundwater Extraction (and Treatment) System
	2.	Vapor mitigation by Loading Dock Sub-slab Depressurization System (SSDS)
	3.	Vapor mitigation by Warehouse SSDS
	4.	Access Control by fence and gate
Inspections		Frequency
1. Site-Wide		Annually
2. Emergency (e.g., natural disaster)		Within 5 days of event
Monitoring		
1. Groundwater Extraction and Treatment System Effluent		Quarterly
2. Loading Dock SSDS—Pressure Differential/Vacuum		Quarterly
3. Warehouse SSDS—Pressure Differential/Vacuum		Quarterly
4. Groundwater Quality		Semiannual
Maintenance		
1. Groundwater Extraction and Treatment System		Quarterly
2. Loading Dock SSDS		Quarterly
3. Warehouse SSDS		Quarterly
Reporting		
1. Discharge Monitoring (to Buffalo Sewer Authority)		Quarterly
2. Inspections (with Periodic Review Report)		Annual
3. Periodic Review Report (including IC/EC Certification)		Annual

1. INTRODUCTION

1.1 General

Leica Microsystems, Inc. (Leica) entered into an Order on Consent with the New York State Department of Environmental Conservation (NYSDEC) on 8 October 1993 to remediate their former property at 203 Eggert Road, Cheektowaga, Erie County, New York (hereinafter referred to as the “Site”). Figure 1 shows the Site location and boundaries, with the metes and bounds included in the Environmental Easement provided in Appendix A. The Site is currently in the New York State Inactive Hazardous Waste Disposal Site Remedial Program (Site No. 915156). Historical remedial work has been completed, but contaminated environmental media remain at the Site (hereafter referred to as “remaining contamination”). Institutional controls (ICs) and engineering controls (ECs) have been incorporated to control exposure to remaining contamination and facilitate protection of public health and the environment.

An Environmental Easement for the Site was granted to NYSDCE, and is recorded as the Declaration of Covenants and Restrictions (provided in Appendix A) with the Erie County Clerk. It requires compliance with the Site Management Plan (SMP or Plan) and all ICs and ECs emplaced on the Site. The SMP is a required element of the remedial program to manage remaining contamination at the Site until the Environmental Easement is extinguished in accordance with Environmental Conservation Law Article 71, Title 36. Failure to properly implement the SMP is a violation of Environmental Conservation Law, 6 New York Codes, Rules and Regulations (NYCRR) Part 375 and the Order on Consent for the Site, as well as the Environmental Easement, and thereby subject to applicable penalties and/or grounds for revocation of the Certificate of Completion. A copy of the SMP must be present at the Site.

All reports associated with the Site can be viewed by contacting NYSDCE or its successor agency managing environmental issues in New York State. Appendix B provides contact information for persons involved with the Site.

The SMP for the Site initially prepared and approved by NYSDCE (*EnergySolutions* 2011), and ERM Consulting & Engineering, Inc. (ERM) revised this Plan on behalf of Leica in accordance with the requirements of NYSDCE’s Division of Environmental Remediation (DER)-10 “Technical Guidance for Site Investigation and Remediation”, effective 18 June 2010, and the guidelines provided by NYSDCE. This SMP describes how to implement the ICs and ECs required by the Environmental Easement for the Site.

1.2 Revisions

Revisions to the SMP shall be proposed in writing to NYSDCE’s Project Manager and must be approved prior to implementation. Revisions are required in at least the following circumstances: a change in media monitoring requirements, upgrades to or shutdown of a remedial system, post-remedial removal of contaminated soil, or other significant changes to the Site conditions. In accordance with the Environmental Easement for the Site, NYSDCE will provide a notice of any approved changes to the SMP and append these notices to the SMP that is retained in its files. This document is the revised SMP, which is being submitted to NYSDCE for review and approval.

1.3 Notifications

Leica will submit notifications to NYSDCE for the following in accordance with NYSDCE’s DER-10:

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the Order on Consent, 6 NYCRR Part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.

- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan (see Appendix D).
- Notice within 48-hours of detection of any damage or defect to the foundation, structures, or EC that reduces or has the potential to reduce the effectiveness of an EC, and any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces, or has the potential to reduce, the effectiveness of ECs in place at the Site. Written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action must be submitted to NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of Order on Consent, and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing to NYSDEC.

Table 1-1 includes contact information for the above notifications, and will be updated and amended, as necessary, to provide accurate contact information.

Table 1-1: Notification Contact Information*

Name	Contact Information
NYSDEC Project Manager: Jaspal Walia	+1 (716) 851-7220 Jaspal.Walia@dec.ny.gov
NYSDOH Project Manager: Melissa Doroski	+1 (518) 402-7860 Melissa.Doroski@health.ny.gov
Cheektowaga Town Engineer: Patrick Bowen	+1 (716) 897-7288 pbowen@tocny.org
Buffalo Sewer Authority Investigator: Al Alagna	+1 (716) 851-4664 aalagna@buffalosewer.org

* Note: Notification contact information are subject to change and will be updated as necessary.

The responsibilities of the Site owner and remedial party are provided in Appendix C.

2. SUMMARY OF PREVIOUS INVESTIGATION AND REMEDIAL ACTIONS

2.1 Site Location

The Site is in Cheektowaga, Erie County, New York and is identified as Section 91.00, Block 1, Lot 26.12 (owned by Calypso Development of WNY, Inc.) and Lot 26.11 (owned by Leica Microsystems, Inc.) on the Town of Cheektowaga Tax Map. The Site is approximately 24 acres commercial land located in a mixed commercial and residential area. It is bound by Sugar Road and Saint Stanislaus Cemetery to the north, Saint John's Cemetery (referred to as the Eastern off-Site Parcel) to the east, single-family residential dwellings to the south, and Eggert Road and a vacant undeveloped lot to the west.

2.2 Physical Setting

2.2.1 Land Use

The Site has an approximately 360,000 square-foot multi-story brick building (the "Main Building"), an approximately 3,100 square-foot single-story metal building, and an approximately 325 square-foot single-story brick pump house. The Main Building was originally built in 1938, and reached its current configuration in 1967. The remainder of the Site is either asphalt-paved parking or landscaped. Lot 26.12 is currently occupied by Sam-Son Distribution (Sam-Son), who uses it as a distribution warehouse, and Lot 26.11 is currently vacant. The Site topography is generally flat.

Figure 1 is a Site Location Map depicting nearby surface water bodies, major access routes, and local topography. Figure 2 is a Site Plan depicting major Site features and boundaries. Refer to Appendix A for a metes and bounds description of the Site, as included in the Environmental Easement. The properties immediately south of the Site include residential dwellings; the property immediately north of the Site include St Stanislaus Cemetery; the property immediately east of the Site include Saint John's Cemetery; and the property to the west of the Site include vacant undeveloped lot.

2.2.2 Geology

Based on data collected at the Site, geology generally consists of five geologic units, from shallowest to deepest:

1. Fill material (generally less than 1 foot thick, but up to 6 feet thick in artificially raised areas).
2. Lake sediments, primarily consisting of silts and clays (up to 10 feet thick).
3. Glacial outwash, sand (up to 3 feet thick)
4. Till, primarily consisting of compacted sand and gravel (up to 3 feet thick).
5. Bedrock, consisting of the Onondaga Formation limestone, Akron Dolostone, Bertie Shales and Dolomites, and the Camillus Shale within the upper 160 feet.

2.2.3 Hydrogeology

Groundwater is often present within the till layer immediately above bedrock, but not always. When present, hydraulic gradients suggest the potential for groundwater migration to the south and west. Groundwater is consistently detected within bedrock fractures, though there are a limited number of transmissive fractures present within the upper portion of the bedrock. Similar to overburden, hydraulic gradients in shallow bedrock suggest the potential for groundwater migration to the south and west.

The depth to groundwater at the Site exhibits seasonal fluctuations and is generally encountered around 8 to 10 feet below ground surface in overburden and slightly deeper in shallow rock due to a downward

vertical hydraulic gradient. Vertical and horizontal flow directions are affected locally around the active groundwater extraction well MW-11A.

An overburden groundwater elevation contour map is shown on Figure 3 and a bedrock groundwater elevation contour map is shown on Figure 4. Groundwater elevation data are provided in Table 1. Groundwater monitoring well construction information is included in Table 2.

2.3 History

2.3.1 Site Operational History

Spencer Lens, an optical lens manufacturer, first developed the Site in 1938, and maintained operations through 1945. Between 1945 and 1986, American Optical Corporation owned and operated the Site. Cambridge Instruments, Inc. owned and operated the Site between 1986 and 1990, when they merged with Leica, Inc., and continued operations under the Leica name through 1993 when manufacturing operations at the Site ceased. In October 1993, the Site buildings and a majority of the Site (Lot 26.12) was sold to Calypso Development and leased to Sam-Son.

Leica retained an approximately 100-foot by 390-foot (approximately 1.2 acre) area (Lot 26.11) in the southeast portion of the original parcel where the majority of the constituent impacts were located.

Prior to 1993, Site operations consisted of the manufacturing of scientific instruments and optical devices, and included two primary processes: 1) machining, cleaning, coating, and assembly of metal parts and components; and 2) shaping, grinding, polishing, and coating of glass lenses for use in ophthalmic instruments, microscopes, refractometers, and other optical instruments. Paints, solvents, oils, cyanides, and metals were used as part of manufacturing activities.

2.3.2 On-Site and Off-Site Investigation and Remedial History

A summary of on-Site investigation and remedial activities is presented in Table 3.

2.4 Remedial Action Objectives

The March 1997 Record of Decision established the following Remedial Action Objectives (RAOs) for the Site, with the overarching goal of meeting all applicable standards, criteria, and guidance (SCG) values, and protecting human health and the environment:

- Groundwater:
 - Restore groundwater, to the maximum extent practicable, to applicable SCG values shown in Table 2-1.
 - Eliminate constituent migration via groundwater so that potential releases of, and contact with, constituent-impacted groundwater does not present a threat to human health and the environment.

Table 2-1: Site-Specific RAOs—Groundwater

Analyte	Concentration (micrograms per liter)
Trichloroethene	5
1,2-Dichloroethene	5
Vinyl Chloride	5
Toluene	5
Xylenes (Total)	5
Ethylbenzene	5
1,1,1-Trichloroethane	5

■ Soil:

- Prevent or mitigate the leaching and/or migration of constituents in soil that would cause groundwater and/or surface water impacts above SCG values shown in Table 2-2.
- Eliminate, to the maximum extent practicable, the potential for direct contact by potential receptors to constituent-impacted soil.

Table 2-2: Site-Specific RAOs—Soil

Analyte	Concentration (micrograms per kilogram)			
	Original	Total Organic Carbon Adjusted Values ^a		
		Fill—4.0%	Clay—1.5%	Sandy Silt—2.0%
Benzene	60	232	87	116
1,1-Dichloroethane	200	600	225	300
1,2-Dichloroethene	100	280	105	140
Ethylbenzene	5,500	22,000	8,250	11,000
Methylene Chloride	200	420	158	210
Toluene	1,500	6,000	2,250	3,000
1,1,1-Trichloroethane	800	3,040	1,140	1,520
Trichloroethene	1,000	2,250	945	1,260
Vinyl Chloride	20	456	171	228
Xylenes (Total)	1,200	4,800	1,800	2,400

^a General state-wide RAOs for soils are based on a default total organic carbon content of 1 percent. These original default RAOs for soil were subsequently adjusted based on actual Site-specific percentages of total organic carbon in the three distinct soil types (fill, clay, sandy silt) encountered in the Site remediation area. Calculations of the adjusted RAOs were performed in accordance with NYSDEC Technical and Administrative Guidance Memorandum 4046: Determination of Soil Cleanup Objectives and Cleanup Levels (24 January 1994). Adjusted values were calculated and presented in a report prepared by NES entitled Additional Investigation Report, dated July 1998.

■ Soil Vapor

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

- NYSDEC and NYSDOH do not currently have standards, criteria or guidance values for concentrations of compounds in soil vapor, so no comparison to criteria is provided. However, there are guidelines for certain chemicals in soil vapor and indoor air that are listed in the NYSDOH Soil Vapor / Indoor Air Decision Matrices (NYSDOH 2017).

2.5 Remaining Contamination

The most up-to-date tables and figures reporting remaining contamination are reported annually in the Periodic Review Report (PRR).

2.5.1 Soil

On 18 May 2004, NYSDEC issued a No Further Action letter for the remediation of Site soils outside of the Main Building's footprint. The decision was based upon the remedial information contained in the following reports:

- Status Report (SCIENTECH 2002)
- Soil Remedial Action Closure Report (SCIENTECH 2004)

Table 4 and Figure 5 summarize the exceedances of contaminants of concern of site-specific RAOs of all soil samples collected within and immediately adjacent to the Main Building between December 2005 and April 2019.

2.5.2 Groundwater

Data pertaining to remaining contamination in groundwater is presented on an annual basis in the PRRs.

Table 5 summarizes the contaminants of concern exceedances of Site-specific RAOs of all groundwater samples collected in 2019. Figures 6 and 7 depict the exceedances in overburden and bedrock wells, respectively.

2.5.3 Soil Vapor and Indoor Air

2.5.3.1 On-Site

As the vapor mitigation EC, two sub-slab depressurization systems (SSDSs) have been installed and operating at the Site. There were various rounds of investigations prior to installation of the Loading Dock SSDS in 2012 and the Warehouse SSDS in 2016. Table 6 and Figure 8 summarize the contaminants of concern that required actions as prescribed by the NYSDOH Soil Vapor / Indoor Air Decision Matrices prior to installation of the SSDSs. The basement indoor air sample collected after the installation of the warehouse SSDS in March 2016 had concentrations of 1,1-DCE, cis-1,2-DCE, and TCE above the NYSDOH Soil Vapor / Indoor Air Decision Matrices. The basement is unoccupied and remains locked for the majority of the time, which reduces the potential of exposure. During the annual Site-wide inspection, the occupancy of the basement will be verified and recorded on the inspection form.

In March 2020, 12 indoor air samples were collected throughout the occupied portions on the main floor of the Site building to confirm the efficacy of the SSDS. Additionally, two ambient air samples and one field duplicate sample were collected. The results were compared to the NYSDOH Air Guideline Values and no detected concentrations exceeded the guideline values. Table 7 summarizes the analytical results and Figure 9 shows the sample locations.

2.5.3.2 Off-Site

In March and April 2019, sub-slab soil gas and indoor air samples were collected from seven residences along Preston Road to evaluate off-site vapor intrusion. The sampling results were compared to the NYSDOH Soil Vapor/Indoor Air Decision Matrices and no detected concentrations required further action, with the exception of the results collected at 111 Preston Road. ERM attempted to resample the sub-slab and indoor air at this residence during the 2019-2020 heating season; however, due to lack of responsiveness from the homeowner and the onset of the COVID-19 pandemic, sampling has been postponed until the 2020-2021 heating season. Table 8 summarizes the analytical results, Table 9 summarizes the comparison of results at 111 Preston Road to the Decision Matrices, and Figure 10 shows the sample locations. In the fall of 2019, additional residential vapor intrusion was planned for four residences on Eggert Road. Homeowner outreach was conducted; however, prior to the onset of COVID-19 pandemic, no homeowners had granted access. As such, residential vapor intrusion evaluation along Eggert Road is postponed until the 2020-2021 heating season.

The results of the residential vapor intrusion evaluation will be documented in a report under separate cover once the planned sampling activities are complete.

3. INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 Introduction

Due to remaining contamination at the Site, ICs and ECs are required to protect human health and the environment. This IC/EC Plan describes the procedures for implementing and managing all ICs/ECs at the Site.

3.2 Institutional Controls

The following ICs are required by the Declaration of Covenants and Restrictions, as included in the Environmental Easement for the Site:

- No construction, use, or occupancy that results in a disturbance, or excavation that threatens the integrity of the ECs or that results in unacceptable human exposure to impacted soils may occur without prior written approval of NYSDEC;
- No disturbance, removal, or other interfere with the installation, use, operation and maintenance of ECs required for the remedy may occur without a prior written waiver from NYSDEC;
- The Site may not be used for purposes other than for commercial or industrial use (including vegetable gardening and farming), without a written waiver from NYSDEC;
- The use of groundwater underlying the Site is prohibited without necessary water quality treatment as determined by NYSDOH or the Erie County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from NYSDEC;
- The Site owner or Leica will evaluate the potential for vapor intrusion for any new buildings developed on the Site, and if identified, a vapor intrusion mitigation measure will be implemented prior to occupancy;
- The Site owner will allow NYSDEC, its agents, employees, or other representatives to enter and inspect the Site in a reasonable manner and at reasonable times;
- All ECs must be operated, maintained, inspected, and monitored, and the results reported on an annual basis, unless the property owner first obtains permission to modify or discontinue such controls from the Department or the Relevant Agency, as specified in this SMP;
- Leica will submit periodic certification reports prepared and submitted by a professional engineer or environmental professional, which certifies that the ICs/ECs put in place are unchanged from the previous certification (unless NYSDEC approved), comply with SMP, and have not been impaired; and
- The declarations will be deemed covenant and will run with the property subject to the Declaration of Covenants and Restrictions as shown on Figure 2 and in Appendix A, and shall remain in effect unless released by NYSDEC.

3.3 Engineering Control Systems

3.3.1 Description of Engineering Control Systems

3.3.1.1 Groundwater Extraction System

A bedrock groundwater extraction system (GWES) was installed in December 1999 to limit contaminant migration in groundwater. The original GWES consisted of two pneumatic pumps installed in MW-16A

(East Side Dry Well Area) and MW-11A (Southern Area). Each groundwater extraction well is 6 inches in diameter and extends approximately 40 feet below grade. Extracted groundwater was originally pretreated via a multi-stage diffusion system prior to discharge to Buffalo Sewer Authority's (BSA) sanitary sewer system, as authorized under permit.

Since installation, the following modifications have been made to the GWES:

- 18 March 2011: the BSA and Town of Cheektowaga authorized direct discharge of the extracted groundwater without pretreatment because total volatile organic compound (VOC) concentrations in the extracted groundwater were less than the permitted discharge limits.
- April 2011: GWES piping was reconfigured to allow extracted groundwater to bypass the treatment system.
- 2015/2016: GWES upgrades to replace the pneumatic pumps in MW-11A and MW-16A with a single electrical pump in MW-11A. The new MW-11A electric pump is capable of recovering approximately 25 gallons per minute of groundwater, compared to the previously pneumatic pumps in MW-11A and MW-16A, capable of recovering approximately 7 gallons per minute of groundwater each. The new pump eliminated the requirement to operate two separate pumps. The new electric pump in MW-11A is also equipped with a variable frequency drive and electronic transducer to automatically adjust and maintain constant drawdown, electrical service lines (EnergySolutions 2016). Operation of the MW-16A groundwater extraction pump was terminated.

The current configuration of the GWES is shown on Figure 11. Refer to Section 5.0 for operation and maintenance procedures for the GWES. Refer to Appendix E for as-built drawings and Appendix F for a copy of the current BSA discharge permit.

3.3.1.2 Sub-Slab Depressurization System—Loading Dock

EnergySolutions installed the SSDS in the Loading Dock area of the Main Building in December 2012 to mitigate the potential for vapor intrusion. The Loading Dock area SSDS includes two suction points and seven test ports/vapor pin collection points and encompasses approximately 13,000 square feet of the building. The SSDS includes an on-Site audible/visual alarm as well as remote monitoring. In the event that a blower loses power or vacuum, the local alarm will be triggered and a MarCell® System will notify the ERM through a phone call.

To the best of ERM's knowledge, an as-built report for the Loading Dock SSDS was never completed. According to the 2012 PRR, the system was installed according to the *Vapor Mitigation Work Plan* prepared by EnergySolutions, which was approved by NYSDEC on 15 March 2011. The current configuration of the Loading Dock area SSDS is shown on Figure 11. Refer to Section 5.0 for operation and maintenance procedures for this SSDS.

3.3.1.3 Sub-Slab Depressurization System—Warehouse

Synapse installed the SSDS in the Warehouse area of the Main Building in late 2016 to mitigate the potential for vapor intrusion; the system began operating on 19 January 2017. The as-built report for the Warehouse SSDS is provided in Appendix G. The Warehouse SSDS consists of eight subsystems that include the following components:

System	Blower	Pipe Size	Number of Suction Points	Number of Test Ports
System-1	OBAR Model GBR 89	2" PVC – Vent Riser ¹ ; 4" PVC – Main trunk; and 6" PVC – Discharge Pipe.	10	12
System-2	OBAR Model GBR 89	2" PVC – Vent Riser; 4" PVC – Main trunk; and 6" PVC – Discharge Pipe.	10; four sets of double vent riser ²	8
System-3	OBAR Model GBR 89	2" PVC – Vent Riser; 4" PVC – Main trunk; and 6" PVC – Discharge Pipe.	10; five sets of double vent riser	5
System-4	OBAR Model GBR 89	2" PVC – Vent Riser; 4" PVC – Main trunk; and 6" PVC – Discharge Pipe.	8	6
System-5	OBAR Model GBR 89	2" and 3" PVC – Vent Riser; 4" PVC – Main trunk; and 6" PVC – Discharge Pipe.	9; two sets of double vent riser	5
System-6	OBAR Model GBR 89	2" and 3" PVC – Vent Riser; 4" PVC – Main trunk; and 6" PVC – Discharge Pipe.	12; two sets of double vent riser	6
System-7	OBAR Model GBR 89	2" and 3" PVC – Vent Riser; 4" PVC – Main trunk; and 6" PVC – Discharge Pipe.	11	6
System-8	OBAR Model GBR 89	2" and 3" PVC – Vent Riser; 4" PVC – Main trunk; and 6" PVC – Discharge Pipe.	10	12

Notes:

¹Vent Riser: pipe extending vertically above the suction point and connecting with the main system conveyance trunk line.

²Double Vent Riser: two 2-inch diameter vent risers installed 6 to 12 inches apart from each other and manifolded together into the main system conveyance trunk line.

The main warehouse SSDS has been monitored with a remote SCADA 3000 monitoring system. In the event that a blower loses power or vacuum, an alarm will be initiated by the SCADA 3000 that notifies the entity responsible for system operation through a phone call. The current configuration of the Warehouse SSDS is shown on Figure 11. Refer to Section 5.0 for operation and maintenance procedures for this SSDS.

In the fall of 2019, System-7 and System-8 were turned off because these portions of the building are unoccupied due to deteriorating building conditions and this area is unsafe to enter. If building conditions are restored, the SSDS and indoor air should be evaluated prior to occupation.

3.3.2 Criteria for Termination of Engineering Control Systems

According to Section 6.4 of DER-10, a remedial process is considered completed when effectiveness monitoring indicates that the remedy has achieved the RAOs or when it can be demonstrated that the remedy has achieved the bulk reduction of contamination and it would not be feasible to continue operation of the remedy, provided the remedy has been properly implemented, optimized to its fullest extent, and could not be otherwise modified to improve performance.

3.3.2.1 Groundwater Extraction System

In the event that monitoring data indicate that the GWES may no longer be required, Leica will submit a proposal to NYSDEC to discontinue operation of the system. The GWES will remain in place and operational until permission to discontinue its use is granted in writing by NYSDEC.

3.3.2.2 Sub-Slab Depressurization Systems—Loading Dock and Warehouse

Operation of the Loading Dock and Warehouse SSDSs will not be discontinued unless prior written approval is granted by NYSDEC and NYSDOH. In the event that monitoring data indicates that sub-slab depressurization may no longer be required, Leica will submit a proposal to NYSDEC and NYSDOH to discontinue the operation of one or both of the SSDSs. The SSDSs will remain in place and operational until permission to discontinue their use is granted in writing by NYSDEC.

4. MONITORING AND SAMPLING PLAN

4.1 General

This Monitoring and Sampling Plan describes the measures for evaluating the overall performance and effectiveness of the ICs and ECs and to monitor the spatial distribution and temporal trends in groundwater quality, and may only be revised with the approval of NYSDEC. Details regarding the sampling procedures, data quality usability objectives, and analytical methods are included in the Quality Assurance Project Plan (QAPP) provided in Appendix H.

4.2 Site-Wide Inspection

Site-wide inspections will be performed at least once per year to evaluate all ICs and ECs. NYSDEC must approve any changes to the frequency or duration of inspections. Site-wide inspections will also be performed after all severe weather events and emergencies that may affect ECs or monitoring devices within seven days of the event to verify the effectiveness of all ICs/ECs implemented at the Site. Written confirmation must be provided to NYSDEC; this must include a summary of actions taken, or to be taken, and the potential impact to the environment and the public. During these inspections, an inspection form will be completed (as provided in Appendix I) and include observations to assess the following:

- Compliance with all ICs, including Site usage;
- Condition and continued effectiveness of all ECs;
- General Site conditions;
- Safety inspection; and
- Compliance with requirements of this SMP and the Environmental Easement.

4.3 Engineering Controls Monitoring and Sampling

4.3.1 Engineering Control Systems Monitoring

The ECs will be monitored according to the schedule identified in Table 4-1 to determine if the remedy is performing as designed. NYSDEC must approve modifications to the frequency or sampling requirements. Each EC system must be visually inspected during each monitoring event. Unscheduled inspections and/or sampling may take place when a suspected failure of an EC has been reported or an emergency occurs that is deemed likely to affect the operation of the system.

The Inspection Checklist in Appendix I has a complete list of components to be inspected for each EC. Maintenance or repair will be required immediately, per the Operation and Maintenance Plan, if any equipment readings are not within their specified operational range, if any equipment is observed to be malfunctioning, or if the system is not performing within specifications.

Table 4-1: Remedial System Monitoring Requirements and Schedule

Remedial System Component	Monitoring Parameter	Operating Condition(s) ¹	Monitoring Schedule
GWES			
	Flow Rate	2,000–10,000 gpd	Daily via telemetry, Quarterly in person
	Flow (Total)	Total Gallons	
	Groundwater Elevation	17 to 22 ft bgs	Quarterly via gauging
Loading Dock SSDS			
Entryway Blower	Vacuum Reading	3.30 in W.C.+/- 1 in W.C.	Daily confirmation of system operation via telemetry; quarterly checks of vacuum reading from system manometers in person and annual check of pressure differential from test ports in person.
Loading Dock	Vacuum Reading	3.25 in W.C. +/- 1 in W.C.	
Warehouse SSDS			
Blower No. 1	Vacuum Reading	12.0 in W.C.+/-3.6 in W.C.	Daily confirmation of system operation via telemetry; quarterly checks of pressure differential from system manometers in person and annual check of pressure differential from test ports in person.
Blower No. 2	Vacuum Reading	7.0 in W.C. +/-2.1 in W.C.	
Blower No. 3	Vacuum Reading	10 in W.C.+/-3.0 in W.C.	
Blower No. 4	Vacuum Reading	14 in W.C. +/-4.2 in W.C.	
Blower No. 5	Vacuum Reading	13 in W.C. +/-3.9 in W.C.	
Blower No. 6	Vacuum Reading	7 in W.C. +/-3.9 in W.C.	
Blower No. 7	Vacuum Reading	Not currently operational due to unsafe building condition and lack of occupancy.	
Blower No. 8	Vacuum Reading	Not currently operational due to unsafe building condition and lack of occupancy.	

Notes:

bgs = below ground surface; ft = feet; gpd = gallons per day; in W.C. = inches of water column

¹SSDS vacuum readings are subject to seasonal variations including temperature, pressure, humidity, and groundwater level.

4.3.2 Groundwater Extraction System Sampling

The effluent from the GWES will be sampled on a quarterly basis in accordance with the Authorization to Discharge under the Town of Cheektowaga/Buffalo Pollutant Discharge Elimination System issued by the BSA and Town of Cheektowaga (Permit No. 20-02-CH014; effective 1 February 2020). Effluent grab samples will be collected from the sampling port on the GWES discharge line and analyzed for the following parameters:

- Semi-volatile organic compounds by USEPA Method 625;
- Volatile organic compounds by USEPA Method 624; and

- Total extractable hydrocarbons by USEPA Method 1664A.

4.4 Groundwater Monitoring and Sampling

Groundwater monitoring will be performed consistent with the groundwater monitoring program presented in Table 10 and the QAPP (Appendix H) to assess the remedy performance and to monitor the spatial distribution and temporal trends in groundwater quality; NYSDEC must approve any change to the sampling frequency or requirements. Groundwater monitoring activities include groundwater elevation gauging, field parameter monitoring, and collection of groundwater samples for laboratory analysis. The groundwater monitoring program is designed to focus on remaining source areas, the perimeter of the Site (particularly in areas with impacted groundwater), and off-Site areas; monitoring of upgradient groundwater quality is not included as there are no known or suspected sources of contamination located hydraulically upgradient of the Site and there is already a temporally extensive dataset for upgradient groundwater quality.

Groundwater samples will be collected in accordance with USEPA Low-Flow Groundwater Sampling Procedures. For monitoring wells that exhibit insufficient recharge, the monitoring well will be pumped dry and a recharge sample will be collected within 24 hours. Samples will be collected in laboratory-provided bottles and submitted under standard chain-of-custody protocol for analysis of VOCs by USEPA Method 8260C. Groundwater sampling results will be compared to the Site-specific RAOs.

5. OPERATION AND MAINTENANCE PLAN

5.1 General

This Operation and Maintenance Plan provides a brief description of the measures necessary to operate and maintain the mechanical components of the remedy selected for the Site.

5.2 Operation and Maintenance of Groundwater Extraction System

The following sections provide a description of the operations and maintenance of the GWES. As-built drawings and cut-sheets for the GWES are in Appendix E.

5.2.1 System Start-Up and Testing

System start up and testing will be conducted if the Site's GWES goes down or significant changes are made to the system and it must be restarted.

- Prior to start-up, all electrical service, communications, and conveyance lines will be inspected against the as-built drawings to verify that all equipment is appropriately connected. All aboveground and accessible piping, valves, and connections will be visually examined for signs of leaks or potential leaks, and the electronic transducer and flow meter will be visually examined to verify proper operation.
- Following start-up, groundwater elevation and effluent flow rates will be measured and checked against specified design ranges, and adjusted, as necessary. Effluent samples will be collected from the sampling port on the discharge line and analyzed for the parameters required by the current Authorization to Discharge.
- Additionally, manufacturer's recommendations for start-up of the equipment will be incorporated.

5.2.2 Routine System Maintenance Activities

Routine monitoring and maintenance will be performed to verify that the Site's GWES is operating as designed. During quarterly inspections, visual inspections of control system, effluent discharge point, piping, and valves will be completed. General maintenance activities will include cleaning and removing any build-up of foreign material from the extraction pump, piping, and valves, and preventative maintenance of system components in accordance with the manufacturer's recommendations.

5.2.3 Non-Routine System Operation and Maintenance

Non-routine operation and maintenance activities typically occur when the warning device (i.e., remote telemetry unit) indicates an operational failure; significant changes are made to the GWES operations; or when repairing or replacing system components which were noted during the visual inspection to present a potential system failure or shutdown. The scope of non-routine operation and maintenance activities will vary depending on the circumstances, but will generally include:

- Shutting down the system and systematically inspecting it to identify any malfunctioning or failed components.
- The component(s) will be repaired or replaced.

Table 5-1 below summarizes the schedule of routine maintenance activities.

Table 5-1: Summary of Routine Maintenance

Remedial System	Maintenance Item	Frequency
GWES	Remote Terminal Unit Connection Test	Daily
	Visual Inspection	Quarterly
	Component/System Cleaning	As-Needed
	Equipment Preventative Maintenance	Per Manufacture's Recommendations
Loading Dock SSDS	Remote Terminal Unit Connection Test	Daily*
	Visual Inspection of Risers, Pipes, Blower, and Manometer; Test Audible/Visual Alarm	Quarterly
	Concrete Floor Inspection	Annual
	Building Change Evaluation	Annual
	Exhaust/Effluent Point Inspection	Annual
	Component/System Cleaning	As-Needed
	Equipment Preventative Maintenance	Per Manufacture's Recommendations
Warehouse SSDS	Remote Terminal Unit Connection Test	Daily
	Visual Inspection of Risers, Pipes, Blowers, and Manometers; Test Audible/Visual Alarm	Quarterly
	Concrete Floor Inspection	Annual
	Building Change Evaluation	Annual
	Exhaust/Effluent Point Inspection	Annual
	Component/System Cleaning	As-Needed
	Equipment Preventative Maintenance	Per Manufacture's Recommendations

**Daily telemetry for the Loading Dock SSDS will commence after system upgrades in 2020*

5.2.4 Groundwater Monitoring Well Repair, Replacement, and Decommissioning

If biofouling or silt accumulation occurs in a groundwater monitoring well, the accumulation will be physically agitated, and the well will be surged and redeveloped. Repairs and/or replacement of groundwater monitoring wells will be performed based on assessments of structural integrity and overall performance.

Groundwater monitoring wells will be properly decommissioned and replaced if they are unusable or deemed to be no longer necessary. NYSDEC will be notified prior to repairing or decommissioning any groundwater monitoring well and the repair or decommissioning and replacement process will be documented in the subsequent PRR. Groundwater monitoring wells that are decommissioned because they have been rendered unusable will be replaced in-kind at a nearby available location, unless otherwise approved by NYSDEC. Well abandonment will be performed in accordance with NYSDEC's CP-43: *Groundwater Monitoring Well Decommissioning Procedures*.

5.2.5 System Monitoring Devices and Alarms

The GWES is equipped with automatic (i.e., remote telemetry unit) monitoring and warning devices to indicate when the system is not operating as designed. In the event the monitoring and warning devices indicate attention is needed, applicable maintenance and repairs will be completed and the system will be

restarted. Potential warnings include low- and high-level water alarms, low- and high-flow alarms, and a power failure alarm. Operational problems will be noted in the PRR for that reporting period.

5.3 Operation and Maintenance of SSDSs

The following sections provide a description of the operations and maintenance of the Site's SSDSs. As-built drawings and cut-sheets for the Warehouse SSDS is provided in Appendix G; to the best of ERM's knowledge, an as-built report for the Loading Dock SSDS was never completed.

5.3.1 System Start-Up and Testing

The system should continue operating and should never be turned off unless required for maintenance or inspection, or if the building is unoccupied or unsafe for occupancy. Turning off the system will trigger an audible/visual alarm and will also send an electronic notification to the entity responsible for system operation. The following system start-up and testing will be conducted if the system goes down or significant changes are made to the system:

- Prior to start-up:
 - the system will be inspected for tightness, including accessible aboveground piping, valves, connections, and sumps;
 - the concrete slab will be inspected to identify potential short-circuiting conditions;
 - the blower will be visually examined for failures or other abnormal operations; and
 - connectivity with the Remote Terminal Unit should be tested.
- The SSDS can be turned on or off from the switch located on the blower enclosure, the breaker located in the electrical panel near the System-06 blower, or the switch next to the manometer panel (only for loading dock area).
- Following start-up, the sub-slab pressure at each monitoring point will be measured. If necessary, the sub-slab vacuum will be adjusted to achieve a minimum of 0.004 inches of water column pressure differential across the majority of the monitoring points.
- After balancing the system and achieving vacuum coverage, smoke tests will be performed to identify any leaks/short circuiting conditions through cracks in the concrete floor, floor joints, and suction points. Identified leaks will be resealed until smoke tests indicate that the concrete slab is appropriately sealed.
- Additionally, manufacturer's recommendations for start-up and testing for the equipment will be incorporated.

5.3.2 Routine System Operation and Maintenance

Routine system maintenance will be performed to keep the Site's SSDSs operating as designed, as shown above in Table 5-1. System components to be monitored include, but are not limited to: suction points, accessible piping, blower units, exhaust/effluent discharge points, and emission control units. Quarterly and annual routine operation and maintenance activities will be recorded on the forms as included in Appendix I. Operational and maintenance activities will be summarized in the PRR for that reporting period.

5.3.3 Non-Routine System Operation and Maintenance

Non-routine operation and maintenance typically occurs when the warning device (e.g., remote telemetry unit) indicates an operational failure; or when repairing or replacing system components. The scope of non-routine operation and maintenance activities will vary, depending on the reason for the activities.

5.3.4 System Monitoring Devices and Alarms

The SSDSs are equipped with visual (i.e., manometers, vacuum gauges) and automatic (i.e., remote telemetry unit) monitoring and warning devices to indicate when the systems are not operating as designed. In the event that monitoring and warning devices indicate attention is needed, applicable maintenance and repairs will be conducted, as specified in this Operation and Maintenance Plan, and the SSDS will be restarted. Operational problems will be noted in the PRR for that reporting period.

6. PERIODIC ASSESSMENTS AND EVALUATIONS

6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms and weather events, an increase in flooding events, shifting precipitation patterns, and wide temperature fluctuations resulting from global climate change and instability, have the potential to impact the performance, effectiveness, and protectiveness of remedial systems. An initial vulnerability assessment was completed to evaluate the potential for such events to adversely impact the Site's remedial systems and is documented in Sections 6.1.1 through 6.1.4. This vulnerability assessment should be updated periodically.

6.1.1 Flood Plain

According to the Federal Emergency Management Agency Flood Map Service Center, the Site is in an area of minimal flood hazard.

6.1.2 Site Drainage and Storm Water Management

ERM has not observed any areas of flooding or pooling storm water on the Site.

6.1.3 Erosion

ERM has not observed any evidence of erosion at the Site; the majority of the Site is either vegetated or covered by buildings or asphalt.

6.1.4 High Wind

There are overhead electric transmission lines north of the Site along Sugar Road, west of the Site along Eggert Road, and along the southern Site boundary. There are trees located sporadically along the transmission lines, so it is possible that high winds could damage the power lines and disrupt power to the Site building and ECs. The remedial systems are connected to telemetry that provide remote monitoring information. High-wind events could also damage the telemetry lines at or around the Site.

6.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires consideration of green remediation concepts and techniques for all stages of the remedial program, including Site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. Green remediation evaluations and resultant system modifications can be undertaken as part of a formal Remedial System Optimization or at any point in the project life cycle. Modifications resulting from green remediation evaluations will be implemented during routine operation and maintenance activities, and these modifications will be presented in a PRR.

6.2.1 Remedial Systems

Remedial systems will be operated in such a way as to conserve materials and resources to the greatest extent possible. Consideration will be given to operating rates and use of reagents and consumables. Spent materials will be sent for recycling, as appropriate.

6.2.2 Frequency of System Checks, Sampling, and Other Periodic Activities

Transportation to and from the Site, using consumables on Site visits for checking systems or collecting samples, and shipping samples to a laboratory for analysis have direct and/or inherent energy costs.

These periodic activities will be scheduled and designed to maximize efficiency so they can be done without impacting remedy protectiveness, while reducing energy and resource expenditure.

6.3 Remedial System Optimization

A RSO study will be conducted any time that NYSDEC or the remedial party requests in writing that an in-depth evaluation of the remedy is needed. An RSO may be appropriate if any of the following occur:

- The management and operation of the remedial system is exceeding the estimated costs.
- The remedial system is not performing as expected or as designed.
- Previously unidentified source material may be suspected.
- Plume shift has potentially occurred.
- Site conditions change due to development, change of use, change in groundwater use, etc.
- There is an anticipated transfer of the Site management to another remedial party or agency.
- A new and applicable remedial technology becomes available.

The RSO will critique the Site's conceptual model, summarize past performance, document current cleanup practices, summarize progress made toward the Site's cleanup goals, gather additional performance or media-specific data and information, and recommend improvements to enhance the ability of the present system to reach RAOs or to provide a basis for changing the remedial strategy.

The RSO study will focus on overall Site cleanup strategy; process optimization and management with the intent of identifying impediments to cleanup; and improvements to Site operations to increase efficiency, improve cost effectiveness, and reduce remedial timeframes. Green remediation technology and principals are to be considered when performing the RSO.

7. REPORTING REQUIREMENTS

7.1 Site Management Reports

Site inspection, maintenance, and monitoring events will be recorded on the appropriate Site management forms provided in Appendix I. Applicable inspection forms and media sampling data generated for the Site will be included in the annual PRRs, which are discussed in Section 7.2, and will be provided in electronic format to NYSDEC at the frequency prescribed in Table 7-1.

Table 7-1: Reporting Requirements

Report	Frequency
Discharge Monitoring to BSA	Quarterly
Periodic Review Report, including:	Annually
■ Discharge Monitoring to NYSDEC	Annually
■ Inspections	Annually
■ Monitoring Data	Annually
■ Routine Maintenance	Annually
■ Non-Routine Maintenance	Annually

Interim monitoring and inspections reports, routine maintenance event reporting forms, and non-routine maintenance reporting forms will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air);
- Copies of inspection forms completed;
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables for all sampled;
- Any observations, conclusions, or recommendations;
- A determination as to whether or not contaminant conditions have changed since the last reporting event; and
- Other documentation, as appropriate.

Data will be reported in digital format as defined by NYSDEC. Currently, data is to be submitted electronically to the NYSDEC EQulS database.

7.2 Periodic Review Report

A PRR is submitted annually to the NYSDEC in May of each year. The report includes the following:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the Site.

- Results of the required annual Site inspections and severe condition/emergency inspections, if applicable.
- All applicable Site management forms and other records generated for the Site during the reporting period in NYSDEC-approved electronic format, if not previously submitted.
- A summary of any discharge monitoring data and/or information generated during the reporting period, with comments and conclusions.
- Data summary tables and graphical representations of contaminants of concern by media (e.g., groundwater, soil vapor). Laboratory reports will include all compounds analyzed. Data tables will present data for selected analytes in comparison to applicable regulatory standards, with all exceedances of standards highlighted. Temporal concentration trend plots will be presented for selected analytes.
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted in digital format as defined by NYSDEC. Currently, data is supplied electronically and submitted to NYSDEC's EQUIS database.
- An evaluation that includes the following:
 - The operation and effectiveness of all treatment units, including identification of any needed repairs or modifications;
 - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring and Sampling Plan for the media being monitored;
 - Trends in contaminant levels in the affected media will be evaluated to determine if the remedy continues to be effective in achieving remedial goals as specified by the Decision Document;
 - The overall performance and effectiveness of the remedy; and
 - Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan.
- A performance summary for all treatment systems at the Site during the calendar year, including information such as:
 - The number of days the system operated for the reporting period;
 - The average, high, and low flows per day;
 - An estimate of contaminant mass removed;
 - A description of breakdowns and/or repairs along with an explanation for any significant downtime;
 - A description of the resolution of performance problems;
 - Alarm conditions;
 - Trends in equipment failure;
 - A summary of the performance, effluent and / or effectiveness monitoring; and
 - Comments, conclusions, and recommendations based on data evaluation.

7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a qualified environmental professional or Professional Engineer licensed to practice in New York State (depending on the need to evaluate engineering systems) will prepare, and include in the PRR, a signed certification as per the requirements of NYSDEC's DER-10 6.3(d) and 6 NYCRR 375-1.8(h)(3)(i).

The PRR will be submitted, in electronic format, to NYSDEC's Central Office and Regional Office, and NYSDOH Bureau of Environmental Exposure Investigation. The PRR may need to be submitted in hard-copy format, as requested by the NYSDEC Project Manager.

7.3 Corrective Measures Work Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an IC or EC, a Corrective Measures Work Plan will be submitted to NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the Corrective Measures Work Plan until it has been approved by NYSDEC.

7.4 Remedial System Optimization Report

In the event that an RSO is to be performed, an RSO report must be submitted to NYSDEC for approval. The RSO report will document the research, investigation, and data gathering that was conducted, evaluate the results and facts obtained, present a revised Site conceptual model, and present recommendations. RSO recommendations are to be implemented upon approval from NYSDEC. Additional work plans, design documents, health and safety plans, etc., may still be required to implement the recommendations, based on the actions that need to be taken. A final engineering report and update to the SMP may also be required.

The RSO report will be submitted, in electronic format, to the NYSDEC Central Office, Regional Office in which the Site is located, Site Control and the NYSDOH Bureau of Environmental Exposure Investigation.

8. REFERENCES

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TABLES

Table 1
Summary of Water Level Elevations Measured in December 2019
Former Leica Microsystems, Inc.
Cheektowaga, New York

Well	Measurement Date	Historical Reference Elevation (ft amsl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)
INT-10	19-Dec-19	662.33	9.25	653.08
INT-10A	19-Dec-19	662.2	9.15	653.05
INT-11	19-Dec-19	662.27	8.35	653.92
INT-11A	19-Dec-19	662.26	9.90	652.36
INT-12	19-Dec-19	662.46	9.30	653.16
INT-13	19-Dec-19	662.2	8.77	653.43
INT-14	19-Dec-19	662.18	9.32	652.86
INT-15	19-Dec-19	662.26	10.10	652.16
INT-16	19-Dec-19	662.11	9.98	652.13
INT-17	19-Dec-19	662.19	9.95	652.24
INT-18	23-Dec-19	662.24	10.05	652.19
INT-19	19-Dec-19	662.35	9.66	652.69
INT-2A	19-Dec-19	662.28	11.29	650.99
INT-2R	19-Dec-19	662.08	9.93	652.15
MW-1A	23-Dec-19	662.9	12.95	649.95
MW-2	20-Dec-19	656.5	7.35	649.15
MW-2D	20-Dec-19	657.02	7.00	650.02
MW-3	23-Dec-19	655.3	5.75	649.55
MW-4	23-Dec-19	655.57	4.6	650.97
MW-5	20-Dec-19	654.07	3.30	650.77
MW-5A	20-Dec-19	654.16	4.12	650.04
MW-6	23-Dec-19	660.3	8.90	651.40
MW-6A	23-Dec-19	658.88	9.41	649.47
MW-7	23-Dec-19	658.21	4.52	653.69
MW-9	23-Dec-19	654.99	6.56	648.43
MW-9A	23-Dec-19	654.21	5.15	649.06
MW-10	23-Dec-19	654.88	4.75	650.13
MW-13	19-Dec-19	654.66	2.52	652.14
MW-13A	19-Dec-19	655.13	2.7	652.43
MW-14	19-Dec-19	652.96	4.76	648.20
MW-14A	19-Dec-19	652.45	3.63	648.82
MW-15A	23-Dec-19	658.51	8.51	650
MW-16R	20-Dec-19	659.49	7.14	652.35
MW-17A	20-Dec-19	658.58	3.80	654.78
MW-18	20-Dec-19	662.21	9.04	653.17
MW-18A	20-Dec-19	662.08	11.92	650.16
MW-19	23-Dec-19	660.1	6.35	653.75
MW-20	20-Dec-19	659.12	3.96	655.16
MW-21	20-Dec-19	657.72	6.62	651.1
MW-22	19-Dec-19	657.08	2.05	655.03

Table 1
Summary of Water Level Elevations Measured in December 2019
Former Leica Microsystems, Inc.
Cheektowaga, New York

Well	Measurement Date	Historical Reference Elevation (ft amsl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MW-22A	19-Dec-19	654.28	4.18	650.10
MW-23	19-Dec-19	657.93	3.56	654.37
MW-24	19-Dec-19	662.18	8.50	653.68
MW-24A	19-Dec-19	662.3	11.20	651.10
MW-25	19-Dec-19	652.39	3.42	648.97
MW-25A	19-Dec-19	652.76	3.18	649.58
MW-26	19-Dec-19	652.87	9.45	643.42
MW-26A	19-Dec-19	653.08	2.70	650.38
MW-27	19-Dec-19	654.02	5.82	648.20
MW-27A	19-Dec-19	654.26	5.89	648.37
MW-28	19-Dec-19	652.63	6.38	646.25
MW-28A	19-Dec-19	652.44	9.96	642.48
MW-29	19-Dec-19	652.58	7.02	645.56
MW-29A	23-Aug-19	652.43	7.38	645.05
MW-30	19-Dec-19	655.93	Dry	-
MW-30A	19-Dec-19	655.71	8.45	647.26
MW-31	23-Dec-19	654.99	3.25	651.74
MW-31D	23-Dec-19	655.11	6.64	648.47
MW-33	19-Dec-19	661.89	6.15	655.74
MW-33A	19-Dec-19	661.83	14.13	647.7
MW-34	19-Dec-19	661.41	5.91	655.5
MW-34A	19-Dec-19	661.31	12.63	648.68
MW-35A	19-Dec-19	659.47	8.14	651.33
MW-36	20-Dec-19	655.14	6.88	648.26
MW-100A	23-Dec-19	657.23	8.24	648.99

Notes:

ft = feet

amsl = above mean sea level

- = Not applicable

Table 2
Well Construction Information
Former Leica Microsystems, Inc.
Cheektowaga, New York

Well ID	Screened Formation	Well Depth (feet)	Material	Screen Length (feet)	Screened Interval (feet below ground surface)
INT-2A	Bedrock	34.5	Unknown	-	Open Borehole
INT-2R	Overburden	12.5	PVC	5	7.5 - 12.5
INT-10	Overburden	13	PVC	5	8 - 13
INT-10A	Bedrock	34	Unknown	-	Open Borehole
INT-11	Overburden	15.2	PVC	5	8 - 13
INT-11A	Bedrock	34.2	Unknown	-	Open Borehole
INT-12*	Overburden	11.12			
INT-13	Overburden	10.76	PVC	5	5.76 - 10.76
INT-14	Overburden	11.6	PVC	5	6.6 - 11.6
INT-15*	Overburden	11.6			
INT-16*	Overburden	11.7			
INT-17*	Overburden	12.37			
INT-18*	Overburden	12.12			
INT-19	Overburden	13.78	PVC	5	8.78 - 13.78
MW-1	Overburden	12.6	Stainless Steel	5	7.6 - 12.6
MW-1A	Bedrock	39.4	Stainless Steel	-	Open Borehole
MW-2	Overburden	8.5	Stainless Steel	5	3.5 - 8.5
MW-2D	Bedrock	50	Stainless Steel	10	40 - 50
MW-3	Overburden	11	Stainless Steel	5	6 - 11
MW-4	Overburden	12.8	Stainless Steel	4.8	8 - 12.8
MW-5	Overburden	11.9	Stainless Steel	2.1	9.4 - 11.5
MW-5A	Bedrock	42	Stainless Steel	-	Open Borehole
MW-6	Overburden	15.5	Stainless Steel	2.1	13.0 - 15.1
MW-6A	Bedrock	36	Stainless Steel	-	Open Borehole
MW-7	Overburden	12.8	Stainless Steel	2.1	10.7 - 12.8
MW-9	Overburden	11	Stainless Steel	2	9 - 11
MW-9A*	Bedrock	59.4			
MW-10	Overburden	11.6	Stainless Steel	2	8.6 - 10.6
MW-11A*	Overburden	35			
MW-13	Overburden	10.5	Stainless Steel	2	8.5 - 10.5
MW-13A	Bedrock	45	Stainless Steel	-	Open Borehole
MW-14	Overburden	12	Stainless Steel	2	8.5 - 10.5
MW-14A	Bedrock	35	Stainless Steel	-	Open Borehole
MW-15A	Bedrock	36	Stainless Steel	-	Open Borehole
MW-16A	Bedrock	40	Stainless Steel	-	Open Borehole
MW-16R	Overburden	12	Stainless Steel	2	10 - 12
MW-17A	Bedrock	40	Stainless Steel	-	Open Borehole
MW-18	Overburden	13.4	Stainless Steel	2	11.4 - 13.4
MW-18A	Bedrock	35	Unknown	-	Open Borehole
MW-19	Overburden	13.9	Stainless Steel	2	11.9 - 13.9

Table 2
Well Construction Information
Former Leica Microsystems, Inc.
Cheektowaga, New York

Well ID	Screened Formation	Well Depth (feet)	Material	Screen Length (feet)	Screened Interval (feet below ground surface)
MW-20	Overburden	12.2	Stainless Steel	2	10.2 - 12.2
MW-21	Overburden	12.7	Stainless Steel	2	10.7 - 12.7
MW-21A	Bedrock	40	Unknown	10	30 - 40
MW-22	Overburden	10.5	Stainless Steel	2	8.5 - 10.5
MW-22A*	Bedrock	45			
MW-23	Overburden	13.5	Stainless Steel	2	11.5 - 13.5
MW-24	Overburden	15	Unknown	10	5 - 15
MW-24A	Bedrock	35	Unknown	-	Open Borehole
MW-25	Overburden	11	PVC	5	6 - 11
MW-25A	Bedrock	34	Stainless Steel	-	Open Borehole
MW-26	Overburden	11	PVC	5	6 - 11
MW-26A	Bedrock	34	Stainless Steel	-	Open Borehole
MW-27*	Overburden	11.5			
MW-27A	Bedrock	35	Unknown	-	Open Borehole
MW-28*	Overburden	12.5			
MW-28A	Bedrock	35	Unknown	-	Open Borehole
MW-29*	Overburden	14.5			
MW-29A	Bedrock	40	Unknown	-	Open Borehole
MW-30*	Overburden	6.9			
MW-30A*	Bedrock	44.5			
MW-31*	Overburden	8.34			
MW-31D*	Bedrock	53	Unknown	10	40 - 50
MW-33	Overburden	7.2	PVC	3	4.2 - 7.2
MW-33A	Bedrock	40	PVC	10	30 - 40
MW-34	Overburden	8.9	PVC	5	3.9 - 8.9
MW-34A	Bedrock	40	PVC	10	30 - 40
MW-35A	Bedrock	40	PVC	10	21 - 31
MW-36	Overburden	31	PVC	5	3.1 - 8.1
MW-37	Overburden	8	PVC	3	5 - 8
MW-37A	Bedrock	31	PVC	10	21 - 31
MW-38	Overburden	7.5	PVC	5	2.5 - 7.5
MW-38A	Bedrock	31.5	PVC	10	21.5 - 31.5
MW-39	Overburden	8	PVC	5	3 - 8
MW-100A	Bedrock	70.3	Unknown	5	65.3 - 70.3

Notes:

* Indicates that ERM does not have well construction information.

Table 3
Summary of Previous Investigations
Former Leica Microsystems, Inc.
Cheektowaga, New York

Investigation	Activities	Summary of Findings
Real Property Environmental Appraisal of the Site: July 1990	-	-
Phase II ESA: November 1990	-	Identified presence of volatile organic compounds (VOCs) in shallow fill soil and in groundwater.
Supplemental Phase II ESA: May - July 1991	-	Investigation confirmed the results of the 1990 Phase II. New York State Department of Environmental Conservation (NYSDEC) was informed of the residual constituent impacts at the Site.
Supplemental Site Investigation: July 1992	-	Identified VOCs in soil and groundwater. Semivolatile organic compounds (SVOCs) and metals were detected in soil samples at concentrations exceeding recommended soil clean up objectives.
State Registry: November 1992	-	NYSDEC listed the Site on New York State's Registry of Inactive Hazardous Waste Site's as a Class 2 location.
Consent Order: October 1993	-	Leica entered into a Consent Order with NYSDEC to conduct a Remedial Investigation/Feasibility Study and develop the Remedial Design/Remedial Action plan for the Site. The Order required Leica to investigate the Site and propose remedial alternative(s) for the Site.
Remedial Investigation: 1994	Advancement of 52 soil borings and collection of 33 soil samples.	VOCs were detected in shallow soil and sediment at concentrations below soil cleanup objectives in the Eastern Off-Site Parcel. VOCs were detected in shallow and deep soil at concentrations that exceeded soil cleanup objects in the East Side Dry Well. Metals were also detected in shallow and deep soil, but at concentrations below soil clean up objectives. Metals were detected in soil at concentrations consistent with background conditions in the West Side Dry Well. VOCs and SVOCs were detected in shallow and deep soil at concentrations that exceeded soil cleanup objectives and non-aqueous phase liquid (NAPL) was observed in the Southern Area. Metals were also detected in shallow and deep soil, but at concentrations below soil clean up objectives. Low-level concentrations of VOCs were detected in shallow and deep soil in the Former Drum Storage Area.
	Installation of 10 overburden and nine bedrock groundwater monitoring wells.	In both overburden and bedrock, the highest concentrations of trichloroethene, 1,2-dichloroethene, 1,1,1-trichloroethane, ethylbenzene, xylene, and vinyl chloride were detected in the East Dry Well area and the Southern Area of the Site. Within the East Side Dry Well area, concentrations of VOCs were higher in bedrock groundwater than in overburden and bedrock groundwater concentrations decreased significantly in the downgradient direction. Metals and SVOCs were generally detected at low concentrations.
	Collection of one surface water quality sample and one surficial soil sample collected from the Eastern Off-Site Parcel	Metals (copper, lead, and zinc) were detected at concentrations above ambient surface water quality standards and guidance values; no other constituents were detected above laboratory reporting limits. SVOCs and metals (arsenic, cadmium, lead, and zinc) were detected above recommended soil cleanup objectives; no other constituents were detected above laboratory reporting limits.
	Air Pathway Analysis was conducted for the potential air emission source area (225 feet by 75 feet area of the Eastern Off-Site Parcel)	The analysis found the estimated maximum annual and short-term impact concentrations are at least one order of magnitude lower than their respective state standards.
	Performance of a biota survey	None
	Health Risk Assessment	The risk assessment concluded that the (then current) risks associated with exposure topsoil, groundwater, sediments, and surface water for current and future land uses were below the accepted concentration equivalent to a lifetime cancer risk of 1×10^{-6} to 1×10^{-4} range. Hazard indices associated with exposures to surficial soils, sediment, and surface water were also below the level of concern of 1.0.

Table 3
Summary of Previous Investigations
Former Leica Microsystems, Inc.
Cheektowaga, New York

Investigation	Activities	Summary of Findings
Feasibility Study: 1995	Proposed and evaluated five remedial alternatives	The selected remedy was a combination of institutional controls and the following engineering controls: groundwater hydraulic containment and in-situ treatment of VOC-impacted soil and groundwater via dual vacuum extraction with pneumatic fracturing.
Remedial Pre-Design: 1996	NAPL investigation	Identified less than 500 cubic yards of NAPL-containing soil, primarily between 8 to 11 feet below ground surface (silt sand zone), in the Southern Area.
	Soil treatability study	Mechanical volatilization (i.e., soil vapor extraction) with biodegradation would accomplish the response action outcomes (RAOs) for soil in the Former Drum Storage Area, East Side Dry Well area, and NAPL-containing soil in the Southern Area.
	Deep bedrock groundwater investigation	Indicated that deep bedrock groundwater was not impacted (as compared to shallow) in the southeastern area of the Site, and that deep bedrock exhibited similar constituent impacts as compared to shallow in the East Side Dry Well area.
	Bedrock aquifer pumping study	The bedrock aquifer pumping study was inclusive and recommend additional step-drawdown test be performed at higher rates and with a more complete monitoring network. As part of the aquifer pumping tests, VOC removal via air stripping was evaluated for the treatment of extracted groundwater, and it was concluded that air stripping would be sufficient to meet effluent discharges limits to sanitary sewer.
Additional Investigation: 1998	Define the lateral extent of impacts in the Southern Area	NES concluded the limits of subsurface constituent impacts were "satisfactorily" delineated to the north and south of the Southern Area and of the north of the East Side Dry Well area, but were not conclusively determined to the northeast and west of the Southern Area.
	Obtain Site-specific data on the organic content of soil	The total organic carbon data collected during the additional investigation was used to adjust the soil RAOs for each of the three Site-Specific soil classifications (i.e., fill, clay, sandy silt).
Construction of Remediation System: April - December 1999	Construction of the air sparging/dual vacuum extraction (AS/DVE) system	The system was designed for the treatment of VOC-impacted soil. The system consisted of two horizontal extraction wells in the Former Drum Storage Area; 10 horizontal extraction wells, 12 vertical extraction wells, and 12 air sparge points in the East Side Dry Well area; and 46 horizontal extraction wells, 39 vertical extraction wells, and 44 air sparge points in the Southern Area.
	Construction of the groundwater extraction and treatment (GWE&T) system	The system consisted of two groundwater extraction wells (MW-16A in the East Side Dry Well area and MW-11A in the Southern Area) and a groundwater treatment system.
Interim Closure: May 2002	-	Confirms constituents in soil in the Former Drum Storage Area and East Side Dry Well area were below RAOs, but residential constituent impacts above RAOs in portions of the Southern Area.
NYSDEC Authorization: July 2002	-	NYSDEC authorized the discontinuation of the AS/DVE within the Former Drum Storage Area and East Side Dry Well areas.
Excavation: October 2002 - May 2003	Excavation and disposal of soil	SCIENTECH oversaw excavation and disposal of 8,106 tons of soil from the Southern Area, approximately 850 tons of which was treated on-Site via ex-situ SVE to reduce constituent concentrations below contained-in thresholds prior to landfill disposal. Post-excavation confirmatory sampling indicated the residual constituent concentrations in soil within the Southern Area were below the RAOs.
Backfilling: Spring 2004	Backfilling of the excavation area	-
NYSDEC issues NFA letter: May 2004	-	NYSDEC issued a NFA letter for the remediation of Site soils limited to the Former Drum Storage Area, East Side Dry Well area, and Southern Area (all outside of the Main Building's footprint).
Passive soil vapor survey: June 2005	Passive soil vapor survey in the vicinity of the East Side Dry Well.	Results indicated the presence of VOCs within soil vapor near the Main Building's Loading Dock.
Limited Subsurface Soil Investigation: December 2005	-	Identified elevated concentrations of VOCs in subsurface soil beneath the Main Building in the vicinity of the loading dock.
Soil Investigation near the East Side Dry Well Area: March 2006	-	Analytical results indicated constituent concentrations below RAOs, consistent with the results of the closure confirmation samples from the area collected in 2001 and 2002.
Vapor Intrusion Investigation: December 2006	A vapor intrusion investigation was conducted near the Main Building's loading dock.	VOCs in sub-slab soil vapor and indoor air were reported at concentrations exceeding applicable action levels.

Table 3
Summary of Previous Investigations
Former Leica Microsystems, Inc.
Cheektowaga, New York

Investigation	Activities	Summary of Findings
HRC Injection Proposal: September 2007	EnergySolutions proposed a HRC injection program to address VOC-impacted groundwater, which was believed to be the source of VOC-impacts to soil vapor and indoor air.	NYSDEC approved the program in November 2007.
HRC Injections: May 2008	Approximately 4,000 pounds of HRC was injected into the East Side Dry Well and Southern Areas.	Post-injection groundwater quality samples indicated that the HRC injection program had not significantly affected VOC concentrations or the presence of degradation products. Post-injection sub-slab soil vapor and indoor air samples collected from the Main Building's Loading Dock area suggested the HRC injection program had positively affected (caused a decline) VOC concentrations in soil vapor and indoor air.
Off-Site Residential Vapor Intrusion Investigation: 2009	Residential vapor intrusion investigation at 30 and 34 Rowan Road.	Comparison of results to NYSDOH decision matrix thresholds indicated no further action was warranted.
Off-Site Residential Vapor Intrusion Investigation: 2010	Residential vapor intrusion investigation at 130 and 134 Preston Road and installation of additional off-Site monitoring wells	Comparison of results to NYSDOH decision matrix thresholds indicated no further action was warranted.
Vapor Intrusion Mitigation: May 2011 to September 2016:	Pilot Testing: May - June 2011	Pilot testing to complete the design of the proposed sub-slab depressurization system (SSDS) within the Loading Dock Area, and supplemental groundwater sampling within the Main Building. Groundwater results indicated concentrations of VOCs beneath the Main Building extended further to the west and south than anticipated.
	Submittal of <i>Supplemental Sub-Slab Gas Investigation Work Plan</i> : June 2011	Approved by NYSDEC in September 2011.
	Submittal of <i>Second Supplemental Sub-Slab Gas Investigation Work Plan</i> : June 2012	Approved by NYSDEC in July 2012.
	Implementation of the <i>Second Supplemental Sub-Slab Gas Investigation Work Plan</i> : September 2012	Refine the conceptual site model and confirm potential source areas within the Main Building.
	Installation of the Loading Dock SSDS: December 2012	N/A
	Submittal of Supplemental Office Area Sub-Slab Gas Investigation and Indoor Air Investigation Work Plan: March 2013	Approved by NYSDEC in March 2013. Results suggested likely presence of additional source areas within the Main Building contributing to the elevated VOC concentrations in groundwater, soil, sub-slab soil vapor, and indoor air.
	Pilot Testing: 2014	Pilot testing and designing a larger SSDS in the Main Building's Warehouse
	Installation of Main Building Warehouse SSDS: September 2016	N/A
Off-Site Investigation: 2014	Geophysical survey to locate preferential pathways (e.g., bedrock fractures) for off-Site plume migration.	Major bedrock fractures within the area were not identified.

Table 3
Summary of Previous Investigations
Former Leica Microsystems, Inc.
Cheektowaga, New York

Investigation	Activities	Summary of Findings
Supplemental Investigation and Remedial Actions: 2015 - Present	Discontinuation of the MW-16A groundwater extraction pump and constant pumping test at MW-11A	N/A
	Various upgrades to remedial systems	Upgrades to the MW-11A groundwater extraction pump, constant pumping test within the vicinity of MW-2A, and membrane interface probe investigation to identify areas for a potential Enhanced Biological Remediation (April 2016) as proposed in the <i>Supplemental Area B and C Investigation and Remediation Using 3-DME: 2015 Remedial Action Work Plan</i> .
	ERM becomes environmental consultant for the Site	In 2018, ERM Consulting & Engineering, Inc. (ERM) assumes responsibility for implementation of this SMP. ERM developed a preliminary conceptual Site model and identified the following data gaps that require additional investigation: a) potential for additional overburden source areas beneath the Main Building, and b) the vertical extent of impacts in bedrock groundwater is not defined. ERM is also conducting residential vapor intrusion investigations on Preston and Eggert Roads.

Notes:

- Indicates that ERM does not have a copy of the report prepared summarizing the investigation.

Table 4
Summary of Contaminants of Concern in Soil
Former Leica Microsystems, Inc.
Cheektowaga, New York

Location	Contaminants of Concern that Exceed Remedial Action Objectives (RAOs) ¹										
	None	Benzene	1,1-Dichloroethane	1,2-dichloroethane	Ethylbenzene	Methylene chloride	Toluene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	Xylene (total)
ABR-16	X										
ABR-17	X										
ABSR-1									X		
ABSR-2	X										
ABSR-3									X		
ABSR-4			X					X			
ABSR-5	X										
ABSR-6								X	X		
ABSR-7	X										
ABSR-8								X	X		
ABSR-9	X										
ABSR-10	X										
ABSR-11	X										
ABSR-12	X										
ABSR-13	X										
ABSR-14	X										
ABSR-15	X										
ABSR-18	X										
ABSR-19	X										
ABSR-20	X										
B-100	X										
B-101	X										
B-102	X										
B-103	X										
B-104									X		
B-105	X										
B-106	X										
B-107									X		
B-108	X										
B-109	X										
B-110	X										
B-111	X										
B-112									X		
B-113	X										
B-114									X		

Table 4
Summary of Contaminants of Concern in Soil
Former Leica Microsystems, Inc.
Cheektowaga, New York

Location	Contaminants of Concern that Exceed Remedial Action Objectives (RAOs) ¹										
	None	Benzene	1,1-Dichloroethane	1,2-dichloroethane	Ethylbenzene	Methylene chloride	Toluene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	Xylene (total)
B-115	X										
B-116									X		
B-117	X										
B-118	X										
B-119	X										
B-120	X										
B-121	X										
B-122	X										
B-123									X		
B-124	X										
B-125	X										
B-126									X		
B-127									X		
B-128									X		
B-129									X		
B-130									X		
B-131	X										
B-132									X		
B-133									X		
INT-2-01	X										
INT-2-02	X										
INT-2-03									X		
INT-2-04									X		
INT-2-05									X		
INT-2-06									X		
INT-2-07									X		
INT-2-08									X		
INT-2-09									X		
MIPS-4A	X										
MIPS-5A	X										
MIPS-6C	X										
MW-18A	X										
MW-24A	X										

Notes:

¹ The Site Adjusted RAO for clay was conservatively used for all locations.

X indicates that the contaminant of concern exceeded the Site-specific RAO at the designated location.

Soil data was collected between December 2005 and April 2019.

Table 5
Summary of Contaminants of Concern in Groundwater
Former Leica Microsystems, Inc.
Cheektowaga, New York

Well ID	Formation Screened	Contaminants of Concern that Exceed Remedial Action Objectives (RAOs)								
		None	1,1,1-Trichloroethane	cis-1,2-Dichloroethene	Ethylbenzene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride	Xylene (total)
INT-2R	Overburden			X			X	X		
INT-2A	Bedrock			X			X	X	X	
INT-10	Overburden			X			X	X		
INT-10A	Bedrock			X				X	X	
INT-11	Overburden			X				X		
INT-11A	Bedrock			X				X	X	
INT-12	Overburden			X			X	X		
INT-13	Overburden		X	X			X	X		
INT-14	Overburden			X				X		
INT-15	Overburden			X				X		
INT-16	Overburden			X				X		
INT-17	Overburden			X					X	
INT-18	Overburden			X			X	X		
INT-19	Overburden			X				X		
MW-1	Overburden	X								
MW-2	Overburden			X			X	X		
MW-2D	Bedrock			X					X	
MW-3	Overburden	X								
MW-5	Overburden	X								
MW-5A	Bedrock	X								
MW-6	Overburden			X				X	X	
MW-6A	Bedrock			X			X	X	X	
MW-10	Overburden			X					X	
MW-14	Overburden			X					X	
MW-14A	Bedrock			X					X	
MW-16R	Overburden		X	X	X	X			X	X
MW-16A	Bedrock		X	X	X	X		X	X	X
MW-18	Overburden	X								
MW-18A	Bedrock			X				X	X	
MW-19	Overburden			X						
MW-21A	Bedrock	X								
MW-22	Overburden	X								

Table 5
Summary of Contaminants of Concern in Groundwater
Former Leica Microsystems, Inc.
Cheektowaga, New York

Well ID	Formation Screened	Contaminants of Concern that Exceed Remedial Action Objectives (RAOs)								
		None	1,1,1-Trichloroethane	cis-1,2-Dichloroethene	Ethylbenzene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride	Xylene (total)
MW-22A	Bedrock	X								
MW-23	Overburden	X								
MW-24	Overburden				X					X
MW-24A	Bedrock				X					X
MW-25	Overburden	X								
MW-25A	Bedrock	X								
MW-26	Overburden	X								
MW-26A	Bedrock			X						
MW-27	Overburden	X								
MW-27A	Bedrock	X								
MW-28	Overburden			X					X	
MW-28A	Bedrock	X								
MW-29	Overburden	X								
MW-29A	Bedrock	X								
MW-30A	Bedrock	X								
MW-31	Overburden	X								
MW-31D	Bedrock			X					X	
MW-33	Overburden	X								
MW-33A	Bedrock			X					X	
MW-34	Overburden	X								
MW-34A	Bedrock			X		X			X	X
MW-35A	Bedrock	X								
MW-36	Overburden			X				X		
MW-100A	Bedrock			X					X	

Notes:

X indicates that the contaminant of concern exceeded the Site-specific RAO at the designated location in at least one sampling event conducted in 2019.

Table 6
Summary of Contaminants of Concern in Soil Vapor and Indoor Air
Former Leica Microsystems, Inc.
Cheektowaga, New York

Location	Contaminants of Concern that Required Actions under the NYSDOH Decision Matrices								
	None	Trichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethene	Carbon Tetrachloride	Tetrachloroethene	1,1,1-Trichloroethane	Methylene Chloride	Vinyl Chloride
IDA-1 / SSV-4		X							
IDA-2 / SSV-5	X								
IDA-3		X							
IDA-4 / SSV-3		X							
IDA-5		X							
IDA-6 / SSV-2		X	X						
IDA-7		X							
IDA-8 / SSV-1		X							
IDA-9	X								
IDA-10	X								
IDA-11		X							
IA-1 / SB-1		X	X	X	X		X		X
IA-2 / SB-2		X	X	X	X		X		X
IA-3 / SB-3		X	X	X	X				X
IA-4 / SB-4		X	X	X	X		X		X

Notes:

IDA / SSV samples were collected in March 2016.

IA / SB samples were collected in March 2010.

X indicates that the contaminant of concern required action under the NYSDOH Decision Matrices at the designated location.

Table 7
Summary of Indoor Air Analytical Data
Former Leica Microsystems - Cheektowaga Facility
Cheektowaga, New York

Analyte	Location ID	AA-S	AA-W	IA-08	IA-09	IA-10	IA-11	IA-12	IA-13	IA-14	IA-15	IA-15	IA-16	IA-17	IA-18	IA-19	IA-20
	Sample Date	27-Mar-20	27-Mar-20	27-Mar-20	27-Mar-20	27-Mar-20	27-Mar-20	27-Mar-20	27-Mar-20	27-Mar-20	27-Mar-20	27-Mar-20	27-Mar-20	27-Mar-20	27-Mar-20	27-Mar-20	27-Mar-20
	Sample Type	N	N	N	N	N	N	N	N	N	N	FD	N	N	N	N	N
	NYSDOH Air Guideline Value																
Method TO15, µg/m3																	
1,2,4-Trimethylbenzene	NS	< 0.983	< 0.983	< 0.983	< 0.983	< 0.983	< 0.983	< 0.983	< 0.983	< 0.983	< 0.983	< 0.983	< 0.983	< 0.983	< 0.983	< 0.983	1.38
2-Butanone	NS	< 1.47	< 1.47	< 1.47	< 1.47	< 1.47	< 1.47	2.04	< 1.47	< 1.47	3.42	2.53	1.73	2.60	2.44	< 1.47	< 1.47
Acetone	NS	2.61	2.52	5.27	4.28	4.47	4.92	3.56	4.32	3.63	5.75	5.44	5.08	5.80	4.63	6.20	3.75
Benzene	NS	< 0.639	< 0.639	< 0.639	< 0.639	< 0.639	< 0.639	< 0.639	< 0.639	< 0.639	< 0.639	< 0.639	< 0.639	< 0.639	< 0.639	0.639	< 0.639
Chloroform	NS	< 0.977	< 0.977	< 0.977	5.66	1.12	1.38	< 0.977	< 0.977	< 0.977	< 0.977	< 0.977	< 0.977	< 0.977	< 0.977	< 0.977	< 0.977
Cyclohexane	NS	< 0.688	< 0.688	< 0.688	< 0.688	< 0.688	< 0.688	< 0.688	< 0.688	< 0.688	< 0.688	< 0.688	< 0.688	< 0.688	< 0.688	< 0.688	1.98
Dichlorodifluoromethane (Freon 12)	NS	1.96	2.11	2.22	2.16	2.14	2.32	2.22	2.23	2.27	2.26	2.24	2.22	2.19	2.47	2.24	2.10
Ethanol	NS	< 9.42	< 9.42	72.5	24.1	14.8	154	21.1	21.3	14.9	23.2	28.8	30.9	25.4	18.3	610	21.9
Ethylbenzene	NS	< 0.869	< 0.869	< 0.869	< 0.869	< 0.869	< 0.869	0.882	< 0.869	< 0.869	1.08	0.995	< 0.869	1.17	1.26	< 0.869	< 0.869
Isopropyl alcohol	NS	< 1.23	< 1.23	4.45	< 1.23	< 1.23	5.09	< 1.23	1.47	< 1.23	2.65	1.65	2.08	1.55	1.58	6.64	< 1.23
m,p-Xylenes	NS	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	2.60	1.95	< 1.74	3.48	3.36	2.63	4.03	4.07	2.05	< 1.74
Methyl chloride	NS	0.843	0.878	0.865	0.830	0.878	0.876	0.861	0.890	0.863	0.867	0.900	0.880	0.884	0.890	0.898	0.855
n-Hexane	NS	< 0.705	< 0.705	< 0.705	< 0.705	< 0.705	< 0.705	< 0.705	< 0.705	< 0.705	< 0.705	< 0.705	< 0.705	< 0.705	< 0.705	0.923	< 0.705
o-Xylene	NS	< 0.869	< 0.869	< 0.869	< 0.869	< 0.869	< 0.869	1.11	0.925	< 0.869	1.69	1.71	1.32	1.92	1.90	0.947	< 0.869
Styrene	NS	< 0.852	< 0.852	< 0.852	< 0.852	< 0.852	< 0.852	1.36	< 0.852	1.04	1.18	< 0.852	< 0.852	< 0.852	1.83	< 0.852	< 0.852
Tetrahydrofuran	NS	< 1.47	< 1.47	< 1.47	< 1.47	< 1.47	< 1.47	< 1.47	< 1.47	< 1.47	< 1.47	< 1.47	1.62	< 1.47	< 1.47	< 1.47	3.33
Toluene	NS	< 0.754	< 0.754	< 0.754	1.42	1.55	0.927	2.46	2.28	1.46	2.73	2.72	2.40	3.70	3.44	2.48	1.93
Trichlorofluoromethane (Freon 11)	NS	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	1.21	< 1.12	< 1.12	< 1.12	< 1.12	1.12	< 1.12
Method TO15-SIM, µg/m3																	
Carbon tetrachloride	NS	0.453	0.396	0.453	0.421	0.421	0.434	0.421	0.465	0.491	0.415	0.390	0.434	0.465	0.403	0.465	0.415
Tetrachloroethene	30	< 0.136	< 0.136	3.11	0.170	0.170	15.6	1.11	0.224	0.475	0.624	0.366	0.237	0.380	0.536	0.312	0.258
Trichloroethene	2	< 0.107	< 0.107	< 0.107	< 0.107	< 0.107	0.140	< 0.107	< 0.107	0.145	0.118	0.140	< 0.107	< 0.107	< 0.107	< 0.107	< 0.107

Notes:

< = Compound not detected at concentrationsabove the laboratory reporting detection limit.The laboratory reporting detection limit is shown.

NYSDOH Air Guideline Values from the October 2006 *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* and updates in September 2013 and August 2015

NS = No standard available

Units are in µg/m3 = micrograms per cubic meter

All analyses performed by Alpha Analytical Westborough.

Table 8
Residential Vapor Intrusion Sample Summary
Former Leica, Inc. Site
Cheektowaga, New York

	Address	111 Preston Road			114 Preston Road		117 Preston Road		121 Preston Road		124 Preston Road		131 Preston Road		134 Preston Road		Outdoor Ambient Air		
	Location ID	OS-004	OS-004	OS-004	OS-007	OS-007	OS-003	OS-003	OS-001	OS-001	OS-005	OS-005	OS-006	OS-006	OS-002	OS-002	OA-001	OA-002	OS-AA
	Sample Date	05-Apr-19	27-Mar-19	27-Mar-19	26-Apr-19	26-Apr-19	27-Mar-19	27-Mar-19	27-Mar-19	27-Mar-19	05-Apr-19	05-Apr-19	05-Apr-19	05-Apr-19	27-Mar-19	27-Mar-19	27-Mar-19	05-Apr-19	26-Apr-19
	Sample Type	N	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	Matrix Unit	IA	SV	SV	IA	SV	IA	SV	IA	SV	IA	SV	IA	SV	IA	SV	OA	OA	OA
Analyte																			
Trichloroethene	µg/m3	0.215	1.47	1.20	0.118	< 1.07	< 0.107	< 1.07	0.140	< 1.07	< 0.107	< 1.61	< 0.107	< 1.07	0.107	< 1.07	< 0.107	< 0.358	0.145
cis-1,2-Dichloroethene	µg/m3	2.26	8.41	7.61	< 0.079	< 0.793	< 0.079	< 0.793	< 0.079	< 0.793	0.131	< 1.19	0.131	< 0.793	< 0.079	< 0.793	< 0.079	< 0.264	< 0.079
1,1-Dichloroethene	µg/m3	< 0.079	< 0.793	< 0.793	< 0.079	< 0.793	< 0.079	< 0.793	< 0.079	< 0.793	< 0.079	< 1.19	< 0.079	< 0.793	< 0.079	< 0.793	< 0.079	< 0.264	< 0.079
Carbon tetrachloride	µg/m3	0.572	< 1.26	< 1.26	0.453	< 1.26	0.516	< 1.26	0.459	< 1.26	0.585	< 1.89	0.629	< 1.26	0.453	< 1.26	0.459	0.862	0.447
Tetrachloroethene	µg/m3	< 0.136	< 1.36	< 1.36	< 0.136	< 1.36	0.190	< 1.36	0.292	< 1.36	< 0.136	< 2.03	0.149	< 1.36	0.170	< 1.36	< 0.136	< 0.452	0.902
1,1,1-Trichloroethane	µg/m3	< 0.109	< 1.09	< 1.09	< 0.109	< 1.09	< 0.109	< 1.09	0.235	< 1.09	< 0.109	< 1.64	< 0.109	< 1.09	< 0.109	< 1.09	< 0.109	< 0.364	< 0.109
Methylene chloride	µg/m3	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 2.61	7.78	< 1.74	< 1.74	< 1.74	< 1.74	23.9	1.81
Vinyl chloride	µg/m3	0.529	< 0.511	< 0.511	< 0.051	< 0.511	< 0.051	< 0.511	< 0.051	< 0.511	0.097	< 0.767	< 0.051	< 0.511	< 0.051	< 0.511	< 0.051	< 0.171	< 0.051
Recommended Action		Resample			No further action		No further action		No further action		No further action		No further action		No further action		No further action		

Notes:

< = Compound not detected at concentrations above the laboratory reporting detection limit. The laboratory reporting detection limit is shown.

Units are in µg/m3 = micrograms per cubic meter

All analyses performed by Alpha Analytical Westborough.

IA = Indoor Air

SV = Soil Vapor

OA = Outdoor Air

N = normal sample

FD = field duplicate

The initial indoor air sample at 111 Preston Road was not analyzed because the Summa canister had insufficient vacuum due to a faulty flow controller. 111 Preston Road was resampled for indoor air; results from the second sampling event are shown.

A sump water sample was collected from 134 Preston Road. The sump water was non-detect for all compounds analyzed except acetone.

Table 9
Summary of Results at 111 Preston Road
Former Leica Microsystems - Cheektowaga Facility
Cheektowaga, New York

					Location ID	OS-004	OS-004	OS-004	OS-004	OA-001-032719	OA-002-040519
					Sample Date	05-Apr-19	27-Mar-19	27-Mar-19	26-Apr-19	27-Mar-19	05-Apr-19
					Sample Type	N	N	FD	N	N	N
					Matrix	IA	SV	SV	SV	OA	OA
Analyte	Unit	Indoor Air Stage 2 Matrix Thresholds	Indoor Air Stage 3 Matrix Thresholds	Soil Vapor Stage 2 Matrix Thresholds	Soil Vapor Stage 3 Matrix Thresholds						
Matrix A Group, µg/m3											
Trichloroethene	µg/m3	0.2	1	6	60	0.215	1.47	1.20	< 1.07	< 0.107	< 0.358
cis-1,2-Dichloroethene	µg/m3	0.2	1	6	60	2.26	8.41	7.61	< 0.793	< 0.079	< 0.264
1,1-Dichloroethene	µg/m3	0.2	1	6	60	< 0.079	< 0.793	< 0.793	< 0.793	< 0.079	< 0.264
Carbon tetrachloride	µg/m3	0.2	1	6	60	0.572	< 1.26	< 1.26	< 1.26	0.459	0.862
Matrix B Group, µg/m3											
Tetrachloroethene	µg/m3	3	10	100	1,000	< 0.136	< 1.36	< 1.36	< 1.36	< 0.136	< 0.452
1,1,1-Trichloroethane	µg/m3	3	10	100	1,000	< 0.109	< 1.09	< 1.09	< 1.09	< 0.109	< 0.364
Methylene chloride	µg/m3	3	10	100	1,000	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	23.9
Matrix C Group, µg/m3											
Vinyl chloride	µg/m3	0.2	NS	6	60	0.529	< 0.511	< 0.511	< 0.511	< 0.051	< 0.171

Notes:
< = Compound not detected at concentrations above the laboratory reporting detection limit. The laboratory reporting detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
Units are in µg/m3 = micrograms per cubic meter
All analyses performed by Alpha Analytical Westborough.

NY-SVI-MATRIX-ABC-AI-STAGE2-2017 = NYS SVI Decision Matrix Soil Vapor/Indoor Air Matrix A, B, C, May 2017.
NY-SVI-MATRIX-ABC-AI-STAGE3-2017 = NYS SVI Decision Matrix Soil Vapor/Indoor Air Matrix A, B, C, May 2017.
NY-SVI-MATRIX-ABC-SV-STAGE2-2017 = NYS SVI Decision Matrix Soil Vapor/Indoor Air Matrix A, B, C, May 2017.
NY-SVI-MATRIX-ABC-SV-STAGE3-2017 = NYS SVI Decision Matrix Soil Vapor/Indoor Air Matrix A, B, C, May 2017.

Green shading = exceeds decision matrix thresholds for indoor air, but is not detected in soil vapor and is also detected in outdoor ambient air (background condition)
Blue shading = exceeds stage 2 criteria for indoor air, but corresponding soil vapor data is below thresholds -> no further action
Orange shading = exceeds stage 2 criteria for indoor air, regardless of soil vapor concentration -> Identify sources and resample or mitigate
Red shading = exceeds stage 3 criteria for indoor air and stage 2 criteria for soil vapor -> mitigate





Table 10
Groundwater Quality Sampling Program
Former Leica Microsystems, Inc.
Cheektowaga, New York

Groundwater Monitoring Well/ Site Location	Formation Screened	Monitoring Schedule	Parameters		
			Water Level	Geochemical	VOCs
On-Site - East Side Dry Well					
MW-16A	Bedrock	Annual	X	X	X
INT-2R	Overburden	Annual	X	X	X
INT-13	Overburden	Annual	X	X	X
INT-14	Overburden	Annual	X	X	X
MW-24A	Bedrock	Annual	X	X	X
On-Site - West Side Dry Well					
MW-31	Overburden	Annual	X	X	X
MW-31D	Bedrock	Annual	X	X	X
MW-33	Overburden	Semiannual	X	X	X
MW-33A	Bedrock	Semiannual	X	X	X
MW-34	Overburden	Semiannual	X	X	X
MW-34A	Bedrock	Semiannual	X	X	X
MW-35A	Bedrock	Semiannual	X	X	X
MW-36	Overburden	Semiannual	X	X	X
MW-37	Overburden	Semiannual	X	X	X
MW-37A	Bedrock	Semiannual	X	X	X
MW-38	Overburden	Semiannual	X	X	X
MW-38A	Bedrock	Semiannual	X	X	X
MW-39	Overburden	Semiannual	X	X	X
On-Site Southern Area					
MW-6A	Bedrock	Annual	X	X	X
MW-11A	Bedrock	Semiannual	X	X	X
Downgradient - Off-Site					
MW-14	Overburden	Semiannual	X	X	X
MW-23	Overburden	Semiannual	X	X	X
MW-25	Overburden	Semiannual	X	X	X
MW-25A	Bedrock	Semiannual	X	X	X
MW-26	Overburden	Semiannual	X	X	X
MW-26A	Bedrock	Semiannual	X	X	X
MW-27	Overburden	Semiannual	X	X	X
MW-27A	Bedrock	Semiannual	X	X	X
MW-28	Overburden	Semiannual	X	X	X
MW-28A	Bedrock	Semiannual	X	X	X
MW-29	Overburden	Semiannual	X	X	X
MW-29A	Bedrock	Semiannual	X	X	X

FIGURES





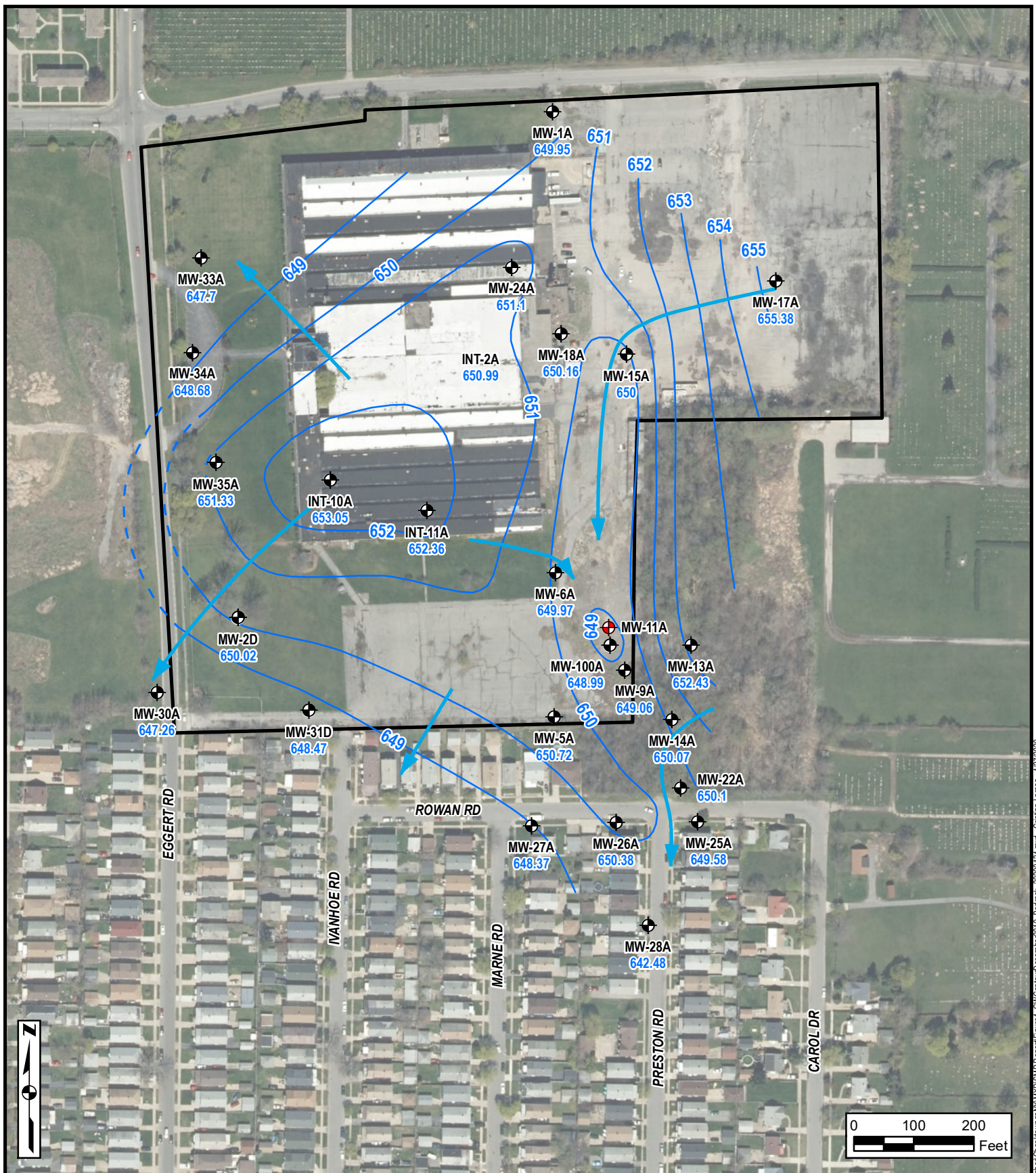
-  Monitoring Well
 Groundwater Elevation Contour (Dashed where inferred)
 Groundwater Flow Direction
 Site Property Boundary

- Groundwater elevations are reported as feet above mean sea level.
- ESRI World imagery.






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Figure 3: December 2019 Overburden
Groundwater Elevation Contour Map
Former Leica, Inc. Facility
203 Eggert Road
Cheektowaga, New York





Legend

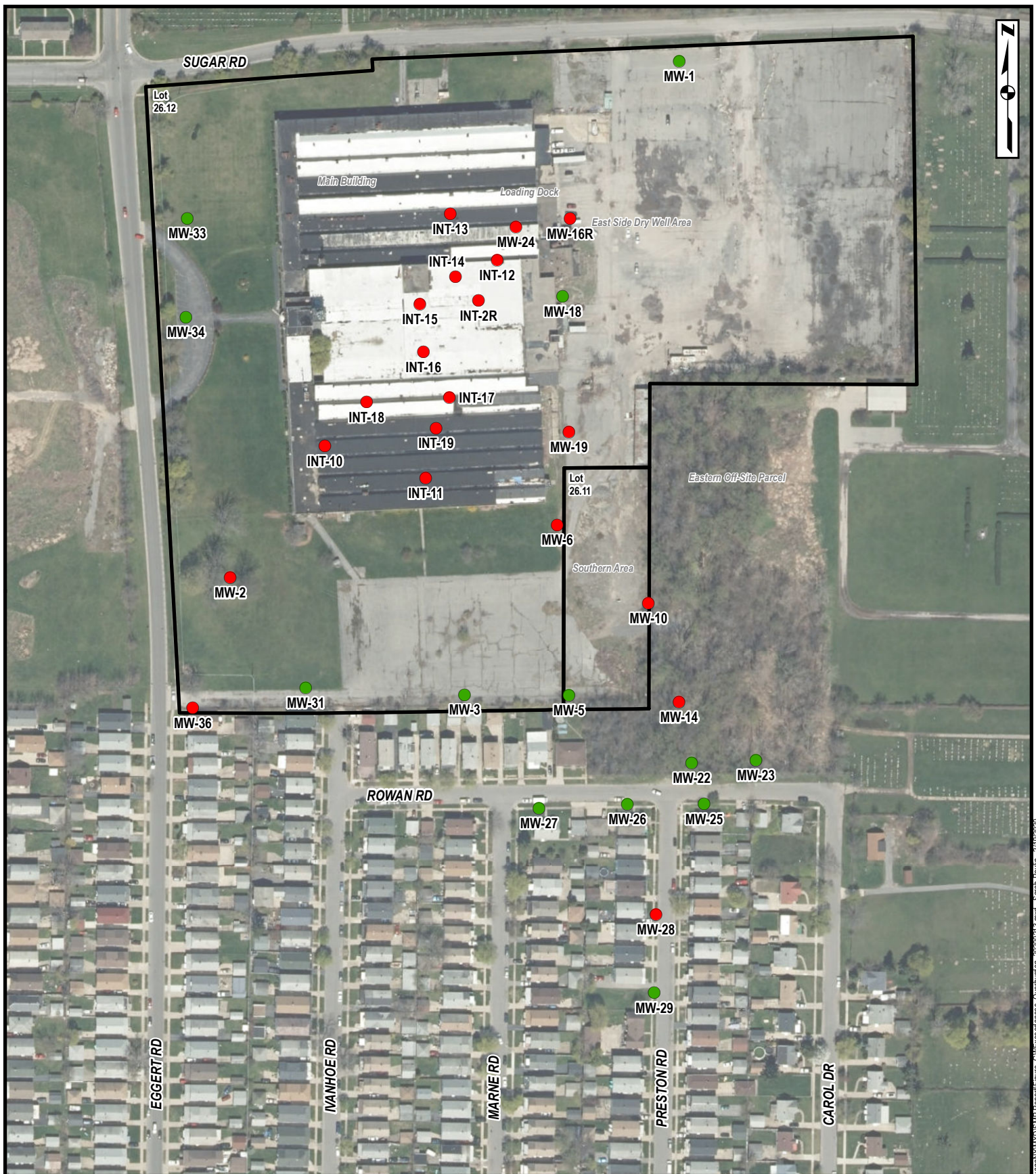
-  Monitoring Well
-  Extraction Well
-  Groundwater Elevation Contour (Dashed where inferred)
-  Groundwater Flow Direction
-  Site Property Boundary

Notes

- Groundwater elevations are reported as feet above mean sea level.
- ESRI World imagery. Reproduced under license with ArcGIS 10.5.

Figure 4: December 2019 Bedrock Groundwater Elevation Contour Map
Former Leica, Inc. Facility
203 Eggert Road
Cheektowaga, New York





Legend

Groundwater Overburden Wells Site Property Boundary

- Non - Exceedance
- Exceedance*

NOTE:

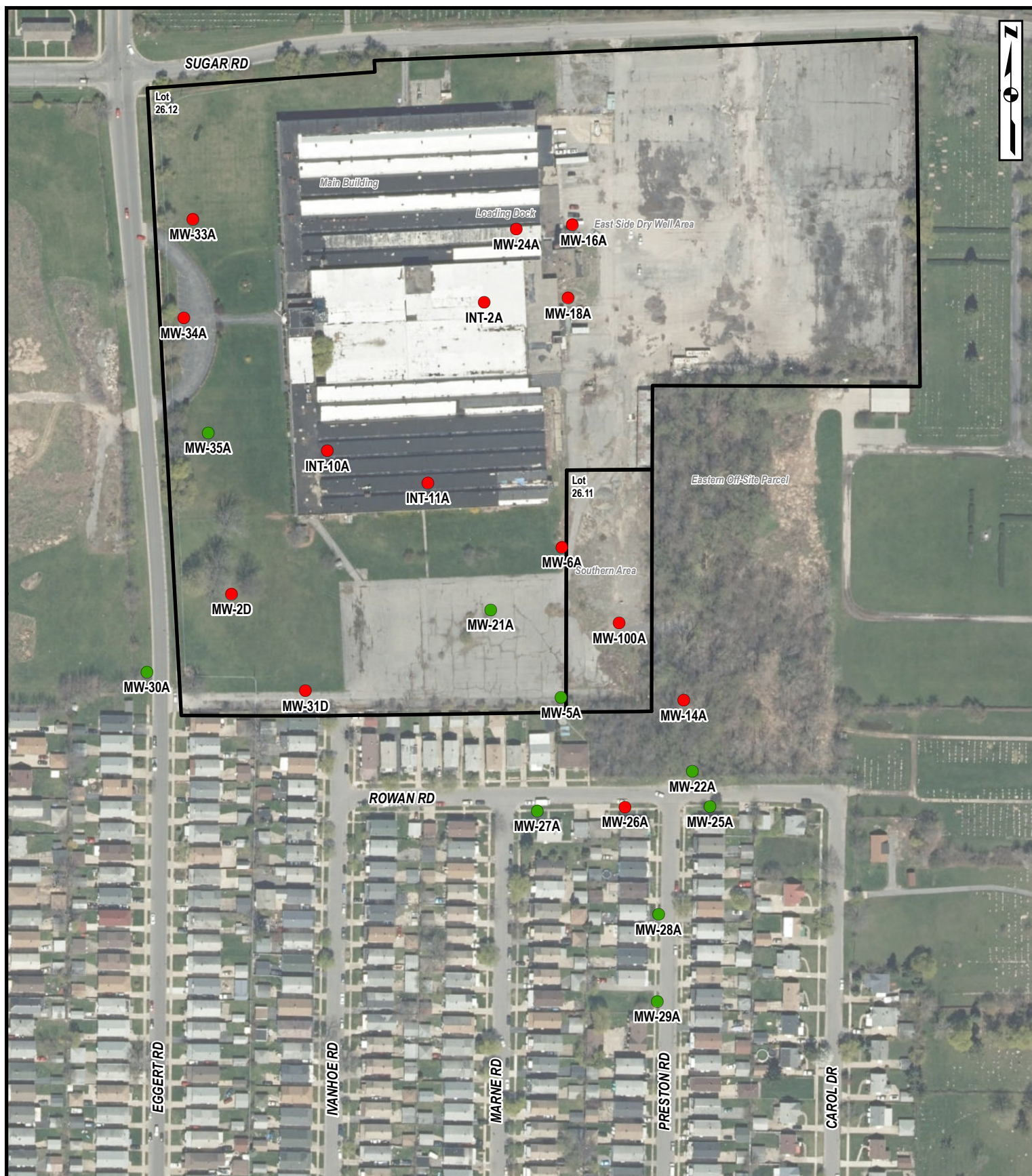
* Indicates that one or more contaminants of concern exceed site-specific Remedial Action Objectives (RAOs)
 - Groundwater data was collected in 2019

0 150 300 450
 Feet

Source: ESRI World imagery. Reproduced under license with ArcGIS 10.7.

Figure 6: Summary of Contaminants of Concern in Overburden Groundwater
 Former Leica, Inc. Facility
 203 Eggert Road
 Cheektowaga, New York





Legend

Groundwater Bedrock Wells Site Property

- Non - Exceedance
- Exceedance*

NOTE:

* Indicates that one or more contaminants of concern exceed site-specific Remedial Action Objectives (RAOs)
 - Groundwater data was collected in 2019



Source: ESRI World imagery. Reproduced under license with ArcGIS 10.7.

Figure 7: Summary of Contaminants of Concern in Bedrock Groundwater
 Former Leica, Inc. Facility
 203 Eggert Road
 Cheektowaga, New York





Legend

March 2016 Indoor Air and Soil Vapor Data  Site Property Boundary

▲ Non-Exceedance

▲ Exceedance*

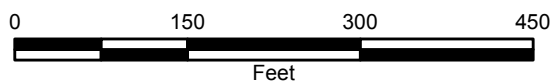
March 2010 Indoor Air and Soil Vapor Data

● **Non-Exceedance**

● Exceedance*

NOTE:

* Indicates that one or more contaminants of concern exceeded the NYSDOH Soil Vapor/Indoor Air Decision Matrices

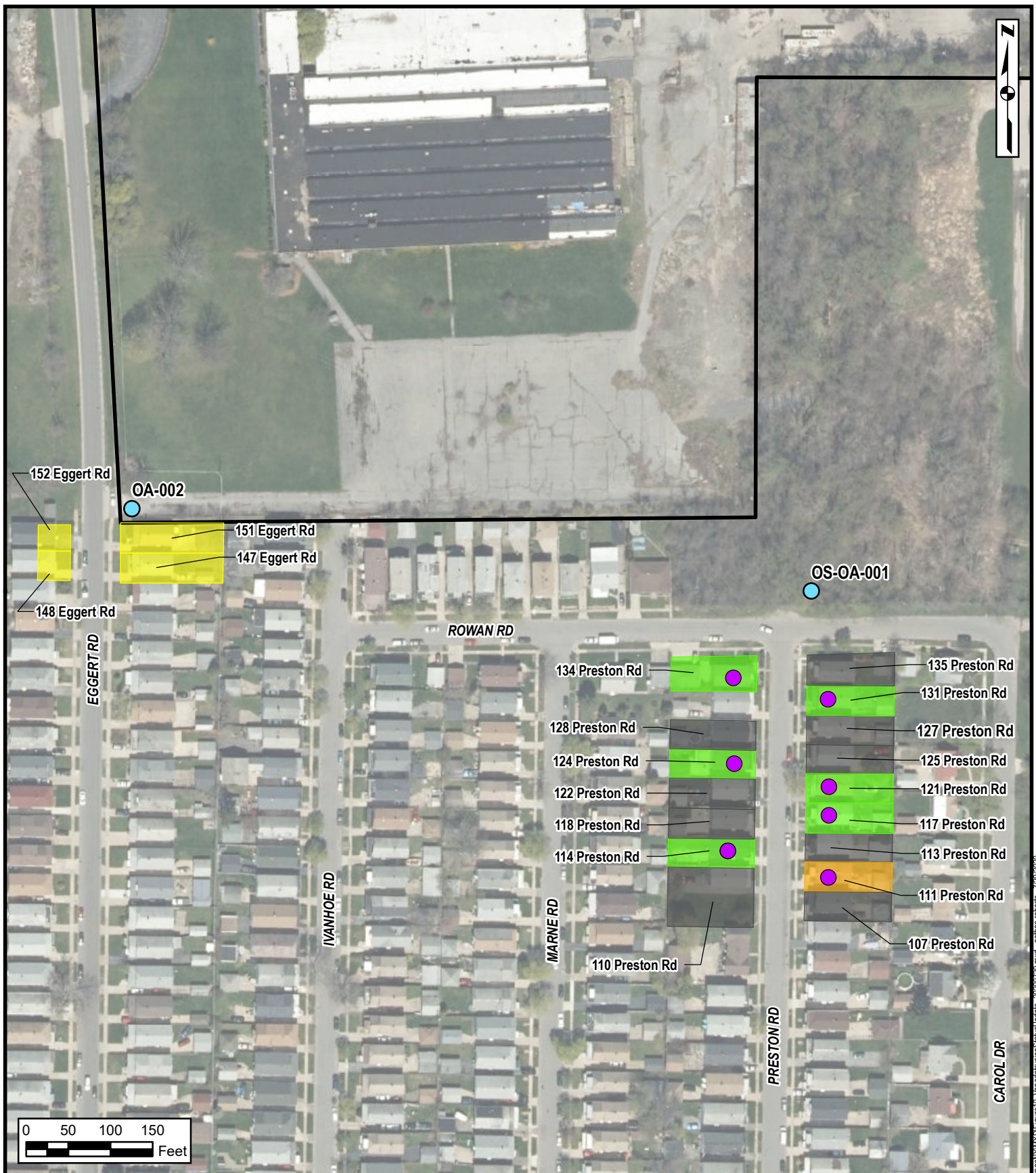


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Figure 8: Summary of Contaminants of Concern in Soil Vapor and Indoor Air
Former Leica, Inc. Facility
203 Eggert Road
Cheektowaga, New York

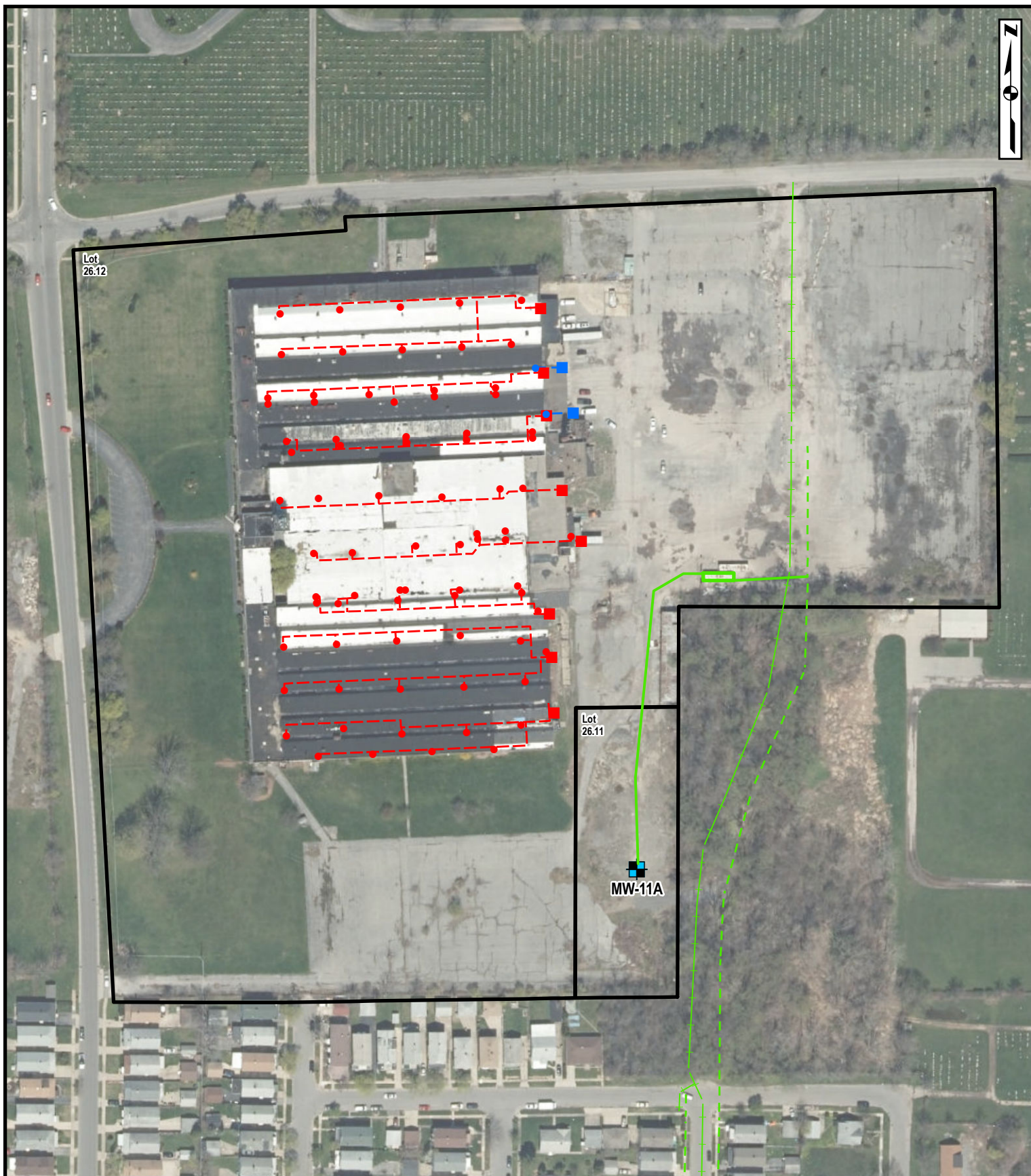
Former Leica, Inc. Facility
203 Eggert Road
Cheektowaga, New York





SOURCE: ESRI World imagery. Reproduced under license with ArcGIS 10.7





Legend

Warehouse Sub Slab Depressurization System

- Warehouse Exterior Mounted Fan
- Warehouse Vacuum Sump
- - Warehouse PVC Piping

Loading Dock Sub Slab Depressurization System

- Loading Dock Exterior Mounted Fan
- Loading Dock Vacuum Sump
- - Loading Dock PVC Piping

Groundwater Extraction (and Treatment) System

- Groundwater Extraction (and Treatment) Trailer
- - Groundwater Extraction (and Treatment) System Piping
- - Sanitary Sewer Line
- - Stormwater Line
- Extraction Well
- Site Property Boundary

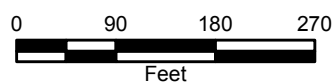


Figure 11: Plan of Engineering Controls

Former Leica, Inc. Facility
203 Eggert Road
Cheektowaga, New York



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APPENDIX A ENVIRONMENTAL EASEMENT

DECLARATION of COVENANTS and RESTRICTIONS

THIS COVENANT is made the 1 day of DECEMBER 2011, by Leica Microsystems, Inc., a foreign business corporation doing business in the State of New York, with offices at 2345 Waukegan, Bannockburn, Illinois 60015.

WHEREAS, the Leica, Inc. Site is the subject of an Order on Consent executed by Leica, Inc. (now known as Leica Microsystems, Inc.) as part of the New York State Department of Environmental Conservation's ("Department") State Superfund Program and consists of two parcels, one of which is that parcel of real property located at in the Town of Cheektowaga, County of Erie, State of New York, Tax Map Parcel Number 91.00-1-26.11, which is part of lands conveyed by Warner-Lambert Technologies, Inc. to Reichert-Jung Inc.; Reichert-Jung Inc. having merged with Cambridge Instruments, Inc.; Cambridge Instruments, Inc. having changed its name to Leica, Inc., by deed dated May 2, 1986 and recorded in the Erie County Clerk's Office on March 16, 1987 in Book 9689 of Deeds at Page 226, and being more particularly described in Appendix "A," attached to this declaration and made a part hereof, and hereinafter referred to as the "Property"; and

WHEREAS, the Department approved a remedy to eliminate or mitigate all significant threats to the environment presented by the contamination disposed at the Property and such remedy requires that the Property be subject to restrictive covenants.

NOW, THEREFORE, Leica Microsystems, Inc., for itself and its successors and/or assigns, covenants that:

First, the Property subject to this Declaration of Covenants and Restrictions is as shown on a map attached to this declaration as Appendix "B" and made a part hereof.

Second, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, there shall be no construction, use or occupancy of the Property that results in the disturbance or excavation of the Property which threatens the integrity of the engineering controls, or which results in unacceptable human exposure to contaminated soils.

Third, the owner of the Property shall not disturb, remove, or otherwise interfere with the installation, use, operation, and maintenance of engineering controls required for the remedy, which are described in the Department approved Site Management Plan dated September 2011 and approved November 17, 2011 ("SMP"), which is incorporated and made enforceable hereto, subject to modifications as approved by the Department or Relevant Agency, unless in each instance the owner first obtains a written waiver of such prohibition from the Department or the Relevant Agency.

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ERIE COUNTY
CLERK'S OFFICE

Fourth, the owner of the Property shall prohibit the Property from ever being used for purposes other than for commercial or industrial use without the express written waiver of such prohibition by the Department or the Relevant Agency.

Fifth, the owner of the Property shall prohibit the use of the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or the Relevant Agency.

Sixth, the owner of the Property or Leica Microsystems, Inc. shall provide a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department or Relevant Agency, which will certify that the institutional and engineering controls put in place are unchanged from the previous certification unless approved by the Department or the Relevant Agency, comply with the SMP, and have not been impaired.

Seventh, the owner of the property or Leica Microsystems, Inc. shall evaluate the potential for vapor intrusion for any new buildings to be developed on the Property. Provision for mitigation, if determined to be needed, such as installation of a vapor barrier or sub-slab vapor system or other engineering controls, shall be implemented on all new structures developed on the Property, prior to occupancy.

Eighth, the owner of the Property or Leica Microsystems, Inc., in compliance with the SMP (including the Soils Management Plan), shall continue in full force and effect any institutional and engineering controls required for the remedy and maintain such controls, including the in-place sub-slab depressurization system, monitoring wells indentified in the SMP, groundwater recovery system, unless the owner first obtains permission to modify or discontinue such controls from the Department or the Relevant Agency.

Ninth, the owner of the Property shall allow the Department, its agents, employees, or other representatives of the State to enter and inspect the Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

Tenth, this Declaration is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Property, and shall provide that the owner and its successors and assigns consent to enforcement by the Department or the Relevant Agency of the prohibitions and restrictions that are require to be recorded, and hereby covenant not to contest the authority of the Department or the Relevant Agency to seek enforcement.

Eleventh, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Department or the Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

Leica Microsystems, Inc.

By: Carl S. Grabinski

STATE OF ILLINOIS)

COUNTY OF DuPAGE)

On the 1ST day of DECEMBER, in the year 2011, before me the undersigned, personally appeared CARL S. GRABINSKI, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by hi/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Clarysel Austin
Notary Public, State of Illinois

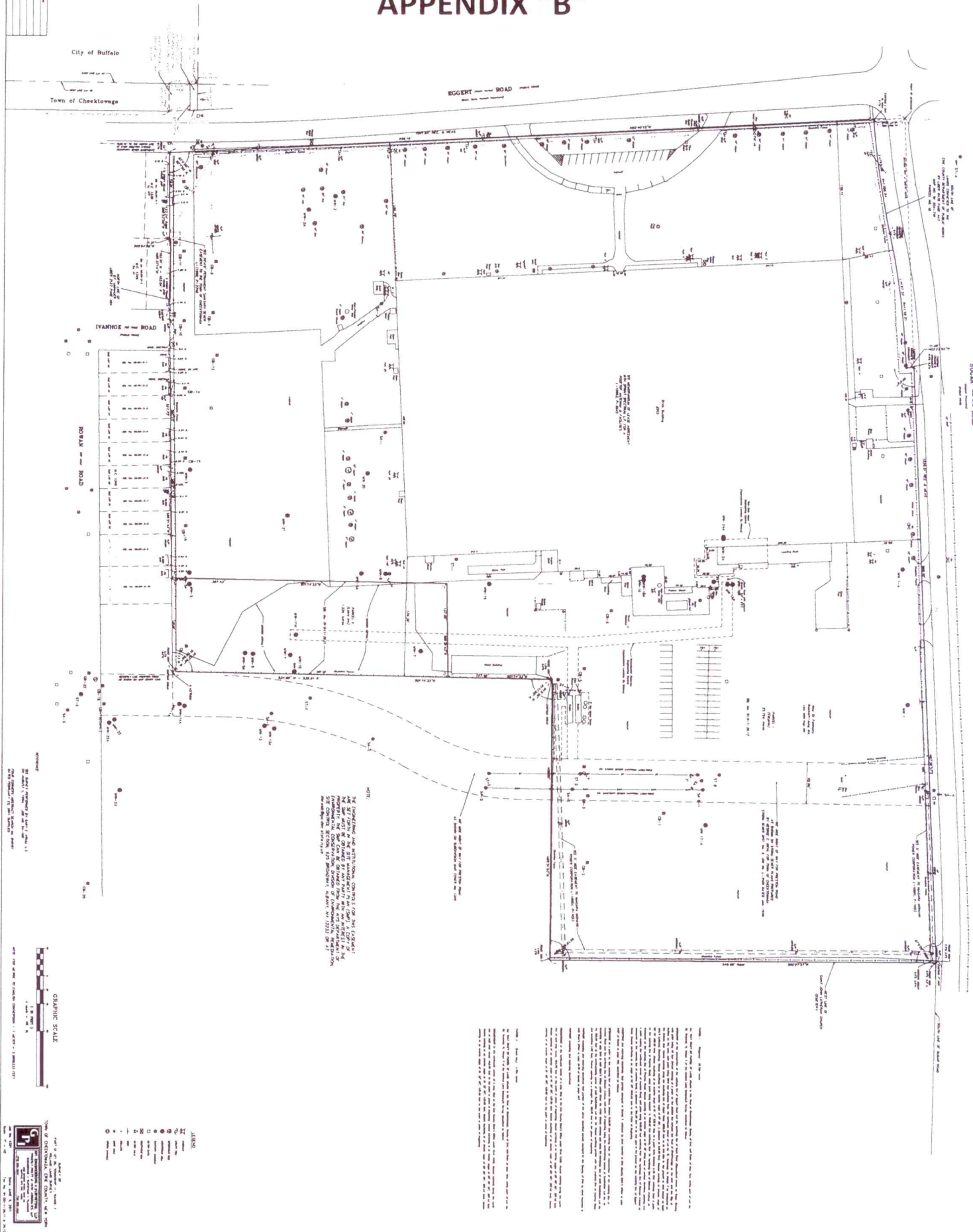


APPENDIX A

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Cheektowaga, County of Erie, State of New York and being part of Lot 35, Township 11, Range 7 of the Holland Land Company's Survey and being more particularly described as follows:

COMMENCING at the northwest corner of a map filed at the Erie County Clerk's office under Cover 1349; thence easterly along the north line of said map cover, 493.80 feet to the point or place of beginning; thence northerly at an interior angle of $88^{\circ}08'00''$, 387.43 feet; thence easterly at an interior angle of $91^{\circ}52'00''$, 137.00 feet; thence southerly at an interior angle of $88^{\circ}08'00''$ 387.43 feet, thence westerly at an interior angle of $91^{\circ}52'00''$, 137.00 feet to the point or place of beginning.

APPENDIX "B"



DECLARATION of COVENANTS and RESTRICTIONS

THIS COVENANT is made the 21st day of December 2011, by Calypso Development of WNY, Inc. a corporation organized and existing under the laws of the State of New York and having an office for the transaction of business at 203 Eggert Road, Buffalo, New York 14215.

WHEREAS, the Leica, Inc. Site is the subject of an Order on Consent executed by Leica, Inc. as part of the New York State Department of Environmental Conservation's ("Department") State Superfund Program and consists of two parcels, one of which is that parcel of real property located at the intersection of Eggert Road and Sugar Road in the Town of Cheektowaga, County of Erie, State of New York, Tax Map Parcel Number 91.00-1-26.12, which is part of lands conveyed by Leica, Inc. (now known as Leica Microsystems, Inc.) to Calypso Development of WNY, Inc., by deed dated October 26, 1993 and recorded in the Erie County Clerk's Office in Book 10778 of Deeds at Page 784, and being more particularly described in Appendix "A," attached to this declaration and made a part hereof, and hereinafter referred to as the "Property"; and

WHEREAS, the Department approved a remedy to eliminate or mitigate all significant threats to the environment presented by the contamination disposed at the Property and such remedy requires that the Property be subject to restrictive covenants.

NOW, THEREFORE, Calypso Development of WNY, Inc., for itself and its successors and/or assigns, covenants that:

First, the Property subject to this Declaration of Covenants and Restrictions is as shown on a map attached to this declaration as Appendix "B" and made a part hereof.

Second, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, there shall be no construction, use or occupancy of the Property that results in the disturbance or excavation of the Property which threatens the integrity of the engineering controls, or which results in unacceptable human exposure to contaminated soils.

Third, the owner of the Property shall not disturb, remove, or otherwise interfere with the installation, use, operation, and maintenance of engineering controls required for the remedy, which are described in the Department approved Site Management Plan dated September 2011 and approved November 17, 2011 ("SMP"), which is incorporated and made enforceable hereto, subject to modifications as approved by the Department or Relevant Agency, unless in each instance the owner first obtains a written waiver of such prohibition from the Department or the Relevant Agency.

FILED
FEB 28 2012
ERIE COUNTY
CLERK'S OFFICE

Fourth, the owner of the Property shall prohibit the Property from ever being used for purposes other than for commercial or industrial use without the express written waiver of such prohibition by the Department or the Relevant Agency.

Fifth, the owner of the Property shall prohibit the use of the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or the Relevant Agency.

Sixth, the owner of the Property or Leica Microsystems, Inc. shall provide a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department or Relevant Agency, which will certify that the institutional and engineering controls put in place are unchanged from the previous certification unless approved by the Department or the Relevant Agency, comply with the SMP, and have not been impaired.

Seventh, the owner of the property or Leica Microsystems, Inc. shall evaluate the potential for vapor intrusion for any new buildings to be developed on the Property. Provision for mitigation, if determined to be needed, such as installation of a vapor barrier or sub-slab vapor system or other engineering controls, shall be implemented on all new structures developed on the Property, prior to occupancy.

Eighth, the owner of the Property or Leica Microsystems, Inc., in compliance with the SMP (including the Soils Management Plan), shall continue in full force and effect any institutional and engineering controls required for the remedy and maintain such controls, including the in-place sub-slab depressurization system, monitoring wells identified in the SMP, groundwater recovery system, unless the owner first obtains permission to modify or discontinue such controls from the Department or the Relevant Agency.

Ninth, the owner of the Property shall allow the Department, its agents, employees, or other representatives of the State to enter and inspect the Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

Tenth, this Declaration is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Property, and shall provide that the owner and its successors and assigns consent to enforcement by the Department or the Relevant Agency of the prohibitions and restrictions that are required to be recorded, and hereby covenant not to contest the authority of the Department or the Relevant Agency to seek enforcement.

Eleventh, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Department or the Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.


IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

Calypso Development of WNY, Inc.

By: 

STATE OF NEW YORK)
) ss:
COUNTY OF ERIE)

On the 21st day of December, in the year 2011, before me the undersigned, personally appeared Lawrence Sadkin, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by hi/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.


Notary Public B State of New York

LINDA C. FROST
Notary Public, State of New York
Registration No. 01FR4973001
Qualified in Erie County
My Commission Expires Oct. 9, 2014

Appendix A

Property Metes and Bounds

PARCEL I (Calypso) 22.72 +/- Acres

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Cheektowaga, County of Erie, and State of New York, being part of Lot No. 35, Township 11, Range 7 of the Holland Land Company's Survey, described as follows.

BEGINNING at the intersection of the easterly line of Eggert Road and the southerly line of Sugar Road (Sometimes know as Sugar Street), said point being 49 feet distant easterly of a point on the division line between the Town of Cheektowaga on the east and the City of Buffalo on the west, said point being 1019 feet southerly from the northwest corner of Lot No. 35, Township 11, Range 7 as measured on the division line; thence easterly along the southerly line of Sugar Road 1229.51 feet to an iron pipe in the ground at land known as Saint John's Lutheran Cemetery; thence southerly at an interior angle of $87^{\circ} 09' 00''$, a distance of 549.98 feet; thence westerly at interior angle of $90^{\circ} 19' 00''$ 409.90 feet; thence southerly at an exterior angle of $91^{\circ} 11' 00''$ 535.51 feet, to a point being located 4.45 feet westerly from a point on the westerly line of Preston Road, which point being located is 1548.68 feet northerly from the northerly line of Delevan Avenue, as measured on the westerly line of Preston Road; thence westerly at an interior angle of $91^{\circ} 52' 00''$ along land of various abutters, passing over a point making the northwest corner of Ivanhoe Road, said point being 1539.87 feet northerly from the northerly line of Delevan Avenue as measured on the westerly line of Ivanhoe Road, a distance of 754.50 feet to an iron pipe in the ground on the easterly line of Eggert Road; thence northerly at an angle of $92^{\circ} 07' 00''$ 1041.64 feet to the Point of Beginning.

EXCEPTING and reserving therefrom, that portion conveyed to George F. Umhauer by deed recorded in Erie County Clerk's Office in Liber 2127 of Deeds at page 484, described as follows:

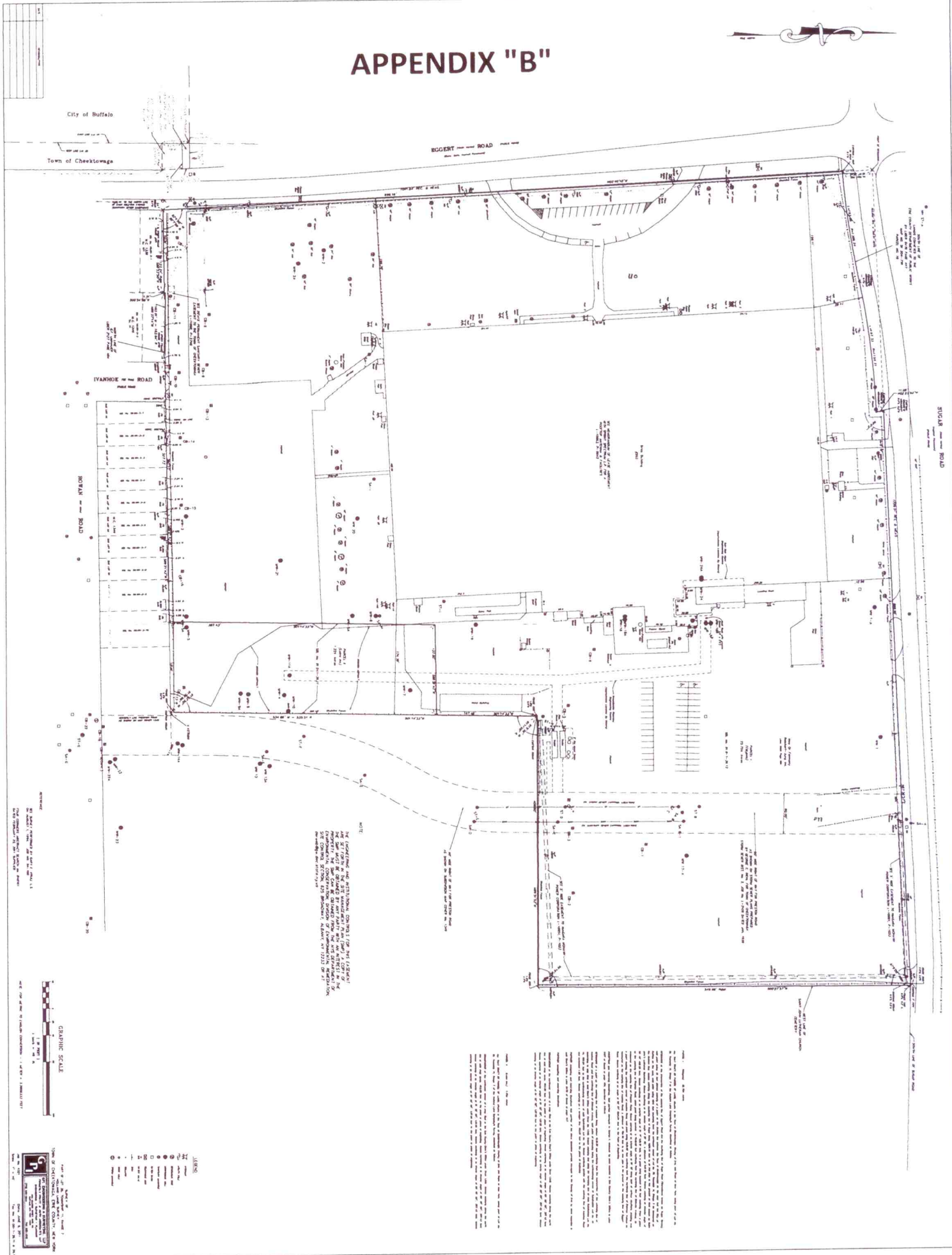
BEGINNING at a point on the westerly line of Ivanhoe Road, distant 1539.87 feet northerly from the intersection of the westerly line of Ivanhoe Road and the northerly line of Delavan Avenue, said point of beginning being the northeasterly corner of Subdivision Lot No. 44 according to Map filed in said Clerk's Office under Cover No. 1349; thence westerly and along the northerly line of said Subdivision Lot No. 44, 103.04 feet to the northwesterly corner of said Subdivision Lot No. 44; thence northerly parallel with the westerly line of Ivanhoe Road and extended 1.83 feet; thence easterly on a straight line, 103.01 feet to the place of beginning;

FURTHER excepting and reserving therefrom that portion of the above described parcel conveyed to the County of Erie by deed recorded in said clerk's office in Liber 8478 of Deeds at page 447.

FURTHER excepting and reserving therefrom:

COMMENCING at the northwest corner of a map filed at the Erie County Clerk's Office under Cover 1349; thence easterly along the north line of said map cover, 493.80 feet to the point or place of beginning; thence northerly at an interior angle of $88^{\circ} 08' 00''$, 387.43 feet; thence easterly at an interior angle of $91^{\circ} 52' 00''$, 137.00 feet; thence southerly at an interior angle of $88^{\circ} 08' 00''$, 387.43 feet, thence westerly at an interior angle of $91^{\circ} 52' 00''$, 137.00 feet to the point or place of beginning.

APPENDIX "B"



APPENDIX B LIST OF SITE CONTACTS



Affiliation & Name	Contact Information
NYSDEC Project Manager: Jaspal Walia	+1 (716) 851-7220 Jaspal.Walia@dec.ny.gov
NYSDOH Project Manager: Melissa Doroski	+1 (518) 402-7860 Melissa.Doroski@health.ny.gov
Responsible Party (RP) Representative: Leica: Stephen Evanoff	+1 (970) 214-4063 Stephen.Evanoff@danaher.com
Property Owner Representative: Joe Carlo	+1 (800) 677-2533 Joe@sam-son.com
Environmental Consultant: ERM Consulting & Engineering, Inc. (ERM)	+1 (315) 445-2554
ERM Partner-in-Charge: Joe Fiacco, P.G.	+1 (617) 646-7840 Joe.Fiacco@erm.com
ERM Project Manager: Michael Nigro, P.G.	+1 (315) 233-3028 Michael.Nigro@erm.com
ERM NY Professional Engineer: Jaydeep Parikh	+1 (215) 479-2742 Jaydeep.Parikh@erm.com
ERM Site Manager: Jason Reynolds	+1 (716) 725-5369 Jason.Reynolds@erm.com

APPENDIX C

RESPONSIBILITIES OF SITE OWNER AND REMEDIAL PARTY



Responsibilities of Site Owner and Remedial Party

Leica, Inc.

Erie County

Cheektowaga, New York

NYSDEC Site No. 915156

August 2020

CONTENTS

1. RESPONSIBLE PARTIES 1

2. SITE OWNER’S RESPONSIBILITIES 2

3. REMEDIAL PARTY RESPONSIBILITIES 3

1. RESPONSIBLE PARTIES

The responsibilities for implementing the Site Management Plan (SMP) for the former Leica Microsystems, Inc. (Leica) property located at 203 Eggert Road, Cheektowaga, Erie County, New York (hereinafter referred to as the "Site") are divided between the site owner and a Remedial Party, as defined below. The Site is currently in the New York State Inactive Hazardous Waste Disposal Site Remedial Program (Site No. 915156). The owner is currently listed as:

Name: Sam-Son Distribution

Address: 203 Eggert Road, Cheektowaga, New York

Property Owner Representative: Joe Carlo, 1-800-677-2533

The Remedial Party is:

Name: Danaher Corporation

Address: 2200 Pennsylvania Avenue NW, Suite 800W, Washington, DC

Remedial Party Representative: Stephen Evanoff, 970-214-4063

2. SITE OWNER'S RESPONSIBILITIES

1. The owner shall follow the provisions of the SMP as they relate to future construction and excavation at the Site.
2. In the event the site is delisted, the owner remains bound by the Environmental Easement and shall submit, upon request by the New York State Department of Environmental Conservation (NYSDEC), a written certification that the Environmental Easement is still in place and has been complied with.
3. The owner shall grant access to the Site to the RP and the NYSDEC and its agents for the purposes of performing activities required under the SMP and assuring compliance with the SMP.
4. The owner is responsible for assuring the security of the remedial components located on its property to the best of its ability. In the event that damage to the remedial components or vandalism is evident, the owner shall notify the site's RP and the NYSDEC in accordance with the timeframes indicated in Section 1.3 of the SMP.
5. In the event some action or inaction by the owner adversely impacts the Site, the owner must notify the Site's RP and the NYSDEC in accordance with the time frame indicated in Section 1.3 of the SMP and coordinate the performance of necessary corrective actions with the RP.
6. The owner must notify the RP and the NYSDEC of any changes in ownership of the Site property (identifying the tax map numbers in any correspondence) and provide contact information for the new owner of the Site property. Change of ownership written notification shall be made 60 days prior to the change.
7. Until such time as the NYSDEC deems the sub-slab depressurization systems (SSDs) unnecessary, the owner shall operate the system, pay for the utilities for the system's operation, and report any maintenance issues to the RP and NYSDEC.

3. REMEDIAL PARTY RESPONSIBILITIES

1. The RP must follow the SMP provisions regarding any construction and/or excavation it undertakes at the Site.
2. The RP shall report to the NYSDEC all activities required for remediation, operation, maintenance, monitoring, and reporting. Such reporting includes, but is not limited to, Periodic Review Reports and certifications, electronic data deliverables, corrective action work plans and reports, and updated SMPs.
3. Before accessing the Site to undertake a specific activity, the RP shall provide the owner advance notification that shall include an explanation of the work expected to be completed.
4. If the NYSDEC determines that an update of the SMP is necessary, the RP shall update the SMP and obtain final approval from the NYSDEC.
5. The RP shall notify the NYSDEC and the owner of any changes in RP ownership and/or control and of any changes in the party/entity responsible for the operation, maintenance, and monitoring of and reporting with respect to any remedial system (Engineering Controls) 60 days advance of the change. The RP shall provide contact info for the new party/entity.
6. The RP shall notify the NYSDEC of any damage or modifications of the systems as required under Section 1.3 of the SMP.
7. The RP is responsible for the proper maintenance of the SSDSs in accordance with Section 5 of the SMP.
8. Prior to change in use that impacts the remedial system or requirements and/or responsibilities for implementing the SMP, the RP shall submit an amended SMP for approval by the NYSDEC.
9. Any change in use, change in ownership, change in Site classification (e.g., delisting), reduction or expansion of remediation, and other significant changes related to the Site may result in a change of responsibilities, and therefore, necessitate an update to the SMP and/or updated legal documents. The RP shall contact the NYSDEC to discuss the need to update such documents.

APPENDIX D EXCAVATION WORK PLAN



Excavation Work Plan

Leica, Inc.
Erie County
Cheektowaga, New York
NYSDEC Site No. 915156

29 May 2020
Project No.: 0484448

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Acronyms and Abbreviations

CAMP	Community Air-Monitoring Plan
DER	Department of Environmental Remediation
EWP	Evacuation Work Plan
GPR	Ground penetrating radar
HASP	Health and Safety Plan
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PID	Photoionization detector
PRR	Periodic Review Report
SMP	Site Management Plan

SPDES	State Pollutant Discharge Elimination System
TCL	Target Compound List
VOCs	Volatile Organic Compounds

1. NOTIFICATION

Intrusive subsurface activities at the Site will be conducted in accordance with the requirements set forth in this Excavation Work Plan (EWP). At least 15 days prior to the start of any activity that is anticipated to encounter residual constituent impacts, the Site owner or their representative will notify New York State Department of Environmental Conservation (NYSDEC). Table 1 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix A of the Site Management Plan (SMP).

Table 1-1: Notification Contact Information

Name	Contact Information
NYSDEC Project Manager: Jaspal Walia	+1 (716) 851-7220 Jaspal.Walia@dec.ny.gov
NYSDOH Project Manager: Melissa Doroski	+1 (518) 402-7860 Melissa.Doroski@health.ny.gov
Cheektowaga Town Engineer: Patrick Bowen	+1 (716) 897-7288 pbowen@tocny.org

Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of constituent impacted soil to be excavated and any work that may impact an engineering control(s);
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of constituents of concern, potential presence of grossly constituent impacted media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

2. SOIL SCREENING METHODS

Visual, olfactory, and instrument-based (e.g. photoionization detector [PID]) soil screening will be performed by a qualified environmental professional during all excavations into known or potentially constituent impacted material. Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the Certification of Completion.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-

site as soil beneath a cover or if the material can be used as cover soil. Further discussion of off-site disposal of materials and on-site reuse is provided in Sections 6 and 7, respectively, of this EWP.

3. SOIL STAGING METHODS

Soil stockpiles will be continuously encircled with a berm, wattle, and/or silt fence. Hay bales, or equivalent, will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps/polyethylene sheeting. Stockpiles will be routinely inspected and damaged covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC.

4. MATERIAL EXCAVATION AND LOAD OUT

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and remedial party (if applicable) and its contractors are responsible for safe execution of all invasive and other work performed under this EWP.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. Requests will be filed with Dig Safely New York to facilitate the identification, location, and marking of subsurface utilities. In addition, private utility clearance using ground penetrating radar (GPR) and/or other appropriate technologies will also be conducted. It will be determined whether a risk or impediment to the planned work under this EWP is posed by utilities or easements on the Site. As appropriate, certain utilities may need to be protected and remain active while others should be shutdown/de-energized, terminated, and/or removed to facilitate excavation activities.

A truck wash will be operated on-site, as appropriate. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

5. MATERIAL TRANSPORTED OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 New York Codes, Rules and Regulations (NYCRR) Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid,

truck/trailer liners will be used. Truck/trailer liners will be used for material that is characteristically or listed hazardous waste; as determined in accordance with State and Federal regulations.

All trucks will be washed prior to leaving the Site as described in Section 4. Truck wash waters will be collected and disposed of off-Site in an appropriate manner.

Truck transport routes will be identified in the pre-excavation notification to NYSDEC. All trucks loaded with Site materials will exit the vicinity of the Site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site.

Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-Site in order to minimize off-site disturbance. Off-site queuing will be limited to the maximum extent practical.

6. MATERIAL DISPOSAL OFF-SITE

All material excavated and removed from the Site will be treated as constituent impacted and regulated material, unless demonstrated otherwise through appropriate chemical testing, and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of material from this Site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to NYSDEC. Unregulated off-Site management of materials from this Site will not occur without formal NYSDEC approval.

Off-Site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to NYSDEC in the Periodic Review Report (PRR). This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and constituent impacted soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Unrestricted Soil Cleanup Objectives is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

7. MATERIAL REUSE ON-SITE

Material proposed for on-Site reuse will be identified in the pre-excavation notification to NYSDEC. Reuse “on-Site” means reuse on-Site of material that originates at the Site and which does not leave the Site during the excavation. Material reuse on-Site will comply with the requirements of Division of Environmental Remediation (DER)-10 Section 5.4(e)4. The pre-excavation notification will include a work plan detailing sampling methods, analytical testing, acceptable reuse constituent concentrations, and stockpiling segregation.

The qualified environmental professional will ensure that procedures defined for materials reuse in the pre-excavation notification are followed and that unacceptable material does not remain on-Site. Constituent impacted on-site material, including historic fill and impacted soil, that is acceptable for reuse on-Site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-Site will be sampled for asbestos and the results will be reported to NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be reused on-Site.

8. FLUIDS MANAGEMENT

All liquids to be removed from the Site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the Site, and will be managed off-Site, unless prior approval is obtained from NYSDEC.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a State Pollutant Discharge Elimination System (SPDES) permit.

9. COVER SYSTEM RESTORATION

The Site does not rely on an engineered barrier as part of the remedy. In the event an engineered barrier is installed as part of remedy, after the completion of soil removal and any other invasive activities, the cover system will be restored in a manner that is at least equivalent to the existing cover system.

10. BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the Site will be approved by the qualified environmental professional and will be in compliance with provisions in this EWP prior to receipt at the Site. The sources of imported material will be identified in the pre-excavation notification to NYSDEC. A Request to Import/Reuse Fill or Soil form will be prepared and submitted to the NYSDEC Project Manager allowing a minimum of 5 business days for review.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the Site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards as listed in DER-10 Appendix 5 - Allowable Constituent Levels for Imported Fill or Soil, Subdivision 5.4(e) Commercial Use will be met for all imported material. Unless otherwise approved by NYSDEC, sampling of imported materials will be conducted in accordance with requirements of DER-10 Table 5.4(e)10, specifying the chemical testing and frequency.

Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

11. STORMWATER POLLUTION PREVENTION

Earth disturbing activities will be performed in accordance with applicable Federal, State, and local regulations, and all necessary permits will be obtained in advance of such activities. For earth disturbing less than 1 acre, the standards listed in the section will apply. For earth disturbing activities equal to or greater than 1 acre, a Stormwater Pollution Prevention Plan that conforms to the requirements of NYSDEC's Division of Water guidelines and New York State (NYS) regulations (i.e., SPDES General Permit for Stormwater Discharges from Construction Activity – GP-0-15-002) and standards will be developed prior to commencing such activities.

Erosion and sediment controls will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the erosion and sediment controls functional.

All undercutting or erosion of erosion and sediment controls shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing erosion and sediment controls damaged due to weathering.

Erosion and sediment control measures will be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

Appropriate erosion and sediment controls will be installed around the entire perimeter of the construction area.

12. EXCAVATION CONTINGENCY PLAN

If underground tanks or other previously unidentified release sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (Target Analyte List metals; Target Compound List [TCL] volatiles and semi-volatiles, TCL pesticides and polychlorinated biphenylsPCBs), unless the Site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to NYSDEC for approval prior to sampling.

Identification of unknown or unexpected constituent impacted media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the PRR.

13. COMMUNITY AIR MONITORING PLAN

A community air-monitoring plan (CAMP) involving near real-time monitoring for volatile organic compounds (VOCs) and particulates will be implemented during any outdoor excavation activity initiated under this EWP. The CAMP will be developed in accordance with the guidance in Appendix 1A of DER-10, Generic Community Air Monitoring Plan. The CAMP will detail the perimeter air monitoring program, action levels, methods for monitoring, analytes, and instrumentation. The CAMP will be submitted with the pre-excavation notification.

In general, air monitoring stations will be located based upon prevailing wind conditions. However, air monitoring locations will be adjusted on a daily or more frequent basis based on actual wind directions, and will consist (at a minimum) of an upwind and at least one downwind monitoring station. A monitoring station(s) will also be placed between the Site and any adjacent sensitive receptors, as determined in the CAMP.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and New York State Department of Health (NYSDOH) Project Managers.

14. ODOR CONTROL PLAN

This section details the odor control plan for controlling emissions of nuisance odors off-site and on-site. Specific odor control methods to be used on a routine basis will include, but are not limited to, limiting the area of open excavations, shrouding open excavations with tarps or other covers, utilizing manufactured suppressants. If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the remedial party's Remediation Engineer, and any measures that are implemented will be discussed in the PRR.

All necessary means will be employed to prevent on- and off-Site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-Site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-Site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

15. DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-Site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-Site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.

- Clearing and grubbing of larger areas will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-Site roads will be limited in total area to minimize the area required for water truck sprinkling.


16. OTHER NUISANCES

As required based upon the work proposed and potential other nuisances the following may be developed:

- A plan for rodent control developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work.
- A plan developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

APPENDIX E GROUNDWATER EXTRACTION SYSTEM AS BUILT



DOCUMENT CONTROL NO.	PROJECT	LEICA MICROSYSTEMS INC. 203 EGGERT RD CHEEKTOWAGA, NY	 209 E. CHIPPENS HILL RD BURLINGTON, CT. 06013 (203)770-0855	PROJECT # 137015	
				FILENAME:	
REVISION NO.	DRAWING	Site Map and Groundwater Recovery System		SCALE: 1" : 120'	DATE: 3/10/17
				BY: DRS	CK: RM
				FIGURE # 2	

APPENDIX F AUTHORIZATION TO DISCHARGE

**AUTHORIZATION TO DISCHARGE UNDER THE TOWN OF CHEEKTOWAGA/
BUFFALO POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**PERMIT NO. 20-02-CH014
EPA 40CFR 403**

In accordance with the provisions of the Federal Water Pollution Control Act, as amended, and the Sewer Regulations of the Buffalo Sewer Authority and the Town of Cheektowaga Sewer Use Ordinance authorization is hereby granted to:

Leica Microsystems

to discharge groundwater from a facility located at:

203 Eggert Road, Cheektowaga, New York 14225

to the Town of Cheektowaga and the Buffalo Municipal Sewer System.

Issuance of this permit is based upon a permit application filed on **August 18, 2019** and analytical data. This permit is granted in accordance with discharge limitations, monitoring requirements and other conditions set forth in Parts I and II hereof.

**Effective this 1st day of February, 2020
To Expire the 31st day of January, 2023**

Patrick T. Bowen

Town Engineer, Town of Cheektowaga

Signed this 16TH day of DECEMBER, 2019

[Signature]

General Manager, Buffalo Sewer Authority

Signed this 24TH day of DECEMBER, 2019

PART I: SPECIFIC CONDITIONS

A. DISCHARGE LIMITATIONS & MONITORING REQUIREMENTS

During the period beginning the effective date of this permit and lasting until the expiration date, discharge from the permitted facility outfall (see attached map) shall be limited and monitored **Quarterly** by the permittee as specified below:

Sample Point	Parameter	Discharge Limitations	Sampling Requirements	
		(mg/L except pH) Daily Max	Period	Type
001	pH	5.0 – 12.0 S.U.	1 day	Composite
	Total Extractable			
	Hydrocarbons EPA 1664	100	1 day	Composite
	EPA Test Method 624	2.14 mg/L ⁽¹⁾⁽⁴⁾	1 day	Grab ⁽²⁾
	EPA Test Method 625	2.14 mg/L ⁽¹⁾⁽⁴⁾	1 day	Grab ⁽²⁾
	Total Daily Flow	18,000 gallons	1 day	Discharge flow meter readings ⁽³⁾

1. The permittee must report any compound whose concentration is greater than 0.01 mg/L. The permittee is not authorized to discharge any of the parameters evaluated by this test procedure, which may cause or contribute to a violation of water quality standards or harm the sewerage system. Any parameter detected may, at the discretion of the Buffalo Sewer Authority or the Town of Cheektowaga be specifically limited and incorporated into this permit.
2. A single grab sample must be collected quarterly of the discharge and analyzed by a NYSDOH certified laboratory.
3. The discharge flow meter must be calibrated bi-annually by a factory certified technician. A copy of the most recent certificate of calibration must be submitted with each monitoring report.
4. Should any violation of the daily limits for EPA Test Methods 624 and 625 occur, permittee will be required to pretreat the groundwater prior to discharge.

PART I: SPECIFIC CONDITIONS

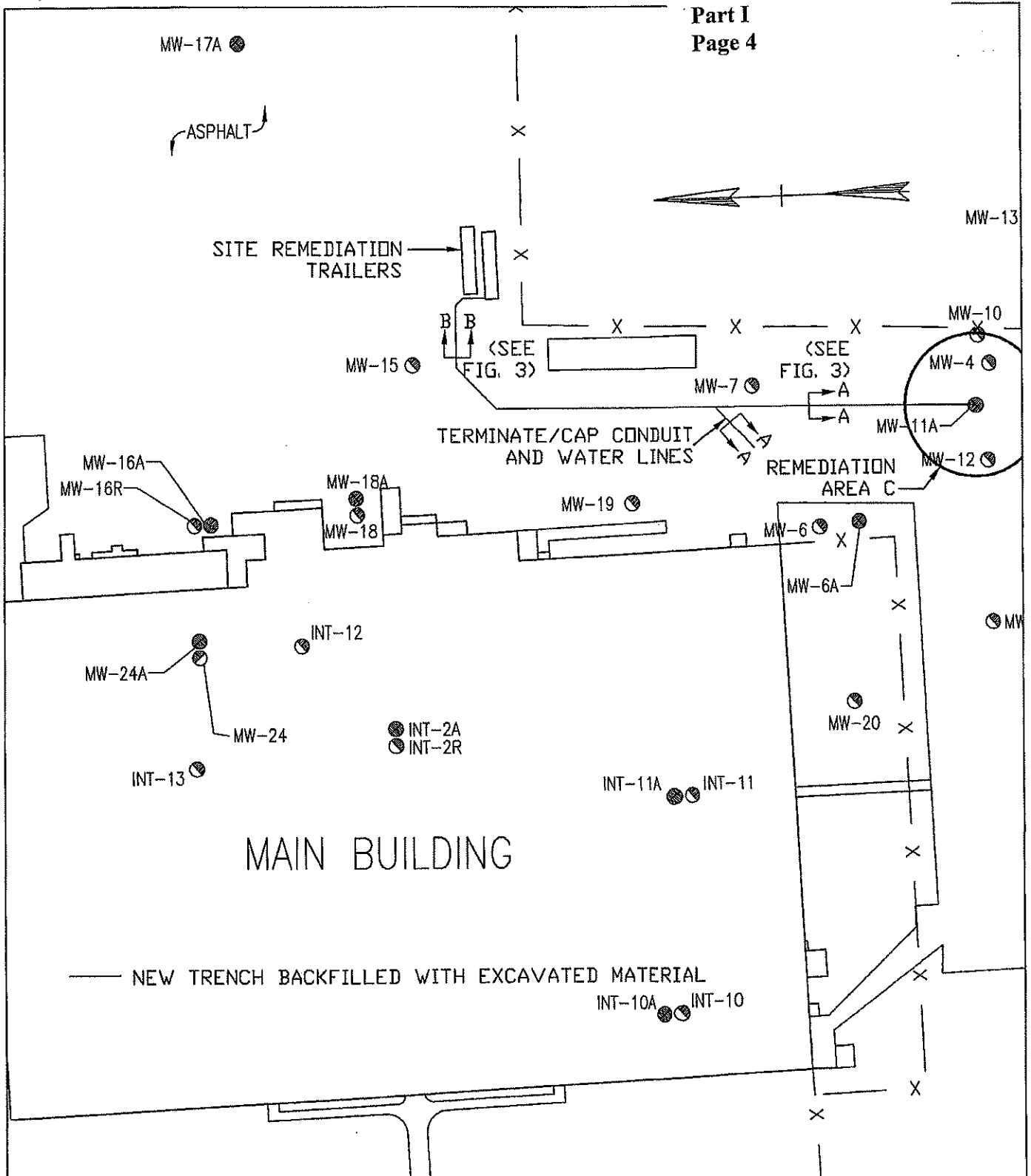
B. DISCHARGE MONITORING REPORTING REQUIREMENTS

During the period beginning the effective date of this permit and lasting until the expiration date, discharge monitoring results shall be summarized and reported by the permittee on the days specified below:

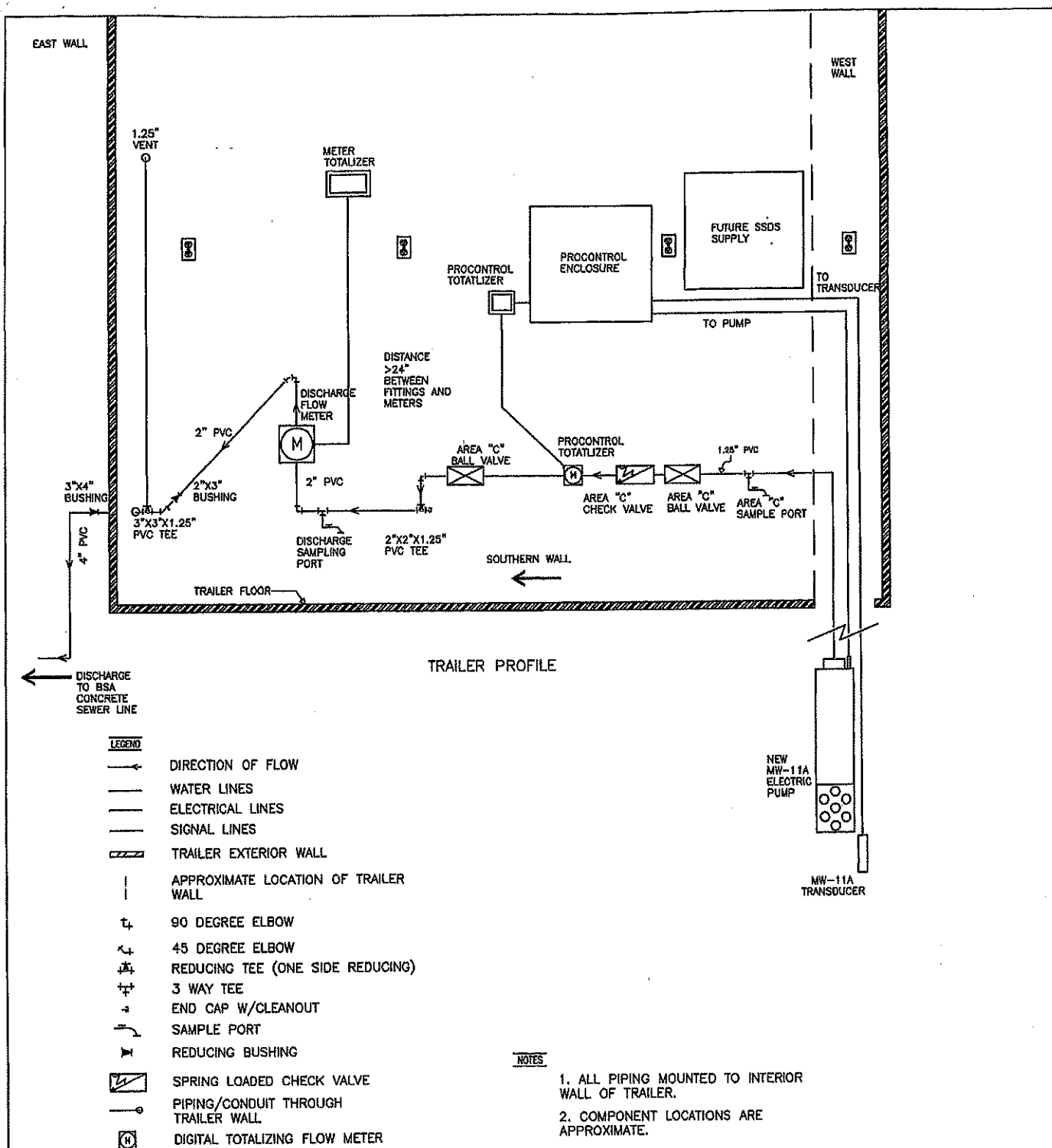
Sample Point	Parameter	Reporting Requirements	
		Initial Report	Subsequent Reports*
001	All Parameters	March 31, 2020	Every June 30 th , Sept. 30 th , Dec. 31 st and March 31 st


* If any monitoring report shows a violation of any BSA pollutant limit, the permittee shall immediately commence monitoring on a monthly basis. Reports will then be due on the last day of each month, for the previous month's samples. (eg. Report on samples collected in Jan. must be submitted by the last day of Feb). When the permittee shows consistent compliance with all BSA pollutant limits, the permittee may request a return to quarterly monitoring. Such permission will not be unreasonably withheld.

* Please submit new discharge permit application 6 months prior to the expiration of this permit *



DOCUMENT CONTROL NO.	PROJECT	LEICA MICROSYSTEMS INC. 203 EGGERT RD CHEEKTOWAGA, NY	ENERGYSOLUTIONS 984 SOUTHFORD RD MIDDLEBURY, CT. 06762 (203)797-8301	PROJECT # 187016
REVISION NO.				FILENAME:
	DRAWING	AS BUILT SITE PLAN AND TRENCH LOCATIONS		SCALE: 1" = 100'
				DATE: 5/24/16
				BY: DRS CK: MC
				FIGURE # AB-2



DOCUMENT CONTROL NO.	PROJECT	LEICA MICROSYSTEMS INC. 203 EGGERT RD CHEEKTOWAGA, NY	 ENERGY SOLUTIONS 984 SOUTHFORD RD MIDDLEBURY, CT. 06762 (203)797-8301	137015
				DATE: 5/25/16
REVISION NO.	DRAWING	AS BUILT TRAILER MODIFICATIONS ELECTRICAL AND PLUMBING LAYOUT		SCALE: NTS
				BY: DRS
				FIGURE 1 AB-6

**TOWN OF CHEEKTOWAGA/BUFFALO POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT**

PART II GENERAL CONDITIONS

A. MONITORING AND REPORTING

1. Local Limits

Except as otherwise specified in this permit, the permit holder shall comply with all specific prohibitions, limits on pollutants or pollutant parameters set forth in the Buffalo Sewer Authority Sewer Use Regulations, as amended from time to time, and such prohibitions, limits and parameters shall be deemed pretreatment standards for purposes of the Clean Water Act

2. Definitions

Definitions of terms contained in this permit are as defined in the Town of Cheektowaga Local Law No. 2 and the Buffalo Sewer Authority Sewer Use Regulations.

3. Discharge Sampling Analysis

All Wastewater discharge samples and analyses and flow measurements shall be representative of the volume and character of the monitored discharge. Methods employed for flow measurements and sample collections and analyses shall conform to the Buffalo Sewer Authority "Sampling Measurement and Analytical Guidelines Sheet."

4. Recording of Results

For each measurement or sample taken pursuant to the requirements of the permit, the Permittee shall record the information as required in the "Sampling Measurement and Analytical Guidelines Sheet."

5. Additional Monitoring by Permittee

If the Permittee monitors any pollutants at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in 40 CFR Part 136 the results of such monitoring shall be included in the calculation and reporting of values required under Part I, B. Such increased frequency shall also be indicated.

6. Reporting

All reports prepared in accordance with this Permit shall be submitted to:

**Patrick Bowen, P.E.
Town Engineer
275 Alexander Ave.
Cheektowaga, New York, 14211**

All self-monitoring reports shall be prepared in accordance with the BSA "Sampling Measurement and Analytical Guidelines Sheet." These reporting requirements shall not relieve the Permittee of any other reports, which may be required by the

N.Y.S.D.E.C. or the U.S.E.P.A.

B. PERMITTEE REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit and with the information contained in the TC/BPDES Permit Application on which basis this permit is granted. In the event of any facility expansions, production increases, process modifications or the installation, modification or repair of any pretreatment equipment which may result in new, different or increased discharges of pollutants, a new TC/BPDES Permit Application must be submitted prior to any change. Following receipt of an amended application, the BSA may modify this permit to specify and limit any pollutants not previously limited. In the event that the proposed change will be covered under an applicable Categorical Standard, a Baseline Monitoring Report must be submitted at least ninety (90) days prior to any discharge.

2. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed, calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation shall be retained at this facility for a minimum of three (3) years, or longer if requested by the General Manager and/or Town Engineer.

3. Notification of Slug, Accidental Discharge or Spill

In the event that a slug, accidental discharge or any spill occurs at the facility for which this permit is issued, it is the responsibility of the Permittee to immediately notify the B.S.A. Treatment Plant at 851-4664 ext 5374 of the quantity and character of such discharge. If requested by the B.S.A., within five (5) days following all such discharges, the Permittee shall submit a report describing the character and duration of the discharge, the cause of the discharge, and measures taken or that will be taken to prevent a recurrence of such discharge.

4. Noncompliance Notification

If, for any reason, the Permittee does not comply with or will be unable to comply with any discharge limitation specified in this permit, the Permittee or their assigns must verbally notify the Industrial Waste Section at 851-4664 ext 5374 within twenty-four (24) hours of becoming aware of the violation. The Permittee shall provide the Industrial Waste Section with the following information, in writing, within five (5) days of becoming aware of such condition:

- a. a description of the discharge and cause of noncompliance and;
- b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

5. Adverse Impact

The Permittee shall take all reasonable steps to minimize any adverse impact to the Buffalo and Town Sewerage System resulting from noncompliance with any discharge limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

6. Waste Residuals

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters and/or the treatment of intake waters, shall be disposed of in a manner such as to prevent any pollutant from such materials from entering the Buffalo or Town Sewer System.

7. Power Failures

In order to maintain compliance with the discharge limitations and prohibitions of this permit, the Permittee shall provide an alternative power source sufficient to operate the wastewater control facilities; or, if such alternative power source is not provided the Permittee shall halt, reduce or otherwise control production and/or controlled discharges upon the loss of power to the wastewater control facilities.

8. Treatment Upsets

- a. Any industrial user which experiences an upset in operations that places it in a temporary state of noncompliance, which is not the result of operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation, shall inform the Industrial Waste Section immediately upon becoming aware of the upset. Where such information is given verbally, a written report shall be filed by the user within five (5) days. The report shall contain:
 - (i) A description of the upset, its cause(s) and impact on the discharger's compliance status.
 - (ii) The duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance is continuing, the time by which compliance is reasonably expected to be restored
 - (iii) All steps taken or planned to reduce, eliminate, and prevent recurrence of such an upset.
- b. An industrial user which complies with the notification provisions of this Section in a timely manner shall have an affirmative defense to any enforcement action brought by the Industrial Waste Section/Town Engineer for any noncompliance of the limits in this permit, which arises out of violations attributable to and alleged to have occurred during the period of the documented and verified upset.

9. Treatment Bypasses

- a. A bypass of the treatment system is prohibited unless the following conditions are met:
 - (i) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; or
 - (ii) There was no feasible alternative to the bypass, including the use of auxiliary treatment or retention of the wastewater; and
 - (iii) The industrial user properly notified the Industrial Waste Section as described in paragraph b. below.
- b. Industrial users must provide immediate notice to the Industrial Waste Section upon delivery of an unanticipated bypass. If necessary, the Industrial Waste Section may require the industrial user to submit a written report explaining the cause(s), nature, and duration of the bypass, and the steps being taken to prevent its recurrence.
- c. An industrial user may allow a bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it is for essential maintenance to ensure efficient operation of the treatment system. Industrial users anticipating a bypass must submit notice to the Industrial Waste Section at least ten (10) days in advance. The Industrial Waste Section may only approve the anticipated bypass if the circumstances satisfy those set forth in paragraph a. above.

C. PERMITTEE RESPONSIBILITIES

1. Permit Availability

The originally signed permit must be available upon request at all times for review at the address stated on the first page of this permit.

2. Inspections

The Permittee shall allow the representatives of the Buffalo Sewer Authority or Town of Cheektowaga upon the presentation of credentials and during normal working hours or at any other reasonable times, to have access to and copy any records required in this permit; and to sample any discharge of pollutants.

3. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities for which this permit has been issued the permit shall become null and void. The succeeding owner shall submit a completed Town of Cheektowaga/ Buffalo Sewer Authority permit application prior to discharge to the sewer system.

D. PERMITTEE LIABILITIES

1. Permit Modification

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to the following:

- a. Violation of any terms or conditions of this permit,
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts,
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

2. Imminent Danger

In the event there exists an imminent danger to health or property, the permitter reserves the right to take immediate action to halt the permitted discharge to the sewerage works.

3. Civil and Criminal Liability

Nothing in this permit shall relieve the Permittee from any requirements, liabilities, or penalties under provisions of the Town of Cheektowaga Local Law No. 2, the "Sewer Regulations of the Buffalo Sewer Authority" or any Federal, State and/or local laws or regulations.

4. Penalties for Violations of Permit Conditions

The "Sewer Regulations of the Buffalo Sewer Authority" and Town of Cheektowaga Local Law No. 2, provide that any person who violates a B.P.D.E.S. permit condition is liable to the Authority and/or the Town for a civil penalty of up to \$10,000 per day for each violation. Any person who willfully or negligently violates permit conditions will be referred to the New York State Attorney General.

E. NATIONAL PRETREATMENT STANDARDS

If a pretreatment standard or prohibition (including any Schedule of Compliance specified in such pretreatment standard or prohibition) is established under Section 307 (b) of the Act for a pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with such pretreatment standard or prohibition.

F. PLANT CLOSURE

In the event of plant closure, the Permittee is required to notify the Industrial Waste Section/Town Engineer in writing as soon as an anticipated closure date is determined, but in no case later than five (5) days of the actual closure.

G. CONFIDENTIALITY

Except for data determined to be confidential under Section 308 of the Act, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Buffalo Sewer Authority or Town Engineer of the Town of Cheektowaga. As required by the Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act.

H. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

APPENDIX G

SUB-SLAB DEPRESSURIZATION SYSTEM—WAREHOUSE AS-BUILT



**SUB-SLAB DEPRESSURIZATION SYSTEM
AS-BUILT REPORT**

**203 EGGERT ROAD
CHEEKTOWAGA, NEW YORK**

Prepared for:

**Leica Microsystems, Inc
1500 Mittel Boulevard
Wood Dale, IL 60191**

Prepared by:

**Synapse Property Resources
360 Erie Boulevard East
Syracuse, NY 13202
(315) 475-3700**

June 2017

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APPENDICES

Appendix A – Laboratory Analytical Data Package

1.0 INTRODUCTION

On behalf of Leica Microsystems, Inc (Leica), Synapse Property Resources (Synapse) has prepared this Sub-Slab Depressurization System (SSDS) As-Built Report relative to the Property located at 203 Eggert Road, Cheektowaga, New York (the Property).

The structure of this SSDS As-Built Report has been prepared in general conformance with requirements set forth in the New York State Department of Environmental Conservation (NYSDEC) DER-10, *Technical Guidance for Site Investigation and Remediation, May 2010* (DER-10) and the New York State Department of Health (NYSDOH) Final, *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, October 2006 (updated May 2017).

1.1 Design Objectives and Goals

The purpose of this SSDS As-Built Report is to document that the SSDS design objectives and performance goals were achieved following complete system installation. The system objectives and performance goals include the following elements:

- Reduce and maintain indoor air concentrations of trichloroethylene (TCE) below 1 microgram per cubic meter ($\mu\text{g}/\text{m}^3$) as per NYSDOH Soil Vapor Guidance Document Matrix A.
- Create a minimum negative pressure of -0.004 inches of water column (In. W.C) beneath the existing 203 Eggert Road building slab so as to prevent vapors from entering the indoor air of the building, while also releasing the trapped vapors beneath the slab;
- Demonstrate an applied radius of influence between vacuum sumps associated with the eight individual SSDS fans and to confirm a maintained sub-slab vacuum; and
- Demonstrate system effectiveness while maintaining for continuous operation of the SSDS, with no significant non-operating time.

1.2 Property Overview

The Property consists of a 22-acre parcel in an industrial setting, with residential development to the south of the Property. San-Son currently owns the building at the Property and utilizes the space for the storage of commercial electronics. Leica has retained ownership of a portion the land exterior the building where soil and groundwater contamination were first identified in the 1990s.

The San-Son building occupies approximately 260,000 square feet and is surrounded by paved access roads and parking areas.

1.3 Property History

The San-Son building was built in 1938 by the Spencer Lens Company for the manufacture of scientific instruments and high quality optical devices. Leica purchased the Property in 1990 and continued operations at the Property until 1993. Leica currently retained ownership of part of the land where contamination was identified. To address impacted areas, Leica implemented a number of cleanup measures at the Property including:

SUB-SLAB DEPRESSURIZATION SYSTEM AS-BUILT REPORT
203 EGGERT ROAD
CHEEKTOWAGA, NEW YORK

- Installation and operation of a Dual Vacuum Extraction/Pneumatic fracturing system to remove groundwater within the shallow groundwater zone;
- Installation of a deep groundwater extraction and treatment system to address contamination within the bedrock;
- Excavation of 9,500 tons of contaminated soil at a portion of the Property; and
- Implementation of a long term monitoring strategy to ensure the effectiveness of the groundwater treatment system.

The soil contamination source area has been removed from the Property, and residual low levels of groundwater contamination remaining. This groundwater contamination has been managed by a groundwater extraction and treatment system that has been in operation since 2002.

In 2008, Leica conducted an injection program utilizing Hydrogen Release Compound (HRC) to accelerate degradation of the residual chlorinated compounds in groundwater. In 2010, Leica conducted a soil vapor intrusion investigation that identified a vapor intrusion condition within the San-Son building followed by some limited interim mitigation.

In 2015, Leica conducted a sub-slab diagnostic investigation to determine whether a building wide SSDS was a feasible approach to mitigate the vapor intrusion condition. The sub-slab diagnostic investigation determined that a building-wide SSDS was a viable option to address the vapor intrusion condition. A Sub-Slab Depressurization Installation Plan (Synapse, July 2016) was submitted to NYSDEC and subsequently approved

2.0 BASELINE INDOOR AIR QUALITY ASSESSMENT

In order to develop a baseline understanding of indoor air and sub-slab vapor concentrations prior to the installation of the building-wide SSDS, Synapse reviewed supplemental indoor air data and sub-slab data provided by Energy Solutions for the Property (November 2010 and January 2013). Following the review, Synapse prepared an indoor air and sub-slab vapor sampling plan that included the collection of samples from similar locations of previous sampling events to establish a baseline for indoor air and sub-slab vapor. A total of eleven indoor air and five sub-slab vapor samples were collected concurrently and were designated as IDA-1 through IDA-11 and SSV-1 through SSV-5, respectively.

The baseline indoor air and sub-slab vapor sampling was conducted on March 18, 2016 utilizing 6-liter Summa® canisters, with an 8-hour flow controller. The volatile organic compounds (VOCs) of focus included trichloroethylene (TCE) and cis and trans-1, 2-dichloroethene (1, 2-DCE), however a full USEPA TO-15 scan was conducted by Alpha Analytical of Westborough, MA. The findings of the 2016 Baseline Assessment are summarized as follows.

Indoor Air Quality

- TCE was identified in all eleven indoor air samples at concentrations above NYSDOH Soil Vapor/Indoor Air Matrix A and/or Matrix B mitigation guidance levels. Concentrations of TCE ranged from 1.1 ug/m³ in sample IDA-10 to 26.8 ug/m³ in sample IDA-4.

Sub-Slab Vapor

- TCE was identified in four of the five sub-slab vapor samples at concentrations above NYSDOH Soil Vapor/Indoor Air Matrix A mitigation guidance levels. Concentrations of TCE ranged from 88.7 ug/m³ in sample SSV-5 to 342,000 ug/m³ in sample IDA-2.

3.0 SSDS INSTALLATION OVERVIEW

The overall objective of the SSDS is to limit the migration of sub-slab soil vapor into the indoor air of the 203 Eggert Road building through meeting the system performance objectives described in Section 1.1.

The SSDS building-wide design was based on the findings of the February 2015 Interim SSDS investigation, which identified that 60 feet to 80 feet horizontal spacing would provide converging vacuum fields in the sub-slab soils. The interim SSDS investigation consisted of utilizing a portable 6.5 horse power (hp) shop vacuum with a maximum flow rate of 200 cubic feet per minute (CFM) to create pressure differential at each of the six (6) vacuum suction cavities installed in the north, center and south zones of the building. The applied vacuum beneath the sub-slab was measured at varying distances from the sumps, as In. W.C. measured with a Fluke Model 922 digital monometer.

Based on the interim investigation, a building-wide SSDS was scaled-up to consist of 83 vacuum sumps (VS-1A through VS-8J) connected to eight (8) OBAR Model GBR 89 high performance radial fans mounted on the east exterior wall of the building. The SSDS layout as currently installed is depicted on Figure 1 – SSDS Installation Layout Plan.

3.1 Sub-slab Diagnostic Testing and SSDS Performance Measurements

In order to evaluate and confirm sub-slab pressure fields below the San-Son building, 117 sub-slab diagnostic measurement points were installed through the building slab and are depicted on Figure 2 – Sub-Slab Diagnostic Test Location Plan. The pressure differential beneath the sub-slab was measured and recorded as In. W.C. measured with a Fluke Model 922 digital monometer. The measurements are included in Table 1 – Sub-Slab Diagnostic Results.

North Zone

The north zone SSDS consists of three individual fans (Fan No. 1, 2 and 3) that are connected to ten, 15 and ten vacuum sumps, respectively. Initial sub-slab diagnostic measurements readings in the north zone ranged from -0.001 In. W.C. at test location 24 to -0.080 In. W.C. at test location 14. Final diagnostic measurements ranged from -0.005 In. W.C. at test location 2 to -0.050 In. W.C. at test location 4. The results of the diagnostic testing in the north zone demonstrate horizontal pressure differential fields between 25 and 50 feet, which demonstrate influence from the adjacent systems.

Center Zone

The center zone SSDS consists of two individual fans (Fan No. 4 and 5) that are connected to six and nine vacuum sumps, respectively. Initial sub-slab diagnostic measurements readings in the center zone ranged from -0.002 In. W.C. at test location 33 to -0.281 In. W.C. at test location

43. Final diagnostic measurements ranged from -0.014 In. W.C. at test location 34 to -0.045 In. W.C. at test location 31. The results of the diagnostic testing in the center zone demonstrate horizontal pressure differential fields between 30 and 55 feet, which demonstrate influence from the adjacent systems.

South Zone

The south zone SSDS consists of three individual fans (Fan No. 6, 7 and 8) that are connected to 12, 11 and ten vacuum sumps, respectively. Initial sub-slab diagnostic measurements readings in the south zone ranged from -0.003 In. W.C. at test location 76 to -0.020 In. W.C. at test location 78. Final diagnostic measurements ranged from -0.008 In. W.C. at test location 92 to -0.081 In. W.C. at test location 105. The results of the diagnostic testing in the south zone demonstrate horizontal pressure differential fields that average between 35 and 50 feet, which demonstrate influence from the adjacent systems.

3.2 SSDS Controls, Monitoring and Piping Network

The eight OBAR fans are individually monitored in real time by a Sensaphone SCADA 3000 Remote Terminal Unit (RTU). The SCADA 3000 monitors the SSDS 24 hours per day through receivers mounted on the building that receive continuous wireless signals from the transmitters mounted on each fan. Each fan also includes an interior mounted monometer installed at eye level to provide a visual indication to tenants that the system is operating. In the event that a fan loses power or vacuum an alarm will be initiated by the SCADA 3000 that notifies the administrator through a telephone call. The SSDS controls and monitoring are depicted on Figure 3 – Building Profile and Miscellaneous Details.

The piping network consists of 2-inch diameter schedule 40 polyvinyl chloride (PVC) piping originating at vacuum sump floor locations and connecting to 3-inch diameter trunk lines that run the width of the building and terminate at the east exterior building wall. The vacuum sump locations depicted on Figure 2 and provide final installed construction layout of the system. The sump locations were located near building column lines with the intent for the interior columns to provide a level of protection for the vertical PVC risers. In areas where the vacuum sump risers could not be protected by the columns bollards were installed or 2-inch diameter iron pipe was installed and transitioned back to PVC four or five feet from the building floor.

The horizontal pipe runs were installed with a minimum slope returning to the vacuum sumps of 1-inch per 20-feet. The horizontal pipe runs were supported with pipe hangers within two feet of couplings and a maximum hanger spacing of six feet per New York State Plumbing Code. Each vacuum sump was sealed with foam backer rod and polyurethane self-leveling caulk and allowed to sufficiently dry according to manufacturer specifications prior to activation of the system. All 83 vacuum sumps included 2-inch ball valves for balancing the system, where required. As installed the vertical and horizontal PVC piping runs, including elbows, valves and fittings, consist of approximately 4,670 linear feet.

4.0 POST SSDS INSTALATION INDOOR AIR AND SUB-SLAB VAPOR EVALUATION

Approximately three (3) months after activating the SSDS, a second round of indoor air and sub-slab soil vapor samples were collected concurrently on March 30, 2017 to evaluate the effectiveness of the building-wide SSDS in reducing indoor air concentrations to levels below NYSDOH Matrix A guidance levels. All samples were collected at similar locations as the March 2016 baseline sampling event and collected in accordance with the Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, May 2017). The 6-liter Summa® canisters were cataloged and logged on Table 2– Canister Log that included beginning and ending vacuum readings and other observed conditions during the sampling event.

The indoor air and the sub-slab soil vapor samples were collected using 6-liter Summa® canisters with a flow controller calibrated for eight-hour sample duration and certified as clean by the laboratory. The samples collected were packaged and shipped via courier service to Alpha Analytical of Westborough, Massachusetts. The indoor air and the sub-slab soil vapor samples were analyzed in accordance with USEPA Method TO-15.

4.1 Weather Conditions

Barometric Pressure

The potential influence of barometric pressure on the movement of sub-slab soil vapors to indoor air was evaluated during the soil vapor investigation. Changes in barometric pressure can have an effect on soil vapor by causing cyclic up and down effect on vapor transport; however, it is small when compared to atmospheric pressure. The barometric pressure readings were consistent during the sampling event conducted on March 30, 2017 with levels ranging from 29.6-inches to 29.8-inches and therefore not expected to significantly influence soil vapor intrusion.

Other Conditions

The wind speed ranged between five to eight miles per hour with a general west to northwest direction obtained from measurements recorded at the Rome Griffiss Airfield during the 8-hour sampling event. The interior building temperature ranged from 43 degrees Fahrenheit (°F) in the Center Zone to 55.6 °F in South Zone. The interior building relative humidity ranged from 51% in Center Zone to 53.4% in South Zone. The building's zone heating system was operational during the sampling event.

4.2 Post-SSDS Indoor Air Sampling Results

In order to evaluate the effectiveness of the SSDS, on March 30, 2017, a total of 11 indoor air samples including seven indoor air samples (IDA-033017-1 through IDA-033017-11) and two outdoor air samples (ODA-1 and ODA-2) were collected concurrently with 3 sub-slab soil vapor samples. Sample locations are presented on Figure 4 – Indoor Air and Sub-Slab Vapor Location Plan March 2017. The indoor air samples were selected to be representative of workers breathing zone and were collected at similar location to the March 2016 baseline sampling event. The outdoor air sample location was selected to evaluate the potential for

outdoor air to contribute to VOC levels in indoor air. The following summarizes the findings of the indoor air and sub-slab soil vapor samples analytical results.

- NYSDOH VOCs of concern were not detected in any of the eleven of the indoor air samples IDA-033017-1 through IDA-033017-11 at concentrations above NYSDOH Air Guideline Values.
- VOCs were not detected in outdoor air samples at concentrations above NYSDOH Air Guideline Values.
- A tabular summary of the indoor air analytical results in comparison to NYSDOH Air Guideline Values are presented in Table 3 – Indoor Air Analytical Summary. A complete copy of the laboratory analytical report is provided in Appendix A.

4.3 Post-SSDS Installation Sub-Slab Soil Vapor Sampling Results

On March 30, 2017, a total of five (5) sub-slab soil vapor samples were collected concurrently with the 11 indoor air samples and one (1) outdoor air sample. The sample locations are presented on Figure 4 and were selected to be representative of conditions where the highest levels of soil vapor were previously detected during the March 2016 baseline sampling event. The sub-slab soil vapor samples were collected from temporary soil vapor implants installed in the building and constructed of 1/2-inch diameter 316 stainless steel vapor implants connected to 1/4-inch OD polyethylene tubing.

Sub-Slab Soil Vapor Results

- TCE was detected at concentrations in four of the five sub-slab soil vapor samples (SSV-033017-1, SSV-03017-2, SSV-033017-3 and SSV-033017-5) that exceeded NYSDOH Soil Vapor/Indoor Air Matrix 1 mitigation guidance levels.
 - Concentrations of TCE ranged from 88.7 ug/m³ in sample SSV-033017-5 to 6,560 ug/m³ in sample SSV-033017-3.
- The concentration of TCE in sub-slab soil vapor sample SSV-033017-2 demonstrates a decreasing trend in comparison to the March 2016 baseline sub-slab sample results.

A summary of the laboratory analytical results are presented in Table 4 – Sub-Slab Soil Vapor Analytical Summary and Figure 4 and a copy of the laboratory analytical report is provided in Appendix A.

5.0 CONCLUSIONS

Based on the results of the recently completed SSDS installation, sub-slab diagnostic testing and post SSDS installation indoor air sampling at the Property, the following conclusions can be drawn.

Post-SSDS Indoor Air Quality

- NYSDOH VOCs of concern were not detected in any of the indoor air samples at concentrations above NYSDOH Air Matrix A Guidance Values, during the March 30, 2017 Post-SSDS sampling event.

Sub-Slab Soil Vapor

NYSDOH VOCs of concern were detected in four of the five sub-slab soil vapor samples (SSV-033017-1, SSV-03017-2, SSV-033017-3 and SSV-033017-5) at concentrations that exceeded the NYSDOH Soil Vapor/Indoor Air Matrix A mitigation guidance levels. TCE vapor concentrations measured at SSV-2/SSV-03017-2 have decreased two orders of magnitude from 342,000 ug/m³ measured in March 2016 as compared to 1,240 ug/m³ in March 2017. This resulting reduction demonstrates that the SSDS has created a differential pressure below the slab and by releasing the trapped sub-slab vapor.

The resulting reduction of Post-SSDS indoor air quality (IAQ) and sub-slab soil vapor demonstrate that the SSDS is operating as designed.

6.0 RECOMMENDATIONS

Based on the results and findings herein, it is recommended that the SSDS continue to operate to mitigate the potential for soil vapor intrusion and to release the trapped sub-slab soil vapor.

The indoor air and sub-slab vapor should be re-sampled during the 2017-2018 heating season to continue to document the effectiveness of the SSDS and to report the results in the annual periodic review report (PRR) for the Property.

Given that the IAQ is below Matrix A guidance levels and sub-slab soil vapor above 60 ug/m³, NYSDOH guidance requires continued mitigation.

7.0 REFERENCES

- New York State Department of Health (October 2006, Updated May 2017). *Guidance for Evaluation Soil Vapor Intrusion in the State of New York*.
- Synapse Property Resources, July 2016, SSDS Installation Plan, 203 Eggert Road, Cheektowaga, New York
- United States Environmental Protection Agency. *Radon Mitigation Standards (EPA 402-R-93-078, Revised April 1994)*

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TABLES

Sub-Slab Depressurization System As-Built Report
203 Eggert Road
Cheektowaga, New York

June 2017

Table 1 – Sub-Slab Diagnostic Results
Table 2 – Summa Canister Log
Table 3 – Indoor Air Analytical Summary
Table 4 – Sub-Slab Soil Vapor Analytical Summary

<div>TABLE 1</div> <div>Sub-Slab Diagnostic Results</div> <div>Sub-Slab Depressurization System Post-Installation</div> <div>203 Eggert Road</div> <div>Cheektowaga, New York</div>				
Building Location	SSDS Fan	Diagnostic Test Point ID	Pressure Differential (Inches of W.C.)	Approximate Horizontal Radius of Influence (Feet) February 2017
North Zone	Fan No. 1	1	-0.005	50
		2	-0.005	40
		3	-0.01	40
		4	-0.05	40
		5	-0.004	30
		6	-0.005	45
		7	-0.032	43
		8	-0.08	50
		9	-0.021	40
		10	-0.014	45
North Zone	Fan No. 2	11	-0.002	25
		12	-0.006	40
		13	-0.04	45
		14	-0.008	40
		15	-0.002	30
		16	-0.036	30
		17	-0.05	25
		18	-0.015	30
		19	-0.02	30
		20	-0.002	20
		21	-0.005	30
		22	-0.02	25
		23	0.000	40
North Zone	Fan 3	24	-0.001	20
		25	-0.003	30
		26	-0.01	20
		27	-0.02	35
Center Zone	Fan 4	28	-0.032	40
		29	-0.003	50
		30	-0.007	55
		31	-0.045	50
		32	-0.023	42
		33	-0.002	40
		34	-0.014	50
		35	-0.003	50
		36	-0.101	45
		40	-0.025	40
		41	-0.010	40
Center Zone	Fan 5	37	-0.032	35
		38	-0.005	40
		39	-0.040	35
		42	-0.202	30
		43	-0.220	40
		44	-0.020	35
		45	-0.050	40
		46	-0.016	30
		47	-0.013	35
		48	-0.153	25
South Zone	Fan 6	49	-0.002	30
		50	-0.004	40
		51	-0.017	35
		52	-0.013	40
		53	-0.054	30
		54	-0.083	20
		55	-0.040	40
		56	-0.002	35
		57	-0.002	30
		58	-0.006	25
		59	-0.003	30
		60	-0.005	30
		61	0.000	30
		62	-0.207	20
		63	-0.047	40
		64	-0.006	40
		65	-0.011	40
		66	-0.002	50
		67	-0.020	25
		68	-0.090	20
		69	-0.012	30
		70	-0.037	40
		71	-0.010	35
		72	-0.009	40
		73	-0.009	30
		74	-0.103	20
		75	-0.010	40

TABLE 1 Sub-Slab Diagnostic Results Sub-Slab Depressurization System Post-Installation 203 Eggert Road Cheektowaga, New York				
Building Location	SSDS Fan	Diagnostic Test Point ID	Pressure Differential (Inches of W.C.)	Approximate Horizontal Radius of Influence (Feet) February 2017
South Zone	Fan 7	76	-0.003	40
		77	-0.009	35
		78	-0.020	25
		79	-0.001	45
		80	-0.003	50
		81	-0.004	30
		82	-0.009	45
		83	-0.002	40
		84	-0.003	35
		85	-0.030	30
		86	-0.010	30
		87	-0.002	30
		88	-0.002	40
		89	-0.002	25
		90	-0.001	40
South Zone	Fan 8	91	-0.004	35
		92	-0.008	30
		93	-0.005	20
		94	-0.015	25
		95	-0.003	40
		96	-0.001	20
		97	-0.001	30
		98	-0.002	45
		99	-0.019	40
		100	-0.001	40
		101	-0.002	40
		102	-0.007	20
		103	-0.011	30
		104	-0.002	45
		105	-0.081	25
		106	-0.106	35
		107	-0.002	25
		108	-0.017	25
		109	-0.010	25
		110	-0.008	35
		111	-0.007	30
		112	-0.001	20
		113	-0.002	35
		114	-0.150	20
		115	-0.008	30
		116	-0.002	40
		117	-0.013	40

TABLE 2
Summa Canister Log
March 30, 2017
Sub-Slab Vapor & IDA Quality
203 Eggert Road
Cheektowaga, New York

Sample ID	Canister ID	Regulator ID	Initial Vacuum	Final Vacuum	Start Time	Stop Time	Notes
IDA-033017-1	511	250	-29.12	-8.76	8:37	4:14	
IDA-033017-2	391	46	-28.01	-6.85	8:40	4:11	
IDA-033017-3	105	144	-29.15	-8.33	8:45	4:22	
IDA-033017-4	539	172	-28.68	-7.29	8:17	8:53	
IDA-033017-5	403	766	-29.36	-6.96	8:51	4:24	
IDA-033017-6	186	915	-29.83	-9.2	8:19	3:59	
IDA-033017-7	323	699	-28.71	-15.34	8:52	4:25	
IDA-033017-8	364	294	-29.38	-6.68	8:25	4:06	
IDA-033017-9	544	811	-29.69	-10.26	9:06	4:28	
IDA-033017-10	332	370	-29.71	-5.38	8:54	4:28	
IDA-033017-11	551	848	-19.82	-5.35	8:47	3:57	
ODA-033017-1	536	795	-31.38	-9.4	9:02	4:45	
SSV-033017-1	547	809	-29.73	-6.52	8:24	4:05	
SSV-033017-2	375	589	-29.9	-6.27	8:18	3:52	
SSV-033017-3	338	203	-29.2	-10.44	8:16	3:52	
SSV-033017-4	414	237	-29.91	-10.46	8:36	4:13	
SSV-033017-5	459	292	-27.6	-7.27	8:39	4:09	

TABLE 3

Post SSDS Installation
Indoor Air Analytical Summary
203 Eggert Road
Cheektowaga, New York

SAMPLE ID	NYSDOH	IDA-033017-1	IDA-033017-2	IDA-033017-3	IDA-033017-4	IDA-033017-5
SAMPLING DATE	Soil Vapor/Indoor Air Matrix	3/30/2017	3/30/2017	3/30/2017	3/30/2017	3/30/2017
BUILDING LOCATION	Mitigation Guidance Values	Office	Office	North Building	North Building	Center Building
UNITS	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)
Volatile Organic Compounds USEPA TO-15						
Dichlorodifluoromethane	NS	1.84	1.95	0.989 U	1.78	1.75
Chloromethane	NS	1.06	1.18	1.06	0.987	1.05
Freon-114	NS	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Vinyl chloride	0.2 ⁽³⁾	-	-	-	-	-
1,3-Butadiene	NS	0.442 U	0.442 U	0.454	0.982	2.32
Bromomethane	NS	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U
Chloroethane	NS	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U
Ethanol	NS	54.6	74.4	9.42 U	10.3	9.42 U
Vinyl bromide	NS	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U
Acetone	NS	23.6	10	2.38 U	2.38 U	2.38 U
Trichlorofluoromethane	NS	1.12 U	1.12 U	1.12 U	1.12 U	1.12 U
Isopropanol	NS	14	2.14	1.23 U	1.76	1.25
1,1-Dichloroethene	1 ⁽¹⁾	-	-	-	-	-
Tertiary butyl Alcohol	NS	1.52 U	1.52 U	1.52 U	1.52 U	1.52 U
Methylene chloride	10 ⁽²⁾	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U
3-Chloropropene	NS	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U
Carbon disulfide	NS	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U
Freon-113	NS	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U
trans-1,2-Dichloroethene	NS	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U
1,1-Dichloroethane	NS	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U
Methyl tert butyl ether	NS	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U
2-Butanone	NS	3.51	1.47 U	2.31	4.04	3.45
cis-1,2-Dichloroethene	1 ⁽¹⁾	-	-	-	-	-
Ethyl Acetate	NS	1.8 U	1.8 U	2.05	3.21	2.33
Chloroform	NS	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U
Tetrahydrofuran	NS	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U
1,2-Dichloroethane	NS	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U
n-Hexane	NS	0.705U	0.705 U	0.751	0.705 U	0.726
1,1,1-Trichloroethane	10 ⁽²⁾	-	-	-	-	-
Benzene	NS	0.789	0.639 U	1.12	1.33	2.1
Carbon tetrachloride	1 ⁽¹⁾	-	-	-	-	-
Cyclohexane	NS	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U
1,2-Dichloropropane	NS	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U
Bromodichloromethane	NS	1.34U	1.34 U	1.34 U	1.34 U	1.34 U
1,4-Dioxane	NS	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U
Trichloroethene	1 ⁽¹⁾	-	-	-	-	-
2,2,4-Trimethylpentane	NS	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U
Heptane	NS	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
cis-1,3-Dichloropropene	NS	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U
4-Methyl-2-pentanone	NS	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U
trans-1,3-Dichloropropene	NS	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U
1,1,2-Trichloroethane	NS	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U
Toluene	NS	14.9	0.957	12.1	18.5	17.1
2-Hexanone	NS	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
Dibromochloromethane	NS	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
1,2-Dibromoethane	NS	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U
Tetrachloroethene	10 ⁽²⁾	-	-	-	-	-
Chlorobenzene	NS	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U
Ethylbenzene	NS	4.82	0.869 U	1.93	5.43	4.56
p/m-Xylene	NS	15.3	1.74 U	5.39	15.8	12.3
Bromoform	NS	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U
Styrene	NS	4.3	0.852 U	2.05	5.75	4.51
1,1,2,2-Tetrachloroethane	NS	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U
o-Xylene	NS	5.26	0.869 U	1.87	5.47	4.39
4-Ethyltoluene	NS	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
1,3,5-Trimethylbenzene	NS	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
1,2,4-Trimethylbenzene	NS	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
Benzyl chloride	NS	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U
1,3-Dichlorobenzene	NS	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dichlorobenzene	NS	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichlorobenzene	NS	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2,4-Trichlorobenzene	NS	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U
Hexachlorobutadiene	NS	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U
NYSDOH Compounds of Concern						
Methylene chloride	10 ⁽²⁾	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U
Vinyl chloride	0.2 ⁽³⁾	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
1,1-Dichloroethene	1 ⁽¹⁾	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U
cis-1,2-Dichloroethene	1 ⁽¹⁾	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U
1,1,1-Trichloroethane	10 ⁽²⁾	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U
Carbon tetrachloride	1 ⁽¹⁾	0.126 U	0.421	0.736	0.629	0.478
Trichloroethene	1 ⁽¹⁾	0.199	0.129	0.107 U	0.833	0.161
Tetrachloroethene	10 ⁽²⁾	0.136	0.136 U	0.136 U	0.136 U	0.136 U

Notes:

NYSDOH Referenced Sub-Slab Guidelines Herein Represents the Minimum Sub-Slab Vapor Concentrations Requiring Mitigation, Regardless of Indoor Air Concentrations.

Bold = Concentration is above Matrix A, Matrix B or Matrix C NYSDOH Soil Vapor/Indoor Air Guidelines Values for Mitigation.

NS = No NYSDOH Standard.

U = Analyte was analyzed for but not detected above the reporting limit.

E = Concentration of analyte is above the range of the calibration curve and/or the linear range of the instrument.

ug/m3 = micrograms per cubic meter

1. Denotes Soil Vapor/Indoor Air Matrix A.

2. Denotes Soil Vapor/Indoor Air Matrix B.

3. Denotes Soil Vapor/Indoor Air Matrix C.

TABLE 3 (Con't)

Post SSDS Installation
Indoor Air Analytical Summary
203 Eggert Road
Cheektowaga, New York

SAMPLE ID	NYSDOH Soil Vapor/Indoor Air Matrix Mitigation Guidance Values	IDA-033017-6	IDA-033017-7	IDA-033017-8	IDA-033017-9	IDA-033017-10	IDA-033017-11	ODA-033017-1
SAMPLING DATE		3/30/2017	3/30/2017	3/30/2017	3/30/2017	3/30/2017	3/30/2017	3/30/2017
BUILDING LOCATION	Center Building		South Building	South Building	South Building	South Building	South Building	Outdoor Air
UNITS	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)
Volatile Organic Compounds USEPA TO-15								
Dichlorodifluoromethane	NS	1.46	1.6	1.56	1.65	1.65	1.5	1.87
Chloromethane	NS	1.09	1.12	1.1	1.03	0.985	1.17	1
Freon-114	NS	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Vinyl chloride	0.2 ⁽³⁾	-	-	-	-	-	-	-
1,3-Butadiene	NS	1.38	1.82	0.743	1.42	1.11	1.03	0.442 U
Bromomethane	NS	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U
Chloroethane	NS	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U
Ethanol	NS	9.42 U	9.42 U	9.42 U	9.52	9.42 U	13.7	9.42 U
Vinyl bromide	NS	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U
Acetone	NS	2.38 U	2.38 U	2.38 U	2.38 U	2.38 U	2.38 U	4.58
Trichlorofluoromethane	NS	1.12 U	1.12 U	1.12 U	1.12 U	1.12 U	1.12 U	1.12 U
Isopropanol	NS	1.29	1.23 U	1.23 U	1.4	1.23 U	1.74	1.23 U
1,1-Dichloroethene	1 ⁽¹⁾	-	-	-	-	-	-	-
Tertiary butyl Alcohol	NS	1.52 U	1.52 U	1.52 U	1.52 U	1.52 U	1.52 U	1.52 U
Methylene chloride	10 ⁽²⁾	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U
3-Chloropropene	NS	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U
Carbon disulfide	NS	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U
Freon-113	NS	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U
trans-1,2-Dichloroethene	NS	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U
1,1-Dichloroethane	NS	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U
Methyl tert butyl ether	NS	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U
2-Butanone	NS	5.4	1.96	2.59	3.19	1.99	5.31	1.47 U
cis-1,2-Dichloroethene	1 ⁽¹⁾	-	-	-	-	-	-	-
Ethyl Acetate	NS	2.22	1.8 U	1.8 U	3.75	1.8 U	3.06	1.8 U
Chloroform	NS	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U
Tetrahydrofuran	NS	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U
1,2-Dichloroethane	NS	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U
n-Hexane	NS	1.17	0.705 U	0.705 U	0.705 U	1.04	0.705 U	0.705 U
1,1,1-Trichloroethane	10 ⁽²⁾	-	-	-	-	-	-	-
Benzene	NS	1.57	1.51	1.13	1.5	1.28	1.19	0.639 U
Carbon tetrachloride	1 ⁽¹⁾	-	-	-	-	-	-	-
Cyclohexane	NS	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U
1,2-Dichloropropane	NS	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U
Bromodichloromethane	NS	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U
1,4-Dioxane	NS	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U
Trichloroethene	1 ⁽¹⁾	-	-	-	-	-	-	-
2,2,4-Trimethylpentane	NS	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U
Heptane	NS	0.82 U	0.82	0.82	0.82 U	0.82 U	0.82 U	0.82 U
cis-1,3-Dichloropropene	NS	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U
4-Methyl-2-pentanone	NS	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U
trans-1,3-Dichloropropene	NS	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U
1,1,2-Trichloroethane	NS	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U
Toluene	NS	21.1	13	19	22.9	12.2	29.2	0.754 U
2-Hexanone	NS	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
Dibromochloromethane	NS	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
1,2-Dibromoethane	NS	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U
Tetrachloroethene	10 ⁽²⁾	-	-	-	-	-	-	-
Chlorobenzene	NS	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U
Ethylbenzene	NS	4.47	2.94	5.34	6.04	2.21	6.3	0.869 U
p/m-Xylene	NS	11	7.43	15	17.1	5.82	17.2	1.74 U
Bromoform	NS	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U
Styrene	NS	6.05	3.98	8.13	8.9	2.12	10.2	0.852 U
1,1,2,2-Tetrachloroethane	NS	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U
o-Xylene	NS	3.87	2.49	5.04	5.91	2.05	5.43	0.869 U
4-Ethyltoluene	NS	0.983	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
1,3,5-Trimethylbenzene	NS	0.983	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
1,2,4-Trimethylbenzene	NS	0.983	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
Benzyl chloride	NS	1.04	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U
1,3-Dichlorobenzene	NS	1.2	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dichlorobenzene	NS	1.2	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichlorobenzene	NS	1.2	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2,4-Trichlorobenzene	NS	1.48	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U
Hexachlorobutadiene	NS	2.13	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U
NYSDOH Compounds of Concern								
Methylene chloride	10 ⁽²⁾	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U
Vinyl chloride	0.2 ⁽³⁾	0.051	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
1,1-Dichloroethene	1 ⁽¹⁾	0.079	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U
cis-1,2-Dichloroethene	1 ⁽¹⁾	0.079	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U
1,1,1-Trichloroethane	10 ⁽²⁾	0.109	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U
Carbon tetrachloride	1 ⁽¹⁾	0.717	0.503	0.447	0.547	0.434	0.516	0.428
Trichloroethene	1 ⁽¹⁾	0.22	0.107 U	0.215	0.134	0.107 U	0.129	0.107 U
Tetrachloroethene	10 ⁽²⁾	0.136	0.136 U	0.346	0.136 U	0.136 U	0.136 U	0.136 U

Notes:

NYSDOH Referenced Sub-Slab Guidelines Herein Represents the Minimum Sub-Slab Vapor Concentrations Requiring Mitigation, Regardless of Indoor Air Concentrations.

Bold = Concentration is above Matrix A, Matrix B or Matrix C NYSDOH Soil Vapor/Indoor Air Guidelines Values for Mitigation.

NS = No NYSDOH Standard.

U = Analyte was analyzed for but not detected above the reporting limit.

E = Concentration of analyte is above the range of the calibration curve and/or the linear range of the instrument.

ug/m3 = micrograms per cubic meter

1. Denotes Soil Vapor/Indoor Air Matrix A.

2. Denotes Soil Vapor/Indoor Air Matrix B.

3. Denotes Soil Vapor/Indoor Air Matrix C.

TABLE 4
Post SSDS Installation
Sub-Slab Soil Vapor Analytical Summary
203 Eggert Road
Cheektowaga, New York

SAMPLE ID	NYSDOH Soil Vapor/Indoor Air Matrix Mitigation Guidance Values	SSV-033017-1	SSV-033017-2	SSV-033017-3	SSV-033017-4	SSV-033017-5
SAMPLING DATE		3/30/2017	3/30/2017	3/30/2017	3/30/2017	3/30/2017
BUILDING LOCATION		South Building	Center Building	North Building	Office	Office
UNITS	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)	(ug/m ³)
Volatile Organic Compounds USEPA TO-15						
Dichlorodifluoromethane	NS	2.43	3.3 U	9.89 U	1.43	1.52
Chloromethane	NS	0.826 U	1.38 U	4.13 U	0.57	0.413 U
Freon-114	NS	2.8 U	4.66 U	14 U	1.4 U	1.4 U
Vinyl chloride	60 ⁽³⁾	1.02 U	1.71 U	5.11 U	0.511 U	0.511 U
1,3-Butadiene	NS	1.19	2.05	4.42 U	0.442 U	0.442 U
Bromomethane	NS	1.55 U	2.59 U	7.77 U	0.777 U	0.777 U
Chloroethane	NS	1.06 U	2.22	5.28 U	12.5	18.2
Ethanol	NS	18.8 U	67.8	94.2 U	9.42 U	9.42 U
Vinyl bromide	NS	1.75 U	2.92 U	8.74 U	0.874 U	0.874 U
Acetone	NS	4.75 U	7.91 U	23.8 U	2.38 U	2.38 U
Trichlorofluoromethane	NS	2.25 U	3.75 U	11.2 U	1.22	1.19
Isopropanol	NS	2.46 U	4.1 U	12.3 U	1.23 U	1.23 U
1,1-Dichloroethene	60 ⁽¹⁾	1.59 U	2.64 U	7.93 U	0.793 U	0.793 U
Tertiary butyl Alcohol	NS	3.03 U	5.06 U	15.2 U	2.9	3.3
Methylene chloride	1000 ⁽²⁾	3.47 U	5.8 U	17.4 U	1.74 U	1.74 U
3-Chloropropene	NS	1.25 U	2.09 U	6.26 U	0.626 U	0.626 U
Carbon disulfide	NS	1.25 U	2.08 U	6.23 U	0.788	0.623 U
Freon-113	NS	3.07 U	5.11 U	15.3 U	1.53 U	1.53 U
trans-1,2-Dichloroethene	NS	65.8	4.36	22.8	0.793 U	0.793 U
1,1-Dichloroethane	NS	1.62 U	2.7 U	8.09 U	0.809 U	0.809 U
Methyl tert butyl ether	NS	1.44 U	2.4 U	7.21 U	0.721 U	0.721 U
2-Butanone	NS	2.95 U	5.4	14.7 U	1.9	1.47 U
cis-1,2-Dichloroethene	60 ⁽¹⁾	2.03	3.79	7.93 U	0.793 U	0.793 U
Ethyl Acetate	NS	3.6 U	6.02 U	18 U	1.8 U	1.8 U
Chloroform	NS	1.95 U	5.32	9.77 U	0.977 U	0.977 U
Tetrahydrofuran	NS	2.95 U	4.93 U	14.7 U	2.02	1.47 U
1,2-Dichloroethane	NS	1.62 U	2.7 U	8.09 U	2.52	1.06
n-Hexane	NS	1.41 U	2.55	7.05 U	0.705 U	2.57
1,1,1-Trichloroethane	1000 ⁽²⁾	2.18 U	3.64 U	10.9 U	1.09 U	1.09 U
Benzene	NS	1.28 U	2.13 U	6.39 U	0.824	2.19
Carbon tetrachloride	60 ⁽¹⁾	2.52 U	4.2 U	12.6 U	1.26 U	1.26 U
Cyclohexane	NS	1.38 U	4.37	6.88 U	0.688 U	2.04
1,2-Dichloropropane	NS	1.85 U	3.08 U	9.24 U	0.924 U	0.924 U
Bromodichloromethane	NS	2.68 U	4.47 U	13.4 U	1.34 U	1.34 U
1,4-Dioxane	NS	1.44 U	2.4 U	7.21 U	0.721 U	0.721 U
Trichloroethene	60 ⁽¹⁾	452	1240	6560	2.23	88.7
2,2,4-Trimethylpentane	NS	1.87 U	3.12 U	9.34 U	0.934 U	0.934 U
Heptane	NS	1.64 U	2.73 U	8.2 U	0.82	1.3
cis-1,3-Dichloropropene	NS	1.82 U	3.03 U	9.08 U	0.908 U	0.908 U
4-Methyl-2-pentanone	NS	4.1 U	6.84 U	20.5 U	2.05 U	2.05 U
trans-1,3-Dichloropropene	NS	1.82 U	3.03 U	9.08 U	0.908 U	0.908 U
1,1,2-Trichloroethane	NS	2.18 U	3.64 U	10.9 U	1.09 U	1.09 U
Toluene	NS	6.44	9.69	7.54 U	7.69	3.81
2-Hexanone	NS	1.64 U	2.73 U	8.2 U	0.82 U	0.82 U
Dibromochloromethane	NS	3.41 U	5.68 U	17 U	1.7 U	1.7 U
1,2-Dibromoethane	NS	3.07 U	5.13 U	15.4 U	1.54 U	1.54 U
Tetrachloroethene	1000 ⁽²⁾	2.71 U	4.52 U	13.6 U	1.36 U	1.36 U
Chlorobenzene	NS	1.84 U	3.07 U	9.21 U	0.921 U	0.921 U
Ethylbenzene	NS	2.69	2.9 U	8.69 U	1.15	0.869 U
p/m-Xylene	NS	8.86	5.78 U	17.4 U	3.72	1.74 U
Bromoform	NS	4.14 U	6.9 U	20.7 U	2.07 U	2.07 U
Styrene	NS	5.41	2.84 U	8.52 U	0.852 U	0.852 U
1,1,2,2-Tetrachloroethane	NS	2.75 U	4.58 U	13.7 U	1.37 U	1.37 U
o-Xylene	NS	3.37	2.9 U	8.69 U	1.45	0.869 U
4-Ethyltoluene	NS	1.97 U	3.28 U	9.83 U	0.983 U	0.983 U
1,3,5-Trimethylbenzene	NS	1.97 U	3.28 U	9.83 U	0.983 U	0.983 U
1,2,4-Trimethylbenzene	NS	1.97 U	3.28 U	9.83 U	0.983 U	1.36
Benzyl chloride	NS	2.07 U	3.45 U	10.4 U	1.04 U	1.04 U
1,3-Dichlorobenzene	NS	2.4 U	4.01 U	12 U	1.2 U	1.2 U
1,4-Dichlorobenzene	NS	2.4 U	4.01 U	12 U	1.2 U	1.2 U
1,2-Dichlorobenzene	NS	2.4 U	4.01 U	12 U	1.2 U	1.2 U
1,2,4-Trichlorobenzene	NS	2.97 U	4.95 U	14.8 U	1.48 U	1.48 U
Hexachlorobutadiene	NS	4.27 U	7.11 U	21.3 U	2.13 U	2.13 U

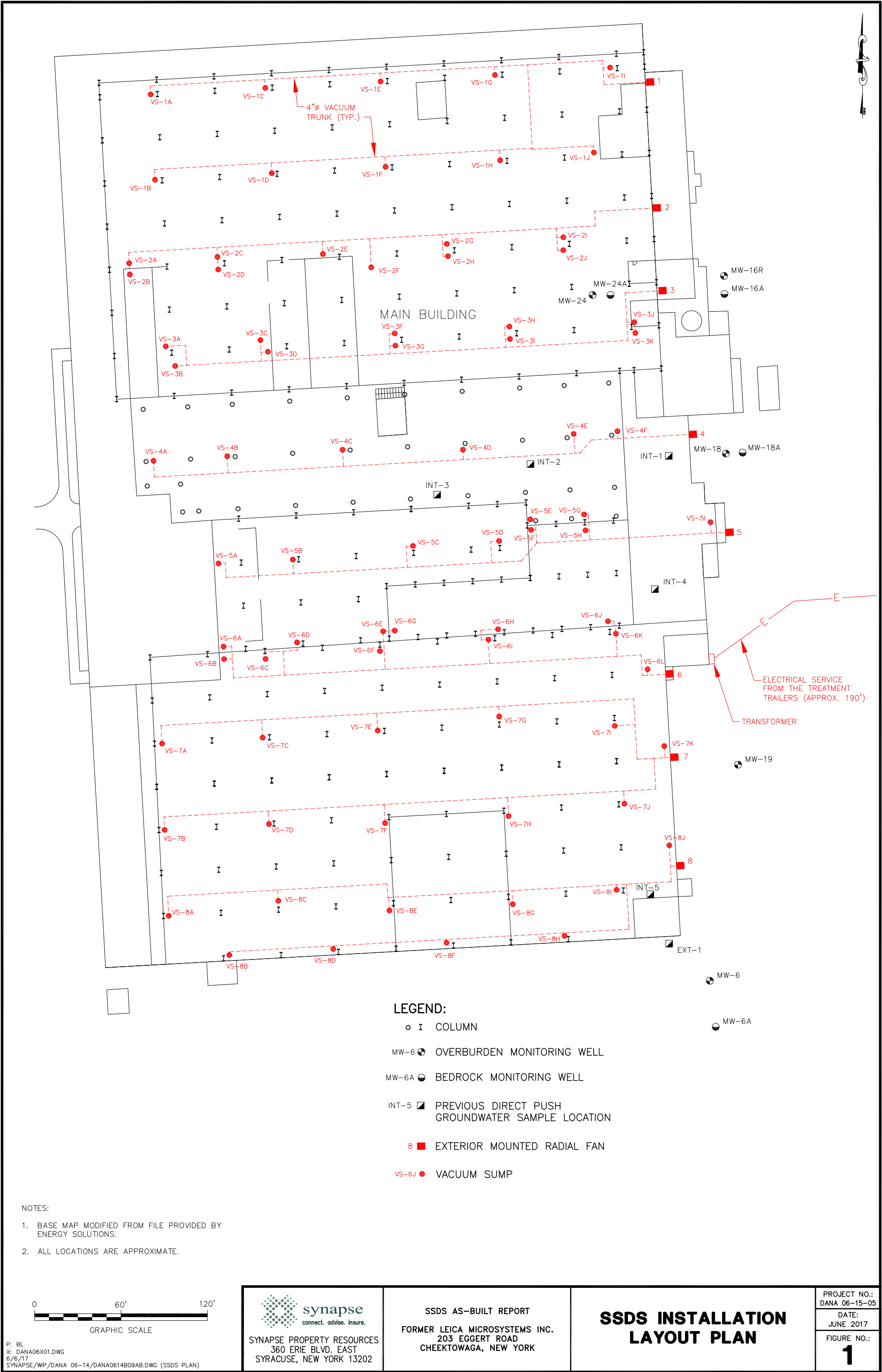
Notes:
NYSDOH Referenced Sub-Slab Guidelines Herein Represents the Minimum Sub-Slab Vapor Concentrations Requiring Mitigation, Regardless of Indoor Air Concentrations.
Bold = Concentration is above Matrix 1 / Matrix A or Matrix 2 / Matrix B NYSDOH Soil Vapor/Indoor Air Guidelines Values for Mitigation.
NS = No NYSDOH Standard.
U = Analyte was analyzed for but not detected above the reporting limit.
E = Concentration of analyte is above the range of the calibration curve and/or the linear range of the instrument.
ug/m3 = micrograms per cubic meter
1. Denotes Soil Vapor/Indoor Air Matrix A.
2. Denotes Soil Vapor/Indoor Air Matrix B.
3. Denotes Soil Vapor/Indoor Air Matrix C.

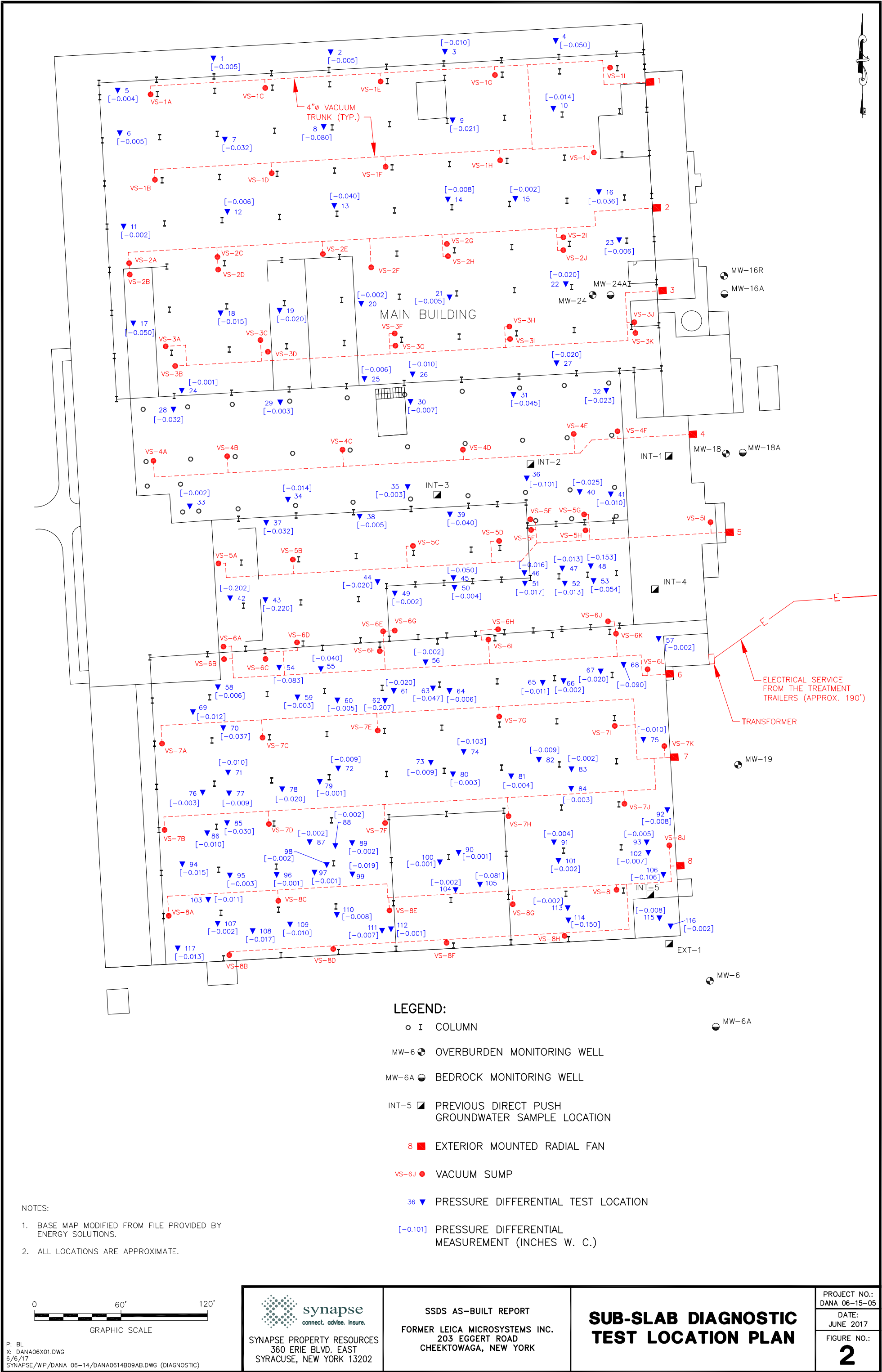
FIGURES

Sub-Slab Depressurization System As-Built Report
203 Eggert Road
Cheektowaga, New York

June 2017

- Figure 1 – SSDS Installation Layout Plan
- Figure 2 – Sub-Slab Diagnostic Test Location Plan
- Figure 3 – Building Profile and Miscellaneous Details
- Figure 4 – Indoor Air and Sub-Slab Vapor Sample Location Plan March 2017





APPENDIX A
LABORATORY ANALYTICAL DATA PACKAGE

Sub-Slab Depressurization System As-Built Report
203 Eggert Road
Cheektowaga, New York

June 2017



ANALYTICAL REPORT

Lab Number:	L1709791
Client:	Synapse Risk Management, LLC 360 Erie Blvd. East Syracuse, NY 13202
ATTN:	Roger Creighton
Phone:	(315) 475-3700
Project Name:	FORMER LEICA MICROSYSTEMS
Project Number:	DANA07-15.02
Report Date:	04/06/17

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), NJ NELAP (MA015), CT (PH-0141), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), 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 #P330-13-00067), USFWS (Permit #LE2069641).

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



Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1709791-01	IDA-033017-1	AIR	CHEEKTOWAGA, NY	03/30/17 16:14	03/30/17
L1709791-02	IDA-033017-2	AIR	CHEEKTOWAGA, NY	03/30/17 16:11	03/30/17
L1709791-03	IDA-033017-3	AIR	CHEEKTOWAGA, NY	03/30/17 16:22	03/30/17
L1709791-04	IDA-033017-4	AIR	CHEEKTOWAGA, NY	03/30/17 16:23	03/30/17
L1709791-05	IDA-033017-5	AIR	CHEEKTOWAGA, NY	03/30/17 16:24	03/30/17
L1709791-06	IDA-033017-6	AIR	CHEEKTOWAGA, NY	03/30/17 15:59	03/30/17
L1709791-07	IDA-033017-7	AIR	CHEEKTOWAGA, NY	03/30/17 16:25	03/30/17
L1709791-08	IDA-033017-8	AIR	CHEEKTOWAGA, NY	03/30/17 16:06	03/30/17
L1709791-09	IDA-033017-9	AIR	CHEEKTOWAGA, NY	03/30/17 16:28	03/30/17
L1709791-10	IDA-033017-10	AIR	CHEEKTOWAGA, NY	03/30/17 16:28	03/30/17
L1709791-11	IDA-033017-11	AIR	CHEEKTOWAGA, NY	03/30/17 15:57	03/30/17
L1709791-12	ODA-033017-1	AIR	CHEEKTOWAGA, NY	03/30/17 16:45	03/30/17
L1709791-13	SSV-033017-1	SOIL_VAPOR	CHEEKTOWAGA, NY	03/30/17 16:05	03/30/17
L1709791-14	SSV-033017-2	SOIL_VAPOR	CHEEKTOWAGA, NY	03/30/17 15:58	03/30/17
L1709791-15	SSV-033017-3	SOIL_VAPOR	CHEEKTOWAGA, NY	03/30/17 15:52	03/30/17
L1709791-16	SSV-033017-4	SOIL_VAPOR	CHEEKTOWAGA, NY	03/30/17 16:13	03/30/17
L1709791-17	SSV-033017-5	SOIL_VAPOR	CHEEKTOWAGA, NY	03/30/17 16:09	03/30/17

Project Name: FORMER LEICA MICROSYSTEMS
Project Number: DANA07-15.02

Lab Number: L1709791
Report Date: 04/06/17

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. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated 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.

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 table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

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 Client Service Representative 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 Client Services at 800-624-9220 with any questions.

Project Name: FORMER LEICA MICROSYSTEMS
Project Number: DANA07-15.02

Lab Number: L1709791
Report Date: 04/06/17

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on March 29, 2017. The canister certification results are provided as an addendum.

Sample L1709791-13, -14, and -15: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

Sample L1709791-13, -14, and -16: The presence of Acetone could not be determined in these samples due to a non-target compound interfering with the identification and quantification of this compound.

Sample L1709791-15: The sample was diluted and re-analyzed to quantify the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

Volatile Organics in Air by SIM

Sample L1709791-01 The presence of Carbon Tetrachloride could not be determined in this sample due to a non-target compound interfering with the identification and quantification of this compound.

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: 04/06/17

AIR

Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-01
Client ID: IDA-033017-1
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 04/03/17 18:36
Analyst: MB

Date Collected: 03/30/17 16:14
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloromethane	0.513	0.200	--	1.06	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	29.0	5.00	--	54.6	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	9.93	1.00	--	23.6	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	5.70	0.500	--	14.0	1.23	--		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	1.19	0.500	--	3.51	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
n-Hexane	ND	0.200	--	ND	0.705	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-01

Date Collected: 03/30/17 16:14

Client ID: IDA-033017-1

Date Received: 03/30/17

Sample Location: CHEEKTOWAGA, NY

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzene	0.247	0.200	--	0.789	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	3.95	0.200	--	14.9	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	1.11	0.200	--	4.82	0.869	--		1
p/m-Xylene	3.53	0.400	--	15.3	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	1.01	0.200	--	4.30	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.21	0.200	--	5.26	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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-01

Date Collected: 03/30/17 16:14

Client ID: IDA-033017-1

Date Received: 03/30/17

Sample Location: CHEEKTOWAGA, NY

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	92		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	84		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-01
Client ID: IDA-033017-1
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/17 18:36
Analyst: MB

Date Collected: 03/30/17 16:14
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.372	0.200	--	1.84	0.989	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		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	0.037	0.020	--	0.199	0.107	--		1
Tetrachloroethene	0.020	0.020	--	0.136	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	81		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-02
Client ID: IDA-033017-2
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/17 19:10
Analyst: MB

Date Collected: 03/30/17 16:11
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloromethane	0.572	0.200	--	1.18	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	39.5	5.00	--	74.4	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.21	1.00	--	10.0	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	0.869	0.500	--	2.14	1.23	--		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
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
n-Hexane	ND	0.200	--	ND	0.705	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-02
 Client ID: IDA-033017-2
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:11
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	0.254	0.200	--	0.957	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
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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-02
 Client ID: IDA-033017-2
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:11
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	90		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	85		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-02
Client ID: IDA-033017-2
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/17 19:10
Analyst: MB

Date Collected: 03/30/17 16:11
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.395	0.200	--	1.95	0.989	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		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	0.067	0.020	--	0.421	0.126	--		1
Trichloroethene	0.024	0.020	--	0.129	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	83		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-03
Client ID: IDA-033017-3
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/17 19:47
Analyst: MB

Date Collected: 03/30/17 16:22
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloromethane	0.514	0.200	--	1.06	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.205	0.200	--	0.454	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
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	0.783	0.500	--	2.31	1.47	--		1
Ethyl Acetate	0.569	0.500	--	2.05	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
n-Hexane	0.213	0.200	--	0.751	0.705	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-03

Date Collected: 03/30/17 16:22

Client ID: IDA-033017-3

Date Received: 03/30/17

Sample Location: CHEEKTOWAGA, NY

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzene	0.350	0.200	--	1.12	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	3.20	0.200	--	12.1	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	0.445	0.200	--	1.93	0.869	--		1
p/m-Xylene	1.24	0.400	--	5.39	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.481	0.200	--	2.05	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.430	0.200	--	1.87	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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-03
 Client ID: IDA-033017-3
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:22
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	90		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	83		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-03
Client ID: IDA-033017-3
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 04/03/17 19:47
Analyst: MB

Date Collected: 03/30/17 16:22
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		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	0.117	0.020	--	0.736	0.126	--		1
Trichloroethene	0.020	0.020	--	0.107	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	81		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-04
Client ID: IDA-033017-4
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/17 20:21
Analyst: MB

Date Collected: 03/30/17 16:23
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloromethane	0.478	0.200	--	0.987	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.444	0.200	--	0.982	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	5.45	5.00	--	10.3	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	0.718	0.500	--	1.76	1.23	--		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	1.37	0.500	--	4.04	1.47	--		1
Ethyl Acetate	0.892	0.500	--	3.21	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
n-Hexane	ND	0.200	--	ND	0.705	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-04

Date Collected: 03/30/17 16:23

Client ID: IDA-033017-4

Date Received: 03/30/17

Sample Location: CHEEKTOWAGA, NY

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzene	0.416	0.200	--	1.33	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	4.92	0.200	--	18.5	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	1.25	0.200	--	5.43	0.869	--		1
p/m-Xylene	3.63	0.400	--	15.8	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	1.35	0.200	--	5.75	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.26	0.200	--	5.47	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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-04
 Client ID: IDA-033017-4
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:23
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	88		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	81		60-140

Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-04
Client ID: IDA-033017-4
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/17 20:21
Analyst: MB

Date Collected: 03/30/17 16:23
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.359	0.200	--	1.78	0.989	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		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	0.100	0.020	--	0.629	0.126	--		1
Trichloroethene	0.155	0.020	--	0.833	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	81		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-05
Client ID: IDA-033017-5
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 04/03/17 21:30
Analyst: MB

Date Collected: 03/30/17 16:24
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloromethane	0.508	0.200	--	1.05	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	1.05	0.200	--	2.32	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	0.509	0.500	--	1.25	1.23	--		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	1.17	0.500	--	3.45	1.47	--		1
Ethyl Acetate	0.646	0.500	--	2.33	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
n-Hexane	0.206	0.200	--	0.726	0.705	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-05

Date Collected: 03/30/17 16:24

Client ID: IDA-033017-5

Date Received: 03/30/17

Sample Location: CHEEKTOWAGA, NY

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzene	0.657	0.200	--	2.10	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	4.53	0.200	--	17.1	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	1.05	0.200	--	4.56	0.869	--		1
p/m-Xylene	2.84	0.400	--	12.3	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	1.06	0.200	--	4.51	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.01	0.200	--	4.39	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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-05
 Client ID: IDA-033017-5
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:24
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	87		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	78		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-05
Client ID: IDA-033017-5
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 04/03/17 21:30
Analyst: MB

Date Collected: 03/30/17 16:24
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.353	0.200	--	1.75	0.989	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		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	0.076	0.020	--	0.478	0.126	--		1
Trichloroethene	0.030	0.020	--	0.161	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	77		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-06
Client ID: IDA-033017-6
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/17 22:04
Analyst: MB

Date Collected: 03/30/17 15:59
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloromethane	0.530	0.200	--	1.09	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.625	0.200	--	1.38	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	0.523	0.500	--	1.29	1.23	--		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	1.83	0.500	--	5.40	1.47	--		1
Ethyl Acetate	0.615	0.500	--	2.22	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
n-Hexane	0.331	0.200	--	1.17	0.705	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-06
 Client ID: IDA-033017-6
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 15:59
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzene	0.490	0.200	--	1.57	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	5.59	0.200	--	21.1	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	1.03	0.200	--	4.47	0.869	--		1
p/m-Xylene	2.53	0.400	--	11.0	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	1.42	0.200	--	6.05	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.892	0.200	--	3.87	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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-06
 Client ID: IDA-033017-6
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 15:59
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	84		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	77		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-06
 Client ID: IDA-033017-6
 Sample Location: CHEEKTOWAGA, NY
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 04/03/17 22:04
 Analyst: MB

Date Collected: 03/30/17 15:59
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.296	0.200	--	1.46	0.989	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		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	0.114	0.020	--	0.717	0.126	--		1
Trichloroethene	0.041	0.020	--	0.220	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	76		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-07
Client ID: IDA-033017-7
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 04/03/17 22:39
Analyst: MB

Date Collected: 03/30/17 16:25
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloromethane	0.544	0.200	--	1.12	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.824	0.200	--	1.82	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
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	0.666	0.500	--	1.96	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
n-Hexane	ND	0.200	--	ND	0.705	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-07
 Client ID: IDA-033017-7
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:25
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzene	0.473	0.200	--	1.51	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	3.45	0.200	--	13.0	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	0.677	0.200	--	2.94	0.869	--		1
p/m-Xylene	1.71	0.400	--	7.43	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.935	0.200	--	3.98	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.573	0.200	--	2.49	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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-07
 Client ID: IDA-033017-7
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:25
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	85		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	72		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-07
Client ID: IDA-033017-7
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/17 22:39
Analyst: MB

Date Collected: 03/30/17 16:25
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.323	0.200	--	1.60	0.989	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		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	0.080	0.020	--	0.503	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	71		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-08
Client ID: IDA-033017-8
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 04/03/17 23:14
Analyst: MB

Date Collected: 03/30/17 16:06
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloromethane	0.535	0.200	--	1.10	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.336	0.200	--	0.743	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
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	0.879	0.500	--	2.59	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
n-Hexane	ND	0.200	--	ND	0.705	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-08

Date Collected: 03/30/17 16:06

Client ID: IDA-033017-8

Date Received: 03/30/17

Sample Location: CHEEKTOWAGA, NY

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzene	0.353	0.200	--	1.13	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	5.05	0.200	--	19.0	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	1.23	0.200	--	5.34	0.869	--		1
p/m-Xylene	3.45	0.400	--	15.0	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	1.91	0.200	--	8.13	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.16	0.200	--	5.04	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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-08
 Client ID: IDA-033017-8
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:06
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	90		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	79		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-08
Client ID: IDA-033017-8
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 04/03/17 23:14
Analyst: MB

Date Collected: 03/30/17 16:06
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.316	0.200	--	1.56	0.989	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		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	0.071	0.020	--	0.447	0.126	--		1
Trichloroethene	0.040	0.020	--	0.215	0.107	--		1
Tetrachloroethene	0.051	0.020	--	0.346	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	79		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-09
Client ID: IDA-033017-9
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 04/03/17 23:49
Analyst: MB

Date Collected: 03/30/17 16:28
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloromethane	0.501	0.200	--	1.03	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.641	0.200	--	1.42	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	5.05	5.00	--	9.52	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	0.568	0.500	--	1.40	1.23	--		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	1.08	0.500	--	3.19	1.47	--		1
Ethyl Acetate	1.04	0.500	--	3.75	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
n-Hexane	ND	0.200	--	ND	0.705	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-09

Date Collected: 03/30/17 16:28

Client ID: IDA-033017-9

Date Received: 03/30/17

Sample Location: CHEEKTOWAGA, NY

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzene	0.470	0.200	--	1.50	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	6.07	0.200	--	22.9	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	1.39	0.200	--	6.04	0.869	--		1
p/m-Xylene	3.94	0.400	--	17.1	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	2.09	0.200	--	8.90	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.36	0.200	--	5.91	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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-09
 Client ID: IDA-033017-9
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:28
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	87		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	76		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-09
Client ID: IDA-033017-9
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/17 23:49
Analyst: MB

Date Collected: 03/30/17 16:28
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.334	0.200	--	1.65	0.989	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		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	0.087	0.020	--	0.547	0.126	--		1
Trichloroethene	0.025	0.020	--	0.134	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	75		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-10
Client ID: IDA-033017-10
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 04/04/17 00:23
Analyst: MB

Date Collected: 03/30/17 16:28
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloromethane	0.477	0.200	--	0.985	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.502	0.200	--	1.11	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
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	0.675	0.500	--	1.99	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
n-Hexane	0.294	0.200	--	1.04	0.705	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-10

Date Collected: 03/30/17 16:28

Client ID: IDA-033017-10

Date Received: 03/30/17

Sample Location: CHEEKTOWAGA, NY

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzene	0.400	0.200	--	1.28	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	3.24	0.200	--	12.2	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	0.508	0.200	--	2.21	0.869	--		1
p/m-Xylene	1.34	0.400	--	5.82	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.498	0.200	--	2.12	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.472	0.200	--	2.05	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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-10
 Client ID: IDA-033017-10
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:28
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	87		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	79		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-10
Client ID: IDA-033017-10
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/04/17 00:23
Analyst: MB

Date Collected: 03/30/17 16:28
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.334	0.200	--	1.65	0.989	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		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	0.069	0.020	--	0.434	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	86		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	78		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-11
 Client ID: IDA-033017-11
 Sample Location: CHEEKTOWAGA, NY
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 04/04/17 00:58
 Analyst: MB

Date Collected: 03/30/17 15:57
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloromethane	0.568	0.200	--	1.17	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.464	0.200	--	1.03	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	7.28	5.00	--	13.7	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	0.706	0.500	--	1.74	1.23	--		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	1.80	0.500	--	5.31	1.47	--		1
Ethyl Acetate	0.850	0.500	--	3.06	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
n-Hexane	ND	0.200	--	ND	0.705	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-11

Date Collected: 03/30/17 15:57

Client ID: IDA-033017-11

Date Received: 03/30/17

Sample Location: CHEEKTOWAGA, NY

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzene	0.371	0.200	--	1.19	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	7.74	0.200	--	29.2	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	1.45	0.200	--	6.30	0.869	--		1
p/m-Xylene	3.95	0.400	--	17.2	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	2.40	0.200	--	10.2	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.25	0.200	--	5.43	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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-11

Date Collected: 03/30/17 15:57

Client ID: IDA-033017-11

Date Received: 03/30/17

Sample Location: CHEEKTOWAGA, NY

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	85		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	76		60-140

Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-11
Client ID: IDA-033017-11
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/04/17 00:58
Analyst: MB

Date Collected: 03/30/17 15:57
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.303	0.200	--	1.50	0.989	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		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	0.082	0.020	--	0.516	0.126	--		1
Trichloroethene	0.024	0.020	--	0.129	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	75		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-12
Client ID: ODA-033017-1
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 04/03/17 18:01
Analyst: MB

Date Collected: 03/30/17 16:45
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloromethane	0.485	0.200	--	1.00	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	1.93	1.00	--	4.58	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		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
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
n-Hexane	ND	0.200	--	ND	0.705	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-12

Date Collected: 03/30/17 16:45

Client ID: ODA-033017-1

Date Received: 03/30/17

Sample Location: CHEEKTOWAGA, NY

Field Prep: Not Specified

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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-12
 Client ID: ODA-033017-1
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:45
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	91		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	86		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-12
Client ID: ODA-033017-1
Sample Location: CHEEKTOWAGA, NY
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/17 18:01
Analyst: MB

Date Collected: 03/30/17 16:45
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.379	0.200	--	1.87	0.989	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		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	0.068	0.020	--	0.428	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	84		60-140

Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-13 D
Client ID: SSV-033017-1
Sample Location: CHEEKTOWAGA, NY
Matrix: Soil_Vapor
Analytical Method: 48,TO-15
Analytical Date: 04/05/17 02:53
Analyst: RY

Date Collected: 03/30/17 16:05
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.492	0.400	--	2.43	1.98	--		2
Chloromethane	ND	0.400	--	ND	0.826	--		2
Freon-114	ND	0.400	--	ND	2.80	--		2
Vinyl chloride	ND	0.400	--	ND	1.02	--		2
1,3-Butadiene	0.538	0.400	--	1.19	0.885	--		2
Bromomethane	ND	0.400	--	ND	1.55	--		2
Chloroethane	ND	0.400	--	ND	1.06	--		2
Ethanol	ND	10.0	--	ND	18.8	--		2
Vinyl bromide	ND	0.400	--	ND	1.75	--		2
Acetone	ND	2.00	--	ND	4.75	--		2
Trichlorofluoromethane	ND	0.400	--	ND	2.25	--		2
Isopropanol	ND	1.00	--	ND	2.46	--		2
1,1-Dichloroethene	ND	0.400	--	ND	1.59	--		2
Tertiary butyl Alcohol	ND	1.00	--	ND	3.03	--		2
Methylene chloride	ND	1.00	--	ND	3.47	--		2
3-Chloropropene	ND	0.400	--	ND	1.25	--		2
Carbon disulfide	ND	0.400	--	ND	1.25	--		2
Freon-113	ND	0.400	--	ND	3.07	--		2
trans-1,2-Dichloroethene	16.6	0.400	--	65.8	1.59	--		2
1,1-Dichloroethane	ND	0.400	--	ND	1.62	--		2
Methyl tert butyl ether	ND	0.400	--	ND	1.44	--		2
2-Butanone	ND	1.00	--	ND	2.95	--		2
cis-1,2-Dichloroethene	0.512	0.400	--	2.03	1.59	--		2
Ethyl Acetate	ND	1.00	--	ND	3.60	--		2



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-13 D
 Client ID: SSV-033017-1
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:05
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloroform	ND	0.400	--	ND	1.95	--		2
Tetrahydrofuran	ND	1.00	--	ND	2.95	--		2
1,2-Dichloroethane	ND	0.400	--	ND	1.62	--		2
n-Hexane	ND	0.400	--	ND	1.41	--		2
1,1,1-Trichloroethane	ND	0.400	--	ND	2.18	--		2
Benzene	ND	0.400	--	ND	1.28	--		2
Carbon tetrachloride	ND	0.400	--	ND	2.52	--		2
Cyclohexane	ND	0.400	--	ND	1.38	--		2
1,2-Dichloropropane	ND	0.400	--	ND	1.85	--		2
Bromodichloromethane	ND	0.400	--	ND	2.68	--		2
1,4-Dioxane	ND	0.400	--	ND	1.44	--		2
Trichloroethene	84.1	0.400	--	452	2.15	--		2
2,2,4-Trimethylpentane	ND	0.400	--	ND	1.87	--		2
Heptane	ND	0.400	--	ND	1.64	--		2
cis-1,3-Dichloropropene	ND	0.400	--	ND	1.82	--		2
4-Methyl-2-pentanone	ND	1.00	--	ND	4.10	--		2
trans-1,3-Dichloropropene	ND	0.400	--	ND	1.82	--		2
1,1,2-Trichloroethane	ND	0.400	--	ND	2.18	--		2
Toluene	1.71	0.400	--	6.44	1.51	--		2
2-Hexanone	ND	0.400	--	ND	1.64	--		2
Dibromochloromethane	ND	0.400	--	ND	3.41	--		2
1,2-Dibromoethane	ND	0.400	--	ND	3.07	--		2
Tetrachloroethene	ND	0.400	--	ND	2.71	--		2
Chlorobenzene	ND	0.400	--	ND	1.84	--		2
Ethylbenzene	0.620	0.400	--	2.69	1.74	--		2
p/m-Xylene	2.04	0.800	--	8.86	3.47	--		2
Bromoform	ND	0.400	--	ND	4.14	--		2
Styrene	1.27	0.400	--	5.41	1.70	--		2



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-13 D
 Client ID: SSV-033017-1
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:05
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	0.400	--	ND	2.75	--		2
o-Xylene	0.776	0.400	--	3.37	1.74	--		2
4-Ethyltoluene	ND	0.400	--	ND	1.97	--		2
1,3,5-Trimethylbenzene	ND	0.400	--	ND	1.97	--		2
1,2,4-Trimethylbenzene	ND	0.400	--	ND	1.97	--		2
Benzyl chloride	ND	0.400	--	ND	2.07	--		2
1,3-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,4-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,2-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,2,4-Trichlorobenzene	ND	0.400	--	ND	2.97	--		2
Hexachlorobutadiene	ND	0.400	--	ND	4.27	--		2

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	84		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-14 D
Client ID: SSV-033017-2
Sample Location: CHEEKTOWAGA, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 04/05/17 03:23
Analyst: RY

Date Collected: 03/30/17 15:58
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.667	--	ND	3.30	--		3.333
Chloromethane	ND	0.667	--	ND	1.38	--		3.333
Freon-114	ND	0.667	--	ND	4.66	--		3.333
Vinyl chloride	ND	0.667	--	ND	1.71	--		3.333
1,3-Butadiene	0.926	0.667	--	2.05	1.48	--		3.333
Bromomethane	ND	0.667	--	ND	2.59	--		3.333
Chloroethane	0.843	0.667	--	2.22	1.76	--		3.333
Ethanol	36.0	16.7	--	67.8	31.5	--		3.333
Vinyl bromide	ND	0.667	--	ND	2.92	--		3.333
Acetone	ND	3.33	--	ND	7.91	--		3.333
Trichlorofluoromethane	ND	0.667	--	ND	3.75	--		3.333
Isopropanol	ND	1.67	--	ND	4.10	--		3.333
1,1-Dichloroethene	ND	0.667	--	ND	2.64	--		3.333
Tertiary butyl Alcohol	ND	1.67	--	ND	5.06	--		3.333
Methylene chloride	ND	1.67	--	ND	5.80	--		3.333
3-Chloropropene	ND	0.667	--	ND	2.09	--		3.333
Carbon disulfide	ND	0.667	--	ND	2.08	--		3.333
Freon-113	ND	0.667	--	ND	5.11	--		3.333
trans-1,2-Dichloroethene	1.10	0.667	--	4.36	2.64	--		3.333
1,1-Dichloroethane	ND	0.667	--	ND	2.70	--		3.333
Methyl tert butyl ether	ND	0.667	--	ND	2.40	--		3.333
2-Butanone	1.83	1.67	--	5.40	4.93	--		3.333
cis-1,2-Dichloroethene	0.956	0.667	--	3.79	2.64	--		3.333
Ethyl Acetate	ND	1.67	--	ND	6.02	--		3.333



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-14 D
 Client ID: SSV-033017-2
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 15:58
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloroform	1.09	0.667	--	5.32	3.26	--		3.333
Tetrahydrofuran	ND	1.67	--	ND	4.93	--		3.333
1,2-Dichloroethane	ND	0.667	--	ND	2.70	--		3.333
n-Hexane	0.723	0.667	--	2.55	2.35	--		3.333
1,1,1-Trichloroethane	ND	0.667	--	ND	3.64	--		3.333
Benzene	ND	0.667	--	ND	2.13	--		3.333
Carbon tetrachloride	ND	0.667	--	ND	4.20	--		3.333
Cyclohexane	1.27	0.667	--	4.37	2.30	--		3.333
1,2-Dichloropropane	ND	0.667	--	ND	3.08	--		3.333
Bromodichloromethane	ND	0.667	--	ND	4.47	--		3.333
1,4-Dioxane	ND	0.667	--	ND	2.40	--		3.333
Trichloroethene	230	0.667	--	1240	3.58	--		3.333
2,2,4-Trimethylpentane	ND	0.667	--	ND	3.12	--		3.333
Heptane	ND	0.667	--	ND	2.73	--		3.333
cis-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--		3.333
4-Methyl-2-pentanone	ND	1.67	--	ND	6.84	--		3.333
trans-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--		3.333
1,1,2-Trichloroethane	ND	0.667	--	ND	3.64	--		3.333
Toluene	2.57	0.667	--	9.69	2.51	--		3.333
2-Hexanone	ND	0.667	--	ND	2.73	--		3.333
Dibromochloromethane	ND	0.667	--	ND	5.68	--		3.333
1,2-Dibromoethane	ND	0.667	--	ND	5.13	--		3.333
Tetrachloroethene	ND	0.667	--	ND	4.52	--		3.333
Chlorobenzene	ND	0.667	--	ND	3.07	--		3.333
Ethylbenzene	ND	0.667	--	ND	2.90	--		3.333
p/m-Xylene	ND	1.33	--	ND	5.78	--		3.333
Bromoform	ND	0.667	--	ND	6.90	--		3.333
Styrene	ND	0.667	--	ND	2.84	--		3.333



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-14 D
 Client ID: SSV-033017-2
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 15:58
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	0.667	--	ND	4.58	--		3.333
o-Xylene	ND	0.667	--	ND	2.90	--		3.333
4-Ethyltoluene	ND	0.667	--	ND	3.28	--		3.333
1,3,5-Trimethylbenzene	ND	0.667	--	ND	3.28	--		3.333
1,2,4-Trimethylbenzene	ND	0.667	--	ND	3.28	--		3.333
Benzyl chloride	ND	0.667	--	ND	3.45	--		3.333
1,3-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,4-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,2-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,2,4-Trichlorobenzene	ND	0.667	--	ND	4.95	--		3.333
Hexachlorobutadiene	ND	0.667	--	ND	7.11	--		3.333

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	85		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-15 D
Client ID: SSV-033017-3
Sample Location: CHEEKTOWAGA, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 04/05/17 03:53
Analyst: RY

Date Collected: 03/30/17 15:52
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	2.00	--	ND	9.89	--		10
Chloromethane	ND	2.00	--	ND	4.13	--		10
Freon-114	ND	2.00	--	ND	14.0	--		10
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
1,3-Butadiene	ND	2.00	--	ND	4.42	--		10
Bromomethane	ND	2.00	--	ND	7.77	--		10
Chloroethane	ND	2.00	--	ND	5.28	--		10
Ethanol	ND	50.0	--	ND	94.2	--		10
Vinyl bromide	ND	2.00	--	ND	8.74	--		10
Acetone	ND	10.0	--	ND	23.8	--		10
Trichlorofluoromethane	ND	2.00	--	ND	11.2	--		10
Isopropanol	ND	5.00	--	ND	12.3	--		10
1,1-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Tertiary butyl Alcohol	ND	5.00	--	ND	15.2	--		10
Methylene chloride	ND	5.00	--	ND	17.4	--		10
3-Chloropropene	ND	2.00	--	ND	6.26	--		10
Carbon disulfide	ND	2.00	--	ND	6.23	--		10
Freon-113	ND	2.00	--	ND	15.3	--		10
trans-1,2-Dichloroethene	5.74	2.00	--	22.8	7.93	--		10
1,1-Dichloroethane	ND	2.00	--	ND	8.09	--		10
Methyl tert butyl ether	ND	2.00	--	ND	7.21	--		10
2-Butanone	ND	5.00	--	ND	14.7	--		10
cis-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Ethyl Acetate	ND	5.00	--	ND	18.0	--		10



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-15 D
 Client ID: SSV-033017-3
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 15:52
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloroform	ND	2.00	--	ND	9.77	--		10
Tetrahydrofuran	ND	5.00	--	ND	14.7	--		10
1,2-Dichloroethane	ND	2.00	--	ND	8.09	--		10
n-Hexane	ND	2.00	--	ND	7.05	--		10
1,1,1-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Benzene	ND	2.00	--	ND	6.39	--		10
Carbon tetrachloride	ND	2.00	--	ND	12.6	--		10
Cyclohexane	ND	2.00	--	ND	6.88	--		10
1,2-Dichloropropane	ND	2.00	--	ND	9.24	--		10
Bromodichloromethane	ND	2.00	--	ND	13.4	--		10
1,4-Dioxane	ND	2.00	--	ND	7.21	--		10
Trichloroethene	1020	2.00	--	5480	10.7	--	E	10
2,2,4-Trimethylpentane	ND	2.00	--	ND	9.34	--		10
Heptane	ND	2.00	--	ND	8.20	--		10
cis-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
4-Methyl-2-pentanone	ND	5.00	--	ND	20.5	--		10
trans-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
1,1,2-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Toluene	ND	2.00	--	ND	7.54	--		10
2-Hexanone	ND	2.00	--	ND	8.20	--		10
Dibromochloromethane	ND	2.00	--	ND	17.0	--		10
1,2-Dibromoethane	ND	2.00	--	ND	15.4	--		10
Tetrachloroethene	ND	2.00	--	ND	13.6	--		10
Chlorobenzene	ND	2.00	--	ND	9.21	--		10
Ethylbenzene	ND	2.00	--	ND	8.69	--		10
p/m-Xylene	ND	4.00	--	ND	17.4	--		10
Bromoform	ND	2.00	--	ND	20.7	--		10
Styrene	ND	2.00	--	ND	8.52	--		10



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-15 D
 Client ID: SSV-033017-3
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 15:52
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	2.00	--	ND	13.7	--		10
o-Xylene	ND	2.00	--	ND	8.69	--		10
4-Ethyltoluene	ND	2.00	--	ND	9.83	--		10
1,3,5-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
1,2,4-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
Benzyl chloride	ND	2.00	--	ND	10.4	--		10
1,3-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,4-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2,4-Trichlorobenzene	ND	2.00	--	ND	14.8	--		10
Hexachlorobutadiene	ND	2.00	--	ND	21.3	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		60-140
Bromochloromethane	86		60-140
chlorobenzene-d5	80		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-15 D2
 Client ID: SSV-033017-3
 Sample Location: CHEEKTOWAGA, NY
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 04/05/17 08:23
 Analyst: RY

Date Collected: 03/30/17 15:52
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	1220	4.02	--	6560	21.6	--		20.1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	89		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-16
Client ID: SSV-033017-4
Sample Location: CHEEKTOWAGA, NY
Matrix: Soil_Vapor
Analytical Method: 48,TO-15
Analytical Date: 04/05/17 04:26
Analyst: RY

Date Collected: 03/30/17 16:13
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.290	0.200	--	1.43	0.989	--		1
Chloromethane	0.276	0.200	--	0.570	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	4.72	0.200	--	12.5	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	0.217	0.200	--	1.22	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	0.956	0.500	--	2.90	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.253	0.200	--	0.788	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	0.644	0.500	--	1.90	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 LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-16
 Client ID: SSV-033017-4
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:13
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	0.686	0.500	--	2.02	1.47	--		1
1,2-Dichloroethane	0.623	0.200	--	2.52	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.258	0.200	--	0.824	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	0.415	0.200	--	2.23	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	2.04	0.200	--	7.69	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	0.265	0.200	--	1.15	0.869	--		1
p/m-Xylene	0.857	0.400	--	3.72	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-16
 Client ID: SSV-033017-4
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:13
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.334	0.200	--	1.45	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	84		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	84		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-17
Client ID: SSV-033017-5
Sample Location: CHEEKTOWAGA, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 04/05/17 04:59
Analyst: RY

Date Collected: 03/30/17 16:09
Date Received: 03/30/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.307	0.200	--	1.52	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	6.88	0.200	--	18.2	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	0.212	0.200	--	1.19	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.09	0.500	--	3.30	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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-17

Date Collected: 03/30/17 16:09

Client ID: SSV-033017-5

Date Received: 03/30/17

Sample Location: CHEEKTOWAGA, NY

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	0.262	0.200	--	1.06	0.809	--		1
n-Hexane	0.728	0.200	--	2.57	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.687	0.200	--	2.19	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.593	0.200	--	2.04	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	16.5	0.200	--	88.7	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.316	0.200	--	1.30	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	1.01	0.200	--	3.81	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
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17**SAMPLE RESULTS**

Lab ID: L1709791-17
 Client ID: SSV-033017-5
 Sample Location: CHEEKTOWAGA, NY

Date Collected: 03/30/17 16:09
 Date Received: 03/30/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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	0.277	0.200	--	1.36	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	86		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	88		60-140



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 04/03/17 14:57

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-12 Batch: WG990579-4								
Propylene	ND	0.500	--	ND	0.861	--		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
Vinyl acetate	ND	1.00	--	ND	3.52	--		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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 04/03/17 14:57

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-12 Batch: WG990579-4								
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
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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 04/03/17 14:57

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-12 Batch: WG990579-4								
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
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 LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 04/03/17 15:33

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-12 Batch: WG990580-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	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	0.020	--	ND	0.053	--		1
Ethyl Alcohol	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	0.050	--	ND	0.281	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
tert-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
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		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
Vinyl acetate	ND	1.00	--	ND	3.52	--		1



Project Name: FORMER LEICA MICROSYSTEMS

Lab Number: L1709791

Project Number: DANA07-15.02

Report Date: 04/06/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 04/03/17 15:33

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-12 Batch: WG990580-4								
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		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
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
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
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.020	--	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
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 04/03/17 15:33

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-12 Batch: WG990580-4								
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
1,2,3-Trichloropropane	ND	0.020	--	ND	0.121	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	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
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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17

Method Blank Analysis

Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 04/03/17 15:33

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-12 Batch: WG990580-4								
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 04/04/17 13:59

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 13-17 Batch: WG990932-4								
Propylene	ND	0.500	--	ND	0.861	--		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
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
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 04/04/17 13:59

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 13-17 Batch: WG990932-4								
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
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



Project Name: FORMER LEICA MICROSYSTEMS**Lab Number:** L1709791**Project Number:** DANA07-15.02**Report Date:** 04/06/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 04/04/17 13:59

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 13-17 Batch: WG990932-4								
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
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

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-12 Batch: WG990579-3								
Chlorodifluoromethane	85		-		70-130	-		
Propylene	113		-		70-130	-		
Propane	80		-		70-130	-		
Chloromethane	89		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76		-		70-130	-		
Methanol	78		-		70-130	-		
Vinyl chloride	91		-		70-130	-		
1,3-Butadiene	88		-		70-130	-		
Butane	83		-		70-130	-		
Bromomethane	85		-		70-130	-		
Chloroethane	92		-		70-130	-		
Ethyl Alcohol	81		-		70-130	-		
Dichlorofluoromethane	80		-		70-130	-		
Vinyl bromide	84		-		70-130	-		
Acrolein	73		-		70-130	-		
Acetone	99		-		70-130	-		
Acetonitrile	85		-		70-130	-		
Trichlorofluoromethane	86		-		70-130	-		
iso-Propyl Alcohol	82		-		70-130	-		
Acrylonitrile	82		-		70-130	-		
Pentane	89		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-12 Batch: WG990579-3								
Ethyl ether	85		-		70-130	-		
1,1-Dichloroethene	87		-		70-130	-		
tert-Butyl Alcohol	76		-		70-130	-		
Methylene chloride	92		-		70-130	-		
3-Chloropropene	95		-		70-130	-		
Carbon disulfide	83		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	90		-		70-130	-		
trans-1,2-Dichloroethene	90		-		70-130	-		
1,1-Dichloroethane	95		-		70-130	-		
Methyl tert butyl ether	91		-		70-130	-		
Vinyl acetate	126		-		70-130	-		
2-Butanone	97		-		70-130	-		
cis-1,2-Dichloroethene	99		-		70-130	-		
Ethyl Acetate	102		-		70-130	-		
Chloroform	95		-		70-130	-		
Tetrahydrofuran	96		-		70-130	-		
2,2-Dichloropropane	82		-		70-130	-		
1,2-Dichloroethane	83		-		70-130	-		
n-Hexane	102		-		70-130	-		
Isopropyl Ether	90		-		70-130	-		
Ethyl-Tert-Butyl-Ether	89		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-12 Batch: WG990579-3								
1,1,1-Trichloroethane	94		-		70-130	-		
1,1-Dichloropropene	95		-		70-130	-		
Benzene	101		-		70-130	-		
Carbon tetrachloride	94		-		70-130	-		
Cyclohexane	102		-		70-130	-		
Tertiary-Amyl Methyl Ether	88		-		70-130	-		
Dibromomethane	87		-		70-130	-		
1,2-Dichloropropane	102		-		70-130	-		
Bromodichloromethane	99		-		70-130	-		
1,4-Dioxane	97		-		70-130	-		
Trichloroethene	96		-		70-130	-		
2,2,4-Trimethylpentane	105		-		70-130	-		
Methyl Methacrylate	110		-		70-130	-		
Heptane	105		-		70-130	-		
cis-1,3-Dichloropropene	102		-		70-130	-		
4-Methyl-2-pentanone	99		-		70-130	-		
trans-1,3-Dichloropropene	87		-		70-130	-		
1,1,2-Trichloroethane	99		-		70-130	-		
Toluene	98		-		70-130	-		
1,3-Dichloropropane	88		-		70-130	-		
2-Hexanone	95		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS
Project Number: DANA07-15.02

Lab Number: L1709791
Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-12 Batch: WG990579-3								
Dibromochloromethane	96		-		70-130	-		
1,2-Dibromoethane	94		-		70-130	-		
Butyl Acetate	89		-		70-130	-		
Octane	89		-		70-130	-		
Tetrachloroethene	91		-		70-130	-		
1,1,1,2-Tetrachloroethane	86		-		70-130	-		
Chlorobenzene	97		-		70-130	-		
Ethylbenzene	98		-		70-130	-		
p/m-Xylene	98		-		70-130	-		
Bromoform	95		-		70-130	-		
Styrene	99		-		70-130	-		
1,1,2,2-Tetrachloroethane	101		-		70-130	-		
o-Xylene	100		-		70-130	-		
1,2,3-Trichloropropane	91		-		70-130	-		
Nonane (C9)	95		-		70-130	-		
Isopropylbenzene	94		-		70-130	-		
Bromobenzene	92		-		70-130	-		
o-Chlorotoluene	90		-		70-130	-		
n-Propylbenzene	92		-		70-130	-		
p-Chlorotoluene	91		-		70-130	-		
4-Ethyltoluene	99		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-12 Batch: WG990579-3								
1,3,5-Trimethylbenzene	99		-		70-130	-		
tert-Butylbenzene	94		-		70-130	-		
1,2,4-Trimethylbenzene	102		-		70-130	-		
Decane (C10)	96		-		70-130	-		
Benzyl chloride	95		-		70-130	-		
1,3-Dichlorobenzene	98		-		70-130	-		
1,4-Dichlorobenzene	99		-		70-130	-		
sec-Butylbenzene	96		-		70-130	-		
p-Isopropyltoluene	88		-		70-130	-		
1,2-Dichlorobenzene	100		-		70-130	-		
n-Butylbenzene	98		-		70-130	-		
1,2-Dibromo-3-chloropropane	86		-		70-130	-		
Undecane	103		-		70-130	-		
Dodecane (C12)	101		-		70-130	-		
1,2,4-Trichlorobenzene	100		-		70-130	-		
Naphthalene	93		-		70-130	-		
1,2,3-Trichlorobenzene	94		-		70-130	-		
Hexachlorobutadiene	99		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-12 Batch: WG990580-3								
Propylene	113		-		70-130	-		25
Dichlorodifluoromethane	86		-		70-130	-		25
Chloromethane	90		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	89		-		70-130	-		25
Vinyl chloride	87		-		70-130	-		25
1,3-Butadiene	94		-		70-130	-		25
Bromomethane	85		-		70-130	-		25
Chloroethane	84		-		70-130	-		25
Ethyl Alcohol	82		-		70-130	-		25
Vinyl bromide	81		-		70-130	-		25
Acetone	93		-		70-130	-		25
Trichlorofluoromethane	85		-		70-130	-		25
iso-Propyl Alcohol	86		-		70-130	-		25
Acrylonitrile	83		-		70-130	-		25
1,1-Dichloroethene	87		-		70-130	-		25
tert-Butyl Alcohol ¹	76		-		70-130	-		25
Methylene chloride	90		-		70-130	-		25
3-Chloropropene	91		-		70-130	-		25
Carbon disulfide	83		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	90		-		70-130	-		25
Halothane	94		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-12 Batch: WG990580-3								
trans-1,2-Dichloroethene	87		-		70-130	-		25
1,1-Dichloroethane	93		-		70-130	-		25
Methyl tert butyl ether	90		-		70-130	-		25
Vinyl acetate	109		-		70-130	-		25
2-Butanone	96		-		70-130	-		25
cis-1,2-Dichloroethene	94		-		70-130	-		25
Ethyl Acetate	100		-		70-130	-		25
Chloroform	93		-		70-130	-		25
Tetrahydrofuran	96		-		70-130	-		25
1,2-Dichloroethane	88		-		70-130	-		25
n-Hexane	100		-		70-130	-		25
1,1,1-Trichloroethane	93		-		70-130	-		25
Benzene	97		-		70-130	-		25
Carbon tetrachloride	93		-		70-130	-		25
Cyclohexane	103		-		70-130	-		25
Dibromomethane ¹	78		-		70-130	-		25
1,2-Dichloropropane	99		-		70-130	-		25
Bromodichloromethane	94		-		70-130	-		25
1,4-Dioxane	97		-		70-130	-		25
Trichloroethene	91		-		70-130	-		25
2,2,4-Trimethylpentane	106		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-12 Batch: WG990580-3								
cis-1,3-Dichloropropene	101		-		70-130	-		25
4-Methyl-2-pentanone	101		-		70-130	-		25
trans-1,3-Dichloropropene	82		-		70-130	-		25
1,1,2-Trichloroethane	99		-		70-130	-		25
Toluene	97		-		70-130	-		25
2-Hexanone	93		-		70-130	-		25
Dibromochloromethane	96		-		70-130	-		25
1,2-Dibromoethane	95		-		70-130	-		25
Tetrachloroethene	90		-		70-130	-		25
1,1,1,2-Tetrachloroethane	86		-		70-130	-		25
Chlorobenzene	97		-		70-130	-		25
Ethylbenzene	96		-		70-130	-		25
p/m-Xylene	97		-		70-130	-		25
Bromoform	90		-		70-130	-		25
Styrene	98		-		70-130	-		25
1,1,2,2-Tetrachloroethane	99		-		70-130	-		25
o-Xylene	96		-		70-130	-		25
1,2,3-Trichloropropane ¹	92		-		70-130	-		25
Isopropylbenzene	94		-		70-130	-		25
Bromobenzene ¹	92		-		70-130	-		25
4-Ethyltoluene	99		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-12 Batch: WG990580-3								
1,3,5-Trimethylbenzene	96		-		70-130	-		25
1,2,4-Trimethylbenzene	103		-		70-130	-		25
Benzyl chloride	94		-		70-130	-		25
1,3-Dichlorobenzene	101		-		70-130	-		25
1,4-Dichlorobenzene	100		-		70-130	-		25
sec-Butylbenzene	93		-		70-130	-		25
p-Isopropyltoluene	87		-		70-130	-		25
1,2-Dichlorobenzene	100		-		70-130	-		25
n-Butylbenzene	96		-		70-130	-		25
1,2,4-Trichlorobenzene	103		-		70-130	-		25
Naphthalene	91		-		70-130	-		25
1,2,3-Trichlorobenzene	95		-		70-130	-		25
Hexachlorobutadiene	100		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 13-17 Batch: WG990932-3								
Chlorodifluoromethane	102		-		70-130	-		
Propylene	111		-		70-130	-		
Propane	98		-		70-130	-		
Dichlorodifluoromethane	97		-		70-130	-		
Chloromethane	114		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	99		-		70-130	-		
Methanol	111		-		70-130	-		
Vinyl chloride	100		-		70-130	-		
1,3-Butadiene	115		-		70-130	-		
Butane	109		-		70-130	-		
Bromomethane	94		-		70-130	-		
Chloroethane	95		-		70-130	-		
Ethyl Alcohol	115		-		70-130	-		
Dichlorofluoromethane	93		-		70-130	-		
Vinyl bromide	93		-		70-130	-		
Acrolein	89		-		70-130	-		
Acetone	127		-		70-130	-		
Acetonitrile	103		-		70-130	-		
Trichlorofluoromethane	112		-		70-130	-		
iso-Propyl Alcohol	113		-		70-130	-		
Acrylonitrile	99		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 13-17 Batch: WG990932-3								
Pentane	100		-		70-130	-		
Ethyl ether	110		-		70-130	-		
1,1-Dichloroethene	104		-		70-130	-		
tert-Butyl Alcohol	92		-		70-130	-		
Methylene chloride	120		-		70-130	-		
3-Chloropropene	120		-		70-130	-		
Carbon disulfide	89		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	96		-		70-130	-		
trans-1,2-Dichloroethene	92		-		70-130	-		
1,1-Dichloroethane	92		-		70-130	-		
Methyl tert butyl ether	84		-		70-130	-		
Vinyl acetate	119		-		70-130	-		
2-Butanone	98		-		70-130	-		
cis-1,2-Dichloroethene	83		-		70-130	-		
Ethyl Acetate	92		-		70-130	-		
Chloroform	92		-		70-130	-		
Tetrahydrofuran	97		-		70-130	-		
2,2-Dichloropropane	83		-		70-130	-		
1,2-Dichloroethane	97		-		70-130	-		
n-Hexane	105		-		70-130	-		
Isopropyl Ether	88		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 13-17 Batch: WG990932-3								
Ethyl-Tert-Butyl-Ether	92		-		70-130	-		
1,1,1-Trichloroethane	105		-		70-130	-		
1,1-Dichloropropene	96		-		70-130	-		
Benzene	95		-		70-130	-		
Carbon tetrachloride	117		-		70-130	-		
Cyclohexane	101		-		70-130	-		
Tertiary-Amyl Methyl Ether	84		-		70-130	-		
Dibromomethane	103		-		70-130	-		
1,2-Dichloropropane	104		-		70-130	-		
Bromodichloromethane	113		-		70-130	-		
1,4-Dioxane	100		-		70-130	-		
Trichloroethene	104		-		70-130	-		
2,2,4-Trimethylpentane	106		-		70-130	-		
Methyl Methacrylate	130		-		70-130	-		
Heptane	114		-		70-130	-		
cis-1,3-Dichloropropene	104		-		70-130	-		
4-Methyl-2-pentanone	122		-		70-130	-		
trans-1,3-Dichloropropene	93		-		70-130	-		
1,1,2-Trichloroethane	103		-		70-130	-		
Toluene	80		-		70-130	-		
1,3-Dichloropropane	82		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 13-17 Batch: WG990932-3								
2-Hexanone	105		-		70-130	-		
Dibromochloromethane	93		-		70-130	-		
1,2-Dibromoethane	85		-		70-130	-		
Butyl Acetate	77		-		70-130	-		
Octane	73		-		70-130	-		
Tetrachloroethene	78		-		70-130	-		
1,1,1,2-Tetrachloroethane	81		-		70-130	-		
Chlorobenzene	83		-		70-130	-		
Ethylbenzene	82		-		70-130	-		
p/m-Xylene	84		-		70-130	-		
Bromoform	90		-		70-130	-		
Styrene	80		-		70-130	-		
1,1,2,2-Tetrachloroethane	91		-		70-130	-		
o-Xylene	88		-		70-130	-		
1,2,3-Trichloropropane	82		-		70-130	-		
Nonane (C9)	90		-		70-130	-		
Isopropylbenzene	80		-		70-130	-		
Bromobenzene	81		-		70-130	-		
o-Chlorotoluene	78		-		70-130	-		
n-Propylbenzene	79		-		70-130	-		
p-Chlorotoluene	79		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 13-17 Batch: WG990932-3								
4-Ethyltoluene	83		-		70-130	-		
1,3,5-Trimethylbenzene	84		-		70-130	-		
tert-Butylbenzene	82		-		70-130	-		
1,2,4-Trimethylbenzene	90		-		70-130	-		
Decane (C10)	87		-		70-130	-		
Benzyl chloride	92		-		70-130	-		
1,3-Dichlorobenzene	86		-		70-130	-		
1,4-Dichlorobenzene	86		-		70-130	-		
sec-Butylbenzene	82		-		70-130	-		
p-Isopropyltoluene	76		-		70-130	-		
1,2-Dichlorobenzene	85		-		70-130	-		
n-Butylbenzene	87		-		70-130	-		
1,2-Dibromo-3-chloropropane	93		-		70-130	-		
Undecane	91		-		70-130	-		
Dodecane (C12)	101		-		70-130	-		
1,2,4-Trichlorobenzene	94		-		70-130	-		
Naphthalene	84		-		70-130	-		
1,2,3-Trichlorobenzene	88		-		70-130	-		
Hexachlorobutadiene	88		-		70-130	-		

Lab Duplicate Analysis Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-12 QC Batch ID: WG990579-5 QC Sample: L1709791-04 Client ID: IDA-033017-4						
Chloromethane	0.478	0.525	ppbV	9		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	0.444	0.501	ppbV	12		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	5.45	5.50	ppbV	1		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	ND	ND	ppbV	NC		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
Isopropanol	0.718	0.697	ppbV	3		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		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	1.37	1.33	ppbV	3		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-12 QC Batch ID: WG990579-5 QC Sample: L1709791-04 Client ID: IDA-033017-4						
Ethyl Acetate	0.892	0.946	ppbV	6		25
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
Benzene	0.416	0.401	ppbV	4		25
Cyclohexane	ND	ND	ppbV	NC		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	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	4.92	5.04	ppbV	2		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25

Lab Duplicate Analysis Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-12 QC Batch ID: WG990579-5 QC Sample: L1709791-04 Client ID: IDA-033017-4						
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	1.25	1.29	ppbV	3		25
p/m-Xylene	3.63	3.73	ppbV	3		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	1.35	1.35	ppbV	0		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	1.26	1.30	ppbV	3		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		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

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1709791

Report Date: 04/06/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-12 QC Batch ID: WG990580-5 QC Sample: L1709791-04 Client ID: IDA-033017-4						
Dichlorodifluoromethane	0.359	0.323	ppbV	11		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	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	0.100	0.098	ppbV	2		25
Trichloroethene	0.155	0.154	ppbV	1		25
Tetrachloroethene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 13-17 QC Batch ID: WG990932-5 QC Sample: L1709672-05 Client ID: DUP Sample						
Dichlorodifluoromethane	0.281	0.388	ppbV	32	Q	25
Chloromethane	0.784	0.826	ppbV	5		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	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
Ethyl Alcohol	173	176	ppbV	2		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	24.2	24.5	ppbV	1		25
Trichlorofluoromethane	0.495	0.497	ppbV	0		25
iso-Propyl Alcohol	22.1	23.0	ppbV	4		25
tert-Butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	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

Lab Duplicate Analysis Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 13-17 QC Batch ID: WG990932-5 QC Sample: L1709672-05 Client ID: DUP Sample						
2-Butanone	1.18	1.18	ppbV	0		25
Ethyl Acetate	3.23	3.41	ppbV	5		25
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.349	0.354	ppbV	1		25
Benzene	0.220	0.222	ppbV	1		25
Cyclohexane	ND	ND	ppbV	NC		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	ND	ND	ppbV	NC		25
Heptane	0.562	0.563	ppbV	0		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	2.06	2.01	ppbV	2		25
2-Hexanone	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: FORMER LEICA MICROSYSTEMS

Project Number: DANA07-15.02

Lab Number: L1709791

Report Date: 04/06/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 13-17 QC Batch ID: WG990932-5 QC Sample: L1709672-05 Client ID: DUP Sample						
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	0.306	0.304	ppbV	1		25
p/m-Xylene	1.15	1.18	ppbV	3		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	0.510	0.518	ppbV	2		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		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

Project Name: FORMER LEICA MICROSYSTEMS

Serial_No:04061714:48
Lab Number: L1709791

Project Number: DANA07-15.02

Report Date: 04/06/17

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 Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1709791-01	IDA-033017-1	0250	Flow 3	03/29/17	238558		-	-	-	Pass	4.2	4.2	0
L1709791-01	IDA-033017-1	511	2.7L Can	03/29/17	238558	L1708880-01	Pass	-29.1	-8.5	-	-	-	-
L1709791-02	IDA-033017-2	0046	Flow 5	03/29/17	238558		-	-	-	Pass	4.1	4.3	5
L1709791-02	IDA-033017-2	391	2.7L Can	03/29/17	238558	L1708880-01	Pass	-28.5	-6.8	-	-	-	-
L1709791-03	IDA-033017-3	0144	Flow 4	03/29/17	238558		-	-	-	Pass	4.4	3.8	15
L1709791-03	IDA-033017-3	105	2.7L Can	03/29/17	238558	L1707828-01	Pass	-29.1	-8.0	-	-	-	-
L1709791-04	IDA-033017-4	0172	Flow 5	03/29/17	238558		-	-	-	Pass	4.1	4.4	7
L1709791-04	IDA-033017-4	539	2.7L Can	03/29/17	238558	L1707828-01	Pass	-29.1	-6.7	-	-	-	-
L1709791-05	IDA-033017-5	0766	Flow 3	03/29/17	238558		-	-	-	Pass	4.5	4.6	2
L1709791-05	IDA-033017-5	403	2.7L Can	03/29/17	238558	L1707828-01	Pass	-29.4	-6.5	-	-	-	-
L1709791-06	IDA-033017-6	0915	Flow 5	03/29/17	238558		-	-	-	Pass	4.1	3.9	5
L1709791-06	IDA-033017-6	186	2.7L Can	03/29/17	238558	L1707828-01	Pass	-29.1	-10.4	-	-	-	-
L1709791-07	IDA-033017-7	0699	#20 SV	03/29/17	238558		-	-	-	Pass	4.5	4.3	5
L1709791-07	IDA-033017-7	323	2.7L Can	03/29/17	238558	L1707828-01	Pass	-28.6	-15.1	-	-	-	-
L1709791-08	IDA-033017-8	0294	Flow 5	03/29/17	238558		-	-	-	Pass	4.5	4.3	5

Project Name: FORMER LEICA MICROSYSTEMS

Serial_No:04061714:48
Lab Number: L1709791

Project Number: DANA07-15.02

Report Date: 04/06/17

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 Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1709791-08	IDA-033017-8	364	2.7L Can	03/29/17	238558	L1706972-01	Pass	-29.8	-6.1	-	-	-	-
L1709791-09	IDA-033017-9	0370	Flow 5	03/29/17	238558		-	-	-	Pass	4.5	4.6	2
L1709791-09	IDA-033017-9	544	2.7L Can	03/29/17	238558	L1708277-01	Pass	-29.7	-10.1	-	-	-	-
L1709791-10	IDA-033017-10	0811	Flow 3	03/29/17	238558		-	-	-	Pass	4.5	3.9	14
L1709791-10	IDA-033017-10	332	2.7L Can	03/29/17	238558	L1706972-01	Pass	-29.6	-5.2	-	-	-	-
L1709791-11	IDA-033017-11	0848	Flow 5	03/29/17	238558		-	-	-	Pass	4.4	3.9	12
L1709791-11	IDA-033017-11	551	2.7L Can	03/29/17	238558	L1706972-01	Pass	-29.7	-10.0	-	-	-	-
L1709791-12	ODA-033017-1	0795	Flow 4	03/29/17	238558		-	-	-	Pass	4.3	4.2	2
L1709791-12	ODA-033017-1	536	2.7L Can	03/29/17	238558	L1707695-01	Pass	-29.4	-4.9	-	-	-	-
L1709791-13	SSV-033017-1	0809	Flow 4	03/29/17	238558		-	-	-	Pass	4.4	4.4	0
L1709791-13	SSV-033017-1	547	2.7L Can	03/29/17	238558	L1708880-01	Pass	-29.1	-5.9	-	-	-	-
L1709791-14	SSV-033017-2	0589	Flow 5	03/29/17	238558		-	-	-	Pass	4.5	4.5	0
L1709791-14	SSV-033017-2	375	2.7L Can	03/29/17	238558	L1708880-01	Pass	-28.1	-5.6	-	-	-	-
L1709791-15	SSV-033017-3	0203	Flow 5	03/29/17	238558		-	-	-	Pass	4.2	3.9	7
L1709791-15	SSV-033017-3	338	2.7L Can	03/29/17	238558	L1707523-01	Pass	-29.5	-9.6	-	-	-	-

Project Name: FORMER LEICA MICROSYSTEMS

Serial_No:04061714:48
Lab Number: L1709791

Project Number: DANA07-15.02

Report Date: 04/06/17

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 Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1709791-16	SSV-033017-4	0237	Flow 5	03/29/17	238558		-	-	-	Pass	4.4	4.2	5
L1709791-16	SSV-033017-4	414	2.7L Can	03/29/17	238558	L1708880-01	Pass	-29.4	-9.7	-	-	-	-
L1709791-17	SSV-033017-5	0292	Flow 5	03/29/17	238558		-	-	-	Pass	4.2	3.9	7
L1709791-17	SSV-033017-5	459	2.7L Can	03/29/17	238558	L1708880-01	Pass	-28.0	-7.1	-	-	-	-

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

Lab Number: L1706972
Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1706972-01
Client ID: CAN 332 SHELF 10
Sample Location:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 03/07/17 15:20
Analyst: MB

Date Collected: 03/06/17 16:00
Date Received: 03/07/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1706972**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1706972-01

Date Collected: 03/06/17 16:00

Client ID: CAN 332 SHELF 10

Date Received: 03/07/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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
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
1,1,1-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
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

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1706972**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1706972-01

Date Collected: 03/06/17 16:00

Client ID: CAN 332 SHELF 10

Date Received: 03/07/17

Sample Location:

Field Prep: Not Specified

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



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1706972**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1706972-01

Date Collected: 03/06/17 16:00

Client ID: CAN 332 SHELF 10

Date Received: 03/07/17

Sample Location:

Field Prep: Not Specified

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

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1706972**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1706972-01

Date Collected: 03/06/17 16:00

Client ID: CAN 332 SHELF 10

Date Received: 03/07/17

Sample Location:

Field Prep: Not Specified

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	100		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	101		60-140

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1706972**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1706972-01
Client ID: CAN 332 SHELF 10
Sample Location:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 03/07/17 15:20
Analyst: MB

Date Collected: 03/06/17 16:00
Date Received: 03/07/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	0.020	--	ND	0.053	--		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
Halothane	ND	0.050	--	ND	0.404	--		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: L1706972
Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1706972-01
Client ID: CAN 332 SHELF 10
Sample Location:

Date Collected: 03/06/17 16:00
Date Received: 03/07/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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
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
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1706972**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1706972-01

Date Collected: 03/06/17 16:00

Client ID: CAN 332 SHELF 10

Date Received: 03/07/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
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	100		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	99		60-140

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707523**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707523-01

Date Collected: 03/09/17 16:00

Client ID: CAN 328 SHELF 3

Date Received: 03/10/17

Sample Location:

Field Prep: Not Specified

Matrix: Air

Analytical Method: 48,TO-15

Analytical Date: 03/10/17 15:49

Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707523**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707523-01

Date Collected: 03/09/17 16:00

Client ID: CAN 328 SHELF 3

Date Received: 03/10/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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
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
1,1,1-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
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

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

Lab Number: L1707523
Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1707523-01
Client ID: CAN 328 SHELF 3
Sample Location:

Date Collected: 03/09/17 16:00
Date Received: 03/10/17
Field Prep: Not Specified

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



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707523**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707523-01

Date Collected: 03/09/17 16:00

Client ID: CAN 328 SHELF 3

Date Received: 03/10/17

Sample Location:

Field Prep: Not Specified

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

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707523**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707523-01

Date Collected: 03/09/17 16:00

Client ID: CAN 328 SHELF 3

Date Received: 03/10/17

Sample Location:

Field Prep: Not Specified

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

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

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707523**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707523-01
Client ID: CAN 328 SHELF 3
Sample Location:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 03/10/17 15:49
Analyst: MB

Date Collected: 03/09/17 16:00
Date Received: 03/10/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	0.020	--	ND	0.053	--		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
Halothane	ND	0.050	--	ND	0.404	--		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: L1707523
Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1707523-01
Client ID: CAN 328 SHELF 3
Sample Location:

Date Collected: 03/09/17 16:00
Date Received: 03/10/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707523**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707523-01

Date Collected: 03/09/17 16:00

Client ID: CAN 328 SHELF 3

Date Received: 03/10/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
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	98		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	98		60-140

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

Lab Number: L1707695
Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1707695-01
Client ID: CAN 536 SHELF 7
Sample Location:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 03/13/17 18:41
Analyst: MB

Date Collected: 03/10/17 16:00
Date Received: 03/13/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1



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

Lab Number: L1707695
Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1707695-01
Client ID: CAN 536 SHELF 7
Sample Location:

Date Collected: 03/10/17 16:00
Date Received: 03/13/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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
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
1,1,1-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
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



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707695**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707695-01

Date Collected: 03/10/17 16:00

Client ID: CAN 536 SHELF 7

Date Received: 03/13/17

Sample Location:

Field Prep: Not Specified

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



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

Lab Number: L1707695
Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1707695-01
Client ID: CAN 536 SHELF 7
Sample Location:

Date Collected: 03/10/17 16:00
Date Received: 03/13/17
Field Prep: Not Specified

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

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707695**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707695-01

Date Collected: 03/10/17 16:00

Client ID: CAN 536 SHELF 7

Date Received: 03/13/17

Sample Location:

Field Prep: Not Specified

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	89		60-140

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707695**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707695-01
Client ID: CAN 536 SHELF 7
Sample Location:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 03/13/17 18:41
Analyst: MB

Date Collected: 03/10/17 16:00
Date Received: 03/13/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	0.020	--	ND	0.053	--		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
Halothane	ND	0.050	--	ND	0.404	--		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**Lab Number:** L1707695**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707695-01

Date Collected: 03/10/17 16:00

Client ID: CAN 536 SHELF 7

Date Received: 03/13/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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
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
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707695**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707695-01

Date Collected: 03/10/17 16:00

Client ID: CAN 536 SHELF 7

Date Received: 03/13/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
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	94		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707828**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707828-01
Client ID: CAN 827 SHELF 13
Sample Location:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 03/15/17 11:54
Analyst: RY

Date Collected: 03/13/17 16:00
Date Received: 03/15/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1



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

Lab Number: L1707828
Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1707828-01
Client ID: CAN 827 SHELF 13
Sample Location:

Date Collected: 03/13/17 16:00
Date Received: 03/15/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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
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
1,1,1-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
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



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707828**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707828-01

Date Collected: 03/13/17 16:00

Client ID: CAN 827 SHELF 13

Date Received: 03/15/17

Sample Location:

Field Prep: Not Specified

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



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707828**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707828-01

Date Collected: 03/13/17 16:00

Client ID: CAN 827 SHELF 13

Date Received: 03/15/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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**Lab Number:** L1707828**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707828-01

Date Collected: 03/13/17 16:00

Client ID: CAN 827 SHELF 13

Date Received: 03/15/17

Sample Location:

Field Prep: Not Specified

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

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
Disiloxane, hexamethyl-	1.4	NJ	ppbV		1
unknown siloxane	3.2	J	ppbV		1
Cyclotrisiloxane, Hexamethyl-	3.2	NJ	ppbV		1

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



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707828**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707828-01
Client ID: CAN 827 SHELF 13
Sample Location:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 03/15/17 11:54
Analyst: RY

Date Collected: 03/13/17 16:00
Date Received: 03/15/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	0.020	--	ND	0.053	--		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
Halothane	ND	0.050	--	ND	0.404	--		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: L1707828
Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1707828-01
Client ID: CAN 827 SHELF 13
Sample Location:

Date Collected: 03/13/17 16:00
Date Received: 03/15/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1707828**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1707828-01

Date Collected: 03/13/17 16:00

Client ID: CAN 827 SHELF 13

Date Received: 03/15/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
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	96		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	101		60-140

Project Name:**Lab Number:** L1708277**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1708277-01
 Client ID: CAN 544 SHELF 3
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 03/18/17 15:32
 Analyst: MB

Date Collected: 03/17/17 17:00
 Date Received: 03/18/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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
1,2-Dichloro-1,1,2,2-tetrafluoroethane	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
Ethyl Alcohol	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
iso-Propyl Alcohol	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
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1



Project Name:**Lab Number:** L1708277**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1708277-01

Date Collected: 03/17/17 17:00

Client ID: CAN 544 SHELF 3

Date Received: 03/18/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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
1,1,2-Trichloro-1,2,2-Trifluoroethane	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
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
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		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
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
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



Project Name:

Lab Number: L1708277

Project Number: CANISTER QC BAT

Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1708277-01

Date Collected: 03/17/17 17:00

Client ID: CAN 544 SHELF 3

Date Received: 03/18/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1

Project Name:

Lab Number: L1708277

Project Number: CANISTER QC BAT

Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1708277-01

Date Collected: 03/17/17 17:00

Client ID: CAN 544 SHELF 3

Date Received: 03/18/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-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 (C10)	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 (C12)	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

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds



Project Name:

Lab Number: L1708277

Project Number: CANISTER QC BAT

Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1708277-01

Date Collected: 03/17/17 17:00

Client ID: CAN 544 SHELF 3

Date Received: 03/18/17

Sample Location:

Field Prep: Not Specified

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	89		60-140

Project Name:**Lab Number:** L1708277**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1708277-01
 Client ID: CAN 544 SHELF 3
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 03/18/17 15:32
 Analyst: MB

Date Collected: 03/17/17 17:00
 Date Received: 03/18/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	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	0.020	--	ND	0.053	--		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
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		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:

Lab Number: L1708277

Project Number: CANISTER QC BAT

Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1708277-01

Date Collected: 03/17/17 17:00

Client ID: CAN 544 SHELF 3

Date Received: 03/18/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		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
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name:

Lab Number: L1708277

Project Number: CANISTER QC BAT

Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1708277-01

Date Collected: 03/17/17 17:00

Client ID: CAN 544 SHELF 3

Date Received: 03/18/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
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	95		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	93		60-140

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

Lab Number: L1708880
Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1708880-01
Client ID: CAN 414 SHEF 1
Sample Location:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 03/23/17 18:03
Analyst: RY

Date Collected: 03/23/17 09:00
Date Received: 03/23/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1



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

Lab Number: L1708880
Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1708880-01
Client ID: CAN 414 SHEF 1
Sample Location:

Date Collected: 03/23/17 09:00
Date Received: 03/23/17
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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
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
1,1,1-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
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



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

Lab Number: L1708880
Report Date: 04/06/17

Air Canister Certification Results

Lab ID: L1708880-01
Client ID: CAN 414 SHEF 1
Sample Location:

Date Collected: 03/23/17 09:00
Date Received: 03/23/17
Field Prep: Not Specified

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



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1708880**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1708880-01

Date Collected: 03/23/17 09:00

Client ID: CAN 414 SHEF 1

Date Received: 03/23/17

Sample Location:

Field Prep: Not Specified

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

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1708880**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1708880-01

Date Collected: 03/23/17 09:00

Client ID: CAN 414 SHEF 1

Date Received: 03/23/17

Sample Location:

Field Prep: Not Specified

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	105		60-140
Bromochloromethane	104		60-140
chlorobenzene-d5	102		60-140

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1708880**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1708880-01
 Client ID: CAN 414 SHEF 1
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 03/23/17 18:03
 Analyst: RY

Date Collected: 03/23/17 09:00
 Date Received: 03/23/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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	0.020	--	ND	0.053	--		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
Halothane	ND	0.050	--	ND	0.404	--		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**Lab Number:** L1708880**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1708880-01

Date Collected: 03/23/17 09:00

Client ID: CAN 414 SHEF 1

Date Received: 03/23/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
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
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1708880**Project Number:** CANISTER QC BAT**Report Date:** 04/06/17**Air Canister Certification Results**

Lab ID: L1708880-01

Date Collected: 03/23/17 09:00

Client ID: CAN 414 SHEF 1

Date Received: 03/23/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
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	105		60-140
bromochloromethane	104		60-140
chlorobenzene-d5	102		60-140

Project Name: FORMER LEICA MICROSYSTEMS**Project Number:** DANA07-15.02**Lab Number:** L1709791**Report Date:** 04/06/17**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Cooler Information Custody Seal**Cooler**

N/A Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1709791-01A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30),TO15-SIM(30)
L1709791-02A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30),TO15-SIM(30)
L1709791-03A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30),TO15-SIM(30)
L1709791-04A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30),TO15-SIM(30)
L1709791-05A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30),TO15-SIM(30)
L1709791-06A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30),TO15-SIM(30)
L1709791-07A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30),TO15-SIM(30)
L1709791-08A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30),TO15-SIM(30)
L1709791-09A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30),TO15-SIM(30)
L1709791-10A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30),TO15-SIM(30)
L1709791-11A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30),TO15-SIM(30)
L1709791-12A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30),TO15-SIM(30)
L1709791-13A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30)
L1709791-14A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30)
L1709791-15A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30)
L1709791-16A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30)
L1709791-17A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name: FORMER LEICA MICROSYSTEMS
Project Number: DANA07-15.02

Lab Number: L1709791
Report Date: 04/06/17

GLOSSARY

Acronyms

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).
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.
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.
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.
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

- 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

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.

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.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- 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

Report Format: Data Usability Report



Project Name: FORMER LEICA MICROSYSTEMS
Project Number: DANA07-15.02

Lab Number: L1709791
Report Date: 04/06/17

Data Qualifiers

- 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.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: FORMER LEICA MICROSYSTEMS
Project Number: DANA07-15.02

Lab Number: L1709791
Report Date: 04/06/17

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.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 10

Department: **Quality Assurance**

Published Date: 1/16/2017 11:00:05 AM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**EPA 300:** DW: Bromide**EPA 6860:** NPW and SCM: Perchlorate**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation**EPA 9012B:** NPW: Total Cyanide**EPA 9050A:** NPW: Specific Conductance**SM3500:** NPW: Ferrous Iron**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.**SM5310C:** DW: Dissolved Organic Carbon**Mansfield Facility****SM 2540D:** TSS**EPA 3005A** NPW**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:*Drinking Water***EPA 300.0:** 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, SM4500CI-D, SM2320B, SM2540C, SM4500H-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, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, 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 624:** Volatile Halocarbons & Aromatics,**EPA 608:** 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:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.****Mansfield Facility:***Drinking Water***EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.***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, Pb, Mn, Ni, Se, Ag, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



CHAIN OF CUSTODY

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

AIR ANALYSIS

PAGE 1 OF 2

Serial No: 04061714:48

Date Rec'd in Lab: 3/31/17

ALPHA Job #: L1709791

Client Information

Client: Synapse Property Resources
Address: 360 Erie Blvd East
Syracuse, NY 13202

Phone: 315-475-3700

Fax: 315-475-3780

Email: rcroighton@synapsellc.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

Project Information

Project Name: Former Leica MicroSystem

Project Location: Cheektowaga, NY

Project #: DANA 07.15.02

Project Manager: Roger Creighton

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:

☒ EMAIL (standard pdf report)☐ Additional Deliverables:

Report to: (if different than Project Manager)

Billing Information

☒ Same as Client info

PO #:

Regulatory Requirements/Report Limits

State/Fed Program Res / Comm

NY NYS DOH

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION						Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 S	APH S	Fixed C	Sulfides		Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum													
9791-01	IDA-033017-1	3/30/17	8:37	4:14	-29.12	-8.76	AA	RC	2.7	511	250	X							
-02	IDA-033017-2		8:40	4:11	-28.01	-6.85	AA	RC	2.7	391	046	X							
-03	IDA-033017-3		8:45	4:22	-29.15	-8.33	AA	RC	2.7	105	144	X							
-04	IDA-033017-4		8:17	4:29	-28.68	4:23	AA	RC	2.7	539	172	X							
-05	IDA-033017-5		8:51	6:06	-29.36	4:24	AA	RC	2.7	403	766	X							
-06	IDA-033017-6		8:19	9:20	-29.83	3:59	AA	RC	2.7	186	915	X							
-07	IDA-033017-7		8:52	15:34	-28.71	4:25	AA	RC	2.7	323	699	X							
-08	IDA-033017-8		8:25	6:68	-29.38	4:06	AA	RC	2.7	364	294	X							
-09	IDA-033017-9		9:00	10:26	-29.69	4:28	AA	RC	2.7	544	811	X							
-10	IDA-033017-10		8:54	15:38	-29.71	4:28	AA	RC	2.7	332	370	X							

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)

SV = Soil Vapor/Landfill Gas/SVE

Other = Please Specify

Container Type

CS

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:



CHAIN OF CUSTODY

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

AIR ANALYSIS

PAGE 2 OF 2

Serial No: 04061714:48

ALPHA Job #: L1709791

Client Information

Client: Synapse Property Resources
Address: 360 Erie Blvd East
Syracuse, NY 13202
Phone: 315-475-3700

Fax: 315-475-3780

Email: rcreighton@synapsellc.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

Project Information

Project Name: Former Leica Microsystems
Project Location: Cheektowaga, NY
Project #: DANA07.15.02
Project Manager: Roger Creighton
ALPHA Quote #:

Turn-Around Time

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

Date Due:

Time:

Date Rec'd in Lab: 3/31/17

Report Information - Data Deliverables

☐ FAX
☒ ADEX

Criteria Checker:

(Default based on Regulatory Criteria Indicated)

Other Formats:

☒ EMAIL (standard pdf report)☐ Additional Deliverables:

Report to: (if different than Project Manager)

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program Res / Comm

NY NYSDOH

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION					Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 S	APH S	Fixed C	Sulfides			Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum													
-11	IDK-033017-11	3/30/17	8:47	-5.35	-19.72	3:57	AA	PR	2.7	551	847	X							
-12	ODA-033017-1		9:02	-9.40	-31.38	4:45	AA	PR	2.7	536	795	X							
-13	SSV-033017-1		8:24	-6.52	-29.73	4:05	SV	PR	2.7	547	809	X							
-14	SSV-033017-2		8:18	-6.27	-29.90	3:58	SV	PR	2.7	375	589	X							
-15	SSV-033017-3		8:16	-10.44	-29.20	3:52	SV	PR	2.7	338	203	X							
-16	SSV-033017-4		8:36	-10.40	-29.91	4:13	SV	PR	2.7	414	237	X							
-17	SSV-033017-5	✓	8:39	-7.27	-27.60	4:09	SV	PR	2.7	459	292	X							

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)

SV = Soil Vapor/Landfill Gas/SVE

Other = Please Specify

Container Type

CS

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:

APPENDIX H QUALITY ASSURANCE PROJECT PLAN



Quality Assurance Project Plan

Leica, Inc.
Erie County
Cheektowaga, New York
NYSDEC Site No. 915156

29 May 2020
Project No.: 0484448

CONTENTS

1.	INTRODUCTION	2
2.	QUALITY ASSURANCE OBJECTIVES	2
2.1	Data Quality Objectives	2
2.2	Field Sampling Data Quality Objectives.....	3
2.3	Laboratory Data Quality Objectives	3
3.	QUALITY CONTROL PROCEDURES.....	3
3.1	Field Quality Control Activities	3
3.2	Laboratory Quality Control Activities.....	4
4.	FIELD CALIBRATION PROCEDURES	4
5.	ANALYTICAL PROCEDURES AND DATA EVALUATION	5
6.	PROJECT ROLES AND RESPONSIBILITIES	5

Acronyms and Abbreviations

ASP	Analytical Services Protocol
DQO	Data Quality Objective
ELAP	Environmental Laboratory Accreditation Program
FID	Flame ionization detector
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
PARCC	Precision, accuracy, representativeness, comparability and completeness
PID	Photoionization detector
QAO	Quality Assurance Objectives
QAPP	Quality Assurance Project Plan
QC	Quality Control
SMP	Site Management Plan

1. INTRODUCTION

This Quality Assurance Project Plan (QAPP) has been prepared as part of the Site Management Plan (SMP) for the former Leica, Inc. (Leica) property located 203 Eggert Road, Cheektowaga, Erie County, New York (hereinafter referred to as the "Site"). The Site is currently in the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program, Site No. 195156, which is administered by New York State Department of Environmental Conservation (NYSDEC).

This QAPP identifies the necessary procedures for an orderly, accurate, and efficient data collection and analysis program for the project, and ensures that data meet quality objectives. The objectives for monitoring and ensuring data quality include the following:

- Identify key responsibilities and qualifications of staff responsible for data quality monitoring;
- Ensure that samples are properly managed both in the field and the laboratory;
- Ensure realistic data quality goals are established that will produce data of known and acceptable quality; and
- Ensure that data are accurate, complete, and verifiable.

2. QUALITY ASSURANCE OBJECTIVES

Quality objectives ensure that data collected are sufficient to meet the intended project goals. Quality objectives are pre-established goals or "benchmarks" that are used to monitor and assess the progress and quality of the work performed. It is essential to define quality objectives prior to initiation of any project work to ensure that activities yield data sufficient to meet project objectives.

Quality objectives are divided into two categories: data quality objectives (DQOs) and quality assurance objectives (QAOs). The DQOs are associated with the overall project objective as it relates to data collection. The QAOs define acceptance limits for project-generated data as they relate to data quality.

2.1 Data Quality Objectives

DQOs are qualitative and quantitative criteria required to support the decision making process. DQOs define the uncertainty in a data set and are expressed in terms of precision, accuracy, representativeness, completeness, and comparability (PARCC). The DQOs apply to both characterization and confirmation samples at the site. These parameters are defined as follows:

- **Precision:** a measure of mutual agreement among measurements of the same property usually under prescribed similar conditions. Precision is best expressed in terms of the standard deviation. Various measures of precision exist depending upon the "prescribed similar conditions".
- **Accuracy:** the degree of agreement of a measurement (or an average of measurements) with an accepted reference of "true value". Accuracy is one estimate of the bias in a system.
- **Representativeness:** expresses the degree to which data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition.
- **Completeness:** a measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under correct normal conditions.
- **Comparability:** expresses the confidence with which one data set can be compared with another. Comparability is a qualitative, not quantitative measurement, as in the case of accuracy and

precision. Comparability is assessed by reviewing results or procedures for data that do not agree with expected results.

It is the responsibility of the field team to collect representative and complete samples. It is the responsibility of the field-screening chemist at the laboratory to analyze these samples using accepted protocols resulting in data that meet PARCC standards.

2.2 Field Sampling Data Quality Objectives

The overall quality of sample results depends on proper sample management. Management of samples begins at the time of collection and continues throughout the analytical process. To ensure samples are collected and managed properly and consistently, field procedures for sample collection activities have been developed for the project. The laboratory also has procedures that ensure a proper and consistent analytical process.

Field procedures include descriptions of equipment and procedures required to perform a specific task. The purpose is to increase reproducibility and to document each of the steps required to perform the task. Approved and correctly implemented field procedures should produce data of acceptable quality that meet project DQOs.

2.3 Laboratory Data Quality Objectives

The laboratory will demonstrate analytical precision and accuracy by the analysis of laboratory duplicates and by adherence to accepted manufacture and procedural methodologies.

The performance of the laboratory will be evaluated by the Project Manager and Project Quality Assurance Officer during data reduction. The evaluation will include a review of all deliverables for completeness and accuracy when applicable.

3. QUALITY CONTROL PROCEDURES

This section presents a general overview of the quality assurance and quality control procedures that will be implemented under the SMP. These quality control procedures are to be implemented as follows:

- in the field; and
- in the laboratory utilized for selected sample analyses.

All environmental media samples collected in the field and submitted for laboratory analysis will be:

- Collected in sample containers properly washed, decontaminated, and pre-preserved (if applicable). Containers with preservative will be tagged as such;
- Managed under standard and customary chain-of-custody protocols; and
- Analyzed within sample holding times in accordance with NYSDEC Analytical Services Protocol (ASP) requirements.

3.1 Field Quality Control Activities

Several types of field quality control (QC) samples will be collected and submitted for analysis during the project. Each type of QC sample monitors a different aspect of the field effort. Analytical results for QC samples provide information regarding the adequacy of the sample collection and transportation of samples.

The frequency of field QC samples collected will depend on the total number of samples being collected. Specifics of the sampling activities, including collection frequency and sampling procedures, will depend on the field activities for each event. The six types of field QC samples that will be generated during the project are defined below.

- **Trip blanks** – Trip blank samples monitor for contamination due to handling, transport, cross contamination from other samples during storage, or laboratory contamination.
- **Blind duplicates** – Blind duplicates are used to monitor field and laboratory precision, as well as matrix heterogeneity.
- **Matrix Spikes/Matrix Spike Duplicates** – Matrix Spikes/Matrix Spike Duplicates (MS/MSDs) are used to monitor precision and accuracy of the analytical method on various matrices.

3.2 Laboratory Quality Control Activities

Laboratory QC samples will include the use of method blanks, matrix spikes, laboratory control samples, laboratory duplicates, and surrogate spikes. The five types of laboratory QC samples are defined below.

- **Method blanks** - Method blanks are used to monitor and ensure that the analytical system is free of contamination due either to carryover from previous samples or from laboratory procedures.
- **Matrix Spike samples** - Matrix Spike (MS) samples monitor and assess the effects of the sample matrix on the sample analysis and verify the accuracy and precision of the analysis.
- **Laboratory Control samples** - Laboratory Control samples are used to monitor the accuracy of the analytical procedure without the potential interferences of a matrix.
- **Laboratory Duplicate samples** - Laboratory duplicate samples are used to monitor and assess laboratory precision, as well as potential matrix heterogeneity.
- **Surrogate Spikes** - Surrogate Spikes are utilized to monitor potential interferences from the sample matrix. Surrogate spikes are required for organic analyses only.

4. FIELD CALIBRATION PROCEDURES

Calibration is an integral part of ensuring that results are quantitated correctly. Instruments that are not calibrated either to manufacturers and/or method specifications are likely to produce unreliable results. Proper procedures must be followed and sufficient documentation maintained to ensure calibrations are performed correctly and that sample quantitation accurately reflects sample concentrations.

During the course of this project, instruments that may be used in the field in conjunction with sampling activities include photoionization detector (PID), flame ionization detector (FID), dissolved oxygen meter, turbidity meter, pH and temperature meter, and specific conductance meter. A maintenance, calibration, and operation program will be implemented to ensure that routine calibration and maintenance is performed on all field instruments. The program will be monitored by the Field Team Leader. Trained team members will perform scheduled calibration, field calibrations, checks, and instrument maintenance prior to use each day. Additionally, calibration will be checked as necessary to ascertain that proper measurements are being taken. Calibration procedures will conform to manufacturer's standard instructions.

Field personnel are familiar with the field calibration, operation, and maintenance of the equipment, and will perform the prescribed field operating procedures outlined in the operation and field manuals accompanying the respective instrument. Field personnel will keep records of all field instruments calibrations and field checks in the field logbooks. Calibration information recorded in field logbooks will

include date, time, instrument model, and a description of calibration or field check procedure, results, and any instrument deviations.

If field monitoring equipment should fail, the Field Team Leader will be contacted immediately. Replacement equipment will be provided or the malfunction will be repaired in a timely fashion.

5. ANALYTICAL PROCEDURES AND DATA EVALUATION

Environmental media samples will be collected for the Site-specific constituents of concern. Samples will be analyzed by a New York State-approved Environmental Laboratory Approval Program (ELAP) Contract Laboratory Protocol-certified laboratory. The laboratory will follow all calibration procedures and schedules as specified in U.S. EPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.

Upon receipt of analytical reports from the laboratory, ERM will evaluate data packages and confirm that samples were analyzed within required holding time and at proper detection limits. The laboratory will provide NYSDEC ASP Category B data packages.

A Data Usability Summary Report, in accordance with NYSDEC guidance in DER-10, will be prepared which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method.

Data reduction will consist of presenting analytical results on summary tables.

Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted in digital format as determined by NYSDEC. Currently data is supplied electronically and submitted to NYSDEC's EQUIS database.

6. PROJECT ROLES AND RESPONSIBILITIES

Specific roles and responsibilities have been defined for key project personnel to ensure that project goals are achieved. Each defined role will be performed by a qualified individual. Roles and responsibilities for tasks specific to this QAPP are as follows:

The Program Director is responsible for all ERM activities on the project and assists the ERM Project Manager in planning, coordinating, and controlling all work performed on this project. The Program Director has overall responsibility for developing the QAPP, monitoring the quality of the technical and managerial aspects of the project, and implementing the QAPP and corrective measures, where necessary.

- The **Project Manager** is responsible for the successful and timely completion of the field activities and ensures that all policies and procedures outlined in the SMP, this QAPP, and the Health and Safety Plan are followed by the project team, and is responsible for assigning appropriate staff to project tasks.
- The **Task Manager** is responsible for implementation of the activities described in the appropriate sampling and analysis plan for each specific study area. The Task Manager also handles project oversight and coordination between each of the project team members.
- The **Project Chemist** oversees the laboratory contract, monitors data quality, and conducts data review to ensure the accuracy of data collected during the investigation. The Project Chemist is the

laboratory contact for questions and/or revisions of procedures, methods, or chain-of-custody information, and will verify laboratory procedures and conduct laboratory audits.

- The **Data Manager** is responsible for establishing and maintaining an accurate and representative database for chemical and hydrogeologic data collected during the project.
- The **QA/QC Officer** is responsible for the periodic review, auditing, or assignment of qualified individuals to perform audits of activities associated with the procedures in the QAPP, and for ensuring acceptable data quality.

APPENDIX I SITE MANAGEMENT FORMS

Site Management Plan
Groundwater Extraction & Treatment System Inspection Log and Sampling Sheet
Leica, Inc. Site
Permit No. 07-01-CH014



Date: _____

Time: _____

Checked by: _____

Totalizer Reading: _____

Previous Totalizer Reading: _____

Date: _____

Time: _____

Pump MW-11A Operational: **Yes** ☐ or **No** ☐ If No provide reason:

Notes / General Operating Condition:

Sample Point: _____

Sample ID: _____

Sample Date and Time: _____

Laboratory Name: _____

Analyses for Chain of Custody:

- TPH 1664
- EPA 624
- EPA 625
- pH

Sampler Name: _____

Site Management Plan
Sub-Slab Depressurization System Quaterly Inspection Log Sheet
Leica, Inc. Site



Date: _____ Time: _____ Inspector Name: _____

Remote Terminal Unit

Power on: **Yes** ☐ or **No** ☐ If No provide reason: _____
Connectivity: **Yes** ☐ or **No** ☐ If No provide reason: _____

Loading Dock - Entry Way Blower Unit

Power on: **Yes** ☐ or **No** ☐ If No provide reason: _____
Magnahelic Gauge Reading (in WC): _____
Fan Operational: **Yes** ☐ or **No** ☐ If No provide reason: _____

Loading Dock - Warehouse Blower Unit

Power on: **Yes** ☐ or **No** ☐ If No provide reason: _____
Magnahelic Gauge Reading (in WC): _____
Fan Operational: **Yes** ☐ or **No** ☐ If No provide reason: _____

Warehouse - Blower Unit No. 1

Power on: **Yes** ☐ or **No** ☐
Magnahelic Gauge Reading (in WC): _____
Fan Operational: **Yes** ☐ or **No** ☐ If No provide reason: _____

Warehouse - Blower Unit No. 2

Magnahelic Gauge Reading (in WC): _____
Fan Operational: **Yes** ☐ or **No** ☐ If No provide reason: _____

Warehouse - Blower Unit No. 3

Magnahelic Gauge Reading (in WC): _____
Fan Operational: **Yes** ☐ or **No** ☐ If No provide reason: _____

Warehouse - Blower Unit No. 4

Magnahelic Gauge Reading (in WC): _____
Fan Operational: **Yes** ☐ or **No** ☐ If No provide reason: _____

Warehouse - Blower Unit No. 5

Magnahelic Gauge Reading (in WC): _____
Fan Operational: **Yes** ☐ or **No** ☐ If No provide reason: _____

Warehouse - Blower Unit No. 6

Magnahelic Gauge Reading (in WC): _____
Fan Operational: **Yes** ☐ or **No** ☐ If No provide reason: _____

Warehouse - Blower Unit No. 7

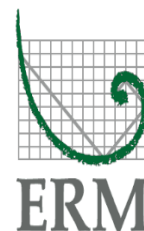
Magnahelic Gauge Reading (in WC): _____
Fan Operational: **Yes** ☐ or **No** ☐ If No provide reason: _____

Warehouse - Blower Unit No. 8

Magnahelic Gauge Reading (in WC): _____
Fan Operational: **Yes** ☐ or **No** ☐ If No provide reason: _____

Notes / General Operating Condition:

Site Management Plan
Sub-Slab Depressurization System Annual Inspection Form-1
Leica, Inc. Site



Date:

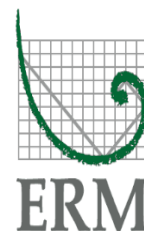
Time:

Collected By:

Note: Fill out Annual Form-1, 2 and 3 along with the Quarterly Inspection form for Annual inspection.

Test Port#	Differential Pressure (Inches of W.C.)	Comments
System-1		
System-2		
System-3		
System-4		
System-5		
System-6		
System-7		
System-8		
Loading Dock-1		
Loading Dock-2		
System 1 Test Port		
TP-1-1		
TP-1-2		
TP-1-3		
TP-1-4		
TP-1-5		
TP-1-6		
TP-1-7		
TP-1-8		
TP-1-9		
TP-1-10		
TP-1-11		
TP-1-12		
System 2 Test Port		
TP-2-2		
TP-2-3		
TP-2-4		
TP-2-5		
TP-2-6		
TP-2-9		
TP-2-10		
TP-2-12		

Site Management Plan
Sub-Slab Depressurization System Annual Inspection Form-1
Leica, Inc. Site

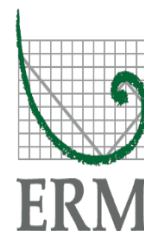


Date:
Time:
Collected By:

Note: Fill out Annual Form-1, 2 and 3 along with the Quarterly Inspection form for Annual inspection.

Test Port#	Differential Pressure (Inches of W.C.)	Comments
System 3 Test Port		
TP-3-3		
TP-3-4		
TP-3-5		
TP-3-6		
System 4 Test Port		
TP-4-1		
TP-4-2		
TP-4-3		
TP-4-4		
TP-4-5		
TP-4-6		
System 5 Test Port		
TP-5-1		
TP-5-2		
TP-5-3		
TP-5-4		
TP-5-5		
System 6 Test Port		
TP-6-1		
TP-6-2		
TP-6-3		
TP-6-4		
TP-6-5		
TP-6-6		
System 7 Test Port		
TP-7-1		
TP-7-2		
TP-7-3		
TP-7-4		
TP-7-5		
TP-7-6		

Site Management Plan
Sub-Slab Depressurization System Annual Inspection Form-1
Leica, Inc. Site



Date:
Time:
Collected By:

Note: Fill out Annual Form-1, 2 and 3 along with the Quarterly Inspection form for Annual inspection.

Test Port#	Differential Pressure (Inches of W.C.)	Comments
System 8 Test Port		
TP-8-1		
TP-8-2		
TP-8-3		
TP-8-4		
TP-8-5		
TP-8-6		
TP-8-7		
TP-8-8		
TP-8-9		
TP-8-10		
TP-8-11		
TP-8-12		
Loading Dock 1 and 2 Test Port/ Sampling Port		
SB-1		
SB-2		
SB-3		
SB-4		
SB-5		

Site Management Plan
Sub-Slab Depressurization System Annual Inspection Form-2
Leica, Inc. Site



Date:

Time:

Collected By:

Note: Fill out Annual Form-1,2 and 3 along with the Quarterly Inspection form for Annual inspection.

Test Port#	Vaccum Reading (Inches of W.C.)	Flow Rate (CFM)	Comments/Velocity (ft/min)
Loading Dock -1			
Loading Dock -2			
VS-1A			
VS-1B			
VS-1C			
VS-1D			
VS-1E			
VS-1F			
VS-1G			
VS-1H			
VS-1I			
VS-1J			
VS-2A			
VS-2B			
VS-2C			
VS-2D			
VS-2E			
VS-2F			
VS-2G			
VS-2H			
VS-2I			
VS-2J			
VS-3A			
VS-3B			
VS-3C			
VS-3D			
VS-3F			
VS-3G			
VS-3H			
VS-3I			
VS-3J			
VS-3K			

Site Management Plan
Sub-Slab Depressurization System Annual Inspection Form-2
Leica, Inc. Site



Date:
Time:
Collected By:

Note: Fill out Annual Form-1,2 and 3 along with the Quarterly Inspection form for Annual inspection.

Test Port#	Vaccum Reading (Inches of W.C.)	Flow Rate (CFM)	Comments/Velocity (ft/min)
VS-4A			
VS-4B			
VS-4C			
VS-4D			
VS-4E			
VS-4F			
VS-5A			
VS-5B			
VS-5C			
VS-5D			
VS-5E			
VS-5F			
VS-5G			
VS-5H			
VS-5I			
VS-6A			
VS-6B			
VS-6C			
VS-6D			
VS-6E			
VS-6F			
VS-6G			
VS-6H			
VS-6I			
VS-6J			
VS-6K			
VS-6L			
VS-7A			
VS-7B			
VS-7C			
VS-7D			
VS-7E			
VS-7F			
VS-7G			
VS-7H			
VS-7I			
VS-7J			
VS-7K			

Site Management Plan
Sub-Slab Depressurization System Annual Inspection Form-2
Leica, Inc. Site



Date:

Time:

Collected By:

Note: Fill out Annual Form-1,2 and 3 along with the Quarterly Inspection form for Annual inspection.

Test Port#	Vaccum Reading (Inches of W.C.)	Flow Rate (CFM)	Comments/Velocity (ft/min)
VS-8A			
VS-8B			
VS-8C			
VS-8D			
VS-8E			
VS-8F			
VS-8G			
VS-8H			
VS-8I			
VS-8J			

Site Management Plan
Sub-Slab Depressurization System Annual Inspection Form-3
Leica, Inc. Site



Date:
Time:
Collected By:

Note: Fill out Annual Form-1, 2 and 3 along with the Quarterly Inspection form for Annual inspection.

Test Port#	Yes	No	Instruct
Loading Dock 1 Test Port			
Mini-magnehelic calibrated? Calibrate mini-magnehelic using digital manometer			
Mini-Magnehelic tubing is secured and clean?			
Vent riser pipes are free from crack, leak, deflection?			
Building Floor is free from the floor crack greater than 1/8 inch?			
Blower and Blower discharge pipe remain secured and free from any debris			
Loading Dock 2 Test Port			
Mini-magnehelic calibrated? Calibrate mini-magnehelic using digital manometer			
Mini-Magnehelic tubing is secured and clean?			
Vent riser pipes are free from crack, leak, deflection?			
Building Floor is free from the floor crack greater than 1/8 inch?			
Blower and Blower discharge pipe remain secured and free from any debris			
System 1 Test Port			
Mini-magnehelic calibrated? Calibrate mini-magnehelic using digital manometer			
Mini-Magnehelic tubing is secured and clean?			
Vent riser pipes are free from crack, leak, deflection?			

Site Management Plan
Sub-Slab Depressurization System Annual Inspection Form-3
Leica, Inc. Site



Date:
Time:
Collected By:

Note: Fill out Annual Form-1, 2 and 3 along with the Quarterly Inspection form for Annual inspection.

Test Port#	Yes	No	Instruct
Building Floor is free from the floor crack greater than 1/8 inch?			
Blower and Blower discharge pipe remain secured and free from any debris			
System 2 Test Port			
Mini-magnehelic calibrated? Calibrate mini-magnehelic using digital manometer			
Mini-Magnehelic tubing is secured and clean?			
Vent riser pipes are free from crack, leak, deflection?			
Building Floor is free from the floor crack greater than 1/8 inch?			
Blower and Blower discharge pipe remain secured and free from any debris			
System 3 Test Port			
Mini-magnehelic calibrated? Calibrate mini-magnehelic using digital manometer			
Mini-Magnehelic tubing is secured and clean?			
Vent riser pipes are free from crack, leak, deflection?			
Building Floor is free from the floor crack greater than 1/8 inch?			
Blower and Blower discharge pipe remain secured and free from any debris			
System 4 Test Port			
Mini-magnehelic calibrated? Calibrate mini-magnehelic using digital manometer			

Site Management Plan
Sub-Slab Depressurization System Annual Inspection Form-3
Leica, Inc. Site



Date:
Time:
Collected By:

Note: Fill out Annual Form-1, 2 and 3 along with the Quarterly Inspection form for Annual inspection.

Test Port#	Yes	No	Instruct
Mini-Magnehelic tubing is secured and clean?			
Vent riser pipes are free from crack, leak, deflection?			
Building Floor is free from the floor crack greater than 1/8 inch?			
Blower and Blower discharge pipe remain secured and free from any debris			
System 5 Test Port			
Mini-magnehelic calibrated? Calibrate mini-magnehelic using digital manometer			
Mini-Magnehelic tubing is secured and clean?			
Vent riser pipes are free from crack, leak, deflection?			
Building Floor is free from the floor crack greater than 1/8 inch?			
Blower and Blower discharge pipe remain secured and free from any debris			
System 6 Test Port			
Mini-magnehelic calibrated? Calibrate mini-magnehelic using digital manometer			
Mini-Magnehelic tubing is secured and clean?			
Vent riser pipes are free from crack, leak, deflection?			
Building Floor is free from the floor crack greater than 1/8 inch?			
Blower and Blower discharge pipe remain secured and free from any debris			

Site Management Plan
Sub-Slab Depressurization System Annual Inspection Form-3
Leica, Inc. Site



Date:
Time:
Collected By:

Note: Fill out Annual Form-1, 2 and 3 along with the Quarterly Inspection form for Annual inspection.

Test Port#	Yes	No	Instruct
System 7 Test Port			
Mini-magnehelic calibrated? Calibrate mini-magnehelic using digital manometer			
Mini-Magnehelic tubing is secured and clean?			
Vent riser pipes are free from crack, leak, deflection?			
Building Floor is free from the floor crack greater than 1/8 inch?			
Blower and Blower discharge pipe remain secured and free from any debris			
System 8 Test Port			
Mini-magnehelic calibrated? Calibrate mini-magnehelic using digital manometer			
Mini-Magnehelic tubing is secured and clean?			
Vent riser pipes are free from crack, leak, deflection?			
Building Floor is free from the floor crack greater than 1/8 inch?			
Blower and Blower discharge pipe remain secured and free from any debris			

Site-Wide Inspection Form
Former Lecia, Inc. Facility
Cheektowaga, New York

Item No.	Description	Yes	No	Inspector Comments	Notes
1	Has a change in Site ownership occurred?				NYSDEC must be informed 60 days in advance.
2	Has a change in Site use occurred?				Current use is commercial/industrial.
3	Is any new building construction planned?				A soil vapor intrusion monitoring plan must be submitted to NYSDEC prior to any construction.
4	Has there been any soil disturbance(s) within the previous year? If yes, was it conducted in accordance with the EWP?				Documentation must be provided as required by the EWP.
5	Are there any planned soil disturbances at this time?				NYSDEC must be informed 15 days in advance.
6	Is groundwater underlying the Site being used?				
7	Is there any non-conforming Site use? For example: vegetable gardens, non-commercial, non-industrial, etc.				
8	Is there any activities being conducted which may interfere with the remedy or implementation of the Site's IC/ECs?				
9	GWE&T - Upon visual inspection of the entire system, are any components or appurtenances performing inadequately?				
10	GWE&T - Remote Terminal Unit/Control Panel - Are there any deficiencies in the control, communication, or alarm devices?				
11	GWE&T - Conveyance - Are there any leaks, blockages, or other deficiencies in the pipes, valves, or connections?				

Item No.	Description	Yes	No	Inspector Comments	Notes
12	GWE&T - Has there been any material reductions in effluent flow rates or changes in water levels?				
13	GWE&T - Pump - Does the pump show signs of abnormal, erratic, or improper operation?				
14	Is the basement occupied?				
15	SSDSs - Remote Terminal Unit/Control Panel - Are there any deficiencies in the control, communication, or alarm devices?				
16	SSDSs - Conveyance - Are there any leaks, blockages, or other deficiencies in the pipes, valves, or connections?				
17	SSDSs - Are there material reductions in the extent of sub-slab vacuum response?				
18	SSDSs - Blower/Fan - Do the blower/fan units show signs of abnormal, erratic, or improper operation?				
19	SSDSs - Is there an air intake or operable window within 10 feet of any exhaust point?				NYSDOH guidance requires exhaust points to be located at least 10 feet away from an air intake.
20	SSDSs - Have there been any material changes to the buildings HVAC system?				
21	SSDSs - Are there signs of leaks/short circuiting through cracks in the concrete floor, floor joints, and suction points?				Evaluate need for repairs in combination with vacuum monitoring readings.

Corrective Measures

If "Yes" is answered for Item Nos. 1-21, specify corrective measures.



Monitoring Well Inspection

Inspection the overall integrity and condition of each groundwater monitoring well.
Is the expansion plug in-place and the well cover secured?

Photographs

Attached photographs of site conditions and any irregularities observed.

Additional Comments / Observations / Notes

Name of Inspector:

Signature of Inspector:

Date:

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ERM's Syracuse Office

5784 Widewaters Parkway
Syracuse, New York 13214

www.erm.com