Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

652 Route 299, Suite 204B, Highland, NY 12528 845.883.0964 FAX 845.883.0965 ctmale@ctmale.com

May 22, 2018

Mr. Matthew Hubicki Project Manager, Remedial Bureau C NYSDEC, Division of Environmental Remediation 625 Broadway, 11th Floor Albany, New York 12233-7014

Re: Site Management Periodic Review Report and IC/EC Certification USAI Lighting Facility Brownfield Cleanup Program (BCP) Site 1126 River Road, New Windsor, New York BCP Site ID: C336087 C.T. Male Project No.: 14.4337

Dear Mr. Hubicki:

On behalf of BDL LLC, C.T. Male Associates Engineering, Surveying, Architecture & Landscape Architecture, D.P.C. (C.T. Male) presents the Site-Wide Periodic Review Report (PRR) for the USAI Lighting Facility (USAI Facility) BCP Site (the Site) in New Windsor, New York. The PRR was prepared in accordance with NYSDEC approved Site Management Plan (SMP) dated November 2016 and the NYSDEC's PRR General Guidance (Enclosure 3). C.T. Male completed site visits on April 5 and April 24, 2018 to observe the integrity of the Surface Cover System for the site, and to assess the vapor intrusion (VI) mitigation measures. This report is the first SMP annual report for the reporting period extending from December 22, 2016 to April 24, 2018.

<u>Site Overview</u>

BDL, LLC entered into a Brownfield Cleanup Agreement with NYSDEC in December 2014 to remediate a 11.4-acre property (Orange County Tax Map: Section 9, Block 1, Lot 97.1) located in the Town of New Windsor, Orange County, New York. A Site Location Map is presented attached depicting the property boundaries.

The remedy at the Site, as documented in the December 2016 Final Engineer Report (FER) prepared by C.T. Male, consisted of the following elements: removal of contaminated soils above commercial soil cleanup objectives (SCOs), placement of a Surface Cover System, installation of VI mitigation measures, and implementation of

May 22, 2018 Mr. Matthew Hubicki Page - 2

the SMP. The SMP was approved in November 2016 and the Certificate of Completion (COC) was issued in December 2016.

At the time the COC was issued and with the Department's approval, various elements of the VI mitigation measures at the USAI Facility were still in progress, as allowed by NYSDEC. These elements included:

- Installation of a passive sub-slab depressurization system (SSDS) in Area 8; and,
- Installation of a vapor barrier and new concrete slab, elements of the passive SSDS, in Areas 4 and 7.

A passive SSDS was installed in Area 8 in accordance with the FER in March 2018. The installation of the SSDS in Area 8 is documented in the Construction Completion Report (CCR), dated and submitted to the Department on March 29, 2018. The CCR, as prepared by C.T. Male, is attached. The installation of the SSDS in Area 8 fulfilled the requirements of the remedy for this portion of the Site.

The installation of the vapor barrier and new concrete slab in Areas 4 and 7 are still in progress due to a change in the construction schedule of the renovations at the USAI Facility. C.T. Male requested an extension in the installation schedule of these elements from the Department on March 6, 2018. This request is documented in the Request to Extend Installation Schedule: SSDS in Areas 4 and 7 Letter (referred to as "Installation Schedule Letter").

The Installation Schedule Letter states: "Area 7 is open to the atmosphere as it is the loading dock area that has not been converted into an enclosed building and Area 4 is unoccupied. Installation of the remaining SSDS components is not warranted until the construction activities in these areas resume as there are no receptors from potential VI. Furthermore, any potential migration of vapors in Area 7 will not affect an enclosed space/area as Area 7 is exposed to the atmosphere. In addition, based on the 2017 VI sampling data, indoor air quality in Area 4 is not substantially impacted by the migration of soil vapors." The complete Installation Schedule Letter is attached.

For the above-stated reasons, it is C.T. Male's opinion that postponing the completion of the final elements of the SSDS in Areas 4 and 7 does not pose a threat to human health and the environment. Pending on NYSDEC granting approval of the extension in the Installation Schedule, VI mitigation measures at the Site have been substantially completed in accordance with the FER and are protective of human health and the environment to meet the of the requirements of this PRR submission.

May 22, 2018 Mr. Matthew Hubicki Page - 3

Qualitative Exposure Assessment

A Qualitative Exposure Assessment (QEA) is presented in this PRR to address questions 8 and 9 of the EC/IC Certification Form (attached). No QEA has been previously prepared for the Site as the Site entered the BCP in the remediation stage not requiring a Remedial Investigation Report (RIR), which includes the QEA. The table presented below summarizes current and potential exposures to remaining Site contaminants.

POTENTIAL EXPOSURES TO SITE CONTAMINANTS			
Environmental Media & Exposure Route	Human Exposure Assessment		
Direct Contact with Soils and Incidental Ingestion of Soils	 There is a low potential for USAI staff, site visitors and trespassers to come into contact with contaminated soil as it is currently covered by clean soils, existing soils, pavement, asphalt and building slabs (Surface Cover System). There is a high potential for construction workers and curious bystanders during renovation activities and/or other ground intrusive activities to come into contact with contaminated soil if excavation extends below the Surface Cover System. The SMP outlines provisions to address potential exposure to on-site contaminants in soils. 		
Ingestion of Groundwater and Direct Contact with Groundwater	 Groundwater at the site is not being used for drinking water, as the area is served by the public water supply. Construction workers during renovation activities and/or other ground intrusive activities may come into contact with contaminated groundwater during ground intrusive redevelopment work at the Site. The SMP outlines provisions to address potential exposure to on-site contaminants in groundwater. 		
Inhalation of Air (exposures related to soil vapor intrusion)	• There is a low to moderate potential for USAI staff, site visitors and trespassers to inhale air contaminated as a result of contaminated soil vapors as the building currently employs VI mitigation measures. VI intrusion sampling must be periodically conducted and the VI mitigation measures must be periodically assessed to determine any changes in this QEA.		

May 22, 2018 Mr. Matthew Hubicki Page - 4

Potential exposure scenarios that could affect the populations outside of the Site boundaries include: inhalation of airborne contaminants from soil and groundwater during any potential ground intrusive activity that may emanate beyond the property boundaries. Perimeter dust and VOC monitoring will be conducted to protect off-site affected populations from Site contaminants during any potential ground intrusive activity and the existence of a public water supply will protect the off-site affected populations from ingestion of contaminated groundwater.

Evaluate Remedy Performance, Effectiveness and Protectiveness

The implemented remedy, as described in the Site Overview section (above), is achieving the remedial goals for the Site. The Surface Cover System is providing protection of human health and the environment from remaining contamination. The VI mitigation measures reduce the potential for sub-slab soil VI into buildings at Site.

IC/EC Plan Compliance Report

The listed IC/EC's listed in the SMP are still applicable and required for the Site. No action or changes are required for the IC/EC's. A completed IC/EC Certification Form is presented attached.

Monitoring Plan Compliance Report

Monitoring requirements consist of on annual site-wide inspections and postremediation media monitoring. The site-wide inspection documents the integrity of the Surface Cover System and the VI intrusion mitigation measures. The site-wide inspection was conducted in accordance with the SMP. The observations and finding of the annual site-wide inspection are presented in the "Operation & Maintenance Plan Compliance Report" section (below) of this PRR.

The post remediation media monitoring consist of: groundwater sampling and VI sampling. Post-remediation media monitoring was performed in accordance with the SMP for this monitoring period and is documented in the following reports:

- Vapor Intrusion Sampling Summary March 2017, dated May 12, 2017 and revised February 5, 2018;
- Vapor Intrusion Sampling Summary December 2017, dated March 20, 2018; and,

May 22, 2018 Mr. Matthew Hubicki Page - 5

• Post-remediation Groundwater Sampling Results Summary Letter – February 2018, dated March 23, 2018.

All reports were submitted to NYSDEC and a summary of these reports is presented below.

Chlorinated solvents in soils vapors and indoor air concentrations inside the building were detected at levels that warrant continued monitoring. The next VI sampling event will be completed during the next heating season (November 2018 to March 2019). Based on the available data, no other response actions are warranted relative to VI monitoring at this time.

Petroleum impacts, indicative of residual petroleum-related contamination known to be present at the Site, were observed in groundwater samples in on-site downgradient wells. SVOC impacts at an upgradient well (MW-16) are likely indicative of a potential off-site source of contamination given the proximity of this well with respect to the remedial petroleum impacted soil. Continued annual groundwater monitoring will be performed as specified in the SMP, with no cause for an adjustment of this frequency. Monitoring wells MW-3 and MW-4 were either damaged or not located, and will be replaced prior to the next groundwater sampling event (anticipated in February 2019). Based on the available data, no other response actions are warranted relative to groundwater monitoring at this time.

Copies of the above-referenced letters and reports are attached.

Operation & Maintenance Plan Compliance Report

The operation and maintenance (O&M) plan for the Surface Cover System consist of the maintenance and periodic inspection the Surface Cover System. The Surface Cover System is comprised of: 12 inches of clean soil (south side of Site), existing soil (north side of the Site), asphalt pavement, concrete covered, sidewalks, and/or concrete building slabs. The integrity of the concrete building slab was also assessed to determine the condition of the VI mitigation measures pertaining to the slab (i.e. sealing of cracks, etc.).

Observations of the Surface Cover System were conducted on April 5 and 24, 2018. Deficiencies observed on the April 5th consisted of: lack of Surface Cover System west of the 2-story office building (area approximately 5' x 12') and deteriorated sealant (VI mitigation measure) in the cracks of the building slab in Areas 10 and 11. These

May 22, 2018 Mr. Matthew Hubicki Page - 6

deficiencies were promptly addressed by the restoration of the Surface Cover System to acceptable conditions and the resealing of the cracks. The corrective measures were confirmed in the April 24 site visit. No other deficiencies related to the Surface Cover System were identified in the April 24 inspection. The Site Inspection Forms for each inspection are attached.

There is no O&M plan for the passive SSDS given the nature of a passive system (i.e., no mechanical components). An O&M plan for the SSDS will be prepared in the event the SSDS be converted to an active system in accordance with the SMP. The exhaust pipes for the passive SSDS were observed to be in good condition. C.T. Male's observations on the integrity of the building slab, a component of the passive SSDS where a passive system exists, is presented under the Surface Cover System O&M inspection (above).

Overall PRR Conclusions and Recommendations

The following conclusions and recommendations relative to compliance with the SMP are provided:

- 1. Groundwater Use Restriction: Requirements were met during the reporting period.
- 2. Landuse Restriction: Requirements were met during the reporting period.
- 3. Site Management Plan: Requirements were met during the reporting period.
- 4. Monitoring Plan: Requirements were met during the reporting period. Monitoring of groundwater and VI shall continue with no modification on the frequency. Monitoring wells MW-3 and MW-4 shall be replaced prior to the new groundwater sampling event (anticipated in February 2019).
- 5. IC/EC Plan: Requirements were met during the reporting period.
- 6. Surface Cover System: Requirements were met during the reporting period. Any future disturbance, inclusive of the proposed renovation activities, shall be implemented in accordance with the SMP.
- 7. VI Mitigation Measures: Requirements were met during the reporting period. Passive SSDS in Areas 4 and 7 shall be installed in accordance with the FER and any modifications shall be made in consultation with NYSDEC and NYSDOH,

May 22, 2018 Mr. Matthew Hubicki Page - 7

but this condition does not limit the ability to certify compliance with the SMP because these areas are unoccupied. Concrete slabs in Areas 10 and 11 shall be periodically monitored for the presence of deteriorated sealant and restored accordingly.

- 8. Based on C.T. Male's evaluation of the components of the SMP, the remedy is achieving the remedial objectives for the site.
- 9. The frequency of the submittal of the PRR should not be changed at this time.
- 10. Site management shall be continued.

Green Remediation Evaluation

According to Section 6.2 of the SMP, green remediation evaluations completed during site management shall be reported in the PRR. Attached is the completed "Summary of Green Remediation Metrics for Site Management" form.

Certifications

For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

- The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering controls employed at this site are unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;

May 22, 2018 Mr. Matthew Hubicki Page - 8

- Use of the site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices; and
- The information presented in this report is accurate and complete.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Rosaura Andújar-McNeil, of C.T. Male Associates at 652 Route 299, Suite 204B, Highland, New York 12528, am certifying on behalf of BDL, LLC, the Owner/Remedial Party for the Site.

Sincerely, C.T. MALE ASSOCIATES

Rosana Andijar-McMeil

Rosaura Andújar-McNeil, P.E. Project Environmental Engineer

Attachments:

Site Location Map EC/IC Form Certification Form Site Inspection Forms Green Remediation Metrics for Site Management Form Letters and Reports to NYSDEC

- 1. Construction Completion Report SSDS Area 8
- 2. Request to Extend Installation Schedule: SSDS in Areas 4 and 7 Letter
- 3. VI Sampling Summary March 2017
- 4. VI Sampling Summary December 2017 (inclusive of response to comments correspondance)

May 22, 2018 Mr. Matthew Hubicki Page - 9

- 5. Post-remediation Groundwater Sampling Results Summary Letter February 2018
- ec: Kevin Goggin, iSER Consulting Sue Sullivan, iSER Consulting Sara Bogardus, NYSDOH Jim McIver, C.T. Male Jeff Marx, C.T. Male John Cappello, Esq., Jacobowitz & Gubits Gerald Jacobowitz, Esq., Jacobowitz & Gubits





Enclosure 2 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form



Site	Site Details	Box 1		
Cit	Nome USALLighting Facility			
510				
Site City Cou Site	e Address: 1126 River Road Zip Code: 12553 //Town: New Windsor unty: Orange e Acreage: 11.4			
Re	April 24, 2018 porting Period: December 22, 2016 to A pril 22, 2018			
		YES	NO	
1.	Is the information above correct?	X		
	If NO, include handwritten above or on a separate sheet.			
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		X	
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?			
4.	. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?			
	If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.			
5.	Is the site currently undergoing development?	X		
		Box 2		
		YES	NO	
6.	Is the current site use consistent with the use(s) listed below? Commercial and Industrial	X		
7.	Are all ICs/ECs in place and functioning as designed?	X		
	IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below a DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.	nd		
AC	corrective Measures Work Plan must be submitted along with this form to address th	nese issi	ues.	
Sig	nature of Owner, Remedial Party or Designated Representative Date			

			Box 2	Α
			YES	NO
8.	Has any new information revealed that assumptions made in the Qualitative E	xposure		
	Assessment regarding offsite contamination are no longer valid?			X
		A Qualitat	ive Ex	posure
	If you answered YES to question 8, include documentation or evidence	Assessment in the PRR	is pr	esented
	that documentation has been previously submitted with this certification	i ionn.		
9.	Are the assumptions in the Qualitative Exposure Assessment still valid?			X
	(The Qualitative Exposure Assessment must be certified every five years)	A Qualitati Assessment	is pre	posure esented
	If you answered NO to question 9, the Periodic Review Report must inclu-	ude an	•	
	updated Qualitative Exposure Assessment based on the new assumptio	ns.		
	· · ·			
SIT	E NO. C336087		Box	< 3
	Description of Institutional Controls			

r

Parcel 9-1-96.1 <u>Owner</u> BDL, LLC Institutional Control

Ground Water Use Restriction Soil Management Plan Landuse Restriction Building Use Restriction Monitoring Plan Site Management Plan IC/EC Plan

The institutional controls present at the Controlled Property (USAI Lighting Facility BCP C336087 Site) are as follows:

1. Track 4 Commercial and Industrial Uses are allowed. The Controlled property may not be used for a higher use, such as unrestricted or restricted residential use, and the engineering controls may not be extinguished without NYSDEC approval, and amending or discontinuing the approved 2016 Site Management Plan (SMP) and the 2016 environmental easement.

2. All future soil disturbance activities below 1 foot cover, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with the approved SMP, and Excavation Work Plan.

3. The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for potable or process use, without necessary water quality treatment as determined by the NYSDOH or Orange County DOH.

4. An evaluation of the potential for soil vapor intrusion for any buildings developed or reoccupied on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.

5. A certification, every year, must be made to the NYSDEC indicating that the requirements of the SMP have been met and denote areas where deficiencies have occurred, if any. A Site Management Report, including any required inspection or sampling documentation and certifications, shall be submitted by the Owner to NYSDEC by April 22nd following the calendar reporting years, along with the Certification, signed and certified by the Owner, and certifying that the engineering controls (e.g., passive SSDS, site cover) are in place and functioning correctly, or noting any deficiencies and including a corrective action plan for these deficiencies to be corrected. The Owner will also certify that NYSDEC is allowed access to the Site to inspect the engineering controls.

9-1-97 BDL, LLC

Ground Water Use Restriction Soil Management Plan Landuse Restriction Building Use Restriction Monitoring Plan Site Management Plan IC/EC Plan

The institutional controls present at the Controlled Property (USAI Lighting Facility BCP C336087 Site) are as follows:

1. Track 4 Commercial and Industrial Uses are allowed. The Controlled property may not be used for a higher use, such as unrestricted or restricted residential use, and the engineering controls may not be extinguished without NYSDEC approval, and amending or discontinuing the approved 2016 Site Management Plan (SMP) and the 2016 environmental easement.

2. All future soil disturbance activities below 1 foot cover, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with the approved SMP, and Excavation Work Plan.

3. The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for potable or process use, without necessary water quality treatment as determined by the NYSDOH or

Orange County DOH.

4. An evaluation of the potential for soil vapor intrusion for any buildings developed or reoccupied on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.

5. A certification, every year, must be made to the NYSDEC indicating that the requirements of the SMP have been met and denote areas where deficiencies have occurred, if any. A Site Management Report, including any required inspection or sampling documentation and certifications, shall be submitted by the Owner to NYSDEC by April 22nd following the calendar reporting years, along with the Certification, signed and certified by the Owner, and certifying that the engineering controls (e.g., passive SSDS, site cover) are in place and functioning correctly, or noting any deficiencies and including a corrective action plan for these deficiencies to be corrected. The Owner will also certify that NYSDEC is allowed access to the Site to inspect the engineering controls.

Box 4

Description of Engineering Controls

Parcel 9-1-96.1 Engineering Control

Vapor Mitigation Cover System

The engineering controls installed at the Controlled Property (USAI Lighting BCP C336087 Site) are as follows:

1. A passive vapor mitigation system will be operated, maintained, monitored as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

2. A site cover system, of at least 1 foot, will be maintained as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

3. Any soil underlying within the Controlled Property, must remain covered with a NYSDEC-approved barrier layer consisting of concrete slabs under building structures, concrete or asphalt pavement in walkways and driving surfaces and clean soil cover in vegetated areas on the Controlled Property, which must be inspected, certified and maintained as required in the NYSDEC-approved SMP, and handled as described in the EWP.

4. Periodic monitoring of groundwater from downgradient wells.

9-1-97

Vapor Mitigation

Cover System

The engineering controls installed at the Controlled Property (USAI Lighting BCP C336087 Site) are as follows:

1. A passive vapor mitigation system will be operated, maintained, monitored as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

2. A site cover system, of at least 1 foot, will be maintained as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

3. Any soil underlying within the Controlled Property, must remain covered with a NYSDEC-approved barrier layer consisting of concrete slabs under building structures, concrete or asphalt pavement in walkways and driving surfaces and clean soil cover in vegetated areas on the Controlled Property, which must be inspected, certified and maintained as required in the NYSDEC-approved SMP, and handled as described in the EWP.

4. Periodic monitoring of groundwater from downgradient wells.

		Box 5
Periodic Review Report (PRR) Certification Statements		
I certify by checking "YES" below that:		
 a) the Periodic Review report and all attachments were prepared under the dire reviewed by, the party making the certification; 	ction of,	and
b) to the best of my knowledge and belief, the work and conclusions described in are in accordance with the requirements of the site remedial program, and gene applications programs and the information program to a compare.	in this co rally acc	ertificatior cepted
engineering practices, and the information presented is accurate and compete.	YES	NO
	X	
If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that following statements are true:	each Ir at all of t	nstitutiona he
(a) the Institutional Control and/or Engineering Control(s) employed at this site i since the date that the Control was put in-place, or was last approved by the De	s uncha partmen	nged it;
(b) nothing has occurred that would impair the ability of such Control, to protect the environment;	public h	ealth and
(c) access to the site will continue to be provided to the Department, to evaluate remedy, including access to evaluate the continued maintenance of this Control;	e the	
(d) nothing has occurred that would constitute a violation or failure to comply wi Site Management Plan for this Control; and	th the	
(e) if a financial assurance mechanism is required by the oversight document for mechanism remains valid and sufficient for its intended purpose established in the time of the setablished in the setablis	or the sit	e, the ment.
	YES	NO
	X	
IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.		
A Corrective Measures Work Plan must be submitted along with this form to address t	hese iss	sues.
Signature of Owner, Remedial Party or Designated Representative Date		

IC CERTIFIC SITE NO. (ATIONS C336087
	Box 6
SITE OWNER OR DESIGNATED R I certify that all information and statements in Boxes statement made herein is punishable as a Class "A" Penal Law.	EPRESENTATIVE SIGNATURE 1,2, and 3 are true. I understand that a false misdemeanor, pursuant to Section 210.45 of the
I <u>Bonnie Littman-Gatof</u> at <u>1126 1</u> print name	<u>River Road, New Windsor, NY 1</u> 2553 print business address
am certifying asBDL , LLC	(Owner or Remedial Party)
for the Site named in the Site Details Section of this for the Site named in the Site Details Section of this for the Site named in the Site Details Section of this for the Site named in the Site named is the S	Form. <u>Scile</u> Representative Date



C.T. MALE ASSOCIATES Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.

 652 Route 299, Suite 204B, Highland, NY 12528

 845.883.0964
 FAX 845.883.0965

 ctmale@ctmale.com



USAI LIGHTING FACILITY SITE (C336087) SITE MANAGEMENT PLAN (SMP) INSPECTION FORM

Date of Inspections	April 5 and 24, 2018 (Note: All notes from the
	4/5/18 inspection unless otherwise indicated.)
Personnel Performing Inspection	Rosaura Andújar-McNeil, P.E.
Weather Conditions	Sunny, 60°
Institutional Controls (List)	Site Management Plan Implementation
	Groundwater Use Restriction Without Treatment
	Use Restriction (Restricted Commercial and
	Industrial)
Engineering Controls (List)	Surface Cover System (site-wide)
	Vapor Intrusion (VI) Mitigation Measures

This SMP Inspection Form shall be utilized to document the observations of the USAI Lighting Facility BCP Site located at 1126 River Road in the Town of New Windsor, Orange County, New York. These observations are to confirm the following:

- The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;

April 5, 2018 Page - **2**

- Nothing has occurred that would constitute a violation or failure to comply with any SMP for this control;
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- Use of the Site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;

General Surface Condition
Has the overall condition of the cover system changed from the Yes No X previous inspection? If Yes, provide detail below and identify on Site Plan
Is there evidence that the site been disturbed for utility repair or $Yes \square$ No \square construction?
If Yes, provide detail below and identify on Site Plan
Deficiencies observed on 4/5/18 consisted of: lack of Surface Cover System west
of the 2-story office building (area approximately 5' x 12') and deteriorated sealant (VI
mitigation measure) in the cracks of the building slab in Areas 10 and 11. Site personnel
was informed of the deficiencies. 4/24/18 – Cracks resealed with epoxy in Areas 10 and 11. Area
without Surface Cover System was backfilled with 12" of ³ / ₄ " clean stone from Area 7 (area
open to the atmosphere with a layer of clean stone pending construction). A demarcation layer

April 5, 2018 Page - 3

<u>Groundwater Use</u>		
Is there evidence of groundwater use? If Yes, provide detail below	Yes 🗌	No
If groundwater use is occurring, is there treatment? If Yes, provide type of treatment below	Yes 🗌	No
If groundwater treatment is occurring, did NYSDEC and NYSDOH approve such treatment? If Yes, provide detail on their approval below	Yes 🗌	No
<u>Site Use</u>		
Is there evidence of site use for activities not allowed by the restricted commercial use BCP definition? If Yes, provide detail below	Yes 🗌	No

USAI Lighting Facility BCP ID: C336087

Vapor Intrusion (VI) Mitigation Measures Assessment Form

Date of Inspections

April 5 and 24, 2018 (Note: All notes from the 4/5/18 inspection unless otherwise indicated.)

Personnel Performing Inspection

Rosaura Andújar-McNeil, P.E.

Area Number and	Location	VI Mitigation Measure*	Condition of Visible	Corrective	Notes
Laber			Mitigation Measure	Y/N	
1 Stock Room	Central	Slab to remain, repair/fill cracks, 10 mil vapor barrier, new concrete slab (6″)	Good	N	Equipment assembly area.
2 Production Areas and Offices	Central	Slab to remain, repair/fill cracks, 10 mil vapor barrier, new concrete slab (6″)	Good	Ν	Used for offices and storage.
3A Production Area	Central	Slab to remain, repair/fill cracks, 10 mil vapor barrier, new concrete slab (6″)	Good	Ν	Fully occupied.
3B Stock Room	Central	Slab to remain, repair/fill cracks, 10 mil vapor barrier, new concrete slab (6")	Good	Ν	Used for storage.
4 Office Space	South-west	Slab to remain, import ¾" stone, 4-inch dia. vent piping in 2016, 10 mil vapor barrier, new concrete slab (2017 install)	SSDS in progress. Sub-slab piping, stone and vapor barrier installed in 2016. New slab remains to be installed.	N	Area to be renovated in 2018/2019. Extension of SSDS Installation Schedule requested. Currently vacant. Post renovation activities to be used as office space.
5 Not labeled	South-east	Slab to remain, import ³ / ₄ " stone, 3-inch dia. vent piping, 10 mil vapor barrier, new concrete slab	Good	N	Area used for compactor and storage for shipping. Post renovation activities to be used as warehouse extension.
6A Stock Room	South-east	New 1/4" thick epoxy coating atop existing concrete floor	Good	N	
6B Loading Dock	South-east	10 mil vapor barrier, new concrete slab	Good	Ν	

Vapor Intrusion (VI) Mitigation Measures Assessment Form

Area Number and	Location	VI Mitigation Measure*	Condition of Visible	Corrective	Notes
Label*			Components of VI	Action	
			Mitigation Measure	Y/N	
7	South-central	Import ³ / ₄ " stone (min 16	SSDS in progress.	Ν	Area to be renovated in
Lobby		inches), 4-inch dia. vent piping	Sub-slab piping and		2018/2019. Currently open to the
		in 2016, 10 mil vapor barrier,	stone installed in		atmosphere. SSDS will require
		new concrete slab (2017 install)	2016. Vapor barrier		modifications during renovation
			and new slab remains		activities. Extension of SSDS
			to be installed.		Installation Schedule Requested.
8	South-west	Slab to be removed, import ³ / ₄ "	Excellent. Retrofit	Ν	Known as "2-story office
Office Space		stone ($\sim 1'$), 4-inch dia. vent	system designed and		Building". Area to be renovated
		piping (25 O.C.), 10 mil vapor	installed in 2018.		in 2018/2019. SSDS will require
		barrier, new concrete slab (5")			modifications during renovation
		(2017 install)			activities.
9	Central	10 mil vapor barrier, new	Excellent	Ν	Used as storage.
Storage Room		concrete slab			
10	North	Concrete floor cracks sealed	Poor. Sealant in	Y	Storage space. Reseal cracks with
Stock Room		with epoxy	cracks in the slab		epoxy. Occupied by 1 -2 staff.
			deteriorated.		4/24/18 – Cracks resealed with
					epoxy.
11	North	Concrete floor cracks sealed	Fair. Sealant in cracks	Y	Storage space. Reseal cracks with
Shipping		with epoxy	in the slab		epoxy. Occupied by 1 -2 staff.
Receiving			deteriorated.		4/24/18– Cracks resealed with
					epoxy.
15	Central	New $\frac{1}{4}$ " thick epoxy coating	Excellent	Ν	Currently used as storage space
Cafeteria		atop of existing concrete floor			and engineering area. Occupied
					by 1 -2 staff.
16	South-central	Concrete floor, cracks sealed	Good.	N	Area to be renovated in
Office Space		with epoxy in 2016, vacant until			2018/2019. Currently space used
		new slab (2017 install)			for storage. Post renovation
					activities to be used conference,
					IT and server area.

USAI Lighting Facility BCP ID: C336087

Vapor Intrusion (VI) Mitigation Measures Assessment Form

Area Number and	Location	VI Mitigation Measure*	Condition of Visible	Corrective	Notes
Label*			Components of VI	Action	
			Mitigation Measure	Y/N	
Notes:					
* As depicted in the on the VI Mitigation Measures Map (dated December 1, 2016).					
1) Areas 12, 13 and 14 not depicted on the VI Mitigation Measures Map.					

Passive Sub-Slab Depressurization System (SSDS)

For each passive SSDS indicate:

Area and Location:	Area 5
Condition of the concrete slab:	Good
Number of SSDS exhaust pipes:	2
	To be observed at next inspection and/or site personnel to provide appropriate
Condition of the SSDS exhaust pipes:	documentation.
	4/24/18 - Good as per documentation provided by site personnel.
Obstruction to air flow at the SSDS	To be observed at next inspection and/or site personnel to provide appropriate
ax haust pipes 2 (Y/N)	documentation.
exhaust pipes: (1/10)	4/24/18 - No obstruction per documentation provided by site personnel.
Visible SSDS piping labeled? (Y/N)	N. Site personnel was informed.
Corrective Action (Y/N)? If Y, indicate:	N
Additional Comments:	None

USAI Lighting Facility BCP ID: C336087

Vapor Intrusion (VI) Mitigation Measures Assessment Form

Area and Location:

Area 8 – 2-story office building

Condition of the concrete slab: Number of SSDS exhaust pipes: Condition of the SSDS exhaust pipes: Obstruction to air flow at the SSDS exhaust pipes? (Y/N) Visible SSDS piping labeled? (Y/N) Corrective Action (Y/N)? If Y, indicate:

Additional Comments:

Other Comments:

Good
1
Good.
Ν
N. Site personnel was informed.
N
None.

Given that passive SSDS in Areas 4 and 7 are in progress, the assessment of the SSDS in these areas was limited to the information presented in the above-referenced table. A full assessment of the SSDS in Areas 4 and 7 will be made following construction completion.

Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.

652 Route 299, Suite 204B, Highland, NY 12528 845.883.0964 FAX 845.883.0965 ctmale@ctmale.com



Summary of Green Remediation Metrics for Site Management

Site Name: _	USAI Li	ghting Facility	Site Code:	C336087	
Address:	1126 Riv	er Road	City:	New Windsor	
State:	NY	Zip Code:	<u>12553</u> County:	Orange County	_

Initial Report Period (Start Date of period covered by the Initial Report submittal) Start Date: _______ December 22, 2016

Current Reporting Period

Reporting Period From: December 22, 2016 To: April 24, 2018

Contact Information

Preparer's Name: <u>Rosaura Andújar-McNeil, P.E.</u> Phone No.: <u>(845) 883-0964</u> Preparer's Affiliation: <u>Remedial Engineer for BBL, LLC</u>

I. Energy Usage: Quantify the amount of energy used directly on-site and the portion of that derived from renewable energy sources.

	Current Reporting	Total to Date
	Period	
Fuel Type 1 (e.g. natural gas (cf))	Not Applicable	
Fuel Type 2 (e.g. fuel oil, propane (gals))	Not Applicable	
Electricity (kWh)	Minimal	Minimal
Of that Electric usage, provide quantity:		
Derived from renewable sources (e.g. solar, wind)	0	0
Other energy sources (e.g. geothermal, solar	0	0
thermal (Btu))		

Provide a description of all energy usage reduction programs for the site in the space provided on Page 3.

II. Solid Waste Generation: Quantify the management of solid waste generated on-site.

	Current Reporting Period (tons)	Total to Date (tons)
Total waste generated on-site	75 – 100 lbs.	75 - 100 lbs.
Of that total amount, provide quantity:		
Transported off-site to landfills	<5 lbs.	<5 lbs.
Transported off-site to other disposal facilities	0	0
Transported off-site for recycling/reuse	0	0
Reused on-site	70 – 95 lbs.	70 – 95 lbs.

May 9, 2018 Mr. Matthew Hubicki Page - 2

Provide a description of any implemented waste reduction programs for the site in the space provided on Page 3.

III. Transportation/Shipping: Quantify the distances travelled for delivery of supplies, shipping of laboratory samples, and the removal of waste.

	Current Reporting Period (miles)	Total to Date (miles)
Standby Engineer/Contractor	2,441	2,441
Laboratory Courier/Delivery Service	0	0
Waste Removal/Hauling	0	0

Provide a description of all mileage reduction programs for the site in the space provided on Page 3. Include specifically any local vendor/services utilized that are within 50 miles of the site.

IV. Water Usage: Quantify the volume of water used on-site from various sources.

	Current Reporting Period (gallons)	Total to Date (gallons)
Total quantity of water used on-site	0	0
Of that total amount, provide quantity:		
Public potable water supply usage	0	0
Surface water usage	0	0
On-site groundwater usage	0	0
Collected or diverted storm water usage	0	0

Provide a description of any implemented water consumption reduction programs for the site in the space provided on Page 3.

V. Land Use and Ecosystems: Quantify the amount of land and/or ecosystems disturbed and the area of land and/or ecosystems restored to a pre-development condition (i.e. Green Infrastructure).

	Current Reporting Period (acres)	Total to Date (acres)
Land disturbed	0	0
Land restored	< 0.05	< 0.05

Provide a description of any implemented land restoration/green infrastructure programs for the site in the space provided on Page 3.

May 9, 2018 Mr. Matthew Hubicki Page - 3

Description of green remediation programs reported above

(Attach additional sheets if needed)

Energy Usage:

Minimal energy was used (from batteries) to remove water from the groundwater monitoring wells and air from the vapor sampling ports. There are no other energy sources being used for remedial purposes.

Waste Generation:

Minimal waste (less than 5 pounds) was generated as a result of SMP sampling activities related to groundwater and soil vapor. A visually estimated 70 - 95 pounds of soil is stored on-site in plastic and will be deposited below the Surface Cover System during renovation activities in 2018/2019 as allowed under the SMP. This small amount of soil was generated during the installation of soil vapor mitigation suction points for the SSDS in Area 8.

Transportation/Shipping:

Transportation to and from the Site is related to SMP monitoring activities by the Remedial Engineer and/or field personnel. Visits to the Site are only on an as needed basis, and usually by a single person (car pooling is often not feasible). Analytical samples collected per the SMP are typically delivered to the laboratory on the return trip from the Site. If this is not feasible, pick up of samples is performed by the laboratory when the laboratory currier is in route to other pickups.

Water usage:

There is no water usage for remedial purposes.

Land Use and Ecosystems:

Remedial activities (completed prior to December 2016) caused land disturbance mostly on the south side of the facility with the installation of a new parking lot, landscape areas and permanent stormwater management features. However, the vegetative growth relative to the landscape areas and stormwater management features has flourished during the reporting period and has become well established. Additional plantings were planted around the perimeter of the stormwater collection basin. These plantings have continued to grow. The land use and ecosystems in the southern portion of the Site are likely to have improved following remedial activities.

Other:

May 17, 2018 Mr. Matthew Hubicki

Letters and Reports to NYSDEC

Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.

ATO ALP

652 Route 299, Suite 204B, Highland, NY 12528 845.883.0964 FAX 845.883.0965 ctmale@ctmale.com

March 29, 2018

Mr. Matthew Hubicki Project Manager, Remedial Bureau C NYSDEC, Division of Environmental Remediation 625 Broadway, 11th Floor Albany, New York 12233-7014

Re: Construction Completion Report for the Sub-Slab Depressurization System in Area 8 USAI Lighting Facility Brownfield Cleanup Program (BCP) Site 1126 River Road, New Windsor, New York BCP Site Number: C336087 C.T. Male Project No.: 14.4337

Dear Mr. Hubicki:

C.T. Male Associates Engineering, Surveying, Architecture & Landscape Architecture, D.P.C. (C.T. Male) presents this construction completion report documenting the installation of a passive sub-slab depressurization system (SSDS) in Area 8 of the USAI Lighting Facility (USAI Facility) at the above-referenced BCP Site (the Site).

The SSDS in Area 8 along with other vapor intrusion (VI) mitigation measures were implemented at the Site to address potential on-site soil VI concerns and are part of the remedy for the Site. VI mitigation measures for the Site are documented in the December 2016 Final Engineer Report (FER). The November 2016 Site Management Plan (SMP) establishes the operation, maintenance and monitoring requirements for the passive SSDS.

Background

Area 8 consists of a two-story, slab-on-grade, office building (approximately 4,000 square feet) in the southwestern portion of the USAI Facility. VI sampling conducted in Area 8 in 2017 indicated that soil vapors are not migrating into the building at levels that require action. However, a passive SSDS was proposed as a preventive measure as part of the remedy for the Site given that Area 8 is located adjacent to a source area that was addressed during remediation. The SMP establishes that a passive SSDS at this Site should be converted to an active system (by installing and operating a fan) as determined by VI sampling. Based on the 2017 laboratory data, converting the passive SSDS in Area 8 into an active SSDS is not warranted at this time.

Diagnostic testing to assess subsurface conditions and determined the radius of influence (ROI) and number of suction points was conducted by OBAR System, Inc. (OBAR) on

March 29, 2018 Mr. Matthew Hubicki Page - 2

February 17, 2018 under the oversight of C.T. Male. A passive SSDS design was prepared and a system was subsequently installed following the diagnostic testing.

SSDS Components

All SSDS components were installed by OBAR on March 12 and 13, 2018 under the observation of C.T. Male. The passive SSDS is comprised of the following components:

- Three (3), 12-inch wide (diameter) by 4-inch deep suction points, and associated subslab piping (2-inch Schedule 40 PVC);
- Gas-permeable layer $(1 1\frac{1}{2})''$ clean round stone) at each suction point;
- Piping network above the slab (2-inch and 3-inch Schedule 40 PVC) connecting the sub-slab piping to the riser pipe;
- One (1) exterior riser pipe (3-inch Schedule 40 PVC);
- Five (5) permanent sub-slab monitoring points (SSMPs, T-1 to T-5)

An as-built drawing of the SSDS is presented as Attachment A.

SSDS Evaluation and Post-Installation Testing

C.T. Male performed a final inspection of the passive SSDS on March 13, 2018 to verify adequate system installation in accordance with the proposed design. All elements of the installation were observed to be in good condition and consistent with the proposed design. Photographs documenting the installation of the system are presented as Attachment B.

Testing of the SSDS with a fan was conducted for informational purposes only. Testing with a temporary fan allows for the evaluation of the SSDS under active conditions. The effectiveness of the SSDS was evaluated by collecting pressure measurements from the SSMPs with a digital micro-manometer while the system was connected to a temporary fan. The temporary fan used during the testing was the OBAR GBR 76 UD tuned to 25 inches of water columns (inches w.c.). Pressure measurements less than - 0.004 inches w.c. are demonstrative of adequate negative pressure underneath the slab for an active system. Pressure measurements during testing ranged from -0.0368 inches w.c. (T-2) to -1.1050 inches w.c. (T-5). The locations of SSMPs are depicted in the as-built drawing in Attachment A. Documented negative pressure measurements at the SSMPs meet the performance criteria (-0.004 inches w.c. or less) for an active system. Based on this information, the SSDS meets the applicable design criteria for conversion to an active system, if necessary. Additional post-installation testing data is presented as Attachment C.

March 29, 2018 Mr. Matthew Hubicki Page - 3

Conclusions

A passive SSDS was installed in Area 8 of the USAI Facility as part of the required remedy for the Site. The SSDS was installed in accordance with the proposed design and all the critical components of the SSDS appear to be working properly. The SSDS is able to provide adequate negative pressure underneath the slab under active conditions. No activation of the system (i.e. installation and operation of a fan) is warranted at this time. Operation, maintenance and monitoring of the passive SSDS will be conducted in accordance with the SMP.

Building renovations in Area 8 are anticipated in 2018. Modifications to the SSDS in Area 8 are likely to be warranted as a result of the proposed changes to the building layout. Proposed modifications to the SSDS will be provided to NYSDEC and NYSDOH for review and approval if changes to the SSDS 8 are warranted.

If you have questions, please contact Rosaura Andújar-McNeil, P.E. at (845) 883-0964 or <u>r.andujar-mcneil@ctmale.com</u>.

Sincerely C.T. MALE ASSOCIATES

Rosaura Andijar-Melleil

Rosaura Andújar-McNeil, P.E. Project Environmental Engineer

- A As-built drawingB Photographs
- C Post-installation testing data
- ec: Kevin Goggin, iSER Consulting Sue Sullivan, iSER Consulting Sara Bogardus, NYSDOH Jim McIver, C.T. Male Jeff Marx, P.E., C.T. Male John Cappello, Esq., Jacobowitz & Gubits Gerald Jacobowitz, Esq., Jacobowitz & Gubits



March 29, 2018 Mr. Matthew Hubicki Page - 5

Photographs



Photograph No. 1: Construction of westernmost suction point, sub-slab cavity filled with $1 - 1\frac{1}{2}$ " clean round stone, on 3/12/2018.



Photograph No. 2: Two-inch Schedule 40 PVC pipe connecting suction point to conveyance pipe on 3/13/2018.

March 29, 2018 Mr. Matthew Hubicki Page - 6

Photograph No. 3: Sub-slab monitoring point (SSMP) installed in the concrete slab for monitoring purposes on 3/13/2018.



Photograph No. 4: Installation of the riser pipe (3-inch Schedule 40 PVC) along the exterior eastern wall of the building on 3/13/18.

Photographs



Post Mitigation Report

Site Address:

USAI Lighting 1126 River Road, New Windsor, New York

Prepared for:

Ms. Rosaura Andújar-McNeil, P.E. Project Environmental Engineer C.T. Male Associates 652 Route 299, Suite 204B Highland, New York 12528

Prepared by:

Mr. Daniel Nuzzetti Project Engineer / Vapor Intrusion Specialist OBAR Systems, Inc. 2969 Route 23 Newfoundland, NJ 07435

March 14, 2018

Table of Contents

1.	Background	3
2.	General System Information	3
3.	Temporary commissioning Data	3
4.	Conclusions	3

Attachments

Attachment 1 – As Built Drawing
1. Background

OBAR Systems was retained to install a Vapor Intrusion Mitigation System in accordance with the OBAR Systems February 27, 2018 Diagnostic Report and System Design. The subject property is located at 1126 River Road in New Windsor, New York.

2. General System Information

One passive sub slab depressurization system was installed as shown in the as built drawings. A total of 3 suction points were installed and all conveyance piping is PVC. The conveyance pipe exits the building on the east wall and terminates 2 feet above the roofline and over 10 feet from intakes.

3. <u>Temporary commissioning Data</u>

The following table display the systems' commissioning values. Because no fan was installed, these values represent data taken with a temporary fan in place, the fan was a GBR76-UD tuned to 25"w.c.

Test Port #	Vacuum ("w.c.)
T-1	-0.1141
T-2	-0.0368
T-3	-0.0647
T-4	-0.0675
T-5	-1.1050

4. <u>Conclusions</u>

The Vapor Intrusion Mitigation System installed at 1126 River Road in New Windsor, New York was installed as designed. If the system is activated it will meet the performance criteria for a successful sub slab depressurization system.



Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.

652 Route 299, Suite 204B, Highland, NY 12528 845.883.0964 FAX 845.883.0965 ctmale@ctmale.com



March 6, 2018

Mr. Matthew Hubicki Project Manager, Remedial Bureau C NYSDEC, Division of Environmental Remediation 625 Broadway, 11th Floor Albany, New York 12233-7014

Re: Request to Extend Installation Schedule: Sub-Slab Depressurization Systems (SSDS) in Areas 4 and 7, USAI Lighting Facility Brownfield Cleanup Program (BCP) Site 1126 River Road, New Windsor, New York BCP Site ID: C336087 C.T. Male Project No.: 14.4337

Dear Mr. Hubicki:

C.T. Males Associates Engineering, Surveying, Architecture & Landscape Architecture, D.P.C. (C.T. Male), on behalf of BDL, LLC, has prepared this request to the Department for an extension in the installation schedule of the remaining SSDS components in Areas 4 and 7 of the USAI Lighting Facility (USAI Facility).

The new vapor barrier and new concrete slab, elements of the SSDS in Areas 4 and 7, were anticipated to be installed in 2017 as part of the construction activities at the USAI Facility. A map depicting these areas is attached. Due to elements beyond the control of the Applicant, the construction schedule has been delayed as a result of previously unidentified and unforeseen structural deficiencies in Areas 4 and 9 of the USAI Facility. In addition, revisions to the floor plans were required to accommodate current and future growth projections for USAI. All other vapor intrusion (VI) mitigations measures have been installed with exception of the SSDS in Area 8 (2-story office building in the southwestern portion of the USAI Facility). The SSDS in Area 8 is anticipated to be installed in mid-March 2018.

Construction activities have not resumed in Areas 4 and 7 as of the date of this letter as the plans for the proposed renovations have not bee finalized. Area 7 is open to the atmosphere as it is the loading dock area that has not been converted into an enclosed building and Area 4 is unoccupied. Installation of the remaining SSDS components is not warranted until the construction activities in these areas resume as there are no receptors from potential vapor intrusion. Furthermore, any potential migration of vapors in Area 7 will not affect an enclosed space/area as Area 7 is exposed to the

March 6, 2018 Mr. Matthew Hubicki Page - 2

atmosphere. In addition, based on the 2017 VI sampling data, indoor air quality in Area 4 is not substantially impacted by the migration of soil vapors.

Construction in Areas 4 and 7 is anticipated to start in the spring/summer of 2018. Remaining SSDS components are anticipated to be installed in August 2018 as part of the planned renovations if allowed by the Department. Photographs depicting the existing conditions of Areas 4 and 7 are attached for your review.

Modifications to the SSDS in Area 7 are likely to be warranted as a result of changes in the proposed building layout. An updated plan will be provided to NYSDEC and NYSDOH for review and approval if changes to the SSDS in Area 7 are warranted.

Please review this information and let us know if BDL, LLC can install the remaining components of the SSDS as part of the planned renovations in August 2018 without any penalty or risk of revocation of the Certificate of Completion. Should you have any questions do not hesitate to contact me at (845) 883-0964 or <u>r.andujar-mcneil@ctmale.com</u>.

Sincerely C.T. MALE ASSOCIATES

Kosauna Andijan-Melleil

Rosaura Andújar-McNeil, P.E. Project Environmental Engineer

Attachments: Vapor Intrusion Mitigation Measures Photographs

ec: Kevin Goggin, iSER Consulting Sue Sullivan, iSER Consulting Sara Bogardus, NYSDOH Jim McIver, C.T. Male Jeff Marx, C.T. Male John Cappello, Esq., Jacobowitz & Gubits Gerald Jacobowitz, Esq., Jacobowitz & Gubits



March 6, 2018 Mr. Matthew Hubicki Page - 4



Photograph 1: Existing Conditions (01/23/2018) – Area 4



Photograph 2: Existing Conditions (01/23/2018) – Area 7

Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.

652 Route 299, Suite 204B, Highland, NY 12528 845.883.0964 FAX 845.883.0965 ctmale@ctmale.com



February 5, 2018

Mr. Matthew Hubicki Project Manager, Remedial Bureau C NYSDEC, Division of Environmental Remediation 625 Broadway, 11th Floor Albany, New York 12233-7014

Re: Response to NYSDEC Comments on the May 12, 2017 Vapor Intrusion (VI) Sampling Summary Letter USAI Lighting Facility Brownfield Cleanup Program (BCP)Site 1126 River Road, New Windsor, New York BCP Site ID: C336087 C.T. Male Project No.: 14.4337

Dear Mr. Hubicki:

C.T. Males Associates Engineering, Surveying, Architecture & Landscape Architecture, D.P.C. (C.T. Male) has prepared this response to NYSDEC and NYSDOH's comment letter regarding the March 2017 VI sampling event at the USAI Lighting Facility (USAI Facility). The March 2017 VI sampling event was conducted to fulfill the post-remediation media monitoring and sampling requirements listed in the Site Management Plan (SMP, dated November 2016). A letter summarizing the results of the March 2017 VI sampling event was prepared by C.T. Male and submitted to NYSDEC on May 12, 2017. Subsequently, NYSDEC provided written comments on the VI Sampling Summary Letter Report on August 4, 2017.

NYSDEC and NYSDOH comments from their August 4, 2017 letter are provided below with C.T. Male's responses in *italics*. Also, C.T. Male's VI Sampling Summary Letter Report originally submitted on May 12, 2017 has been revised to incorporate the NYSDEC comments (Revised May 2017 Letter Report).

Comment No. 1 - "Page 1, 2nd paragraph: It is unclear if construction of sub-slab vapor ports, the sampling and the analysis procedures were consistent with the Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006) with updates (SVI Guidance) due to the lack of detail regarding this sampling. Please note that should the NYSDEC and NYSDOH determine that the previously conducted investigation was inadequate to determine potential for exposure to contaminants via the soil vapor intrusion pathway, a soil vapor intrusion investigation work plan is required in accordance with the SVI Guidance to be

February 5, 2018 Mr. Matthew Hubicki Page - 2

conducted this upcoming heating season should be submitted for NYSDEC and NYSDOH review."

The March 2017 VI sampling event was conducted in general conformance with the SVI Guidance. A vapor sampling sketch (Figure 2 – Sample Construction Sketches in the Revised May 2017 Letter Report) has been prepared to clarify the construction of sub-slab vapor port and sampling procedures at the USAI Facility. It should be noted that due to site conditions, one of the sampling locations (VI-4) had a modified sampling procedure but the results are not believed to have been affected. In addition, the "Sampling Methodology" section of the Revised May 2017 Letter Report has been revised to provide additional information in page 1, paragraph 2.

Comment No. 2 - "Page 2, Sampling Methodology: Please indicate if the canisters were individually or batch certified as clean."

The "Sampling Methodology" section of the Revised May 2017 Letter Report has been revised to indicate this information in page 2, last paragraph, documentation of which was already provided in the laboratory report.

Comment No. 3 - "Page 2, 1st bullet: Changes in air handling and building construction, including the addition of a slab, as well as occupancy of the area may affect the soil vapor intrusion pathway, thereby allowing for potential exposures to site contamination. In order to evaluate current conditions and potential exposures to contamination via the soil vapor intrusion pathway, we require that those areas of the building that previously had a dirt/stone floor, but since have had a slab installed, be resampled in accordance with the SVI guidance."

It is C.T. Male's opinion that resampling in Area 4 is not warranted as no changes have occurred in the building construction following post remediation activities. New crushed stone subbase was placed in Area 4 as a temporary floor (until the final concrete slab is installed) above the original concrete slab. A passive sub-slab depressurization system (SSDS) was installed in the crushed stone subbase. The original concrete slab, which is in an acceptable condition, remains undisturbed since the installation of the SSDS. The intake of the sampling port was installed beneath the original concrete slab. A sketch depicting the floor construction in Area 4 is presented in "Figure 2 – Sample Construction Sketches (Detail No. 2)" in the Revised May 2017 Letter Report. The sample results should be valid and usable as the VI sampling port was installed and sealed into the original concrete slab, which was in good condition at the time of the SSDS installation.

In addition, bullet no. 1 in page 2 of the Revised Letter Report has been revised to provide additional information regarding the floor construction in Area 4.

February 5, 2018 Mr. Matthew Hubicki Page - 3

Comment No. 4 - "Page 3, Analytical Results: "The NYSDOH does not have any standards, criteria or guidance values for concentrations of volatile chemicals in subsurface vapors (either in soil vapor or sub slab vapor). The NYSDOH has developed guideline values (not regulation) for indoor air concentration for methylene chloride, trichloroethene, and tetrachloroethene." Please remove this paragraph as it is misleading. The NYSDOH utilizes the Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006) including updates to recommend actions if warranted, when evaluating current or potential future exposures to contamination via the soil vapor intrusion pathway. This document provides guidance on using background comparison values to aide in the interpretation of sub-slab, indoor, and outdoor air values."

The aforementioned text has been removed from the Revised May 2017 Letter Report.

Comment No. 5 - "Page 5, Application of the NYSDOH Matrix: Please indicate if a product inventory was ever completed prior to sampling. If a product inventory was completed a copy should be included in the appendix of the updated letter/report. This information is needed to help determine if indoor air detections requiring actions are likely the result of soil vapor intrusion or due to the storage or recent use of chemicals in products or building materials within the indoor space of the building. Please note that all sampling events going forward should include a product inventory."

A "Product Inventory" section has been added to the Revised May 2017 Letter Report in page 4, last paragraph, to describe the products and practices observed during the March 2017 VI sampling event with the potential to contribute chemicals to the indoor air. A product inventory was completed for the March 2017 VI sampling event and is now included in the Revised May 2017 Letter Report. A product inventory will be completed for any subsequent VI sampling event.

Comment No. 6 - "Page 6, Background Levels for Selected Compounds: Please follow the NYSDOH Guidance for Evaluating Soil Vapor Intrusion (October 2006), with updates, to identify background values to be used as comparison values."

The table on page 5 of the Revised Letter Report has been revised to provide a comparison of indoor air data to appropriate background levels. Indoor air data was compared to background levels provided in the USEPA's BASE Data Background Levels Indoor Air (dated 2001, 90th percentile value) and USEPA's Database Homes & Offices Indoor Air (dated 1988).

February 5, 2018 Mr. Matthew Hubicki Page - 4

Comment No. 7 - "Recommend that all subsequent SVI sampling events have reporting limits below the lower of the lowest action level for the analyte (0.2 mcg/m3 Matrix "A" and "C" analytes) or 1.0 ug/m3 for all other SVI analysis."

NYSDEC/NYSDOH recommendation has been noted for future VI sampling events, but it should be noted that the ability to reach these detection limits is based on the quality and cleanliness of the actual air sample collected under ambient conditions.

Comment No. 8 – "Lastly, based on these concentrations of contaminants identified in the sub-slab soil vapor and the comments as outlined above, NYSDEC and NYSDOH will require additional soil vapor intrusion investigations occur early in the upcoming heating season, unless your client plans on upgrading the sub-slab depressurization system (SSDS) from a passive system (no blower) to an active system (with blowers)."

Additional VI sampling was conducted early in the heating season at the USAI Facility and a summary report is in progress.

Please review this information and should you have any questions do not hesitate to contact me at (845) 883-0964 or <u>r.andujar-mcneil@ctmale.com</u>.

Sincerely C.T. MALE ASSOCIATES

Rosaura Andigar-Milleil

Rosaura Andújar-McNeil, P.E. Project Environmental Engineer

Attachment: Revised May 2017 Letter Report

ec: Kevin Goggin, iSER Consulting Sue Sullivan, iSER Consulting Sara Bogardus, NYSDOH Jim McIver, C.T. Male Jeff Marx, C.T. Male John Cappello, Esq., Jacobowitz & Gubits Gerald Jacobowitz, Esq., Jacobowitz & Gubits

Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.

50 Century Hill Drive, Latham, NY 12110 518.786.7400 FAX 518.786.7299 ctmale@ctmale.com

May 12, 2017 (Revised February 5, 2018)

Mr. Matthew Hubicki Project Manager, Remedial Bureau C NYSDEC, Division of Environmental Remediation 625 Broadway, 11th Floor Albany, New York 12233-7014

Re: Vapor Intrusion (VI) Sampling Summary USAI Lighting Facility Brownfield Cleanup Program Site 1126 River Road, New Windsor, New York BCP Site Number: C336087 C.T. Male Project No.: 14.4337

Dear Mr. Hubicki,

An evaluation of the potential for soil vapor intrusion at the USAI Lighting Facility building was performed on March 29, 2017 at the above referenced Brownfield Cleanup Program (BCP) Site. The building is occupied and utilized for research, development and manufacture of lighting fixtures. A permanent, passive sub-slab vapor intrusion system or other vapor intrusion measures (i.e., new slab and vapor barrier or epoxy coating on the flooring) were installed in the majority of the main building and sub-slab sampling points were placed within the first floor concrete slab of the building in accordance with the protocols identified in the New York State Department of Health's (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York October 2006 (SVI Guidance).

The sub-slab sampling points were constructed of a 3" or 4" diameter PVC pipe extending below the new and existing concrete slabs and into the slab's existing subbase stone. At the time of the evaluation, the concrete slab had not been poured in the southern portion of the building just north of the main office area, which affected the method of sampling at one sampling location (VI-4). The rest of the sampling points were PVC pipes fitted with a light commercial cleanout with an upper bolted lid at the floor surface and a second threaded lid below the floor surface. A sub-slab soil vapor sample was collected from (4) sub-slab sampling points along with air sample from three (3) indoor ambient locations and two (2) outdoor ambient air locations. Field sketches showing the typical construction of the sub-slab sampling ports are attached.

May 12, 2017 (Revised February 5, 2018) Mr. Matthew Hubicki Page - 2

The sub-slab soil vapor and ambient air samples were collected in accordance with the procedures outline in the NYSDOH's SVI Guidance from the following locations:

- One (1) from each permanent sub-slab vapor sampling point identified as VI-1 to VI-4. VI-1 and VI-2 are located on the west and east sides, respectively, of the main production area. VI-3 is located in an office area northwest of the main production area in closet used for storage and as a lactation room. VI-4 is located near the south end of the building, north of the office area. It should be noted that the interior portion of the building in the area of VI-4 is amidst construction whereby the concrete floor slab subbase is installed atop of the existing concrete floor slab, but the overlying concrete floor is not. For the purpose of laboratory sample identification, the sampling date was added to each sampling location (i.e., VI-1_170329).
- Three (3) indoor ambient air samples identified as IA-1 which was collected in the area of VI-4; IA-2 which was collected in the main production area between VI-1 and VI-2; and IA-3 which was collected in the kitchen area adjacent to VI-3. For the purpose of laboratory sample identification, the sampling date was added to each sampling location (i.e., IA-1_170329).
- Two (2) ambient air samples identified as OA-1 located on the west side of the building; and OA-2 located on the east side of the building. For the purpose of laboratory sample identification, the sampling date was added to each sampling location (i.e., OA-1_170329).

Refer to Figure 1 (attached) for a depiction of the approximate location of the samples.

Sampling Methodology

The samples were collected using certified passivated steel canisters (2.7-liter) that are evacuated to approximately - 30 inches mercury. The samples were collected over an extended period of time using a flow restricting regulator set for an 8 hour sampling period. The air captured in each canister was analyzed for the full list of volatile organic compounds by the EPA Method TO-15.

The lab canisters were batch cleaned. This is documented in Alpha Analytical's laboratory report in Attachment #3 (Pages 60 to 67). There were no detections reported, documenting no potential contamination of the canisters that would affect the laboratory results.

May 12, 2017 (Revised February 5, 2018) Mr. Matthew Hubicki Page - 3

Quality Assurance/Quality Control

Prior to collection of soil vapor samples VI-1_170329 to VI-3_170329, a tracer gas (helium) was used to verify the integrity of the seal around the soil vapor tubing at the top of the concrete floor. The method used with the tracer gas is shown in Figure 2.4 A of the October 2006 NYSDOH SVI Guidance whereby a 2' by 2' rectangular piece of plastic was placed over the concrete slab and flooring material, sealed with modeling clay and a hole cut in the plastic to allow the sample tubing to penetrate. After installing the sample tubing down into the PVC pipe below the lower cap at each location and sealing around the tubing at the penetration point of the plastic with modeling clay and bentonite clay, a clean 5-gallon plastic bucket was placed on the plastic and sealed to the plastic with modeling clay. Using a hole in the bucket and a rubber stopper, the atmosphere in the bucket was charged with helium, and a portable real time helium detector was used to analyze a soil vapor sample for the helium before and after sample collection. The soil vapor sample exhibited no evidence of influence by helium before or after sample collection thereby documenting a good seal on the sample point. In the area of location VI-4, the concrete floor had not been poured. The floor in this area consisted of the crushed stone subbase covered plastic sheeting so the above described method could not be used to verify the seal at the PVC pipe. Despite this, the tubing was sealed using modeling clay and bentonite clay similarly to the other sampling points, and based on the other three locations showing no evidence of ambient air influence, it is reasonable to assume the seal at this location was also effective.

The laboratory results of the soil vapor and ambient air samples were subject to ASP Category B Data Deliverables. At the time of this report, the soil vapor and ambient air samples have not been submitted to EQuIS. The ASP Category B Data Deliverables will not be subjected to Data Usability Summary Report (DUSR) validation unless directed otherwise by NYSDEC. Electronic data deliverables provided by the lab will be submitted to EQuIS unless directed otherwise by NYSDEC.

Alpha Analytical, the project's lab of record, provided the batch cleaned air canisters, flow restricting regulators, and performed the laboratory analysis. Alpha is a New York State Department of Health Environmental Laboratory Approval Program (ELAP) certified laboratory.

May 12, 2017 (Revised February 5, 2018) Mr. Matthew Hubicki Page - 4

Analytical Results

Sampling results for methylene chloride, trichloroethene, and tetrachloroethene are summarized as follows:

- Methylene chloride was not detected above the limit of laboratory detection in two (2) of the four (4) soil vapor samples, in any of the indoor air samples or in any of the outdoor air samples. The two (2) detections in the soil vapor samples ranged between 1.89 and 2.36 ug/m³, well below the NYSDOH air guideline value of 60 ug/m³, although the air guideline value is not applicable to a soil vapor result.
- Trichloroethene was not detected above the limit of laboratory detection in three (3) of the four (4) soil vapor samples, or in the outdoor air samples. Trichloroethene was detected in soil vapor sample VI-1_170329 at 4.21 ug/m³, and in the indoor air samples had detected concentrations ranging from 0.118 to 0.258 ug/m³. The indoor air concentration results are below the NYSDOH air guideline value of 2 ug/m³.
- Tetrachloroethene was detected in three (3) of the four (4) soil vapor samples above the limit of laboratory detection; at VI-1 and VI-2 detections were 1.91 and 4.38 ug/m³, respectively; and at VI-3 it was detected at 705 ug/m³. Detections in indoor air ranged from 0.136 to 0.312 ug/m³, far less than the soil vapor concentrations. Tetrachloroethene was also detected in the outdoor air sample OA-2_170329 at 0.142 ug/m³, which is similar to the indoor air concentrations suggesting tetrachloroethene is present at background levels. Finally, these concentrations in indoor air samples were significantly below its applicable NYSDOH guideline value of 30 ug/m³.

No further action with respect to methylene chloride, trichloroethene, and tetrachloroethene is warranted on the basis of these results summarized above.

Product Inventory

A product inventory of the interior portions of the building was completed at the time of sampling and is provided attached. There were only minimal quantities of products in the building including powdercoating paints, glass cleaner and hand cleaner in their original containers.

May 12, 2017 (Revised February 5, 2018) Mr. Matthew Hubicki Page - 5

Application of NYSDOH Matrix

The TO-15 analytical method includes analyzing for other compounds beyond the three (3) described above that have related guideline values. The NYSDOH guidance describes the process for evaluating the sampling results and actions that may be recommended based on the evaluation using matrices. The NYSDOH developed two (2) matrices (Matrix 1 and Matrix 2) to use as tools in making decisions when soil vapor may be entering a building. These matrices assist in the evaluation of the analytical data, which matrix to use is left to NYSDOH. Four (4) chemicals have been assigned to the two (2) matrices as of the 2006 guidance, as summarized below:

Matrix 1	- Carbon tetrachloride - Trichloroethene (TCE) **
Matrix 2	- Tetrachloroethene (PCE) - 1,1,1-Trichloroethane (1,1,1-TCA) **

Besides the volatile compounds listed above, Matrix 1 was used for the purpose of evaluation as it was more conservative and closer in concentrations to those of the detected compounds. When a sample result was non-detect, the laboratory method detection limit was used for comparison when applying the Matrix 1 criteria rather than a value of zero. This evaluation is summarized on the attached table of results.

As shown on the attached table, certain compounds were detected above the limit of laboratory detection in soil vapor samples obtained beneath the building slab, and were also present in the indoor air and outdoor air samples. A relative comparison was made to each compound's soil vapor, indoor air and outdoor air concentration as Matrix 1 may not be right for each and every compound.

Some compound detections in indoor air appeared to be outliers or due to building operations and not the result of sub-slab vapor migration into the building, these being acetone, ethanol, isopropanol, 2-butanone, ethyl acetate and heptane. Ethanol, ethyl acetate and heptane were detected in indoor air but not detected in any of the soil vapor samples or outdoor air samples. Acetone, isopropanol and 2-butanone were only detected in one (1) or two (2) soil vapor samples, but were detected in all the indoor air samples at concentrations generally higher than the soil vapor detections, and once again these compounds were not detected in outdoor air.

May 12, 2017 (Revised February 5, 2018) Mr. Matthew Hubicki Page - 6

Background Levels for Selected Compounds

Some of the compounds detected in the ambient air samples were also identified at very similar levels in the outside air samples. This would indicate the potential presence of these compounds at background levels and not the result of sub-slab vapor migration into the building.

The EPA conducted a study from 2001 of indoor air quality referred to as Building Assessment and Survey Evaluation. The study included measurement of volatile organic compounds in indoor and outdoor air at 100 randomly selected public and private office buildings across the United States with no known indoor air related complaints. The study is unpublished and the data summaries are Summa canisters results only. Also, the EPA published a Volatile Organic Compound Database in 1988 of indoor and outdoor data from studies across the United States. Below is a comparison of the indoor air concentrations detected in the building to indoor air results EPA has collected that represent typical background concentrations for some of the compounds that could be linked to petroleum related impacts.

Compound	USAI Indoor Air Concentration Detected in 2017 (ug/m ³)	EPA BASE Data Background Levels Indoor Air - 2001 (ug/m ³) ⁽¹⁾	EPA Database Homes & Offices Indoor Air - 1988 (ug/m ³)
Benzene	0.661 to 0.968	9.4	3.3 to 21
Carbon	0.503 to 0.535	< 1.3	Non-detect to 0.83
Tetrachloride			
Ethylbenzene	1.13 to 2.2	5.7	2 to 9.6
m,p-Xylene	4.3 to 7.6	22.2	4.3 to 38 (m-) &
			6.4 to 25 (p-)
o-Xylene	1.99 to 3.49	7.9	2 to 9.3
Toluene	6.33 to 46.4	43	0 to 32

Notes:

⁽¹⁾ 90th percentile value.

As shown in the table above, the typical petroleum related compounds that were detected in indoor air, with the minor exception of toluene, appear to be at concentrations that have been documented to be background concentrations and therefore, not indicative of concentrations affected by sub-slab soil vapor. Toluene was detected at location IA-3 at a concentration of 46.4 ug/m³ and was detected in the soil

May 12, 2017 (Revised February 5, 2018) Mr. Matthew Hubicki Page - 7

vapor sample VI-3 collected nearby at a concentration of 103 ug/m³. The detections of toluene in the other indoor air and other soil vapor locations are below the EPA BASE Data range above.

Conclusions

The findings indicate that the combination of the building's existing and new floor slabs, epoxy coating, 10-mil moisture barrier, and/or passive sub-slab depressurization system, which vents through the building's roof, adequately address the sub-slab soil vapors relative to the building. There does not appear to be justification to require the passive system to be converted into an active system.

There are minimal portions of the building (southwest corner) that are not completed in terms of interior renovation. This area does not yet have the installation of new floor slabs and as applicable, sub-slab vapor mitigation measures. These areas are mostly vacant and are part of the relocation plan of employees to allow for building renovations. This condition (lack of floor slab) may affect the comparison of the analytical results of sub-slab vapor at VI-4 to indoor air IA-1. This comparison of lab data would be further evaluated when sampling is completed after the new concrete floor slab is installed.

There were a couple of potential outliers within the data collected. These outliers should be evaluated against future sampling events to determine their significance and trend. Toluene was one potential outlier that was suspected to be elevated at one location within the sub-slab location (VI-3) and its adjacent indoor air location (IA-3). Toluene is common in petroleum products that may have historically contaminated the site, but given the distance of the sampling location from where petroleum impacts were remediated, it is not reasonable that there is a hydraulic connection. Toluene is also common ingredient in PVC glue that was used to install sub-slab vapor mitigation piping, although the location toluene was suspected to be elevated in was not in an area where sub-slab piping was installed. Other new sub-slab plumbing (and glued joints) may have been installed in this area.

May 12, 2017 (Revised February 5, 2018) Mr. Matthew Hubicki Page - 8

If you have questions, please contact Rosaura Andújar-McNeil, P.E. at at (845) 883-0964 or <u>r.andujar-mcneil@ctmale.com</u>.

Sincerely C.T. MALE ASSOCIATES

Rosaura Andigar-Milleil

Rosaura Andújar-McNeil, P.E. Project Environmental Engineer

Att Figure 1 - Sampling Location Map Figure 2 - Sample Construction Sketches Summary Analytical Table (Detections Only) Full laboratory Report Product Inventory

ec. Revin Goggin ISER Consultin	6
Sue Sullivan iSER Consultin	g
Sara Bogardus NYSDOH	
Jim McIver C.T. Male	
Jeff Marx, P.E. C.T. Male	
John Cappello, Esq. Jacobowitz & C	Gubits
Gerald Jacobowitz, Esq. Jacobowitz & C	Gubits



DATE : MAY 2, 2017



∕∕

50 CENTURY HILL DRIVE, LATHAM, NY 12110 518.786.7400 * FAX 518.786.7299

..\

DWG. NO: 17-288



DETAIL #2 Permanent Sampling Point VI-4 NOTE: Soil vapor samples were purged prior to collection.

FIELD SKETCH
CONSTRUCTION OF SAMPLING PORTS

Prepared by D. Achtyl Not to Scale

LOCATION				VI-1_170329	VI-2_170329	VI-3_170329	VI-4_170329	IA-1_170329	IA-2_170329	IA-3_170329	OA-1_170329	OA-2_170329	9		
SAMPLING DATE				3/29/2017 L1709672-01	3/29/2017 L1709672-02	3/29/2017 L1709672-03	3/29/2017 L1709672-04	3/29/2017 L1709672-05	3/29/2017 L1709672-06	3/29/2017 L1709672-07	3/29/2017 L1709672-08	3/29/2017 L1709672-09	,		
SAMPLE TYPE	•			Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Indoor Air	Indoor Air	Indoor Air	Outdoor Air	Outdoor Air	Matrix 1 Comparison	Matrix 1 DOH Guidance	Proposed Action & Justification
		NYSDOH Air Guidance Values													
Parameter	CasNum	for Indoor Air	Units	Results											
Volatile Organics in Air			1					[<u> </u>					Take reasonable and practical actions to	Exposure is reduced by the installation of a sub-slab depressurization system. Results for indoor air are similar to results in
Dichlorodifluoromethane	75-71-8	No Guidance Value	ug/m3	2.26	ND (<1.98)	3.53	2.24	1.39	1.45	1.76	1.6	1.63	SSV <5 & IAC <5	identify source(s) and reduce exposures	outdoor air, therefore, no further action is warranted.
Chloromethane	74-87-3	No Guidance Value	ua/m3	1 76	ND (<0.826)	ND (<0.826)	16	1 62	1 73	1 52	1 14	1 16	SSV <5 & IAC <5	Take reasonable and practical actions to identify source(s) and reduce exposures	Exposure is reduced by the installation of vapor mitigation measures. The indoor air, outdoor air and soil vapor concentrations lare similar, therefore, no further action is warranted.
															Results for indoor air (and outdoor air) are non-detect, therefore, no further monitoring is warranted as the sub-slab
Chloroethane	75-00-3	No Guidance Value	ug/m3	7.05	ND (<1.06)	8.47	ND (<0.528)	SSV <50 & IAC <1	Monitor	depressurization system appears to be working. Mitigation has already been implemented by installation of vapor mitigation measures. Ethanol was not identified as a					
															contaminant of concern in soil or groundwater as it is an alcohol. The soil vapor concentrations are non-detect suggesting soil
Ethanol	64-17-5	No Guidance Value	ug/m3	ND (<9.42)	ND (<18.8)	ND (<18.8)	ND (<9.42)	326	249	341	ND (<9.42)	ND (<9.42)	SSV <50 & IAC >5	Mitigate	vapor is not the source of the detected concentrations in indoor air, therefore, no further action is warranted. Mitigation has already been implemented by installation of vapor mitigation measures. The soil vapor concentrations are non-
															detect or lower than the indoor air concentrations suggesting soil vapor is not the source of the detected concentrations in indoor
Acetone	67-64-1	No Guidance Value	ug/m3	ND (<2.38)	11.1	ND (<4.75)	41.3	57.5	70.1	112	ND (<2.38)	ND (<2.38)	SSV <50 & IAC >5	Mitigate	air, therefore, no further action is warranted. The indoor air, outdoor air and soil vapor concentrations are similar, except for VI-3 which was slightly higher, but with a vapor
Trichlorofluoromethane	75-69-4	No Guidance Value	ug/m3	1.4	ND (<2.25)	10.4	2.12	2.78	1.82	2.17	1.23	1.23	SSV <50 & IAC <5	Monitor	mitigation system installed, no further monitoring is warranted.
															Exposure is reduced by the installation of vapor mitigation measures. Isopropanol was not identified as a contaminant of concern
														Take reasonable and practical actions to	in soil or groundwater as it is an alcohol. The soil vapor concentrations are non-detect or lower than the indoor air concentrations
Isopropanol	67-63-0	No Guidance Value	ug/m3	ND (<1.23)	ND (<2.46)	ND (<2.46)	3.88	54.3	44.2	280	ND (<1.23)	ND (<1.23)	SSV <5 & IAC >5	identify source(s) and reduce exposures	suggesting soil vapor is not the source of the detected concentrations in indoor air, therefore, no further action is warranted.
															concern in soil or groundwater as it is an alcohol. The soil vapor concentrations are non-detect or lower than the indoor air
Tertiany butyl Alcobol	75-65-0	No Guidance Value	ua/m3	ND (~1.52)	ND (~3.03)	ND (~3.03)	1 58	ND (~1.52)	ND (~1.52)	3 73	ND (~1.52)	ND (~1.52)	SSV ~5 & IAC ~5	Take reasonable and practical actions to	concentrations suggesting soil vapor is not the source of the detected concentrations in indoor air, therefore, no further action is
	75-05-0		ug/m3	ND (<1.52)	ND (<3.03)	ND (<3.03)	1.50	ND (<1.52)	ND (<1.52)	5.75	ND (<1.52)	ND (<1.52)	55V <5 & IAC <5	Take reasonable and practical actions to	Exposure is reduced by the installation of vapor mitigation measures. Considering the non-detect results for indoor air, the
Methylene chloride	75-09-2	60	ug/m3	2.36	ND (<3.47)	ND (<3.47)	1.89	ND (<1.74)	SSV <5 & IAC <5	identify source(s) and reduce exposures	mitigation system appears to be working.				
Carbon disulfide	75-15-0	No Guidance Value	ug/m3	10.6	ND (<1.25)	2.4	1.41	ND (<0.623)	SSV <50 & IAC <1	Monitor	mitigation system appears to be working.				
F 440	70.40.4					7.07									Exposure is reduced by the installation of vapor mitigation measures. Considering the non-detect results for indoor air, the
Freon-113	/6-13-1	No Guidance Value	ug/m3	ND (<1.53)	ND (<3.07)	7.37	ND (<1.53)	SSV <50 & IAC <5	Monitor Take reasonable and practical actions to	mitigation system appears to be working. Exposure is reduced by the installation of vapor mitigation measures. Considering the non-detect results for indoor air, the					
1,1-Dichloroethane	75-34-3	No Guidance Value	ug/m3	ND (<0.809)	ND (<1.62)	4.05	ND (<0.809)	SSV <5 & IAC <1	identify source(s) and reduce exposures	mitigation system appears to be working.					
														Take reasonable and practical actions to	Exposure is reduced by the installation of vapor mitigation measures. The soil vapor concentrations are non-detect or lower than the indoor air concentrations suggesting soil vapor is not the source of the detected concentrations in indoor air, therefore, no
2-Butanone	78-93-3	No Guidance Value	ug/m3	ND (<1.47)	ND (<2.95)	ND (<2.95)	1.8	3.48	3.36	19.5	ND (<1.47)	ND (<1.47)	SSV <5 & IAC >5	identify source(s) and reduce exposures	further action is warranted.
	4 4 7 0 0							11.0	0.7	5.00				Take reasonable and practical actions to	Exposure is reduced by the installation of vapor mitigation measures. The soil vapor concentrations are non-detect suggesting
Ethyl Acetate	141-78-6	No Guidance Value	ug/m3	ND (<1.8)	ND (<3.6)	ND (<3.6)	ND (<1.8)	11.6	2.7	5.66	ND (<1.8)	ND (<1.8)	55V <5 & IAC >5	Identity source(s) and reduce exposures	Exposure is reduced by the installation of vapor mitigation measures. Considering the non-detect results for indoor air, the
Chloroform	67-66-3	No Guidance Value	ug/m3	20	ND (<1.95)	6.98	ND (<0.977)	SSV <50 & IAC <1	Monitor	mitigation system appears to be working.					
Tetrahydrofuran	109-99-9	No Guidance Value	ug/m3	1.85	ND (<2.95)	ND (<2.95)	ND (<1.47)	SSV <5 & IAC <5	identify source(s) and reduce exposures	Exposure is reduced by the installation of vapor mitigation measures. Considering the non-detect results for indoor air, the mitigation system appears to be working.					
	407.00.0			4.04										Take reasonable and practical actions to	Exposure is reduced by the installation of vapor mitigation measures. Considering the non-detect results for indoor air, the
1,2-Dichloroethane	107-06-2	No Guidance Value	ug/m3	1.01	ND (<1.62)	ND (<1.62)	ND (<0.809)	SSV <5 & IAC <1	Identity source(s) and reduce exposures	Mitigation system appears to be working. Mitigation has already been implemented by installation of vapor mitigation measures. The indoor air and outdoor air					
n-Hexane	110-54-3	No Guidance Value	ug/m3	1.55	2.95	74.7	2.11	1.23	0.895	1.74	1.42	0.86	SSV <250 & IAC <5	Mitigate	concentrations are similar, therefore, no further action is warranted.
1,1,1-Trichloroethane	71-55-6	No Guidance Value	ug/m3	9.22	ND (<2.18)	328	ND (<1.09)	See below	SSV >250 & IAC <0.25	Mitigate	Mitigation has already been implemented by installation of vapor mitigation measures. The indoor air concentrations are much lower than the detected soil vapor concentrations, therefore, no further action is warranted.				
	74 40 0					0.40		0.700	0.004	0.000			001/ 5 8 100 4	Take reasonable and practical actions to	Exposure is reduced by the installation of vapor mitigation measures. The indoor air concentrations are in generally lower than
Benzene	71-43-2	No Guidance Value	ug/m3	2.8	ND (<1.28)	2.46	ND (<0.639)	0.703	0.661	0.968	ND (<0.639)	ND (<0.639)	55V <5 & IAC <1	Take reasonable and practical actions to	Exposure is reduced by the installation of vapor mitigation measures. The indoor air and outdoor concentrations are similar,
Carbon tetrachloride	56-23-5	No Guidance Value	ug/m3	4.25	ND (<2.52)	ND (<2.52)	ND (<1.26)	See below	SSV <5 & IAC <1	identify source(s) and reduce exposures	therefore, no further action is warranted.				
Cyclohexane	110-82-7	No Guidance Value	ug/m3	ND (<0.688)	ND (<1.38)	22.5	ND (<0.688)	ND (<0.688)	ND (<0.688)	0.902	ND (<0.688)	ND (<0.688)	SSV <50 & IAC <1	Monitor	levels) for indoor air, the mitigation system appears to be working.
	70.07.5			4.00									001/ 5 8 140 4	Take reasonable and practical actions to	Exposure is reduced by the installation of vapor mitigation measures. Considering the non-detect results for indoor air, the
1,2-Dichloropropane	/8-8/-5	No Guidance Value	ug/m3	4.03	ND (<1.85)	ND (<1.85)	ND (<0.924)	SSV <5 & IAC <1	Take reasonable and practical actions to	Exposure is reduced by the installation of vapor mitigation measures. Considering the non-detect results for indoor air, the					
1,4-Dioxane	123-91-1	No Guidance Value	ug/m3	1.28	ND (<1.44)	ND (<1.44)	ND (<0.721)	SSV <5 & IAC <1	identify source(s) and reduce exposures	mitigation system appears to be working.					
														Take reasonable and practical actions to	Exposure is reduced by the installation of vapor mitigation measures. All indoor air detections are below the NYSDOH air quideline value, and the indoor air concentrations are lower than the detected soil vapor concentrations, therefore, no further
Trichloroethene	79-01-6	2	ug/m3	4.21	ND (<2.15)	ND (<2.15)	ND (<1.07)	See below	SSV <5 & IAC <1	identify source(s) and reduce exposures	action is warranted.				
2.2.4-Trimethylpentane	540-84-1	No Guidance Value	ua/m3	ND (<0.934)	ND (<1.87)	5	ND (<0.934)	ND (<0.934)	ND (<0.934)	1.13	ND (<0.934)	ND (<0.934)	SSV <50 & IAC <5	Monitor	The majority of the results were non-detect, except for IA-3 and VI-3, both collected in the same area. The detected indoor air is concentration is lower than the detected soil vapor concentration, therefore, no further monitoring is warranted.
			1.9,											Take reasonable and practical actions to	Exposure is reduced by the installation of vapor mitigation measures. The soil vapor concentrations are non-detect suggesting
Heptane	142-82-5	No Guidance Value	ug/m3	ND (<0.82)	ND (<1.64)	ND (<1.64)	ND (<0.82)	2.3	2.18	2.93	ND (<0.82)	ND (<0.82)	SSV <5 & IAC <5	identify source(s) and reduce exposures	soil vapor is not the source of the detected concentrations in indoor air, therefore, no further action is warranted.
Toluene	108-88-3	No Guidance Value	liu/m3	7 54	ND (~1 51)	103	2 10	7 76	633	46.4	ND (~0.754)	ND (~0.754)	SSV <250 & IAC >5	Mitigate	Mitigation has already been implemented by installation of vapor mitigation measures. The significance of toluene should be leveluated after the next sampling event as it may be above typical background levels at VI-3 and IA-3 locations.
				7.04		100	2.10	1.10	0.00					Take reasonable and practical actions to	The majority of the results were non-detect, except for IA-3 (which is still generally low), but was not detected in sub slab vapor,
2-Hexanone	591-78-6	No Guidance Value	ug/m3	ND (<0.82)	ND (<1.64)	ND (<1.64)	ND (<0.82)	ND (<0.82)	ND (<0.82)	1.61	ND (<0.82)	ND (<0.82)	SSV <5 & IAC <5	identify source(s) and reduce exposures	therefore, no further action is warranted. Mitigation has already been implemented by installation of vapor mitigation measures. The indoor air concentrations are much
															lower than the detected soil vapor concentrations and/or similar to outdoor air concentrations, therefore, no further action is
Tetrachloroethene	127-18-4	30	ug/m3	1.91	4.38	705	ND (<1.36)	See below	SSV >250 & IAC <1	Mitigate	warranted.				
Chlorobenzene	108-90-7	No Guidance Value	ug/m3	1.62	ND (<1.84)	ND (<1.84)	ND (<0.921)	SSV <5 & IAC <1	identify source(s) and reduce exposures	mitigation system appears to be working.					
Ethylbonzono	100-41-4	No Guidance Value	ua/m3	12.3	ND (~1.74)	ND(-1.74)		1 3 3	1 13	2.2	ND (~0.860)	ND (~0.860)	SSV ~50 & IAC ~5	Monitor	The majority of the soil vapor concentrations are non-detect. The indoor air concentrations are lower than the detected soil vapor concentration, therefore, no further monitoring is warranted.
	100-41-4		ug/m3	12.3	ND (<1.74)	ND(<1.74)	ND (<0.009)	1.55	1.15	2.2	ND (<0.009)	ND (<0.009)	337 <30 & IAC <3	Take reasonable and practical actions to	Exposure is reduced by the installation of vapor mitigation measures. The indoor air concentrations are within EPA background
p/m-Xylene	179601-23-1	No Guidance Value	ug/m3	3.97	ND (<3.47)	ND (<3.47)	1.81	5	4.3	7.6	ND (<1.74)	ND (<1.74)	SSV <5 & IAC >5	identify source(s) and reduce exposures	levels, therefore, no further action is warranted.
Styrene	100-42-5	No Guidance Value	ua/m3	42.6	ND (<1 7)	ND (<1 7)	1.97	ND (<0.852)	ND (<0 852)	6.43	ND (<0.852)	ND (<0.852)	SSV <50 & IAC >5	Mitigate	Mitigation has already been implemented by installation of vapor mitigation measures. Styrene was not identified as a contaminant of concern, therefore, no further action is warranted.
				.2.0						0.10				Take reasonable and practical actions to	Exposure is reduced by the installation of vapor mitigation measures. The indoor air concentrations are within EPA background
o-Xylene	95-47-6	No Guidance Value	ug/m3	3.7	ND (<1.74)	ND (<1.74)	ND (<0.869)	2.22	1.99	3.49	ND (<0.869)	ND (<0.869)	SSV <5 & IAC <5	Identity source(s) and reduce exposures Take reasonable and practical actions to	Inverse therefore, no further action is warranted. Exposure is reduced by the installation of vapor mitigation measures. Considering the non-detect results for indoor air, the
1,2,4-Trimethylbenzene	95-63-6	No Guidance Value	ug/m3	3.53	ND (<1.97)	ND (<1.97)	ND (<0.983)	SSV <5 & IAC <1	identify source(s) and reduce exposures	mitigation system appears to be working.					
Volatile Organics in Air by SIM	71-55-6	No Guidance Value	UU/m3	-	-	-	-	0.12	0 136	0 131	ND (<0 100)	ND (<0 100)			
Carbon tetrachloride	56-23-5	No Guidance Value	ug/m3	-	-	-	-	0.528	0.535	0.503	0.51	0.516			
Trichloroethene Tetrachloroethene	79-01-6	2	ug/m3	-	-	-	-	0.14	0.118	0.258	ND (<0.107)	ND (<0.107)			
	1		Taguno	1	1	1	I	0.172	1 0.100	0.012		1 0.172	_1	1	



ANALYTICAL REPORT

Lab Number:	L1709672
Client:	C.T. Male Associates 50 Century Hill Drive Latham, NY 12210
ATTN: Phone:	Jeffrey Marx (518) 786-7548
Project Name:	USAI
Project Number:	14.4337
Report Date:	04/06/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

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:USAIProject Number:14.4337

 Lab Number:
 L1709672

 Report Date:
 04/06/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1709672-01	VI-1_170329	SOIL_VAPOR	NEW WINDSOR, NY	03/29/17 16:22	03/30/17
L1709672-02	VI-2_170329	SOIL_VAPOR	NEW WINDSOR, NY	03/29/17 17:24	03/30/17
L1709672-03	VI-3_170329	SOIL_VAPOR	NEW WINDSOR, NY	03/29/17 12:50	03/30/17
L1709672-04	VI-4_170329	SOIL_VAPOR	NEW WINDSOR, NY	03/29/17 16:26	03/30/17
L1709672-05	IA-1_170329	AIR	NEW WINDSOR, NY	03/29/17 16:25	03/30/17
L1709672-06	IA-2_170329	AIR	NEW WINDSOR, NY	03/29/17 16:23	03/30/17
L1709672-07	IA-3_170329	AIR	NEW WINDSOR, NY	03/29/17 14:21	03/30/17
L1709672-08	OA-1_170329	AIR	NEW WINDSOR, NY	03/29/17 16:28	03/30/17
L1709672-09	OA-2_170329	AIR	NEW WINDSOR, NY	03/29/17 16:30	03/30/17

Project Name: USAI Project Number: 14.4337

Lab Number: L1709672 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: USAI Project Number: 14.4337

 Lab Number:
 L1709672

 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.

L1709672-02 : The canister vacuum measured on receipt at the laboratory was > 15 in. Hg and was pressurized with Nitrogen before it was used for analysis. The reporting limits have been elevated accordingly.

L1709672-03: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L1709672-03 The presence of Acetone could not be determined in this sample due to a non-target compound interfering with the identification and quantification of this compound.

The WG990932-5 Laboratory Duplicate RPD, performed on L1709672-05, is above the acceptance criteria for dichlorodifluoromethane (32%); however, the sample and duplicate results are less than five times the reporting limit. Therefore, the RPD is valid.

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.

Christoph J Curdenson Christopher J. Anderson

Authorized Signature:

Title: Technical Director/Representative

Date: 04/06/17



AIR



 Lab Number:
 L1709672

 Report Date:
 04/06/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1709672-01	Date Collected:	03/29/17 16:22
Client ID:	VI-1_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15		
Analytical Date:	04/05/17 00:46		
Analyst:	RY		

		ppbV			ug/m3		Dilution	
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.458	0.200		2.26	0.989			1
Chloromethane	0.854	0.200		1.76	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	2.67	0.200		7.05	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	0.249	0.200		1.40	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	0.678	0.500		2.36	1.74			1
3-Chloropropene	ND	0.200		ND	0.626			1
Carbon disulfide	3.39	0.200		10.6	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:USAIProject Number:14.4337

 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-01					Date	Collecte	ed:	03/29/17 16:22
Client ID:	VI-1_170329					Date	Receive	ed:	03/30/17
Sample Location:	NEW WINDSO	OR, NY				Field	Prep:		Not Specified
Devementer		Deculto	ppov		Posulte			Qualifia	Dilution Factor
Volatile Organics in	Air - Mansfield I	ab	RL	MDL	Results		WIDE	Quaimer	
		au							
		4.09	0.200		20.0	0.977			1
Tetrahydrofuran		0.626	0.500		1.85	1.47			1
1,2-Dichloroethane		0.250	0.200		1.01	0.809			1
n-Hexane		0.440	0.200		1.55	0.705			1
1,1,1-Trichloroethane		1.69	0.200		9.22	1.09			1
Benzene		0.875	0.200		2.80	0.639			1
Carbon tetrachloride		0.676	0.200		4.25	1.26			1
Cyclohexane		ND	0.200		ND	0.688			1
1,2-Dichloropropane		0.871	0.200		4.03	0.924			1
Bromodichloromethane		ND	0.200		ND	1.34			1
1,4-Dioxane		0.356	0.200		1.28	0.721			1
Trichloroethene		0.784	0.200		4.21	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-Dichloroprope	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		2.00	0.200		7.54	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		0.282	0.200		1.91	1.36			1
Chlorobenzene		0.351	0.200		1.62	0.921			1
Ethylbenzene		2.84	0.200		12.3	0.869			1
p/m-Xylene		0.915	0.400		3.97	1.74			1
Bromoform		ND	0.200		ND	2.07			1
Styrene		10.0	0.200		42.6	0.852			1



Project Name: USAI Project Number: 14.4337
 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-01					Date	Collecte	ed:	03/29/17 16:22
Client ID:	VI-1_170329					Date	Receive	ed:	03/30/17
Sample Location:	NEW WINDSC	R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air - Mansfield L	.ab							
1,1,2,2-Tetrachloroetha	ne	ND	0.200		ND	1.37			1
o-Xylene		0.851	0.200		3.70	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		0.719	0.200		3.53	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	92		60-140



 Lab Number:
 L1709672

 Report Date:
 04/06/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1709672-02 D	Date Collected:	03/29/17 17:24
Client ID:	VI-2_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15		
Analytical Date:	04/05/17 01:19		
Analyst:	RY		

	ppbV			ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	ND	0.400		ND	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	ND	0.400		ND	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	4.67	2.00		11.1	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	ND	0.400		ND	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	ND	0.400		ND	1.59			2
Ethyl Acetate	ND	1.00		ND	3.60			2



Project Name: USAI Project Number: 14.4337
 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID: Client ID:	L1709672-02 VI-2_170329	D				Date Date	Collecte Receive	ed: ed:	03/29/17 17:24 03/30/17
Sample Location:	NEW WINDSC	DR, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifie	. Factor
Volatile Organics in	Air - Mansfield L	ab							
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		0.836	0.400		2.95	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		ND	0.400		ND	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-Dichloroprope	ne	ND	0.400		ND	1.82			2
1,1,2-Trichloroethane		ND	0.400		ND	2.18			2
Toluene		ND	0.400		ND	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		0.646	0.400		4.38	2.71			2
Chlorobenzene		ND	0.400		ND	1.84			2
Ethylbenzene		ND	0.400		ND	1.74			2
p/m-Xylene		ND	0.800		ND	3.47			2
Bromoform		ND	0.400		ND	4.14			2
Styrene		ND	0.400		ND	1.70			2



Project Name: USAI Project Number: 14.4337
 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-02	D				Date	Collecte	ed:	03/29/17 17:24
Client ID:	VI-2_170329					Date	Receive	ed:	03/30/17
Sample Location:	NEW WINDSO	DR, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air - Mansfield I	_ab							
1,1,2,2-Tetrachloroethar	ne	ND	0.400		ND	2.75			2
o-Xylene		ND	0.400		ND	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	90		60-140
chlorobenzene-d5	84		60-140



 Lab Number:
 L1709672

 Report Date:
 04/06/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1709672-03 D	Date Collected:	03/29/17 12:50
Client ID:	VI-3_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15		
Analytical Date:	04/05/17 01:49		
Analyst:	RY		

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.714	0.400		3.53	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	ND	0.400		ND	0.885			2
Bromomethane	ND	0.400		ND	1.55			2
Chloroethane	3.21	0.400		8.47	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	1.85	0.400		10.4	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	0.770	0.400		2.40	1.25			2
Freon-113	0.962	0.400		7.37	3.07			2
trans-1,2-Dichloroethene	ND	0.400		ND	1.59			2
1,1-Dichloroethane	1.00	0.400		4.05	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	ND	0.400		ND	1.59			2
Ethyl Acetate	ND	1.00		ND	3.60			2



Project Name: USAI Project Number: 14.4337
 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-03	D				Date		ed:	03/29/17 12:50
Sample Location:	NEW WINDSC	R. NY				Field	Receive Prep:	eu.	Not Specified
		,	ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifie	Factor
Volatile Organics in	Air - Mansfield L	ab							
Chloroform		1.43	0.400		6.98	1.95			2
Tetrahydrofuran		ND	1.00		ND	2.95			2
1,2-Dichloroethane		ND	0.400		ND	1.62			2
n-Hexane		21.2	0.400		74.7	1.41			2
1,1,1-Trichloroethane		60.1	0.400		328	2.18			2
Benzene		0.770	0.400		2.46	1.28			2
Carbon tetrachloride		ND	0.400		ND	2.52			2
Cyclohexane		6.55	0.400		22.5	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		ND	0.400		ND	2.15			2
2,2,4-Trimethylpentane		1.07	0.400		5.00	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-Dichloroprope	ne	ND	0.400		ND	1.82			2
1,1,2-Trichloroethane		ND	0.400		ND	2.18			2
Toluene		27.4	0.400		103	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		104	0.400		705	2.71			2
Chlorobenzene		ND	0.400		ND	1.84			2
Ethylbenzene		ND	0.400		ND	1.74			2
p/m-Xylene		ND	0.800		ND	3.47			2
Bromoform		ND	0.400		ND	4.14			2
Styrene		ND	0.400		ND	1.70			2



Project Name: USAI Project Number: 14.4337
 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-03	D				Date	Collecte	ed:	03/29/17 12:50
Client ID:	VI-3_170329					Date	Receive	ed:	03/30/17
Sample Location:	NEW WINDSO	DR, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air - Mansfield I	Lab							
1,1,2,2-Tetrachloroethar	ie	ND	0.400		ND	2.75			2
o-Xylene		ND	0.400		ND	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	92		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	90		60-140



 Lab Number:
 L1709672

 Report Date:
 04/06/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1709672-04	Date Collected:	03/29/17 16:26
Client ID:	VI-4_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15		
Analytical Date:	04/05/17 02:22		
Analyst:	RY		

Parameter	ppbV			ug/m3				Dilution
	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Man	sfield Lab							
Dichlorodifluoromethane	0.454	0.200		2.24	0.989			1
Chloromethane	0.774	0.200		1.60	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	17.4	1.00		41.3	2.38			1
Trichlorofluoromethane	0.378	0.200		2.12	1.12			1
Isopropanol	1.58	0.500		3.88	1.23			1
1,1-Dichloroethene	ND	0.200		ND	0.793			1
Tertiary butyl Alcohol	0.522	0.500		1.58	1.52			1
Methylene chloride	0.543	0.500		1.89	1.74			1
3-Chloropropene	ND	0.200		ND	0.626			1
Carbon disulfide	0.454	0.200		1.41	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	0.612	0.500		1.80	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:USAIProject Number:14.4337

 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-04					Date	Collecte	ed:	03/29/17 16:26
Client ID:	VI-4_170329					Date	Receive	ed:	03/30/17
Sample Location:	NEW WINDSO	PR, NY	nnh\/			Field	Prep:		Not Specified
Paramotor		Poculte	vaqq	MDI	Results	ug/ms		Qualifie	Dilution , Factor
Volatile Organics in	n Air - Mansfield L	ab	NL.		nesuits			quanter	
Chloroform		ND	0.200		ND	0.077			1
Tetrahydrofuran		ND	0.200			0.977			1
1 2-Dichloroethane			0.300			0.900			1
n-Hexane		0.600	0.200		2 11	0.009			1
1 1 1-Trichloroethane		0.000	0.200		2.11	1.00			1
Benzene			0.200			0.639			1
Carbon tetrachloride			0.200			1.26			1
Cyclohexane			0.200			0.688			1
1 2-Dichloropropane			0.200			0.000			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	9	ND	0.200		ND	0.908			1
4-Methyl-2-pentanone		ND	0.500		ND	2.05			1
trans-1,3-Dichloroprope	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		0.581	0.200		2.19	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		0.417	0.400		1.81	1.74			1
Bromoform		ND	0.200		ND	2.07			1
Styrene		0.463	0.200		1.97	0.852			1



Project Name: USAI Project Number: 14.4337
 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-04					Date	Collecte	ed:	03/29/17 16:26
Client ID:	VI-4_170329					Date	Receive	ed:	03/30/17
Sample Location:	NEW WINDSC	R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	n Air - Mansfield L	.ab							
1,1,2,2-Tetrachloroetha	ne	ND	0.200		ND	1.37			1
o-Xylene		ND	0.200		ND	0.869			1
4-Ethyltoluene		ND	0.200		ND	0.983			1
1,3,5-Trimethylbenzene		ND	0.200		ND	0.983			1
1,2,4-Trimethylbenzene		ND	0.200		ND	0.983			1
Benzyl chloride		ND	0.200		ND	1.04			1
1,3-Dichlorobenzene		ND	0.200		ND	1.20			1
1,4-Dichlorobenzene		ND	0.200		ND	1.20			1
1,2-Dichlorobenzene		ND	0.200		ND	1.20			1
1,2,4-Trichlorobenzene		ND	0.200		ND	1.48			1
Hexachlorobutadiene		ND	0.200		ND	2.13			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	92		60-140



Project Name: USAI Project Number: 14.4337

Lab ID:	L1709672-05	Date Collected:	03/29/17 16:25
Client ID:	IA-1_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	04/04/17 16:11		
Analyst:	RY		

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.281	0.200		1.39	0.989			1
Chloromethane	0.784	0.200		1.62	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	173	5.00		326	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	24.2	1.00		57.5	2.38			1
Trichlorofluoromethane	0.495	0.200		2.78	1.12			1
Isopropanol	22.1	0.500		54.3	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	1.18	0.500		3.48	1.47			1
Ethyl Acetate	3.23	0.500		11.6	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
1,2-Dichloroethane	ND	0.200		ND	0.809			1



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-05					Date	Collecte	ed:	03/29/17 16:25
Client ID:	IA-1_170329					Date	Receive	ed:	03/30/17
Sample Location:	NEW WINDSO	R, NY				Field	Prep:		Not Specified
Paramotor		Poculto	ppov	MDI	Results			Qualifie	Dilution , Factor
Volatile Organics in	Air - Mansfield I	ah		MDL	Results	NE	MDL	Quanner	•
n-Hexane		0.349	0.200		1.23	0.705			1
Benzene		0.220	0.200		0.703	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		0.562	0.200		2.30	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-Dichloroprope	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		2.06	0.200		7.76	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		0.306	0.200		1.33	0.869			1
p/m-Xylene		1.15	0.400		5.00	1.74			1
Bromoform		ND	0.200		ND	2.07			1
Styrene		ND	0.200		ND	0.852			1
1,1,2,2-Tetrachloroetha	ne	ND	0.200		ND	1.37			1
o-Xylene		0.510	0.200		2.22	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



Project Name: USAI Project Number: 14.4337
 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-05					Date	Collecte	ed:	03/29/17 16:25
Client ID:	IA-1_170329					Date	Receive	ed:	03/30/17
Sample Location:	NEW WINDSOF	R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	ifier Factor
Volatile Organics in	Air - Mansfield La	ab							
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	85		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	85		60-140



Project Name:USAIProject Number:14.4337

Lab ID:	L1709672-05	Date Collected:	03/29/17 16:25
Client ID:	IA-1_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	04/04/17 16:11		
Analyst:	RY		

	ppbV			ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - Ma	ansfield Lab							
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	0.022	0.020		0.120	0.109			1
Carbon tetrachloride	0.084	0.020		0.528	0.126			1
Trichloroethene	0.026	0.020		0.140	0.107			1
Tetrachloroethene	0.021	0.020		0.142	0.136			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	89		60-140



Project Name: USAI Project Number: 14.4337

Lab ID:	L1709672-06	Date Collected:	03/29/17 16:23
Client ID:	IA-2_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	04/04/17 17:16		
Analyst:	RY		

	ppbV			ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.294	0.200		1.45	0.989			1
Chloromethane	0.836	0.200		1.73	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	132	5.00		249	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	29.5	1.00		70.1	2.38			1
Trichlorofluoromethane	0.323	0.200		1.82	1.12			1
Isopropanol	18.0	0.500		44.2	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	1.14	0.500		3.36	1.47			1
Ethyl Acetate	0.749	0.500		2.70	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
1,2-Dichloroethane	ND	0.200		ND	0.809			1



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID: Client ID: Sample Location:	L1709672-06 IA-2_170329 NEW WINDSO	R. NY				Date Date Field	Collecte Receive Prep:	ed: ed:	03/29/17 16:23 03/30/17 Not Specified
		,	ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifie	Factor
Volatile Organics ir	n Air - Mansfield L	.ab							
n-Hexane		0.254	0.200		0.895	0.705			1
Benzene		0.207	0.200		0.661	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		0.531	0.200		2.18	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-Dichloroprope	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		1.68	0.200		6.33	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		0.261	0.200		1.13	0.869			1
p/m-Xylene		0.990	0.400		4.30	1.74			1
Bromoform		ND	0.200		ND	2.07			1
Styrene		ND	0.200		ND	0.852			1
1,1,2,2-Tetrachloroetha	ne	ND	0.200		ND	1.37			1
o-Xylene		0.457	0.200		1.99	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



Project Name: USAI Project Number: 14.4337
 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-06					Date	Collecte	ed:	03/29/17 16:23	
Client ID:	IA-2_170329					Date	Receive	ed:	03/30/17	
Sample Location:	NEW WINDSOF	R, NY				Field	Prep:		Not Specified	
			ppbV			ug/m3			Dilution	
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	er Factor	
Volatile Organics in	Air - Mansfield La	ab								
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	85		60-140



Project Name: USAI Project Number: 14.4337

Lab ID:	L1709672-06	Date Collected:	03/29/17 16:23
Client ID:	IA-2_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	04/04/17 17:16		
Analyst:	RY		

	ppbV			ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - M	ansfield Lab							
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	0.025	0.020		0.136	0.109			1
Carbon tetrachloride	0.085	0.020		0.535	0.126			1
Trichloroethene	0.022	0.020		0.118	0.107			1
Tetrachloroethene	0.020	0.020		0.136	0.136			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	89		60-140



Project Name: USAI Project Number: 14.4337

Lab ID:	L1709672-07	Date Collected:	03/29/17 14:21
Client ID:	IA-3_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	04/04/17 17:49		
Analyst:	RY		

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.355	0.200		1.76	0.989			1
Chloromethane	0.738	0.200		1.52	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	181	5.00		341	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	47.0	1.00		112	2.38			1
Trichlorofluoromethane	0.387	0.200		2.17	1.12			1
Isopropanol	114	0.500		280	1.23			1
Tertiary butyl Alcohol	1.23	0.500		3.73	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	6.60	0.500		19.5	1.47			1
Ethyl Acetate	1.57	0.500		5.66	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
1,2-Dichloroethane	ND	0.200		ND	0.809			1



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID: Client ID: Sample Location:	L1709672-07 IA-3_170329 NEW WINDSO	R, NY				Date Date Field	Collecte Receive Prep:	ed: ed:	03/29/17 14:21 03/30/17 Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifie	r Factor
Volatile Organics ir	n Air - Mansfield L	ab							
n-Hexane		0.493	0.200		1.74	0.705			1
Benzene		0.303	0.200		0.968	0.639			1
Cyclohexane		0.262	0.200		0.902	0.688			1
1,2-Dichloropropane		ND	0.200		ND	0.924			1
Bromodichloromethane		ND	0.200		ND	1.34			1
1,4-Dioxane		ND	0.200		ND	0.721			1
2,2,4-Trimethylpentane		0.243	0.200		1.13	0.934			1
Heptane		0.716	0.200		2.93	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-Dichloroprope	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		12.3	0.200		46.4	0.754			1
2-Hexanone		0.393	0.200		1.61	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		0.507	0.200		2.20	0.869			1
p/m-Xylene		1.75	0.400		7.60	1.74			1
Bromoform		ND	0.200		ND	2.07			1
Styrene		1.51	0.200		6.43	0.852			1
1,1,2,2-Tetrachloroetha	ne	ND	0.200		ND	1.37			1
o-Xylene		0.804	0.200		3.49	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



Project Name: USAI Project Number: 14.4337
 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-07					Date	Collecte	ed:	03/29/17 14:22
Client ID:	IA-3_170329					Date	Receive	ed:	03/30/17
Sample Location:	NEW WINDSO	R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	ier Factor
Volatile Organics in	h Air - Mansfield L	ab							
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	91		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	90		60-140



Project Name:USAIProject Number:14.4337

Lab ID:	L1709672-07	Date Collected:	03/29/17 14:21
Client ID:	IA-3_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	04/04/17 17:49		
Analyst:	RY		

		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - M	ansfield Lab							
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	0.024	0.020		0.131	0.109			1
Carbon tetrachloride	0.080	0.020		0.503	0.126			1
Trichloroethene	0.048	0.020		0.258	0.107			1
Tetrachloroethene	0.046	0.020		0.312	0.136			1

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



Project Name: USAI Project Number: 14.4337

Lab ID:	L1709672-08	Date Collected:	03/29/17 16:28
Client ID:	OA-1_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	04/04/17 15:05		
Analyst:	RY		

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.323	0.200		1.60	0.989			1
Chloromethane	0.550	0.200		1.14	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	ND	1.00		ND	2.38			1
Trichlorofluoromethane	0.218	0.200		1.23	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



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-08					Date	Collecte	ed:	03/29/17 16:28
Client ID: Sample Location:	0A-1_170329					Date Field	Receive Pron	ed:	03/30/17 Not Specified
Cample Location.			ppbV			ug/m3	r iep.		Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifie	, Factor
Volatile Organics ir	n Air - Mansfield La	ab							
n-Hexane		0.402	0.200		1.42	0.705			1
Benzene		ND	0.200		ND	0.639			1
Cyclohexane		ND	0.200		ND	0.688			1
1,2-Dichloropropane		ND	0.200		ND	0.924			1
Bromodichloromethane		ND	0.200		ND	1.34			1
1,4-Dioxane		ND	0.200		ND	0.721			1
2,2,4-Trimethylpentane		ND	0.200		ND	0.934			1
Heptane		ND	0.200		ND	0.820			1
cis-1,3-Dichloropropene)	ND	0.200		ND	0.908			1
4-Methyl-2-pentanone		ND	0.500		ND	2.05			1
trans-1,3-Dichloroprope	ne	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-Tetrachloroetha	ne	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



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-08					Date	Collecte	ed:	03/29/17 16:28
Client ID:	OA-1_170329					Date	Receive	ed:	03/30/17
Sample Location:	NEW WINDSOF	R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air - Mansfield La	ab							
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	89		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	87		60-140



Project Name: USAI Project Number: 14.4337

Lab ID:	L1709672-08	Date Collected:	03/29/17 16:28
Client ID:	OA-1_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	04/04/17 15:05		
Analyst:	RY		

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - Ma	insfield Lab							
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	0.081	0.020		0.510	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	92		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	91		60-140



Project Name: USAI Project Number: 14.4337

Lab ID:	L1709672-09	Date Collected:	03/29/17 16:30
Client ID:	OA-2_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	04/04/17 15:38		
Analyst:	RY		

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.329	0.200		1.63	0.989			1
Chloromethane	0.562	0.200		1.16	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	ND	1.00		ND	2.38			1
Trichlorofluoromethane	0.219	0.200		1.23	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



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID: Client ID: Sample Location:	L1709672-09 OA-2_170329					Date Date Field	Collecte Receive Prop:	ed: ed:	03/29/17 16:30 03/30/17 Not Specified
Sample Location.		N, IN I	ppbV			ug/m3	riep.		Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifie	Factor
Volatile Organics ir	n Air - Mansfield La	ab							
n-Hexane		0.244	0.200		0.860	0.705			1
Benzene		ND	0.200		ND	0.639			1
Cyclohexane		ND	0.200		ND	0.688			1
1,2-Dichloropropane		ND	0.200		ND	0.924			1
Bromodichloromethane		ND	0.200		ND	1.34			1
1,4-Dioxane		ND	0.200		ND	0.721			1
2,2,4-Trimethylpentane		ND	0.200		ND	0.934			1
Heptane		ND	0.200		ND	0.820			1
cis-1,3-Dichloropropene)	ND	0.200		ND	0.908			1
4-Methyl-2-pentanone		ND	0.500		ND	2.05			1
trans-1,3-Dichloroprope	ne	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-Tetrachloroetha	ne	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



Project Name: USAI Project Number: 14.4337
 Lab Number:
 L1709672

 Report Date:
 04/06/17

Lab ID:	L1709672-09					Date Collected			03/29/17 16:30
Client ID:	OA-2_170329					Date Received:			03/30/17
Sample Location:	NEW WINDSOF	R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air - Mansfield La	ıb							
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	87		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	87		60-140



Project Name: USAI Project Number: 14.4337

Lab ID:	L1709672-09	Date Collected:	03/29/17 16:30
Client ID:	OA-2_170329	Date Received:	03/30/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	04/04/17 15:38		
Analyst:	RY		

		ppbV			ug/m3		Dilution	
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - Ma	insfield Lab							
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	ND	0.020		ND	0.107			1
Tetrachloroethene	0.021	0.020		0.142	0.136			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	91		60-140



		ppbV			ug/m3				Dilution
Parameter	Results	RL	М	DL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mans	field Lab for sample	e(s): 0	1-09	Batch:	WG99093	2-4			
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



		ug/m3				Dilution		
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield	Lab for sampl	e(s): 01-0	09 Batch:	WG99093	2-4			
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



		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfiel	d Lab for samp	ole(s): 01-	09 Batch	n: WG99093	2-4			
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



		ppbV			ug/m3		Dilution	
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - M	ansfield Lab fo	or sample	(s): 05-09	Batch: W	G991046	-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: USAI Project Number: 14.4337

Method Blank Analysis Batch Quality Control

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - Ma	insfield Lab fo	or sample((s): 05-09	Batch: W	G991046	-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



		ppbV		ug/m3		Dilution		
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - M	ansfield Lab fo	or sample	(s): 05-09	Batch: W	/G991046	6-4		
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: USAI Project Number: 14.4337

Method Blank Analysis Batch Quality Control

		ppbV		ug/m3		Dilution		
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - Mans	field Lab fo	or sample	(s): 05-09	Batch: W	G991046	-4		
1,2,3-Trichlorobenzene	ND	0.050		ND	0.371			1
Hexachlorobutadiene	ND	0.050		ND	0.533			1



Project Name: USAI Project Number: 14.4337 Lab Number: L1709672 04/06/17

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	
Volatile Organics in Air - Mansfield Lab	Associated sample(s):	01-09	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	-			



Project Name: USAI Project Number: 14.4337 Lab Number: L1709672 04/06/17

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	
Volatile Organics in Air - Mansfield Lab	Associated sample(s):	01-09	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	-			



Project Name: USAI Project Number: 14.4337 Lab Number: L1709672 04/06/17

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	
Volatile Organics in Air - Mansfield Lab	Associated sample(s):	01-09	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	-			



Project Name: USAI Project Number: 14.4337 Lab Number: L1709672 04/06/17

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	
Volatile Organics in Air - Mansfield Lab A	ssociated sample(s):	01-09	Batch: WG990932	2-3					
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	-			



Project Name: USAI Project Number: 14.4337 Lab Number: L1709672 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):	01-09	Batch: WG990932	2-3					
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	-			



Project Name: USAI Project Number: 14.4337 Lab Number: L1709672 04/06/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics in Air by SIM - Mansfield L	ab Associated s	ample(s): 0	5-09 Batch: WO	G991046-3					
Propylene	120		-		70-130	-		25	
Dichlorodifluoromethane	112		-		70-130	-		25	
Chloromethane	114		-		70-130	-		25	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	103		-		70-130	-		25	
Vinyl chloride	102		-		70-130	-		25	
1,3-Butadiene	115		-		70-130	-		25	
Bromomethane	97		-		70-130	-		25	
Chloroethane	95		-		70-130	-		25	
Ethyl Alcohol	120		-		70-130	-		25	
Vinyl bromide	90		-		70-130	-		25	
Acetone	130		-		70-130	-		25	
Trichlorofluoromethane	113		-		70-130	-		25	
iso-Propyl Alcohol	122		-		70-130	-		25	
Acrylonitrile	98		-		70-130	-		25	
1,1-Dichloroethene	108		-		70-130	-		25	
tert-Butyl Alcohol ¹	91		-		70-130	-		25	
Methylene chloride	121		-		70-130	-		25	
3-Chloropropene	127		-		70-130	-		25	
Carbon disulfide	89		-		70-130	-		25	
1,1,2-Trichloro-1,2,2-Trifluoroethane	100		-		70-130	-		25	
Halothane	93		-		70-130	-		25	



Project Name: USAI Project Number: 14.4337 Lab Number: L1709672 04/06/17

Parameter	LCS %Recovery Qua	LCSD I %Recovery Qual	%Recovery Limits	RPD	RPD Qual Limits
Volatile Organics in Air by SIM - Man	sfield Lab Associated sample(s): 05-09 Batch: WG991046-	3		
trans-1,2-Dichloroethene	92	-	70-130	-	25
1,1-Dichloroethane	96	-	70-130	-	25
Methyl tert butyl ether	87	-	70-130	-	25
Vinyl acetate	118	-	70-130	-	25
2-Butanone	102	-	70-130	-	25
cis-1,2-Dichloroethene	91	-	70-130	-	25
Ethyl Acetate	97	-	70-130	-	25
Chloroform	95	-	70-130	-	25
Tetrahydrofuran	96	-	70-130	-	25
1,2-Dichloroethane	100	-	70-130	-	25
n-Hexane	99	-	70-130	-	25
1,1,1-Trichloroethane	116	-	70-130	-	25
Benzene	96	-	70-130	-	25
Carbon tetrachloride	119	-	70-130	-	25
Cyclohexane	102	-	70-130	-	25
Dibromomethane ¹	96	-	70-130	-	25
1,2-Dichloropropane	105	-	70-130	-	25
Bromodichloromethane	115	-	70-130	-	25
1,4-Dioxane	104	-	70-130	-	25
Trichloroethene	98	-	70-130	-	25
2,2,4-Trimethylpentane	109	-	70-130	-	25


Lab Control Sample Analysis Batch Quality Control

Project Name: USAI Project Number: 14.4337 Lab Number: L1709672 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 sa	ample(s): 05-0	9 Batch: WO	9991046-3					
cis-1,3-Dichloropropene	104		-		70-130	-		25	
4-Methyl-2-pentanone	129		-		70-130	-		25	
trans-1,3-Dichloropropene	93		-		70-130	-		25	
1,1,2-Trichloroethane	109		-		70-130	-		25	
Toluene	82		-		70-130	-		25	
2-Hexanone	106		-		70-130	-		25	
Dibromochloromethane	97		-		70-130	-		25	
1,2-Dibromoethane	88		-		70-130	-		25	
Tetrachloroethene	83		-		70-130	-		25	
1,1,1,2-Tetrachloroethane	84		-		70-130	-		25	
Chlorobenzene	86		-		70-130	-		25	
Ethylbenzene	85		-		70-130	-		25	
p/m-Xylene	88		-		70-130	-		25	
Bromoform	95		-		70-130	-		25	
Styrene	84		-		70-130	-		25	
1,1,2,2-Tetrachloroethane	94		-		70-130	-		25	
o-Xylene	89		-		70-130	-		25	
1,2,3-Trichloropropane ¹	86		-		70-130	-		25	
Isopropylbenzene	85		-		70-130	-		25	
Bromobenzene ¹	84		-		70-130	-		25	
4-Ethyltoluene	91		-		70-130	-		25	



Lab Control Sample Analysis Batch Quality Control

Project Name: USAI Project Number: 14.4337 Lab Number: L1709672 04/06/17

	LCS			LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%	Recovery	Qual	Limits	RPD	Qual	Limits	
Volatile Organics in Air by SIM - Mansfield Lab	Associated s	ample(s):	05-09	Batch: Wo	G991046-3					
1,3,5-Trimethylbenzene	91			-		70-130	-		25	
1,2,4-Trimethylbenzene	95			-		70-130	-		25	
Benzyl chloride	94			-		70-130	-		25	
1,3-Dichlorobenzene	95			-		70-130	-		25	
1,4-Dichlorobenzene	92			-		70-130	-		25	
sec-Butylbenzene	88			-		70-130	-		25	
p-Isopropyltoluene	81			-		70-130	-		25	
1,2-Dichlorobenzene	94			-		70-130	-		25	
n-Butylbenzene	93			-		70-130	-		25	
1,2,4-Trichlorobenzene	101			-		70-130	-		25	
Naphthalene	94			-		70-130	-		25	
1,2,3-Trichlorobenzene	94			-		70-130	-		25	
Hexachlorobutadiene	97			-		70-130	-		25	



Project Name:USAIProject Number:14.4337

Lab Number:

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Volatile Organics in Air - Mansfield Lab	Associated sample(s): 01-09	QC Batch ID: WG990932-5	QC Sample:	L1709672-05	Client ID: I	A-1_170329	
Dichlorodifluoromethane	0.281	0.388	ppbV	32	Q	25	
Chloromethane	0.784	0.826	ppbV	5		25	
Freon-114	ND	ND	ppbV	NC		25	
1,3-Butadiene	ND	ND	ppbV	NC		25	
Bromomethane	ND	ND	ppbV	NC		25	
Chloroethane	ND	ND	ppbV	NC		25	
Ethanol	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	
Isopropanol	22.1	23.0	ppbV	4		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	



Project Name:USAIProject Number:14.4337

Lab Number:

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab	Associated sample(s): 01-09	QC Batch ID: WG990932-5	QC Sample:	L1709672-05	Client ID:	IA-1_170329
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



Project Name:USAIProject Number:14.4337

Lab Number:

Report Date: 0

04/06/17

L1709672

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab	Associated sample(s): 01-09	QC Batch ID: WG990932-5	QC Sample:	L1709672-05	Client ID:	IA-1_170329
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: USAI Project Number: 14.4337

Lab Number: L1709672 04/06/17 Report Date:

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Qual Limits	
Volatile Organics in Air by SIM - Mansfield Lab 1_170329	Associated sample(s): 05-09	QC Batch ID: WG99	01046-5 QC S	Sample: L170	9672-05 Client ID: IA-	
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	0.022	0.023	ppbV	4	25	
Carbon tetrachloride	0.084	0.090	ppbV	7	25	
Trichloroethene	0.026	0.028	ppbV	7	25	
Tetrachloroethene	0.021	0.023	ppbV	9	25	



Project Name: USAI

Project Number: 14.4337

Serial_No:04061714:32 Lab Number: L1709672

Report Date: 04/06/17

Canister and Flow Controller Information

			Media Type	Date	Bottle	Cleaning	Can Leak	Initial Pressure (in Ha)	Pressure on Receipt	Flow Controler	Flow Out	Flow In	% RPC
Samplenum	Client ID	Media ID		Prepared	Order	Batch ID	Check	(in. Hg)	(in. н <u>g</u>)	Leak Chk	mL/min	mL/min	
L1709672-01	VI-1_170329	0232	Flow 4	03/29/17	238966		-	-	-	Pass	4.3	4.5	5
L1709672-01	VI-1_170329	2181	2.7L Can	03/29/17	238966	L1709118-01	Pass	-29.8	-5.5	-	-	-	-
L1709672-02	VI-2_170329	0697	#16 AMB	03/29/17	238966		-	-	-	Pass	4.2	1.1	117
L1709672-02	VI-2_170329	1732	2.7L Can	03/29/17	238966	L1709118-01	Pass	-29.8	-18.9	-	-	-	-
L1709672-03	VI-3_170329	0790	Flow 4	03/29/17	238966		-	-	-	Pass	4.3	9.1	72
L1709672-03	VI-3_170329	104	2.7L Can	03/29/17	238966	L1709118-01	Pass	-29.9	-2.5	-	-	-	-
L1709672-04	VI-4_170329	0143	Flow 4	03/29/17	238966		-	-	-	Pass	4.4	4.0	10
L1709672-04	VI-4_170329	325	2.7L Can	03/29/17	238966	L1709118-01	Pass	-29.8	-7.5	-	-	-	-
L1709672-05	IA-1_170329	0011	Flow 5	03/29/17	238966		-	-	-	Pass	4.5	4.4	2
L1709672-05	IA-1_170329	204	2.7L Can	03/29/17	238966	L1709118-01	Pass	-29.8	-6.7	-	-	-	-
L1709672-06	IA-2_170329	0342	Flow 5	03/29/17	238966		-	-	-	Pass	4.4	4.4	0
L1709672-06	IA-2_170329	108	2.7L Can	03/29/17	238966	L1709118-01	Pass	-29.8	-5.7	-	-	-	-
L1709672-07	IA-3_170329	0791	#3 AMB	03/29/17	238966		-	-	-	Pass	4.5	4.4	2
L1709672-07	IA-3_170329	211	2.7L Can	03/29/17	238966	L1709118-01	Pass	-29.8	-4.2	-	-	-	-
L1709672-08	OA-1_170329	0017	Flow 5	03/29/17	238966		-	-	-	Pass	4.4	4.1	7



Project Name: USAI

Project Number: 14.4337

Serial_No:04061714:32 Lab Number: L1709672

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 Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1709672-08	OA-1_170329	149B	2.7L Can	03/29/17	238966	L1709118-01	Pass	-29.8	-5.7	-	-	-	-
L1709672-09	OA-2_170329	0437	Flow 5	03/29/17	238966		-	-	-	Pass	4.4	4.7	7
L1709672-09	OA-2_170329	464	2.7L Can	03/29/17	238966	L1709118-01	Pass	-29.8	-3.2	-	-	-	-



		Serial_No:04	4061714:32				
Project Name:	BATCH CANISTER CERTIFICATION	Lab Number:	L1709118				
Project Number:	CANISTER QC BAT	Report Date:	04/06/17				
Air Canister Certification Results							

Lab ID:	L1709118-01	Date Collected:	03/26/17 16:00
Client ID:	CAN 2250 SHELF 8	Date Received:	03/27/17
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	03/27/17 16:41		

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



Analyst:

MR

Project Name:BATCH CANISTER CERTIFICATIONProject Number:CANISTER QC BAT

Lab Number: L1709118 Report Date: 04/06/17

Lab ID: Client ID: Sample Location:	L1709118-01 CAN 2250 SHE	09118-01 N 2250 SHELF 8				Date Collected: Date Received: Field Prep:			03/26/17 16:00 03/27/17 Not Specified
			ppbV			ug/m3	- 1		Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifie	Factor
Volatile Organics in	Air - Mansfield Lab	ı							
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-Dichloroethen	e	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 CERTIFICATIONProject Number:CANISTER QC BAT

Lab Number: L1709118 Report Date: 04/06/17

Lab ID: Client ID:	L1709118-01 CAN 2250 SHE	ELF 8				Date Date	Collecte Receive	əd: əd:	03/26/17 16:00 03/27/17
Sample Location:						Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
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	9	ND	0.200		ND	0.908			1
4-Methyl-2-pentanone		ND	0.500		ND	2.05			1
trans-1,3-Dichloroprope	ne	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-Tetrachloroetha	ne	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-Tetrachloroetha	ne	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 CERTIFICATIONProject Number:CANISTER QC BAT

Lab Number: L1709118 Report Date: 04/06/17

Air Canister Certification Results

Lab ID:	L1709118-01					Date	Collecte	ed:	03/26/17 16:00
Client ID:	CAN 2250 SHE	LF 8				Date	Receive	ed:	03/27/17
Sample Location:						Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in A	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-chloropro	opane	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



						Ser	ial_No:040	61714:32
Project Name:	BATCH CANISTI	ER CERT	IFICATION			Lab Nu	umber:	L1709118
Project Number:	CANISTER QC E	BAT				Repor	t Date:	04/06/17
		Air Can	nister Cer	rtificatio	on Results			
Lab ID:	L1709118-01					Date Colle	cted:	03/26/17 16:00
Client ID:	CAN 2250 SHE	LF 8				Date Rece	ived:	03/27/17
Sample Location:						Field Prep	1	Not Specified
			ppbV			ug/m3		Dilution
Parameter		Results	RL	MDL	Results	RL MD	L Qualifie	r Factor

Volatile Organics in Air - Mansfield Lab

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	93		60-140



Report Date: 04/06/17

Lab ID:	L1709118-01	Date Collected:	03/26/17 16:00
Client ID:	CAN 2250 SHELF 8	Date Received:	03/27/17
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	03/27/17 16:41		
Analyst:	MR		

	ppbV			ug/m3				Dilution	
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor	
Volatile Organics in Air by SIM - M	ansfield 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 CERTIFICATIONProject Number:CANISTER QC BAT

Lab Number: L1709118 Report Date: 04/06/17

Lab ID:	L1709118-01					Date	Collecte	ed:	03/26/17 16:00
Client ID:	CAN 2250 SHE	LF 8				Date	Receive	ed:	03/27/17
Sample Location:						Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	- Factor
Volatile Organics in	Air by SIM - Mansfi	eld 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-Dichloroprope	ne	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-Tetrachloroetha	ne	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-Tetrachloroetha	ne	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 CERTIFICATIONProject Number:CANISTER QC BAT

Lab Number: L1709118 Report Date: 04/06/17

Lab ID:L1709118-0Client ID:CAN 2250 3Sample Location:CAN 2250 3		ELF 8			Date Collecte Date Receive Field Prep:			ed: 03/26/17 16:00 ed: 03/27/17 Not Specified	
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	r Factor
Volatile Organics in A	vir by SIM - Mansfi	eld 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

			Acceptance
Internal Standard	% Recovery	Qualifier	Criteria
1,4-difluorobenzene	96		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	95		60-140



Project Name: USAI Project Number: 14.4337 Serial_No:04061714:32

Lab Number: L1709672 Report Date: 04/06/17

Sample Receipt and Container Information

YES

Were project specific reporting limits specified?

Cooler Information Custody Seal

Cooler N/A

Present/Intact

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	рН	deg Ċ	Pres	Seal	Analysis(*)
L1709672-01A	Canister - 2.7 Liter	N/A	N/A		Y	Absent	TO15-LL(30)
L1709672-02A	Canister - 2.7 Liter	N/A	N/A		Y	Absent	TO15-LL(30)
L1709672-03A	Canister - 2.7 Liter	N/A	N/A		Y	Absent	TO15-LL(30)
L1709672-04A	Canister - 2.7 Liter	N/A	N/A		Υ	Absent	TO15-LL(30)
L1709672-05A	Canister - 2.7 Liter	N/A	N/A		Υ	Absent	TO15-LL(30),TO15-SIM(30)
L1709672-06A	Canister - 2.7 Liter	N/A	N/A		Υ	Absent	TO15-LL(30),TO15-SIM(30)
L1709672-07A	Canister - 2.7 Liter	N/A	N/A		Υ	Absent	TO15-LL(30),TO15-SIM(30)
L1709672-08A	Canister - 2.7 Liter	N/A	N/A		Υ	Absent	TO15-LL(30),TO15-SIM(30)
L1709672-09A	Canister - 2.7 Liter	N/A	N/A		Y	Absent	TO15-LL(30),TO15-SIM(30)



Project Name: USAI

Project Number: 14.4337

Lab Number: L1709672

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.
	1
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 of the analyte at less than ten times (10x) the 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. For NDD-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 NJ-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 NJ-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 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: USAI Project Number: 14.4337

Lab Number: L1709672

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: USAI Project Number: 14.4337

 Lab Number:
 L1709672

 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.



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 <u>NPW</u> EPA 8082A: <u>NPW</u>: 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.

						Serial_N	0:04061714:32
	NALYSIS	PAGEOF	Date Rec'd in La	10: 3/30/1	T	ALPHA Job	#: L1709670
CHAIN OF CUSTODY	Project Information		Report Inform	ation - Data De	liverables	Billing Inform	ation
320 Forbes Blvd, Mansfield, MA 02048 TEL: 508-822-9300 FAX: 508-822-3288	Project Name: () < A	P				Same as Clier	nt info PO #:
Client Information	Project Location: Nel	Windon NY	ADEx	ockor			
Client: C.T. N. de Associates	Project #: 14 433	7	(Default base	ed on Regulatory Criten	a Indicated)		
ddress: 50 Contract Hull Po	Project Manager: To ++	M	Other Forn	nats:		Regulatory R	equirements/Report Li
(ichen 1/7 17/10	ALPHA Quote #:	II W M	Additional De	liverables:	~/	State/Fed	Program Res / Co
hone: 518 78/ 7400	Turn-Around Time		Report to: (if differen	TB _ COV] nt than Project Manager)	.>		
 ax:							
	Standard DRUSH	(only confirmed if pre-approved!)					
J. INGAZECI INJECOM	Date Due:	Time:					
other Project Specific Requirements/Com	nents:		<u> </u>				
roject-Specific Target Compound List:					/	etroleum ns by 7	/ / /
					/	es Porta	
A	l Columns B	elow Must	Be Filled	dOut		SIM Subla	/ /
ALPHA Lab ID Lab Use Only) Sample ID	COLLEC	TION	Sample Sampler's	s Can ID I	D - Flow	APH Fixed	Sample, Comments (i.e.
672 d VI-1_170329	3/2a/17 822 162	2 - 30.37 - 6.30	SV DA	2.7 z181 (232 X		
NT 11-2_170320	1 874 172	4-30.00 - 19.73	SU DA	1 1732	2647 ×		
-3 VI-3 170329	\$20 120	0-30-74-3.00	SV DA	1040	749 X		
of UI-4 17037A	\$26 16	6-20.24-8.41	51 00	375	JUZX		
TA-1 170276	020 164	25 -7 15 -7 47		2.11			
SP 1/1_1/0329	925 164		HAIN UH	209			· · · · · · · · · · · · · · · · · · ·
00 1A-2_170329	823 162	3 30.19-6.29	AA IN DA	108 0	342 X		
-01 IA-3-170329	821 192	1 -30:13 - 9.67	AAIN DA		0791 X		
-080A-1_ 170329	828 162	8 -30.29 -6.72	AAoot DA	IPB (X rioc		
-09 0 A-2_ 170329	♥ 830 163	10 -30.45 - 4.89	AAout DA	V 464 0	5437 X		
**************************************	A = Ambient Air (Indoor/Outdo	or)					
SAMPLE MAIRIX CODES \$	v = Soil Vapor/Landfill Gas/SV ther = Please Specify	E	C	Container Type	3		completely. Samples can n
	Relinquished By:	Date/Time	Reçe	ived By:		ate/Time:	clock will not start until any
p-1	1cm	3/20/17 1945	Vin Zn	n_	32817	22:20	submitted are subject to Alp
m No: 101-02 Rev: (25-Sep.15)	DIAL T	3/20/17 50	Lanull	Watt	3130117 (DICO OTIAN	- See reverse side.
a 73 of 73	- Topares	the H MIN SUC		220	<u> </u>	11 05.00	

NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Dan Activ Date/Time Prepared 3/29/17 1100
Preparer's Affiliation Env. Consultant Phone No. 518 786 7100
Purpose of Investigation SIT Sampling
1. OCCUPANT:
Interviewed: Y
Last Name: First Name:
Address:
County:
Home Phone: Office Phone:
Number of Occupants/persons at this location Age of Occupants
2. OWNER OR LANDLORD: (Check if same as occupant) Interviewed: Y/
Last Name: USAL L.ghtmp First Name:
Address: 1126 R. Ver Rd, New Wirdsor, NY
County:
Home Phone: Office Phone:
3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)



School Church Commercial/Multi-use Other: _____

If the property is resid	lential, type? (Circle ap	propriate respon	ise)
Ranch Raised Ranch Cape Cod	2-Family Split Level Contemporary	3-Fam Coloni Mobil	ily ial e Home
Modular	Log Home	use Town Other:	iouses/Condos
If multiple units, how	many?		<u></u>
If the property is com	mercial, type?		
Business Type(s) _			
Does it include resi	idences (i.e., multi-use)?	Y/N	If yes, how many?
Other characteristics:			
Number of floors	1	Building age	<u>UNK</u>
Is the building insul	lated? 🏈 / N	How air tight?	Tight / Average / Not Tight
4. AIRFLOW			
T T. •		4	
Use air current tubes (or tracer smoke to evan	uate airtiow pa	tterns and qualitatively describe:
Airflow between floors			
		·	
Airflow near source			
	<u></u>		
Outdoor air infiltration Λ			
	·····		
Infiltration into air ducts	3	<u> </u>	
·			

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply)

a. Above grade construction:		wood frame	concrete	stone (brick
b. Basement type:		full	crawlspace	slab	other
c. Basement floor:	NA	concrete	dirt	stone	other
d. Basement floor:	NA	uncovered	covered	covered with _	
e. Concrete floor:		unsealed	sealed	sealed with	
f. Foundation walls:		poured	block	stone	other
g. Foundation walls:		unsealed	sealed	sealed with	
h. The basement is:	NA	wet	damp	dry	moldy
i. The basement is:	NA	finished	unfinished	partially finish	ed
j. Sump present?		Y/N			
k. Water in sump?	Y / N /	not applicable			

Basement/Lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation Space Heaters Electric baseboard	Heat pu Stream Wood s	imp radiation stove	Hot water baseboard Radiant floor Outdoor wood boiler	Other
The primary type of fuel used	is:			
Natural Gas Electric Wood	Fuel Oi Propano Coal	1 e	Kerosene Solar	
Domestic hot water tank fuele	d by:			
Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other
Air conditioning:	Central Air	Window units	Open Windows	None

4

Are there air distribution ducts present? Y (N)

,

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/l	owest level occupied?	Full-time	Occasionally	Seldom	Almost Never
Level	General Use of Each	Floor (e.g., f	amilyroom, bedro	om, laundry	y, workshop, storage)
Basement 1 st Floor	NA Lighting 055	embly, w	arehouse spa	ice offi	ces cateterias
2 nd Floor	J Jan				
3 rd Floor	NA				
4 th Floor	AN				
8. FACTORS	S THAT MAY INFLUE	NCE INDOO	R AIR QUALITY	7	
a. Is there a	m attached garage?			Y /	

b. Does the garage have a separate heating unit?	Y/N/MA
c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)	Y / N / NA Please specify
d. Has the building ever had a fire?	Y/N When?
e. Is a kerosene or unvented gas space heater present?	Y 🔊 Where?
f. Is there a workshop or hobby/craft area?	@/N Where & Type? <u><u><u>P</u>arts assembly</u> areas</u>
g. Is there smoking in the building?	Y (How frequently?
h. Have cleaning products been used recently?	(V) N When & Type? General purpose cleaners
i. Have cosmetic products been used recently?	Y N When & Type?

			_
j. Has painting/staining been done in the last 6 months?	ØИ	Where & Whe	n? Office areas
k. Is there new carpet, drapes or other textiles?	(Y) N	Where & Whe	n? Flagring in office areas
l. Have air fresheners been used recently?	Y/N	When & Type	?
m. Is there a kitchen exhaust fan?	Y/Ŋ	If yes, where v	vented?
n. Is there a bathroom exhaust fan?	Y/N	If yes, where v	rented?
o. Is there a clothes dryer?	Y (N	If yes, is it ver	ted outside? Y / N
p. Has there been a pesticide application?	Y/Ø	When & Type	?
Are there odors in the building? If yes, please describe:	ØØ		
Do any of the building occupants use solvents at work? (e.g., chemical manufacturing or laboratory, auto mechanic or boiler mechanic, pesticide application, cosmetologist	(Y) N auto body	shop, painting,	fuel oil delivery,
If yes, what types of solvents are used?	der cog	they /pain	ting / cleaning
If yes, are their clothes washed at work?	Y (D)	(/)	l' l
Do any of the building occupants regularly use or work at response)	a dry-clea	ning service? (Circle appropriate
Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service	<	No Unknown	
Is there a radon mitigation system for the building/structur Is the system active or passive? Active/Passive	re?Y/N	Date of Installa	ition:
9. WATER AND SEWAGE			
Water Supply: Public Water Drilled Well Drive	en Well	Dug Well	Other:
Sewage Disposal: Public Sewer Septic Tank Leach	n Field	Dry Well	Other:
10. RELOCATION INFORMATION (for oil spill residenti	ial emerge	ency)	
a. Provide reasons why relocation is recommended:			

b. Residents choose to: remain in home	relocate to friends/family	relocate to hotel/motel
c. Responsibility for costs associated with	Y/N	
d. Relocation package provided and expla	ined to residents?	Y/N

5

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



First Floor:

						1		 		1 E			···· · ····						1
i								 											
					: [:	1										
ļ		· · · · · · · · · · · ·			tļ.			 <u>.</u>		:		 							
	÷				: 1				1										
	ļ	-			·			 				 							
	1		÷ .																
	÷							 	· ···· ·· ····-?			 ·		ļ					
2	1								1										
				• • • • • • • • • • • • • • • • • • • •	··· 0			 				 		ļ ļ				·	
								 ·				 	······ · ·						
					: 1			:							1	:			
11.1	111			· ·· ····· · •···	er et te	1		 ······		1.1		 							0 I.
1					: 1							- 1		1				•	÷ 1
	: :					i		 									n (
÷	•								-										÷ .
1	-											 							
																			. i
-												:			;				- 1 E
	1							 				· .							
	: 1																		·
	· · · · ·				·			 	:			 							1
-						2									1				1
· • •			· · · · · · · · · · · · · · · · · · ·		÷.	÷.		 											1
•						÷									:				: :
	÷ '	···· · ···	• • •				···· · '	 · · · · · · · ·			18	 							·
:	:																		 4
	÷ .					1			÷ .										
	<u>,</u> 1								1 :										
:																			

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used:

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** <u>Y / N</u>
Production	Powderanding		New/Uscl			Y
Preductor	Glass cleanor		Vsol	Windex		N
Productor	Had closer		Usal			۸)
-						[
			. <u> </u>			
				art		
			•v// •• •			

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)** ** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

P:\Sections\SIS\Oil Spills\Guidance Docs\OSR-3.doc

Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.

652 Route 299, Suite 204B, Highland, NY 12528 845.883.0964 FAX 845.883.0965 ctmale@ctmale.com



March 29, 2018

Mr. Matthew Hubicki Project Manager, Remedial Bureau C NYSDEC, Division of Environmental Remediation 625 Broadway, 11th Floor Albany, New York 12233-7014

Re: Response to the March 2018 NYSDOH's Comments on the Revised May 2017 Vapor Intrusion (VI) Sampling Summary Letter USAI Lighting Facility Brownfield Cleanup Program (BCP)Site 1126 River Road, New Windsor, New York BCP Site ID: C336087 C.T. Male Project No.: 14.4337

Dear Mr. Hubicki:

C.T. Males Associates Engineering, Surveying, Architecture & Landscape Architecture, D.P.C. (C.T. Male) has prepared this response to the March 2018 NYSDOH comment letter regarding C.T. Male's Response to NYSDEC Comments Letter and the Revised VI Summary Letter submitted to NYSDEC on February 5, 2018. The chain of communication is summarized below:

C.T. Male submitted a letter summarizing the results of the March 2017 VI sampling event on May 12, 2017. Subsequently, NYSDEC provided written comments on the May VI Sampling Summary Letter Report on August 4, 2017. C.T. Male responded to NYSDEC and NYSDOH's comments on February 5, 2018 with the Response to NYSDEC Comments Letter and the Revised VI Summary Letter. Subsequently, NYSDOH responded with clarifications and additional comments on a letter dated March 9, 2018.

NYSDOH comments from their March 2018 letter are provided below with C.T. Male's responses in *italics*.

Comment No. 1 - "Page 2, Comment No. 3: As outlined in the "Guidance for Evaluating Soil Vapor Intrusion in the State of New York, with revisions (October, 2006)," any change in use, air handling, occupancy etc. requires a soil vapor intrusion evaluation. The installation of an additional concrete slab over an existing gravel and slab layer may affect the efficiency of the system and

March 29, 2018 Mr. Matthew Hubicki Page - 2

therefore should be evaluated by including pressure field extension testing and sub-slab and indoor air sampling. The SSDS is not considered a complete system until the final concrete slab in installed. Please note the original comment is applicable to the entire site and modifications to the SVI monitoring schedule or SSDS should be made if these changes/modifications occur in the on-site building."

<u>Response to Comment No. 1:</u> C.T. Male acknowledges NYSDOH's comments that changes in use, air handling and occupancy at the USAI Facility may necessitate further VI evaluation. The SSDS in Area 4 is not complete pending the installation of a vapor barrier and new concrete slab. This space is also currently unoccupied. VI sampling will be conducted following the installation of the vapor barrier and new concrete slab. Installation of the vapor barrier and new concrete slab in Area 4 is anticipated in August 2018. VI sampling (inclusive of soil vapor, indoor and outdoor air sampling) was conducted in Area 4 in December 2017 and results indicate that soil vapors are not migrating at levels that require action. It is C.T. Male's opinion that pressure field extension testing is not warranted at this time as the SSDS in Area 4 is a passive system. Pressure field extension testing may be conducted in the event the SSDS is converted to an active system to assess the efficiency of the active system.

The following areas at the USAI Facility will be undergoing renovations in 2018: Area 4, 7, 8 and 16. VI sampling will be conducted in these areas following renovation activities to assess the potential impacts of the proposed renovations on the VI mitigation measures and indoor air quality. VI sampling is anticipated to be conducted in the next heating season (December 2018 to March 2019).

Comment No. 2 - "Page 4, Comment No. 8: Please provide the entire SVI summary report for the 2017-2018 heating season with the data package as soon as possible for my review. The Agencies need adequate time to review and determine if additional actions, especially if additional sampling is needed and as recommended should be conducted during the heating season which on average ends at the end of March. At a minimum, we should receive the SVI sampling data for preliminary review at this time to determine if actions are recommended to address exposures or if additional sampling is recommended and therefore scheduled before the end of the current heating season."

<u>Response to Comment No. 2:</u> The December 2017 VI sampling data and report have been submitted to the NYSDEC and NYSDOH.

March 29, 2018 Mr. Matthew Hubicki Page - 3

> **Comment No. 3** - "Page 4, Analytical Results: Please note that the NYSDOH Air Guidelines are to be used for comparison to indoor and outdoor ambient air results only. The sub-slab vapor and indoor air levels should still be compared to the "Guidance for Evaluating Soil Vapor Intrusion in the State of New York, with revisions (October 2006)" decision matrices to aid in determining the need for additional mitigative actions. "

> <u>Response to Comment No. 3:</u> C.T. Male acknowledges NYSDOH's comments regarding air guidance values and decision matrices and incorporated them into its analysis.

Comment No. 4 - "Page 7, Conclusions: Any areas that are regularly occupied and currently do not have mitigative measures in place should include indoor air sampling at a minimum this heating season to evaluate potential exposure concerns."

<u>Response to Comment 4:</u> It is C.T. Male's understanding that no areas regularly occupied <u>and</u> without VI mitigation measures are present at the USAI Facility as of the date of this letter. A passive SSDS, VI mitigation measure approved in the Final Engineering Report, was installed in March 2018 in Area 8 (2-story office building). Area 8 was a regularly occupied area without a VI mitigation measure prior to March 2018. VI sampling (inclusive of soil vapor, indoor and outdoor air sampling) was conducted in Area 8 in December 2017 (prior to the installation of the passive SSDS) and results indicated that soil vapors were not migrating at levels that require action. Based on this information, no additional indoor air sampling is anticipated this heating season.

Comment No. 5 - "Field Sketch, Construction of Sampling Ports: Please provide clarification on why the sub-slab sampling ports were installed below the original slab and not the newly constructed slab."

<u>Response to Comment 5:</u> It is C.T. Male's opinion that the installation of the sampling port below the original slab provides a more accurate assessment of the risks associated with VI as it is spatially closer to any potential source and will serve as the most conservative approach when assessing risk.

Comment No. 6 - "Indoor Air Quality Questionnaire and Building Inventory: The current product inventory does not provide any useable information about the specific chemicals that have been used in the structure or in the products installed in the building. Future product inventories should list the specific compounds used in these products so we are able to correlate whether or not the

March 29, 2018 Mr. Matthew Hubicki Page - 4

detection of a chemical in indoor air at levels of concern is possibly the result of soil vapor intrusion or instead related to the use of a certain product inside the building.."

<u>Response to Comment 6:</u> An updated product inventory, inclusive of material safety data sheets and listing of specific products, was provided in the VI Sampling Summary – December 2017 Letter.

Please review this information and should you have any questions do not hesitate to contact me at (845) 883-0964 or <u>r.andujar-mcneil@ctmale.com</u>.

Sincerely C.T. MALE ASSOCIATES

Rosaura Andigar-McMeil

Rosaura Andújar-McNeil, P.E. Project Environmental Engineer

ec: Kevin Goggin, iSER Consulting Sue Sullivan, iSER Consulting Sara Bogardus, NYSDOH Jim McIver, C.T. Male Jeff Marx, C.T. Male John Cappello, Esq., Jacobowitz & Gubits Gerald Jacobowitz, Esq., Jacobowitz & Gubits

Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.

652 Route 299, Suite 204B, Highland, NY 12528 845.883.0964 FAX 845.883.0965 ctmale@ctmale.com



March 20, 2018

Mr. Matthew Hubicki Project Manager, Remedial Bureau C NYSDEC, Division of Environmental Remediation 625 Broadway, 11th Floor Albany, New York 12233-7014

Re: Vapor Intrusion (VI) Sampling Summary – December 2017 USAI Lighting Facility Brownfield Cleanup Program (BCP) Site 1126 River Road, New Windsor, New York BCP Site Number: C336087 C.T. Male Project No.: 14.4337

Dear Mr. Hubicki,

An evaluation of the potential for soil vapor intrusion at the USAI Lighting Facility building (USAI Facility) was performed on December 14, 2017 at the above-referenced BCP Site. The building is occupied and utilized for research, development and manufacture of lighting fixtures. A permanent, passive sub-slab VI system or other VI measures (i.e., new slab and vapor barrier or epoxy coating on the flooring) were installed in 2016 in the majority of the main building as a requirement under the New York State BCP. Sub-slab sampling points were placed at various locations throughout the first floor concrete slab of the building.

VI sampling and mitigations measures were performed in general conformance with the protocols established in the New York State Department of Health's (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (SVI Guidance), dated October 2006 and updated May 2017.

The Site Management Plan (SMP) requires the monitoring of soil vapors to assess the performance of the remedy. The results of the VI monitoring will be used to determine the need to convert the existing passive sub-slab vapor intrusion system into an active system, if necessary. An initial post-remediation VI sampling event was conducted in March 2017 and is documented in the VI Sampling Summary Letter Report dated May 12, 2017 that was revised in January 2018 as a result of NYSDEC comments. The December 2017 sampling event was conducted to fulfill the requirements of the SMP and confirm the results of the March 2017 sampling event.

March 20, 2018 Mr. Matthew Hubicki Page - 2

Sampling Locations and Constructions

Six (6) sub-slab soil vapor (VI-1 to VI-6), four (4) indoor ambient (IA-1 to IA-4), and two (2) outdoor ambient air (OA-1 to OA-2) samples were collected throughout or adjacent to the USAI Facility. Four (4) sub-slab soil vapor samples (VI-1 to VI-4) were collected from the existing permanent sub-slab sampling points as outlined in the SMP. Two (2) sub-slab soil vapor samples (VI-5 to VI-6) were collected from temporary sub-slab sampling points in the 2-story office building, located in the southwestern portion of the USAI Facility. For the purpose of laboratory sample identification, the sampling date was added to each sampling location (i.e., OA-1_170329). Figure 1 depicts the approximate locations of the samples.

The construction of the permanent sub-slab sampling points (VI-1 to VI-4) was previously described in the Revised May 2017 VI Sampling Summary Letter Report. The new temporary sub-slab sampling points (VI-5 to VI-6) were constructed by drilling a ½-inch hole in the first floor to a depth of approximately three (3) to six (6) inches below the concrete slab, and installing ¼"-diameter Teflon-lined tubing into the subbase material just beneath the bottom of the concrete slab. The boring was filled with clean porous material and sealed at the surface using a non-VOC containing clay in order to prevent the infiltration of surface air.

The sub-slab soil vapor and ambient air samples were collected simultaneously in accordance with the procedures and requirements outlined in the NYSDOH's SVI Guidance and the site-specific SMP. The indoor and outdoor air samples were placed at approximately 4 feet above the ground surface. The outdoor air samples were collected from locations east and west of the building, within 10 feet of the building.

Sampling Methodology

Each sub-slab sampling point was purged with a helium detector prior to sampling for at least a period of five (5) minutes. The samples were collected using certified passivated steel canisters (2.7-liter) that are evacuated to approximately minus 30inches mercury. The samples were collected over an extended period of time using a flow restricting regulator set for an 8-hour sampling period. The air captured in each canister was analyzed for the full list of volatile organic compounds (VOCs) by the USEPA Method TO-15.
March 20, 2018 Mr. Matthew Hubicki Page - 3

The lab canisters were batch cleaned (see pages 67 to 78 of the attached laboratory report). No detections of VOCs were reported in the canisters prior to sample collection.

Quality Assurance/Quality Control

Prior to collection of soil vapor samples VI-1_171214 to VI-6_171214, a tracer gas (helium) was used to verify the integrity of the seal around the soil vapor tubing at the top of the concrete floor. The method used with the tracer gas was performed in accordance with the NYSDOH SVI Guidance and previously documented in the Revised May 2017 Letter Report. The soil vapor sample exhibited no evidence of influence by helium before or after sample collection indicating that the soil vapor sample results were not influenced by indoor air. In the area of location VI-4, the concrete floor had not been poured. The floor in this area consisted of the crushed stone subbase covered plastic sheeting so the above described method could not be used to verify the seal at the PVC pipe. Based on all other sampling locations showing no evidence of ambient air influence, it is reasonable to assume that the soil vapor sample results were not influence by indoor air.

The laboratory results of the soil vapor and ambient air samples were subject to ASP Category B Data Deliverables. At the time of this report, the soil vapor and ambient air sample results have not been submitted to EQuIS. The ASP Category B Data Deliverables will not be subjected to Data Usability Summary Report (DUSR) validation unless directed otherwise by NYSDEC. Electronic data deliverables provided by the lab will be submitted to EQuIS unless directed otherwise by NYSDEC.

Alpha Analytical Inc. (Alpha), the project's laboratory of record, provided the batch cleaned air canisters, flow restricting regulators, and performed the laboratory analysis. Alpha is a NYSDOH Environmental Laboratory Approval Program (ELAP, certification number 11627) certified laboratory.

Product Inventory and Facility Information

A product inventory of the interior portions of the building was completed at the time of sampling and is attached to this letter. In addition, the site owner's representative provided a listing of the material safety data sheets (MSDS) for chemical and cleaning solutions used on-site (also attached to this letter). A significant amount of cleaning

March 20, 2018 Mr. Matthew Hubicki Page - 4

and chemical products (soaps, air fresheners, hand sanitizers, paints, adhesives, etc.) were documented in the product inventory and in the listing of MSDS.

Analytical Results

A table summarizing analytical results (detections only) and the full laboratory results for the December 2017 sampling event are attached and are referenced throughout this section. Figure 1 depicts the approximate sampling locations and associated chlorinated solvents concentrations for the March 2017 and December 2017 sampling events. Data for both sampling events is presented simultaneously for comparison purposes.

Air Guideline Values - Applicable to Indoor Air Only

NYSDOH established air guideline values for methylene chloride (60 μ g/m³), trichloroethene (TCE, 2 μ g/m³), and tetrachloroethene (PCE, 30 μ g/m³) in indoor air only. PCE was detected in indoor air samples IA-1_171214 (0.244 μ g/m³), IA-2_171214 (0.17 μ g/m³) and IA-3_171214 (0.461 μ g/m³). TCE was detected in indoor air sample IA-3_171214 (0.371 μ g/m³). None of these detections in the indoor air samples exceeded their respective air guideline value. All other results for methylene chloride, PCE and TCE in indoor air samples were non-detect above their corresponding laboratory reporting limit (RL).

No further action with respect to methylene chloride, TCE, and PCE is warranted on the basis of the results summarized above.

Application of NYSDOH Matrices A, B and C to Chlorinated VOCs

Soil vapor/indoor air decision matrices have been developed by NYSDOH as risk management tools to provide guidance on a case-by-case basis about actions that should be taken to address exposures relating to soil vapor intrusion. Eight (8) VOCs have been assigned to three (3) decision matrices (Matrix A, B and C) as of the SVI Guidance (dated October 2006 and updated in May 2017), as summarized below:

March 20, 2018 Mr. Matthew Hubicki Page - 5

Matrix A	 Carbon tetrachloride Cis 1,2 dichloroethene (cis - 1,2 DCE) 1,1 - dichloroethene (1,1 - DCE) TCE
Matrix B	- PCE - 1,1,1-Trichloroethane (1,1,1-TCA) - Methylene chloride
Matrix C	- Vinyl chloride

For matrix evaluation purposes the laboratory RL was used as the comparison concentration when non-detect results were reported for a particular compound. Decision matrices comparison tables are attached for the above-referenced compounds. Figure 1 depicts the sampling locations and the concentration of chlorinated solvents in soil vapors and ambient air samples. Listed below are conclusions drawn from the matrices:

- Concentrations of PCE (854 μg/m³) and 1,1,1-TCA (314 μg/m³) were detected in soil vapor sample VI-3_171214. PCE and 1,1,1-TCA concentrations were detected in the corresponding indoor air sample IA-3_171214 (0.461 μg/m³ and 0.196 μg/m³, respectively). A concentration of 1,1,1-TCA (22.8 μg/m³) was detected in soil vapor sample VI-1_171214. A 1,1,1-TCA concentration was detected in the corresponding indoor air sample IA-2_171214 (0.278 μg/m³). However, "no further action" is recommended by NYSDOH when utilizing the corresponding matrix for these compounds at these sampling locations as soil vapor and indoor air concentrations were less than 1,000 μg/m³ and 3 μg/m³, respectively (applicable Matrix B criteria for taking action).
- A concentration of carbon tetrachloride (7.8 μg/m³) was detected in soil vapor sample VI-1_171214. A carbon tetrachloride concentration was detected in the corresponding indoor air sample IA-2_171214 (0.547 μg/m³). "Monitor" is the recommended action by NYSDOH when utilizing the corresponding matrix for this compound at this sampling location as soil vapor and indoor air concentrations were greater than 0.2 μg/m³ and 6 μg/m³, respectively (applicable Matrix A criteria for taking action).

March 20, 2018 Mr. Matthew Hubicki Page - 6

Any potential migration of these compounds into the indoor air should be addressed by the existing VI mitigation measures. All other concentrations of chlorinated solvents in soil vapor were below 6 μ g/m³. "No further action" was recommended by NYSDOH for all other above-referenced compounds from the guidance matrices.

Relative Comparison for Remaining VOCs

Remaining VOCs have not been assigned to any of the updated decision matrices. In the absence of a decision matrix a relative comparison was performed for soil vapor, indoor air, and outdoor air concentrations.

The following eight compounds were detected in soil vapor at concentrations greater than 6 μ g/m³ (peak concentrations and sampling locations in parenthesis): acetone (37.3 μ g/m³ in VI-5_171214), ethanol (22.2 μ g/m³ in VI-1_171214), chloroform (21.6 μ g/m³ in VI-1_171214), cyclohexane (19 μ g/m³ in VI-3_171214), freon-113 (11.7 μ g/m³ in VI-3_171214), trichlorofluoromethane (11.5 μ g/m³ in VI-3_171214), isopropanol (11 μ g/m³ in VI-6_171214), and 2-butanone (6.11 μ g/m³ in VI-5_171214). All other VOCs were detected at concentrations less than 6 μ g/m³.

Elevated concentrations of acetone (40.3 μ g/m³ in IA-4_171214), ethanol (219 μ g/m³ in IA-2_171214) and isopropanol (87.3 μ g/m³ in IA-4_171214) were detected in the corresponding indoor air samples. The relative elevated concentrations of indoor air when compared to soil vapor concentrations are indicative of an on-site indoor air source and not the likely result of sub-slab vapor migration into the USAI Facility. On-site activities and cleaning agents widely used at the USAI Facility are the likely source of these compounds (see Section "Product Inventory and Facility Information").

Concentrations of chloroform, cyclohexane, freon-113, and 2-butanone in the corresponding indoor and outdoor air samples (IA-2_171214, IA-3_171214, IA-4_171214, OA-1_171214 and OA-2_171214) were non-detect below the laboratory RL (ranging from 0.688 μ g/m³ to 1.53 μ g/m³). Concentrations of trichlorofluoromethane were detected in the corresponding indoor (1.89 μ g/m³ at IA-3_171214) and outdoor (1.66 μ g/m³ at OA-1_171214) air samples. Similar indoor and outdoor air concentrations of these compounds could be indicative of the potential presence of these compounds at background levels and not the result of sub-slab vapor migration into the USAI Facility.

March 20, 2018 Mr. Matthew Hubicki Page - 7

Background Levels for Selected Compounds

Benzene, toluene, ethylbenzene, m,p- & o-xyelnes (BTEX) concentrations in indoor air were evaluated to assess potential impact from remaining petroleum contamination. BTEX indoor air concentrations at the USAI Facility were compared to background levels presented in USEPA's Building Assessment Survey and Evaluation (BASE) Study (dated 2001), and USEPA's Volatile Organic Compound Database (dated 1988) in the table below.

Compound	USAI Indoor Air	EPA BASE Data	EPA Database Homes &
	Concentration	Dackground	Offices indoor Air -
	Detected in 2017	Levels Indoor Air	1988 (µg/m³)
	(µg/m³)	- 2001 (µg/m³) ⁽²⁾	
Benzene	ND ⁽¹⁾ (0.639) to 0.687	9.4	3.3 to 21
Ethylbenzene	ND (0.869) to 2.11	5.7	2 to 9.6
m,p-Xylene	ND (1.74) to 7.12	22.2	4.3 to 38 (m-) &
			6.4 to 25 (p-)
o-Xylene	ND (0.869) to 3.51	7.9	2 to 9.3
Toluene	1.88 to 9.72	43	0 to 32
Notes: (1) ND =	non-detect; ⁽²⁾ 90 th perce	ntile value.	

As shown in the table above, typical petroleum-related compounds detected in indoor air are present at background levels and not indicative of concentrations affected by sub-slab soil vapor.

Conclusions

Chlorinated solvents (PCE and 1,1,1-TCA) were detected in soil vapors from building Areas 2 and 3A. PCE and 1,1,1-TCA concentrations in indoor air have increased slightly when compared to the concentrations documented in the Revised May 2017 VI Sampling Summary Letter Report, but remain below the NYSDOH matrix level for taking additional action to reduce potential for exposure (i.e., monitor only). BTEX concentrations in indoor air and soil vapors have decreased when compared to the concentrations documented in the Revised May 2017 VI Sampling Summary Letter Report. In the absence of meeting the "no further action" categories within NYSDOH matrices, continued monitoring of soil vapors and ambient air is warranted on a yearly

March 20, 2018 Mr. Matthew Hubicki Page - 8

basis for the time being. The next VI sampling event should be completed during the next heating season (November 2018 to March 2019). Based on the available data, no other response action is warranted at this time.

There are portions of the USAI Facility (southwest corner) that are not complete in terms of renovation activities (Areas 4, 7, 8 and 16). A sub-slab depressurization system (SSDS) was installed in Area 8 (2-story office building in the southwestern corner of the USAI Facility) in March 2018. The new vapor barrier and new concrete slab, elements of the SSDS in Areas 4 and 7, were anticipated to be installed in 2017 as part of the construction activities at the USAI Facility.

A petition letter has been submitted to NYSDEC requesting an extension in the installation schedule of the remaining SSDS components in Areas 4 and 7. Area 7 is open to the atmosphere as it is the loading dock area that has not been converted into an enclosed building as planned and Area 4 is currently unoccupied. Installation of the remaining SSDS components cannot be completed until the construction activities in these areas resume. Any potential migration of vapors in Area 7 will not affect an enclosed space/area as Area 7 is exposed to the atmosphere. In addition, based on the 2017 VI sampling data, indoor air quality in Area 4 (sampling locations IA-1 and VI-4) is not substantially impacted by the migration of soil vapors. Construction in Areas 4 and 7 is anticipated to start in the summer of 2018 after the renovation design phase is completed. Remaining SSDS components are anticipated to be installed in August 2018 as part of the planned renovations if the extension is granted by the Department. Monitoring of soil vapors and ambient air is anticipated to be conducted in the upcoming heating season and after the installation of all remaining SSDS components in Areas 4 and 7.

If you have questions, please contact Rosaura Andújar-McNeil, P.E. at (845) 883-0964 or <u>r.andujar-mcneil@ctmale.com</u>.

Sincerely C.T. MALE ASSOCIATES

Rosaura Andigar-Melleil

Rosaura Andújar-McNeil, P.E. Project Environmental Engineer

March 20, 2018 Mr. Matthew Hubicki Page - 9

- Attachments:Figure 1 Chlorinated Solvents in Soil Vapors and Ambient Air
Product Inventory and Facility Information
Summary Analytical Table (Detections Only)
Full Laboratory Report
Matrix A, B and C Comparison Tables
- ec: Kevin Goggin, iSER Consulting Sue Sullivan, iSER Consulting Sara Bogardus, NYSDOH Jim McIver, C.T. Male Jeff Marx, P.E., C.T. Male John Cappello, Esq., Jacobowitz & Gubits Gerald Jacobowitz, Esq., Jacobowitz & Gubits

XREFS: NONE



	ND	LOCATION	IA-3_170329	IA-3_171214
		SAMPLING DATE	3/29/2017	12/14/2017
		1,1,1-TCA	0.131	0.196
_		1,1-DCE	ND	ND
_	\	Carbon tetrachloride	0.503	0.705
		cis-1,2-DCE	ND	ND
		PCE	0.312	0.461
		TCE	0.258	0.371
		Vinyl chloride	ND	ND

329	VI-1_1	/1214	SHIPPI	NG RECEIVING (11)			
017	12/14	1/2017					
	22	.8		LOCATION	OA-2_170329	OA-2_1	71214
	N	D		SAMPLING DATE	3/29/2017	12/14	4/2017
	7.	8		1,1,1-TCA	ND	N	D
	ND			1,1-DCE	ND	N	D
	ND			Carbon tetrachloride	0.516	0.535	
	2.09			cis-1,2-DCE	ND	N	D
	ND			PCE	0.142	N	D
				TCE	ND	N	D
				Vinyl chloride	ND	N	D
	MEN ILL WOM.						

ORANGE COUNTY, NEW YORK

1 OF 1

Sampling 1
VI Perm
NAME
E E
MC

DWG, NO: 17-288

NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Dan Achtyl Date/Time Prepared 12/14/17 1100
Preparer's Affiliation Consultant Phone No. 518 786 7900
Purpose of Investigation 5VI Sampling
1. OCCUPANT:
Interviewed: Y/(N)
Last Name: First Name:
Address:
County:
Home Phone: Office Phone:
Number of Occupants/persons at this location Age of Occupants
2. OWNER OR LANDLORD: (Check if same as occupant)
Interviewed: Y/S
Last Name: USAI Lighting First Name:
Address: 1126 River Rd, New Windsor, NY
County:
Home Phone: Office Phone:
3. BUILDING CHARACTERISTICS
Type of Building: (Circle appropriate response)
Residential School Commercial/Multi-use

Other:

Industrial

Church

If the property is residential,	type? (Circle appro	opriate respon	se)
Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment House Log Home	3-Fami Coloni Mobile Townh Other:	ly al Home ouses/Condos
If multiple units, how many?			
If the property is commercial	, type?		
Business Type(s)			
Does it include residences	(i.e., multi-use)?	Y/N	If yes, how many?
Other characteristics:	\mathbf{r}		
Number of floors /	z in office) B	uilding age_	inknown
Is the building insulated?)/N Н	low air tight?	Tight / Average / Not Tight
4. AIRFLOW			
Use air current tubes or trace	r smoke to evalua	te airflow pat	terns and qualitatively describe:
Airflow between floors			
Airflow near source			
		·	
Outdoor air infiltration			
	<u></u>		
Infiltration into air ducts			

.

. .

2

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply)

a. Above grade construction:		wood frame	concrete	stone	brick	
b. Basement type:		full	crawlspace	slab	other	
c. Basement floor:	NA	concrete	dirt	stone	other	
d. Basement floor:	NA	uncovered	covered	covered with		
e. Concrete floor:		unsealed	sealed	sealed with _		
f. Foundation walls:		poured	block	stone	other	enknown
g. Foundation walls:		unsealed	sealed	sealed with _		unknown
h. The basement is:	NA	wet	damp	dry	moldy	
i. The basement is:	NA	finished	unfinished	partially finis	hed	
j. Sump present?		Y / N				
k. Water in sump?	Y / N .	/ not applicable				
Basement/Lowest level de	pth below g	grade:	(feet)			

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation Space Heaters	Heat Strea	pump m radiation	Hot water baseboard Radiant floor	
Electric baseboard	Woo	d stove	Outdoor wood boiler	Other
The primary type of fuel used	l is:			
Natural Gas	Fuel	Oil	Kerosene	
Electric	Propa	ane	Solar	
Wood	Coal			
Domestic hot water tank fuele	ed by:			
Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other
Air conditioning:	Central Air	Window uni	ts Open Windows	None
		office	Warehouse	

Are there air distribution ducts present? ON Varehouse

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

Above drop ceiling. Not vis	bk		
			<u></u>
			····
	· . ·		
7. OCCUPANCY			
Is basement/lowest level occupied? Full-time Occ	asionally	Seldom	Almost Never
Level General Use of Each Floor (e.g., familyro	oom, bedro	<u>om, laundry, wo</u>	orkshop, storage)
.] A			
Basement \mathcal{DA}			
1st Floor Lighting assembly, ware have	e space	offices ca	stetern
2 nd Floor offices	1 '		
3 rd Floor			
4 th Elecer			
4 riour			
8. FACTORS THAT MAY INFLUENCE INDOOR AIR	QUALITY	,	
a. Is there an attached garage?		Y / 🔊	
b. Does the garage have a separate heating unit?		Y / N / NA	
Are not release now are described on vehicles		VINIM	
stored in the garage (e.g., lawnmower, atv, car)		Y / N / NAY Please specify_	.«
d. Has the building ever had a fire?		Y N When?	
a Is a karasana ar unvantad gas snaga haatar prosant?		V/M Where?	
e. is a kerosene of unvented gas space neater present?		Y/W where?	
f. Is there a workshop or hobby/craft area?	(Y) / N	Where & Type?	PENTS ASSEMDLY WEAS
g. Is there smoking in the building?	Y/Ø	How frequently	?
h. Have cleaning products been used recently?	Ø/ N	When & Type?	General purpose champer
i. Have cosmetic products been used recently?	Y / 🕥	When & Type?	3 4

j. Has painting/sta	ining been done	in the last 6 m	onths? 🛛 🔵 / N	Where & V	vhen? Office are	245
k. Is there new car	rpet, drapes or o	ther textiles?	\mathcal{Q}/N	Where & V	When? off, at an	ZS
l. Have air freshen	ers been used r	ecently?	Y / N	When & T	ype? unknawn	
m. Is there a kitch	en exhaust fan?		Y /N) If yes, whe	re vented?	
n. Is there a bath	room exhaust fa	n?	Y/Z	If yes, whe	re vented?	
o. Is there a clothe	es dryer?		Y /	If yes, is it	vented outside? Y / N	
p. Has there been	a pesticide appli	cation?	Y /M	When & T	ype?	
Are there odors in If yes, please desc	the building? bribe:N	lev constra	ucton" type	c alors	in affice and	
Do any of the buildir (e.g., chemical manufaboiler mechanic, pesti	ng occupants use acturing or labora cide application,	e solvents at wo atory, auto mech cosmetologist	rk? Y / N anic or auto body	y shop, painti	ng, fuel oil delivery,	
If yes, what types o	f solvents are use	ed? Some	our contin	ng, parsti	m, deaning	
If yes, are their clot	hes washed at wo	ork?	YN	/ * >		
Do any of the buildin response)	ig occupants reg	ularly use or w	ork at a dry-cle	aning service	? (Circle appropriate	
Yes, use dry-o Yes, use dry-o Yes, work at a	cleaning regularly cleaning infreque a dry-cleaning ser	/ (weekly) ntly (monthly or rvice	r less)	No Unknown		
Is there a radon miti Is the system active o	gation system fo or passive?	r the building/s Active/Passive	structure? Y / N e	Date of Inst	allation:	
9. WATER AND SEV	WAGE					
Water Supply:	Public Water	> Drilled Well	Driven Well	Dug Well	Other:	
Sewage Disposal:	Public Sever	Septic Tank	Leach Field	Dry Well	Other:	
10. RELOCATION I	NFORMATION	N (for oil spill re	esidential emerg	gency)		
a. Provide reason	is why relocation	ı is recommend	led:			
b. Residents choo	se to: remain in l	home reloca	ate to friends/fam	uly relo	cate to hotel/motel	
c. Responsibility	for costs associa	ted with reimb	ursement explai	ned? Y /	N	
d. Relocation pac	kage provided a	nd explained to	o residents?	V/	N	

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used:

List specific products found in the residence that have the potential to affect indoor air quality.

NA

8

Location	Product Description	Size (units)	Condition [*]	Chemica	l Ingredients	Field Instrument Reading (units)	Photo ** <u>Y / N</u>
VIG abst	Clorox Wipes	BX Qo	z New/use	<u>4</u> e	Photok		R
1	Lysol Toilet Balller	1013202	Neu	r			Y
	Febreze Ar	1× 8 %	z New				Y
	Ulire Air Fretora	le Doz	New	Acetone			Y
	Rad	1×17.5	New				4
	Sichbing Bubbles	82592	itu				Y
	Fatuloso	Ixted	New			_	¥
	Soft Sout	1x365	New				Y
	Lysol disinfertant pay	7×192	New	¥		or international contents.	Y
	Puller Dustor Every	ZXISS	New	\sim		<u></u>	P.
VI-SRow	Room Shrox Wips	1×902	Usel	spe pho	to		N
0-ffice	Purch Hand Scottion	Multi	Usel				N
J	Metholdshop	Nutti	Used				N
UI-3Rccon	Dawn Soap	8×12	New	see pho	to		Y
\downarrow	Softsap	12, 7.50	New				N
Office	Purell, Settsonp	Misc	Vel	_			N
VILZAN	Purell	Misc	Used				N
1	Paulercost	Misc	Nhu Losal	See pho	to		Y
	6.1501 To. 1+ Bay CPM	3200	Dsel				D

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)** ** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Ingrements. However, the photographs must be of good qu UI4 Area Promar 200 Ldex Part 6x low Used ECO 575 AllACU 1x 190 Used P:(Sections/SIS/OFSpills/Guidade Dags/OFF3.doc) 1x 3202 Iroman 1x 3202 Iroman 4x59d Bay 101000 e 2x 5901 USC/Jan Comput 3x 59d Seo phob 11 1



MATERIAL SAFETY DATA SHEETS

AJAX CLEANSER ALCOHOL - ISOPROPYL AP-1 LUBRICATING GREASE – JET-LUBE

CLOROX BLEACH COMET CLEANSER

DAP ALEX PAINTERS ACRYLIC LATEX CAULK DAP ALEX ACRYLIC LATEX CAULK PLUS SILICONE DEKOTE PAINT RELEASE AGENT DOWNY WRINKLE RELEASER

EASTWOOD PRE PAINTING PREP ELMER'S WOOD FILLER

EPC POWDER MFG. INC.-EPOXY-POLYESTER HYBRID - H9038-M1 EPC POWDER MFG. INC.-POLYESTER TGIC – P9113-M8

FABULOSO ALL PURPOSE CLEANER FANTASTIK ALL PURPOSE CLEANER FEBREZE AIR FRESHNER FORMULA 409 ANTIBACTERIAL ALL PURPOSE CLEANER – GREEN LIQUID FORMULA 409 CLEANER – DEGREASER DISINFECT. –CLEAR- WITH CITRUS SCENT

GLADE COUNTRY GARDEN GOJO NATURAL ORANGE PUMICE HAND CLEANER GOO GONE GOO GONE ALL PURPOSE CLEANER

HYDROGEN PEROXIDE

KOPR-KOTE – JET-LUBE 21

LOCTITE PL POLYURETHANE FOOF AND FLASHING SEALANT LOCTITE POWER GRAB CONSTRUCTION ADHESIVE LUCAS Z-TRA HEAVY DUTY GREASE LYSOL-PROF.-BRAND II DISINFECTANT DEODORIZING CLEANER, LEMON SCENT LYSOL - BRAND II DISINFECTANT SPRAY (AEROSOL) LYSOL - PROF.-BRAND III DISENFECTANT SPRAY -ALL SCENTS LYSOL -PROF.-DISINFECTANT TOILET BOWL CLEANER -THICK FORMULA 3M. Controle Pepair 3M – CRYSTAL CLEAR SEALANT 230 3M – HYBRID SEALANT 730, CLEAR 3M – NIVEC CONTACT CLEANER PLUS **3M – POLYSTYRENE FOAM INSULATION SPRAY ADHESIVE 78** 3M - POLYURETHANE MULTI-PURPOSE ADHESIVE 5010, WHITE 3M - SUPER 77 ADHESIVE - BULK 3M – SUPER FOAM FAST SPRAY ADHESIVE 74, ORANGE 3M - SCOTCH-WELD THREADLOCKER TL 71 MINERAL SPIRITS - KRYLON MINERAL SPIRITS - ODORLESS - W.M. BARR MOLYKOTE L-0501 HIGH PERFORMANCE PENETRATING LUBRICANT - DOW MOP & GLO FLOOR SHINE CLEANER MOR-TEMP (99-01015) WHITE P97C500 -ELECTORSTATIC COATING -AZKONOBEL

NOVUS PLASTIC POLISH #1 NOVUS PLASTIC POLISH #2 NOVUS PLASTIC POLISH #3

OLYMPIC PREMIUM INTERIOR LATEX – EGGSHELL –ULTRA WHITE BS1 OLYMPIC PREMIUM INTEROR FLAT ULTRA WHITE/BASE 1

PALMOLIVE DISHWASHING LIQUID PINE SOL CLEANER – CLEAR AMBER – ORIGINAL PINE SOL CLEANER 1 – CLEAR AMBER – THIN LIQUID • PURELL INSTANT HAND SANITIZER RAL – 902-16 – TIGER DRYLAC RUST-OLEUM – PRO 1-GL 2PK FLAT BLACK RUST-OLEUM – PTOUCH+SSPR 6PK – FLAT MATTE CLEAR RUST-OLEUM – STRUST+SSPR 6PK – FLAT WHITE RUST-OLEUM – STRUST+SSPR 6PK GLOSS WHITE RUST-OLEUM – PRO 1-GL 2PK GLOSS WHITE RUST-OLEUM – PTOUCH+SSPR 6PK GLOSS SAGE GREEN 12 OZ RUST-OLEUM – SPECLT SSPR 6PK HIHEAT BAR-B-QUE BLK 120 RUST-OLEUM – CPS 1-GL CP P&S PRIMER-A RUST-OLEUM – SPECLT SSPR 6PK PRIME PLASTIC PRIMER RUST-OLEUM – IC SSPR 6PK ULTRA FLAT BLACK RUST-OLEUM – RUST PREVENTIVE ENAMEL – SILVER METALLIC-KRYLON

SAF-T-LOK RTV 732 MULTI-PURPOPSE SEALANT CLEAR SAF-T-LOK RTV 732 SEALANT - WHITE (PRESSURE CAN) SCRUBBING BUBBLES BATHROOM CLEANER STAINLESS STEEL POLISH STAY CLEAN LIQUID SOLDERING FLUX

TIEBOND HEAVY DUTY CONSTRUCTION ADHESIVE- FRANKLIN INTERNATIONAL TURBO-COAT ACRYLIC COATING

WD-40 WHITE LIQUID ROUGE WINDEX GLASS CLEANER

APPLI -TEC #3251 – BLACK SILICONE- SYRINGE DISPENSER APPLI-TEC #3250 – CLEAR SILICONE – SYRINGE DISPENSER COVESTRO (MAKROLON) MOLD MATERIAL- ENGINEERING NEXTEL-HARTER #6018 - ENGINEERING NEXTEL-PRIMER #5523 – ENGINEERING NEXTEL-SUEDE COATING #3101 – ENGINEERING NEXTEL-HARTER #5524 – ENGINEERING NEXTEL-VERDUNNER #8061 - ENGINEERING

CLOROX WIPES COMPUTER SCREEN WIPES DUST DESTROYER COMPRESSED-GAS DUSTER LIQUID HAND SOAP PLEDGE FURNITURE POLISH KLEAN STRIP- ODOORLES MINERAL SPIRIT

LOCATION	LOCATION IA-1 170329			IA-1_171214	
SAMPLING DATE		3/29/2017	3/29/2017		
LAB SAMPLE ID		L1709672-05		L1746327-07	
SAMPLE TYPE				AIR	
SAMPLE DEPTH (ft.)					
	CasNum	Results	RL	Results	RL
Volatile Organics in Air				-	
1,1,1-Trichloroethane	71-55-6	-	-	-	-
1,1-Dichloroethane	75-34-3	ND	0.809	ND	0.809
1,2,4-Trimethylbenzene	95-63-6	ND	0.983	ND	0.983
1,2-Dichloroethane	107-06-2	ND	0.809	ND	0.809
1,2-Dichloropropane	78-87-5	ND	0.924	ND	0.924
1,3-Butadiene	106-99-0	ND	0.442	ND	0.442
1,4-Dioxane	123-91-1	ND	0.721	ND	0.721
2,2,4-Trimethylpentane	540-84-1	ND	0.934	ND	0.934
2-Butanone	78-93-3	3.48	1.47	2.09	1.47
2-Hexanone	591-78-6	ND	0.82	ND	0.82
4-Methyl-2-pentanone	108-10-1	ND	2.05	ND	2.05
Acetone	67-64-1	57.5	2.38	31.8	2.38
Benzene	71-43-2	0.703	0.639	ND	0.639
Carbon disulfide	75-15-0	ND	0.623	ND	0.623
Carbon tetrachloride	56-23-5	-	-	-	-
Chlorobenzene	108-90-7	ND	0.921	ND	0.921
Chloroethane	75-00-3	ND	0.528	ND	0.528
Chloroform	67-66-3	ND	0.977	ND	0.977
Chloromethane	74-87-3	1.62	0.413	1.15	0.413
Cyclohexane	110-82-7	ND	0.688	ND	0.688
Dichlorodifluoromethane	75-71-8	1.39	0.989	1.72	0.989
Ethanol	64-17-5	326	9.42	163	9.42
Ethyl Acetate	141-78-6	11.6	1.8	2.41	1.8
Ethylbenzene	100-41-4	1.33	0.869	1.25	0.869
Freon-113	76-13-1	ND	1.53	ND	1.53
Heptane	142-82-5	2.3	0.82	ND	0.82
Isopropanol	67-63-0	54.3	1.23	58	1.23
Methylene chloride	75-09-2	ND	1.74	ND	1.74
n-Hexane	110-54-3	1.23	0.705	ND	0.705
o-Xylene	95-47-6	2.22	0.869	1.71	0.869
p/m-Xylene	179601-23-1	5	1.74	4.08	1.74
Styrene	100-42-5	ND	0.852	1.78	0.852
Tertiary butyl Alcohol	75-65-0	ND	1.52	ND	1.52
Tetrachloroethene	127-18-4	-	-	-	-
Tetrahydrofuran	109-99-9	ND	1.47	ND	1.47
Toluene	108-88-3	7.76	0.754	3	0.754
Trichloroethene	79-01-6	-	-	-	-
Trichlorofluoromethane	75-69-4	2.78	1.12	2.29	1.12
Volatile Organics in Air by SIM		-			
1,1,1-Trichloroethane	71-55-6	0.12	0.109	0.262	0.109
Carbon tetrachloride	56-23-5	0.528	0.126	0.541	0.126
Tetrachloroethene	127-18-4	0.142	0.136	0.244	0.136
Trichloroethene	79-01-6	0.14	0.107	ND	0.107



LOCATION	LOCATION IA-2 170329			IA-2_171214	
SAMPLING DATE		3/29/2017	3/29/2017		
LAB SAMPLE ID		L1709672-06		L1746327-08	
SAMPLE TYPE				AIR	
SAMPLE DEPTH (ft.)					
	CasNum	Results	RL	Results	RL
Volatile Organics in Air					
1,1,1-Trichloroethane	71-55-6	-	-	-	-
1,1-Dichloroethane	75-34-3	ND	0.809	ND	0.809
1,2,4-Trimethylbenzene	95-63-6	ND	0.983	ND	0.983
1,2-Dichloroethane	107-06-2	ND	0.809	ND	0.809
1,2-Dichloropropane	78-87-5	ND	0.924	ND	0.924
1,3-Butadiene	106-99-0	ND	0.442	ND	0.442
1,4-Dioxane	123-91-1	ND	0.721	ND	0.721
2,2,4-Trimethylpentane	540-84-1	ND	0.934	ND	0.934
2-Butanone	78-93-3	3.36	1.47	1.91	1.47
2-Hexanone	591-78-6	ND	0.82	ND	0.82
4-Methyl-2-pentanone	108-10-1	ND	2.05	ND	2.05
Acetone	67-64-1	70.1	2.38	30.6	2.38
Benzene	71-43-2	0.661	0.639	ND	0.639
Carbon disulfide	75-15-0	ND	0.623	ND	0.623
Carbon tetrachloride	56-23-5	-	-	-	-
Chlorobenzene	108-90-7	ND	0.921	ND	0.921
Chloroethane	75-00-3	ND	0.528	ND	0.528
Chloroform	67-66-3	ND	0.977	ND	0.977
Chloromethane	74-87-3	1.73	0.413	1.15	0.413
Cyclohexane	110-82-7	ND	0.688	ND	0.688
Dichlorodifluoromethane	75-71-8	1.45	0.989	1.55	0.989
Ethanol	64-17-5	249	9.42	219	9.42
Ethyl Acetate	141-78-6	2.7	1.8	2.34	1.8
Ethylbenzene	100-41-4	1.13	0.869	0.912	0.869
Freon-113	76-13-1	ND	1.53	ND	1.53
Heptane	142-82-5	2.18	0.82	ND	0.82
Isopropanol	67-63-0	44.2	1.23	68.6	1.23
Methylene chloride	75-09-2	ND	1.74	ND	1.74
n-Hexane	110-54-3	0.895	0.705	ND	0.705
o-Xylene	95-47-6	1.99	0.869	1.26	0.869
p/m-Xylene	179601-23-1	4.3	1.74	2.82	1.74
Styrene	100-42-5	ND	0.852	0.971	0.852
Tertiary butyl Alcohol	75-65-0	ND	1.52	ND	1.52
Tetrachloroethene	127-18-4	-	-	-	-
Tetrahydrofuran	109-99-9	ND	1.47	ND	1.47
Toluene	108-88-3	6.33	0.754	2.4	0.754
Trichloroethene	79-01-6	-	-	-	-
Trichlorofluoromethane	75-69-4	1.82	1.12	1.65	1.12
Volatile Organics in Air by SIM				-	
1,1,1-Trichloroethane	71-55-6	0.136	0.109	0.278	0.109
Carbon tetrachloride	56-23-5	0.535	0.126	0.547	0.126
Tetrachloroethene	127-18-4	0.136	0.136	0.17	0.136
Trichloroethene	79-01-6	0.118	0.107	ND	0.107



LOCATION	LOCATION IA-3_170329			IA-3_171214	
SAMPLING DATE		3/29/2017	3/29/2017		
LAB SAMPLE ID		L1709672-07		L1746327-09	
SAMPLE TYPE				AIR	
SAMPLE DEPTH (ft.)					
	CasNum	Results	RL	Results	RL
Volatile Organics in Air					
1,1,1-Trichloroethane	71-55-6	-	-	-	-
1,1-Dichloroethane	75-34-3	ND	0.809	ND	0.809
1,2,4-Trimethylbenzene	95-63-6	ND	0.983	ND	0.983
1,2-Dichloroethane	107-06-2	ND	0.809	ND	0.809
1,2-Dichloropropane	78-87-5	ND	0.924	ND	0.924
1,3-Butadiene	106-99-0	ND	0.442	ND	0.442
1,4-Dioxane	123-91-1	ND	0.721	ND	0.721
2,2,4-Trimethylpentane	540-84-1	1.13	0.934	ND	0.934
2-Butanone	78-93-3	19.5	1.47	4.36	1.47
2-Hexanone	591-78-6	1.61	0.82	ND	0.82
4-Methyl-2-pentanone	108-10-1	ND	2.05	ND	2.05
Acetone	67-64-1	112	2.38	57.7	2.38
Benzene	71-43-2	0.968	0.639	ND	0.639
Carbon disulfide	75-15-0	ND	0.623	ND	0.623
Carbon tetrachloride	56-23-5	-	-	-	-
Chlorobenzene	108-90-7	ND	0.921	ND	0.921
Chloroethane	75-00-3	ND	0.528	ND	0.528
Chloroform	67-66-3	ND	0.977	ND	0.977
Chloromethane	74-87-3	1.52	0.413	1.12	0.413
Cyclohexane	110-82-7	0.902	0.688	ND	0.688
Dichlorodifluoromethane	75-71-8	1.76	0.989	1.7	0.989
Ethanol	64-17-5	341	9.42	507	9.42
Ethyl Acetate	141-78-6	5.66	1.8	4.11	1.8
Ethylbenzene	100-41-4	2.2	0.869	2.11	0.869
Freon-113	76-13-1	ND	1.53	ND	1.53
Heptane	142-82-5	2.93	0.82	ND	0.82
Isopropanol	67-63-0	280	1.23	189	1.23
Methylene chloride	75-09-2	ND	1.74	ND	1.74
n-Hexane	110-54-3	1.74	0.705	ND	0.705
o-Xylene	95-47-6	3.49	0.869	3.51	0.869
p/m-Xylene	179601-23-1	7.6	1.74	7.12	1.74
Styrene	100-42-5	6.43	0.852	2.26	0.852
Tertiary butyl Alcohol	75-65-0	3.73	1.52	ND	1.52
Tetrachloroethene	127-18-4	-	-	-	-
Tetrahydrofuran	109-99-9	ND	1.47	ND	1.47
Toluene	108-88-3	46.4	0.754	9.72	0.754
Trichloroethene	79-01-6	-	-	-	-
Trichlorofluoromethane	75-69-4	2.17	1.12	1.89	1.12
Volatile Organics in Air by SIM		-		-	
1,1,1-Trichloroethane	71-55-6	0.131	0.109	0.196	0.109
Carbon tetrachloride	56-23-5	0.503	0.126	0.705	0.126
Tetrachloroethene	127-18-4	0.312	0.136	0.461	0.136
Trichloroethene	79-01-6	0.258	0.107	0.371	0.107



LOCATION		IA-4_171214	IA-4_171214		OA-1_170329	
SAMPLING DATE		12/14/2017	12/14/2017			
LAB SAMPLE ID		L1746327-10	L1746327-10			
SAMPLE TYPE		AIR				
SAMPLE DEPTH (ft.)						
	CasNum	Results	RL	Results	RL	
Volatile Organics in Air						
1,1,1-Trichloroethane	71-55-6	-	-	-	-	
1,1-Dichloroethane	75-34-3	ND	0.809	ND	0.809	
1,2,4-Trimethylbenzene	95-63-6	ND	0.983	ND	0.983	
1,2-Dichloroethane	107-06-2	ND	0.809	ND	0.809	
1,2-Dichloropropane	78-87-5	ND	0.924	ND	0.924	
1,3-Butadiene	106-99-0	ND	0.442	ND	0.442	
1,4-Dioxane	123-91-1	ND	0.721	ND	0.721	
2,2,4-Trimethylpentane	540-84-1	ND	0.934	ND	0.934	
2-Butanone	78-93-3	ND	1.47	ND	1.47	
2-Hexanone	591-78-6	ND	0.82	ND	0.82	
4-Methyl-2-pentanone	108-10-1	ND	2.05	ND	2.05	
Acetone	67-64-1	41.3	2.38	ND	2.38	
Benzene	71-43-2	0.687	0.639	ND	0.639	
Carbon disulfide	75-15-0	ND	0.623	ND	0.623	
Carbon tetrachloride	56-23-5	-	-	-	-	
Chlorobenzene	108-90-7	ND	0.921	ND	0.921	
Chloroethane	75-00-3	ND	0.528	ND	0.528	
Chloroform	67-66-3	ND	0.977	ND	0.977	
Chloromethane	74-87-3	1.14	0.413	1.14	0.413	
Cyclohexane	110-82-7	ND	0.688	ND	0.688	
Dichlorodifluoromethane	75-71-8	2.53	0.989	1.6	0.989	
Ethanol	64-17-5	899	9.42	ND	9.42	
Ethyl Acetate	141-78-6	ND	1.8	ND	1.8	
Ethylbenzene	100-41-4	ND	0.869	ND	0.869	
Freon-113	76-13-1	ND	1.53	ND	1.53	
Heptane	142-82-5	ND	0.82	ND	0.82	
Isopropanol	67-63-0	87.3	1.23	ND	1.23	
Methylene chloride	75-09-2	ND	1.74	ND	1.74	
n-Hexane	110-54-3	ND	0.705	1.42	0.705	
o-Xylene	95-47-6	ND	0.869	ND	0.869	
p/m-Xylene	179601-23-1	2.07	1.74	ND	1.74	
Styrene	100-42-5	ND	0.852	ND	0.852	
Tertiary butyl Alcohol	75-65-0	ND	1.52	ND	1.52	
Tetrachloroethene	127-18-4	-	-	-	-	
Tetrahydrofuran	109-99-9	ND	1.47	ND	1.47	
Toluene	108-88-3	1.88	0.754	ND	0.754	
Trichloroethene	79-01-6	-	-	-	-	
Trichlorofluoromethane	75-69-4	1.78	1.12	1.23	1.12	
Volatile Organics in Air by SIM						
1,1,1-Trichloroethane	71-55-6	ND	0.109	ND	0.109	
Carbon tetrachloride	56-23-5	0.554	0.126	0.51	0.126	
Tetrachloroethene	127-18-4	ND	0.136	ND	0.136	
Trichloroethene	79-01-6	ND	0.107	ND	0.107	



LOCATION		OA-1_171214	OA-1_171214		OA-2_170329	
SAMPLING DATE		12/14/2017	12/14/2017			
LAB SAMPLE ID		L1746327-11		L1709672-09		
SAMPLE TYPE		AIR				
SAMPLE DEPTH (ft.)						
	CasNum	Results	RL	Results	RL	
Volatile Organics in Air						
1,1,1-Trichloroethane	71-55-6	-	-	-	-	
1,1-Dichloroethane	75-34-3	ND	0.809	ND	0.809	
1,2,4-Trimethylbenzene	95-63-6	ND	0.983	ND	0.983	
1,2-Dichloroethane	107-06-2	ND	0.809	ND	0.809	
1,2-Dichloropropane	78-87-5	ND	0.924	ND	0.924	
1,3-Butadiene	106-99-0	ND	0.442	ND	0.442	
1,4-Dioxane	123-91-1	ND	0.721	ND	0.721	
2,2,4-Trimethylpentane	540-84-1	ND	0.934	ND	0.934	
2-Butanone	78-93-3	ND	1.47	ND	1.47	
2-Hexanone	591-78-6	ND	0.82	ND	0.82	
4-Methyl-2-pentanone	108-10-1	ND	2.05	ND	2.05	
Acetone	67-64-1	3.87	2.38	ND	2.38	
Benzene	71-43-2	0.671	0.639	ND	0.639	
Carbon disulfide	75-15-0	ND	0.623	ND	0.623	
Carbon tetrachloride	56-23-5	-	-	-	-	
Chlorobenzene	108-90-7	ND	0.921	ND	0.921	
Chloroethane	75-00-3	ND	0.528	ND	0.528	
Chloroform	67-66-3	ND	0.977	ND	0.977	
Chloromethane	74-87-3	1.03	0.413	1.16	0.413	
Cyclohexane	110-82-7	ND	0.688	ND	0.688	
Dichlorodifluoromethane	75-71-8	1.53	0.989	1.63	0.989	
Ethanol	64-17-5	ND	9.42	ND	9.42	
Ethyl Acetate	141-78-6	ND	1.8	ND	1.8	
Ethylbenzene	100-41-4	ND	0.869	ND	0.869	
Freon-113	76-13-1	ND	1.53	ND	1.53	
Heptane	142-82-5	ND	0.82	ND	0.82	
Isopropanol	67-63-0	ND	1.23	ND	1.23	
Methylene chloride	75-09-2	ND	1.74	ND	1.74	
n-Hexane	110-54-3	ND	0.705	0.86	0.705	
o-Xylene	95-47-6	ND	0.869	ND	0.869	
p/m-Xylene	179601-23-1	ND	1.74	ND	1.74	
Styrene	100-42-5	ND	0.852	ND	0.852	
Tertiary butyl Alcohol	75-65-0	ND	1.52	ND	1.52	
Tetrachloroethene	127-18-4	-	-	-	-	
Tetrahydrofuran	109-99-9	ND	1.47	ND	1.47	
Toluene	108-88-3	ND	0.754	ND	0.754	
Trichloroethene	79-01-6	-	-	-	-	
Trichlorofluoromethane	75-69-4	1.66	1.12	1.23	1.12	
Volatile Organics in Air by SIM						
1,1,1-Trichloroethane	71-55-6	ND	0.109	ND	0.109	
Carbon tetrachloride	56-23-5	0.642	0.126	0.516	0.126	
Tetrachloroethene	127-18-4	ND	0.136	0.142	0.136	
Trichloroethene	79-01-6	ND	0.107	ND	0.107	



LOCATION		OA-2_171214	OA-2_171214		VI-1_170329	
SAMPLING DATE		12/14/2017	12/14/2017			
LAB SAMPLE ID		L1746327-12	L1746327-12			
SAMPLE TYPE		AIR				
SAMPLE DEPTH (ft.)						
	CasNum	Results	RL	Results	RL	
Volatile Organics in Air				-		
1,1,1-Trichloroethane	71-55-6	-	-	9.22	1.09	
1,1-Dichloroethane	75-34-3	ND	0.809	ND	0.809	
1,2,4-Trimethylbenzene	95-63-6	ND	0.983	3.53	0.983	
1,2-Dichloroethane	107-06-2	ND	0.809	1.01	0.809	
1,2-Dichloropropane	78-87-5	ND	0.924	4.03	0.924	
1,3-Butadiene	106-99-0	ND	0.442	ND	0.442	
1,4-Dioxane	123-91-1	ND	0.721	1.28	0.721	
2,2,4-Trimethylpentane	540-84-1	ND	0.934	ND	0.934	
2-Butanone	78-93-3	ND	1.47	ND	1.47	
2-Hexanone	591-78-6	ND	0.82	ND	0.82	
4-Methyl-2-pentanone	108-10-1	ND	2.05	ND	2.05	
Acetone	67-64-1	3.35	2.38	ND	2.38	
Benzene	71-43-2	ND	0.639	2.8	0.639	
Carbon disulfide	75-15-0	ND	0.623	10.6	0.623	
Carbon tetrachloride	56-23-5	-	-	4.25	1.26	
Chlorobenzene	108-90-7	ND	0.921	1.62	0.921	
Chloroethane	75-00-3	ND	0.528	7.05	0.528	
Chloroform	67-66-3	ND	0.977	20	0.977	
Chloromethane	74-87-3	1.07	0.413	1.76	0.413	
Cyclohexane	110-82-7	ND	0.688	ND	0.688	
Dichlorodifluoromethane	75-71-8	1.76	0.989	2.26	0.989	
Ethanol	64-17-5	ND	9.42	ND	9.42	
Ethyl Acetate	141-78-6	ND	1.8	ND	1.8	
Ethylbenzene	100-41-4	ND	0.869	12.3	0.869	
Freon-113	76-13-1	ND	1.53	ND	1.53	
Heptane	142-82-5	ND	0.82	ND	0.82	
Isopropanol	67-63-0	ND	1.23	ND	1.23	
Methylene chloride	75-09-2	ND	1.74	2.36	1.74	
n-Hexane	110-54-3	ND	0.705	1.55	0.705	
o-Xylene	95-47-6	ND	0.869	3.7	0.869	
p/m-Xylene	179601-23-1	ND	1.74	3.97	1.74	
Styrene	100-42-5	ND	0.852	42.6	0.852	
Tertiary butyl Alcohol	75-65-0	ND	1.52	ND	1.52	
Tetrachloroethene	127-18-4	-	-	1.91	1.36	
Tetrahydrofuran	109-99-9	ND	1.47	1.85	1.47	
Toluene	108-88-3	ND	0.754	7.54	0.754	
Trichloroethene	79-01-6	-	-	4.21	1.07	
Trichlorofluoromethane	75-69-4	1.57	1.12	1.4	1.12	
Volatile Organics in Air by SIM						
1,1,1-Trichloroethane	71-55-6	ND	0.109	-	-	
Carbon tetrachloride	56-23-5	0.535	0.126	-	-	
Tetrachloroethene	127-18-4	ND	0.136	-	-	
Trichloroethene	79-01-6	ND	0.107	-	-	



LOCATION		VI-1_171214	VI-1_171214		VI-2_170329	
SAMPLING DATE		12/14/2017	12/14/2017			
LAB SAMPLE ID		L1746327-01		L1709672-02		
SAMPLE TYPE		SOIL_VAPOR				
SAMPLE DEPTH (ft.)						
	CasNum	Results	RL	Results	RL	
Volatile Organics in Air				-		
1,1,1-Trichloroethane	71-55-6	22.8	1.92	ND	2.18	
1,1-Dichloroethane	75-34-3	ND	1.42	ND	1.62	
1,2,4-Trimethylbenzene	95-63-6	ND	1.73	ND	1.97	
1,2-Dichloroethane	107-06-2	ND	1.42	ND	1.62	
1,2-Dichloropropane	78-87-5	ND	1.63	ND	1.85	
1,3-Butadiene	106-99-0	ND	0.779	ND	0.885	
1,4-Dioxane	123-91-1	ND	1.27	ND	1.44	
2,2,4-Trimethylpentane	540-84-1	ND	1.64	ND	1.87	
2-Butanone	78-93-3	ND	2.6	ND	2.95	
2-Hexanone	591-78-6	ND	1.44	ND	1.64	
4-Methyl-2-pentanone	108-10-1	ND	3.61	ND	4.1	
Acetone	67-64-1	7.65	4.18	11.1	4.75	
Benzene	71-43-2	ND	1.12	ND	1.28	
Carbon disulfide	75-15-0	1.49	1.1	ND	1.25	
Carbon tetrachloride	56-23-5	7.8	2.21	ND	2.52	
Chlorobenzene	108-90-7	ND	1.62	ND	1.84	
Chloroethane	75-00-3	ND	0.929	ND	1.06	
Chloroform	67-66-3	21.6	1.72	ND	1.95	
Chloromethane	74-87-3	ND	0.727	ND	0.826	
Cyclohexane	110-82-7	ND	1.21	ND	1.38	
Dichlorodifluoromethane	75-71-8	ND	1.74	ND	1.98	
Ethanol	64-17-5	22.2	16.6	ND	18.8	
Ethyl Acetate	141-78-6	ND	3.17	ND	3.6	
Ethylbenzene	100-41-4	ND	1.53	ND	1.74	
Freon-113	76-13-1	ND	2.7	ND	3.07	
Heptane	142-82-5	ND	1.44	ND	1.64	
Isopropanol	67-63-0	7.94	2.17	ND	2.46	
Methylene chloride	75-09-2	ND	3.06	ND	3.47	
n-Hexane	110-54-3	ND	1.24	2.95	1.41	
o-Xylene	95-47-6	ND	1.53	ND	1.74	
p/m-Xylene	179601-23-1	ND	3.06	ND	3.47	
Styrene	100-42-5	ND	1.5	ND	1.7	
Tertiary butyl Alcohol	75-65-0	ND	2.67	ND	3.03	
Tetrachloroethene	127-18-4	ND	2.39	4.38	2.71	
Tetrahydrofuran	109-99-9	ND	2.6	ND	2.95	
Toluene	108-88-3	ND	1.33	ND	1.51	
Trichloroethene	79-01-6	2.09	1.89	ND	2.15	
Trichlorofluoromethane	75-69-4	ND	1.98	ND	2.25	
Volatile Organics in Air by SIM						
1,1,1-Trichloroethane	71-55-6	-	-	-	-	
Carbon tetrachloride	56-23-5	-	-	-	-	
Tetrachloroethene	127-18-4	-	-	-	-	
Trichloroethene	79-01-6		-	-	-	



LOCATION		VI-2_171214	VI-2_171214		
SAMPLING DATE		12/14/2017	12/14/2017		
LAB SAMPLE ID		L1746327-02		L1709672-03	
SAMPLE TYPE		SOIL_VAPOR			
SAMPLE DEPTH (ft.)					
	CasNum	Results	RL	Results	RL
Volatile Organics in Air					
1,1,1-Trichloroethane	71-55-6	1.94	1.09	328	2.18
1,1-Dichloroethane	75-34-3	ND	0.809	4.05	1.62
1,2,4-Trimethylbenzene	95-63-6	ND	0.983	ND	1.97
1,2-Dichloroethane	107-06-2	ND	0.809	ND	1.62
1,2-Dichloropropane	78-87-5	ND	0.924	ND	1.85
1,3-Butadiene	106-99-0	ND	0.442	ND	0.885
1,4-Dioxane	123-91-1	ND	0.721	ND	1.44
2,2,4-Trimethylpentane	540-84-1	ND	0.934	5	1.87
2-Butanone	78-93-3	ND	1.47	ND	2.95
2-Hexanone	591-78-6	ND	0.82	ND	1.64
4-Methyl-2-pentanone	108-10-1	ND	2.05	ND	4.1
Acetone	67-64-1	4.39	2.38	ND	4.75
Benzene	71-43-2	ND	0.639	2.46	1.28
Carbon disulfide	75-15-0	1.31	0.623	2.4	1.25
Carbon tetrachloride	56-23-5	ND	1.26	ND	2.52
Chlorobenzene	108-90-7	ND	0.921	ND	1.84
Chloroethane	75-00-3	ND	0.528	8.47	1.06
Chloroform	67-66-3	ND	0.977	6.98	1.95
Chloromethane	74-87-3	ND	0.413	ND	0.826
Cyclohexane	110-82-7	ND	0.688	22.5	1.38
Dichlorodifluoromethane	75-71-8	1.57	0.989	3.53	1.98
Ethanol	64-17-5	9.95	9.42	ND	18.8
Ethyl Acetate	141-78-6	ND	1.8	ND	3.6
Ethylbenzene	100-41-4	ND	0.869	ND	1.74
Freon-113	76-13-1	ND	1.53	7.37	3.07
Heptane	142-82-5	ND	0.82	ND	1.64
Isopropanol	67-63-0	4.72	1.23	ND	2.46
Methylene chloride	75-09-2	ND	1.74	ND	3.47
n-Hexane	110-54-3	ND	0.705	74.7	1.41
o-Xylene	95-47-6	ND	0.869	ND	1.74
p/m-Xylene	179601-23-1	ND	1.74	ND	3.47
Styrene	100-42-5	ND	0.852	ND	1.7
Tertiary butyl Alcohol	75-65-0	ND	1.52	ND	3.03
Tetrachloroethene	127-18-4	ND	1.36	705	2.71
Tetrahydrofuran	109-99-9	ND	1.47	ND	2.95
Toluene	108-88-3	ND	0.754	103	1.51
Trichloroethene	79-01-6	ND	1.07	ND	2.15
Trichlorofluoromethane	75-69-4	1.55	1.12	10.4	2.25
Volatile Organics in Air by SIM				-	
1,1,1-Trichloroethane	71-55-6	-	-	-	-
Carbon tetrachloride	56-23-5	-	-	-	-
Tetrachloroethene	127-18-4	-	-	-	-
Trichloroethene	79-01-6		-		-



LOCATION		VI-3_171214		VI-3_171214	
SAMPLING DATE		12/14/2017	12/14/2017		
LAB SAMPLE ID		L1746327-03	L1746327-03		
SAMPLE TYPE		SOIL_VAPOR		SOIL_VAPOR	
SAMPLE DEPTH (ft.)					
	CasNum	Results	RL	Results	RL
Volatile Organics in Air					
1,1,1-Trichloroethane	71-55-6	314	1.09	-	-
1,1-Dichloroethane	75-34-3	4.65	0.809	-	-
1,2,4-Trimethylbenzene	95-63-6	ND	0.983	-	-
1,2-Dichloroethane	107-06-2	ND	0.809	-	-
1,2-Dichloropropane	78-87-5	ND	0.924	-	-
1,3-Butadiene	106-99-0	ND	0.442	-	-
1,4-Dioxane	123-91-1	ND	0.721	-	-
2,2,4-Trimethylpentane	540-84-1	ND	0.934	-	-
2-Butanone	78-93-3	ND	1.47	-	-
2-Hexanone	591-78-6	ND	0.82	-	-
4-Methyl-2-pentanone	108-10-1	ND	2.05	-	-
Acetone	67-64-1	ND	2.38	-	-
Benzene	71-43-2	ND	0.639	-	-
Carbon disulfide	75-15-0	ND	0.623	-	-
Carbon tetrachloride	56-23-5	ND	1.26	-	-
Chlorobenzene	108-90-7	ND	0.921	-	-
Chloroethane	75-00-3	ND	0.528	-	-
Chloroform	67-66-3	4.82	0.977	-	-
Chloromethane	74-87-3	ND	0.413	-	-
Cyclohexane	110-82-7	19	0.688	-	-
Dichlorodifluoromethane	75-71-8	2.02	0.989	-	-
Ethanol	64-17-5	ND	9.42	-	-
Ethyl Acetate	141-78-6	ND	1.8	-	-
Ethylbenzene	100-41-4	ND	0.869	-	-
Freon-113	76-13-1	11.7	1.53	-	-
Heptane	142-82-5	ND	0.82	-	-
Isopropanol	67-63-0	4.77	1.23	-	-
Methylene chloride	75-09-2	ND	1.74	-	-
n-Hexane	110-54-3	2.23	0.705	-	-
o-Xylene	95-47-6	ND	0.869	-	-
p/m-Xylene	179601-23-1	ND	1.74	-	-
Styrene	100-42-5	ND	0.852	-	-
Tertiary butyl Alcohol	75-65-0	ND	1.52	-	-
Tetrachloroethene	127-18-4	868E	1.36	854	2.71
Tetrahydrofuran	109-99-9	ND	1.47	-	-
Toluene	108-88-3	1.64	0.754	-	-
Trichloroethene	79-01-6	1.81	1.07	-	-
Trichlorofluoromethane	75-69-4	11.5	1.12	-	-
Volatile Organics in Air by SIM					
1,1,1-Trichloroethane	71-55-6	-	-	-	-
Carbon tetrachloride	56-23-5	-	-	-	-
Tetrachloroethene	127-18-4	-	-	-	-
Trichloroethene	79-01-6		-	-	-



LOCATION	LOCATION VI-4 170329			VI-4_171214	
SAMPLING DATE		3/29/2017	3/29/2017		
LAB SAMPLE ID		L1709672-04		L1746327-04	
SAMPLE TYPE				SOIL_VAPOR	
SAMPLE DEPTH (ft.)					
	CasNum	Results	RL	Results	RL
Volatile Organics in Air		·			
1,1,1-Trichloroethane	71-55-6	ND	1.09	ND	1.09
1,1-Dichloroethane	75-34-3	ND	0.809	ND	0.809
1,2,4-Trimethylbenzene	95-63-6	ND	0.983	ND	0.983
1,2-Dichloroethane	107-06-2	ND	0.809	ND	0.809
1,2-Dichloropropane	78-87-5	ND	0.924	ND	0.924
1,3-Butadiene	106-99-0	ND	0.442	ND	0.442
1,4-Dioxane	123-91-1	ND	0.721	ND	0.721
2,2,4-Trimethylpentane	540-84-1	ND	0.934	ND	0.934
2-Butanone	78-93-3	1.8	1.47	ND	1.47
2-Hexanone	591-78-6	ND	0.82	ND	0.82
4-Methyl-2-pentanone	108-10-1	ND	2.05	ND	2.05
Acetone	67-64-1	41.3	2.38	ND	2.38
Benzene	71-43-2	ND	0.639	ND	0.639
Carbon disulfide	75-15-0	1.41	0.623	ND	0.623
Carbon tetrachloride	56-23-5	ND	1.26	ND	1.26
Chlorobenzene	108-90-7	ND	0.921	ND	0.921
Chloroethane	75-00-3	ND	0.528	ND	0.528
Chloroform	67-66-3	ND	0.977	4.54	0.977
Chloromethane	74-87-3	1.6	0.413	0.624	0.413
Cyclohexane	110-82-7	ND	0.688	ND	0.688
Dichlorodifluoromethane	75-71-8	2.24	0.989	1.72	0.989
Ethanol	64-17-5	ND	9.42	ND	9.42
Ethyl Acetate	141-78-6	ND	1.8	ND	1.8
Ethylbenzene	100-41-4	ND	0.869	ND	0.869
Freon-113	76-13-1	ND	1.53	ND	1.53
Heptane	142-82-5	ND	0.82	ND	0.82
Isopropanol	67-63-0	3.88	1.23	1.65	1.23
Methylene chloride	75-09-2	1.89	1.74	ND	1.74
n-Hexane	110-54-3	2.11	0.705	ND	0.705
o-Xylene	95-47-6	ND	0.869	ND	0.869
p/m-Xylene	179601-23-1	1.81	1.74	ND	1.74
Styrene	100-42-5	1.97	0.852	ND	0.852
Tertiary butyl Alcohol	75-65-0	1.58	1.52	ND	1.52
Tetrachloroethene	127-18-4	ND	1.36	ND	1.36
Tetrahydrofuran	109-99-9	ND	1.47	ND	1.47
Toluene	108-88-3	2.19	0.754	1.01	0.754
Trichloroethene	79-01-6	ND	1.07	ND	1.07
Trichlorofluoromethane	75-69-4	2.12	1.12	1.63	1.12
Volatile Organics in Air by SIM				-	
1,1,1-Trichloroethane	71-55-6	-	-	-	-
Carbon tetrachloride	56-23-5	-	-	-	-
Tetrachloroethene	127-18-4	-	-	-	-
Trichloroethene	79-01-6	-			-



LOCATION		VI-5_171214		VI-6_171214	
SAMPLING DATE		12/14/2017		12/14/2017	
LAB SAMPLE ID		L1746327-05		L1746327-06	
SAMPLE TYPE		SOIL_VAPOR		SOIL_VAPOR	
SAMPLE DEPTH (ft.)					
	CasNum	Results	RL	Results	RL
Volatile Organics in Air					
1,1,1-Trichloroethane	71-55-6	ND	1.09	ND	1.09
1,1-Dichloroethane	75-34-3	ND	0.809	ND	0.809
1,2,4-Trimethylbenzene	95-63-6	1.01	0.983	ND	0.983
1,2-Dichloroethane	107-06-2	ND	0.809	ND	0.809
1,2-Dichloropropane	78-87-5	ND	0.924	ND	0.924
1,3-Butadiene	106-99-0	3.72	0.442	0.529	0.442
1,4-Dioxane	123-91-1	ND	0.721	ND	0.721
2,2,4-Trimethylpentane	540-84-1	ND	0.934	ND	0.934
2-Butanone	78-93-3	6.11	1.47	4.22	1.47
2-Hexanone	591-78-6	ND	0.82	ND	0.82
4-Methyl-2-pentanone	108-10-1	ND	2.05	2.24	2.05
Acetone	67-64-1	37.3	2.38	24.5	2.38
Benzene	71-43-2	2.17	0.639	1.99	0.639
Carbon disulfide	75-15-0	0.747	0.623	4.05	0.623
Carbon tetrachloride	56-23-5	ND	1.26	ND	1.26
Chlorobenzene	108-90-7	ND	0.921	ND	0.921
Chloroethane	75-00-3	ND	0.528	ND	0.528
Chloroform	67-66-3	1.65	0.977	1.02	0.977
Chloromethane	74-87-3	ND	0.413	ND	0.413
Cyclohexane	110-82-7	ND	0.688	1.09	0.688
Dichlorodifluoromethane	75-71-8	2.01	0.989	2.02	0.989
Ethanol	64-17-5	18.2	9.42	12.8	9.42
Ethyl Acetate	141-78-6	2.59	1.8	ND	1.8
Ethylbenzene	100-41-4	1.12	0.869	1.04	0.869
Freon-113	76-13-1	ND	1.53	ND	1.53
Heptane	142-82-5	ND	0.82	2.68	0.82
Isopropanol	67-63-0	9.22	1.23	11	1.23
Methylene chloride	75-09-2	ND	1.74	ND	1.74
n-Hexane	110-54-3	0.8	0.705	2.87	0.705
o-Xylene	95-47-6	0.951	0.869	ND	0.869
p/m-Xylene	179601-23-1	2.39	1.74	1.76	1.74
Styrene	100-42-5	ND	0.852	ND	0.852
Tertiary butyl Alcohol	75-65-0	ND	1.52	ND	1.52
Tetrachloroethene	127-18-4	3.1	1.36	2.31	1.36
Tetrahydrofuran	109-99-9	ND	1.47	ND	1.47
Toluene	108-88-3	3.09	0.754	2.34	0.754
Trichloroethene	79-01-6	3.11	1.07	3.03	1.07
Trichlorofluoromethane	75-69-4	1.61	1.12	1.28	1.12
Volatile Organics in Air by SIM					
1,1,1-Trichloroethane	71-55-6	-	-	-	-
Carbon tetrachloride	56-23-5	-	-	-	-
Tetrachloroethene	127-18-4	-	-	-	-
Trichloroethene	79-01-6	-	-	-	-





ANALYTICAL REPORT

Lab Number:L1746327Client:C.T. Male Associates 50 Century Hill Drive Latham, NY 12210ATTN:Jim MciverPhone:(518) 786-7400Project Name:USAIProject Number:14.4337Report Date:12/22/17		
Lab Number:L1746327Client:C.T. Male Associates 50 Century Hill Drive Latham, NY 12210ATTN:Jim MciverPhone:(518) 786-7400Project Name:USAIProject Number:14.4337Report Date:12/22/17		
Client:C.T. Male Associates 50 Century Hill Drive Latham, NY 12210ATTN:Jim MciverPhone:(518) 786-7400Project Name:USAIProject Number:14.4337Report Date:12/22/17	Lab Number:	L1746327
ATTN:Jim MciverPhone:(518) 786-7400Project Name:USAIProject Number:14.4337Report Date:12/22/17	Client:	C.T. Male Associates 50 Century Hill Drive Latham, NY 12210
Project Name:USAIProject Number:14.4337Report Date:12/22/17	ATTN: Phone:	Jim Mciver (518) 786-7400
Project Number:14.4337Report Date:12/22/17	Project Name:	USAI
Report Date: 12/22/17	Project Number:	14.4337
	Report Date:	12/22/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

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



Serial_No:12221713:20

Project Name:USAIProject Number:14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1746327-01	VI-1_171214	SOIL_VAPOR	NEW WINDSOR, NY	12/14/17 16:38	12/14/17
L1746327-02	VI-2_171214	SOIL_VAPOR	NEW WINDSOR, NY	12/14/17 15:40	12/14/17
L1746327-03	VI-3_171214	SOIL_VAPOR	NEW WINDSOR, NY	12/14/17 16:42	12/14/17
L1746327-04	VI-4_171214	SOIL_VAPOR	NEW WINDSOR, NY	12/14/17 15:36	12/14/17
L1746327-05	VI-5_171214	SOIL_VAPOR	NEW WINDSOR, NY	12/14/17 15:34	12/14/17
L1746327-06	VI-6_171214	SOIL_VAPOR	NEW WINDSOR, NY	12/14/17 15:33	12/14/17
L1746327-07	IA-1_171214	AIR	NEW WINDSOR, NY	12/14/17 15:37	12/14/17
L1746327-08	IA-2_171214	AIR	NEW WINDSOR, NY	12/14/17 16:39	12/14/17
L1746327-09	IA-3_171214	AIR	NEW WINDSOR, NY	12/14/17 15:41	12/14/17
L1746327-10	IA-4_171214	AIR	NEW WINDSOR, NY	12/14/17 14:05	12/14/17
L1746327-11	OA-1_171214	AIR	NEW WINDSOR, NY	12/14/17 15:48	12/14/17
L1746327-12	OA-2_171214	AIR	NEW WINDSOR, NY	12/14/17 15:50	12/14/17



Project Name: USAI Project Number: 14.4337

Lab Number: L1746327 Report Date: 12/22/17

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: USAI Project Number: 14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on December 13, 2017. The canister certification results are provided as an addendum.

L1746327-01 : The canister vacuum measured on receipt at the laboratory was > 15 in. Hg. Prior to sample analysis, the canister was pressurized with UHP Nitrogen in order to facilitate the transfer of sample to the Gas Chromatograph. The addition of Nitrogen resulted in a dilution of the samples. The reporting limits have been elevated accordingly.

L1746327-03: The sample was re-analyzed on dilution in order to quantify the results within the calibration range. The results should be considered estimated, and are qualified with an E flag, for any compound that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound that that exceeded the calibration range.

L1746327-03 The presence of Acetone and 2,2,4-Trimethylpentane could not be determined in this sample due to a non-target compound interfering with the identification and quantification of these compounds.

L1746327-07 through -10 results for Acetone should be considered estimated due to co-elution with a non-target peak.

The WG1075510-3 LCS recovery for 1,2,4-trichlorobenzene (134%) is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

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.

Christoph J Curdenson Christopher J. Anderson

Authorized Signature:

Title: Technical Director/Representative

Date: 12/22/17


AIR



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1746327-01 D	Date Collected:	12/14/17 16:38
Client ID:	VI-1_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15		
Analytical Date:	12/21/17 23:08		
Analyst:	MB		

	ppbV			ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	ND	0.352		ND	1.74			1.762
Chloromethane	ND	0.352		ND	0.727			1.762
Freon-114	ND	0.352		ND	2.46			1.762
Vinyl chloride	ND	0.352		ND	0.900			1.762
1,3-Butadiene	ND	0.352		ND	0.779			1.762
Bromomethane	ND	0.352		ND	1.37			1.762
Chloroethane	ND	0.352		ND	0.929			1.762
Ethanol	11.8	8.81		22.2	16.6			1.762
Vinyl bromide	ND	0.352		ND	1.54			1.762
Acetone	3.22	1.76		7.65	4.18			1.762
Trichlorofluoromethane	ND	0.352		ND	1.98			1.762
Isopropanol	3.23	0.881		7.94	2.17			1.762
1,1-Dichloroethene	ND	0.352		ND	1.40			1.762
Tertiary butyl Alcohol	ND	0.881		ND	2.67			1.762
Methylene chloride	ND	0.881		ND	3.06			1.762
3-Chloropropene	ND	0.352		ND	1.10			1.762
Carbon disulfide	0.479	0.352		1.49	1.10			1.762
Freon-113	ND	0.352		ND	2.70			1.762
trans-1,2-Dichloroethene	ND	0.352		ND	1.40			1.762
1,1-Dichloroethane	ND	0.352		ND	1.42			1.762
Methyl tert butyl ether	ND	0.352		ND	1.27			1.762
2-Butanone	ND	0.881		ND	2.60			1.762
cis-1,2-Dichloroethene	ND	0.352		ND	1.40			1.762
Ethyl Acetate	ND	0.881		ND	3.17			1.762



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID: Client ID: Sample Location:	L1746327-01 VI-1_171214					Date Date Field	Collecte Receive Pren:	ed: ed:	12/14/17 16:38 12/14/17 Not Specified
Sample Location.		/K, N I	ppbV			ug/m3	Fiep.		Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifie	Factor
Volatile Organics in	Air - Mansfield L	.ab							
Chloroform		4.42	0.352		21.6	1.72			1.762
Tetrahydrofuran		ND	0.881		ND	2.60			1.762
1,2-Dichloroethane		ND	0.352		ND	1.42			1.762
n-Hexane		ND	0.352		ND	1.24			1.762
1,1,1-Trichloroethane		4.17	0.352		22.8	1.92			1.762
Benzene		ND	0.352		ND	1.12			1.762
Carbon tetrachloride		1.24	0.352		7.80	2.21			1.762
Cyclohexane		ND	0.352		ND	1.21			1.762
1,2-Dichloropropane		ND	0.352		ND	1.63			1.762
Bromodichloromethane		ND	0.352		ND	2.36			1.762
1,4-Dioxane		ND	0.352		ND	1.27			1.762
Trichloroethene		0.389	0.352		2.09	1.89			1.762
2,2,4-Trimethylpentane		ND	0.352		ND	1.64			1.762
Heptane		ND	0.352		ND	1.44			1.762
cis-1,3-Dichloropropene		ND	0.352		ND	1.60			1.762
4-Methyl-2-pentanone		ND	0.881		ND	3.61			1.762
trans-1,3-Dichloroprope	ne	ND	0.352		ND	1.60			1.762
1,1,2-Trichloroethane		ND	0.352		ND	1.92			1.762
Toluene		ND	0.352		ND	1.33			1.762
2-Hexanone		ND	0.352		ND	1.44			1.762
Dibromochloromethane		ND	0.352		ND	3.00			1.762
1,2-Dibromoethane		ND	0.352		ND	2.71			1.762
Tetrachloroethene		ND	0.352		ND	2.39			1.762
Chlorobenzene		ND	0.352		ND	1.62			1.762
Ethylbenzene		ND	0.352		ND	1.53			1.762
p/m-Xylene		ND	0.705		ND	3.06			1.762
Bromoform		ND	0.352		ND	3.64			1.762
Styrene		ND	0.352		ND	1.50			1.762



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-01	D				Date	Collecte	ed:	12/14/17 16:38
Client ID:	VI-1_171214					Date	Receive	ed:	12/14/17
Sample Location:	NEW WINDSO	OR, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air - Mansfield I	Lab							
1,1,2,2-Tetrachloroethar	ne	ND	0.352		ND	2.42			1.762
o-Xylene		ND	0.352		ND	1.53			1.762
4-Ethyltoluene		ND	0.352		ND	1.73			1.762
1,3,5-Trimethylbenzene		ND	0.352		ND	1.73			1.762
1,2,4-Trimethylbenzene		ND	0.352		ND	1.73			1.762
Benzyl chloride		ND	0.352		ND	1.82			1.762
1,3-Dichlorobenzene		ND	0.352		ND	2.12			1.762
1,4-Dichlorobenzene		ND	0.352		ND	2.12			1.762
1,2-Dichlorobenzene		ND	0.352		ND	2.12			1.762
1,2,4-Trichlorobenzene		ND	0.352		ND	2.61			1.762
Hexachlorobutadiene		ND	0.352		ND	3.75			1.762

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	80		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	84		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1746327-02	Date Collected:	12/14/17 15:40
Client ID:	VI-2_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15		
Analytical Date:	12/21/17 23:40		
Analyst:	MB		

		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansf	field Lab							
Dichlorodifluoromethane	0.317	0.200		1.57	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	5.28	5.00		9.95	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	1.85	1.00		4.39	2.38			1
Trichlorofluoromethane	0.275	0.200		1.55	1.12			1
Isopropanol	1.92	0.500		4.72	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	0.420	0.200		1.31	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:USAIProject Number:14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID: Client ID:	L1746327-02 VI-2_171214					Date Date	Collecte Receive	ed: ed:	12/14/17 15:40 12/14/17
Sample Location:	NEW WINDSO	R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifie	. Factor
Volatile Organics ir	h Air - Mansfield L	ab							
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		0.355	0.200		1.94	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-Dichloroprope	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		ND	0.200		ND	0.754			1
2-Hexanone		ND	0.200		ND	0.820			1
Dibromochloromethane		ND	0.200		ND	1.70			1
1,2-Dibromoethane		ND	0.200		ND	1.54			1
Tetrachloroethene		ND	0.200		ND	1.36			1
Chlorobenzene		ND	0.200		ND	0.921			1
Ethylbenzene		ND	0.200		ND	0.869			1
p/m-Xylene		ND	0.400		ND	1.74			1
Bromoform		ND	0.200		ND	2.07			1
Styrene		ND	0.200		ND	0.852			1



Project Name:	USAI
Project Number:	14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-02					Date	Collecte	ed:	12/14/17 15:40
Client ID:	VI-2_171214					Date	Receive	ed:	12/14/17
Sample Location:	NEW WINDSC	R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	h Air - Mansfield L	.ab							
1,1,2,2-Tetrachloroetha	ne	ND	0.200		ND	1.37			1
o-Xylene		ND	0.200		ND	0.869			1
4-Ethyltoluene		ND	0.200		ND	0.983			1
1,3,5-Trimethylbenzene		ND	0.200		ND	0.983			1
1,2,4-Trimethylbenzene		ND	0.200		ND	0.983			1
Benzyl chloride		ND	0.200		ND	1.04			1
1,3-Dichlorobenzene		ND	0.200		ND	1.20			1
1,4-Dichlorobenzene		ND	0.200		ND	1.20			1
1,2-Dichlorobenzene		ND	0.200		ND	1.20			1
1,2,4-Trichlorobenzene		ND	0.200		ND	1.48			1
Hexachlorobutadiene		ND	0.200		ND	2.13			1

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



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1746327-03	Date Collected:	12/14/17 16:42
Client ID:	VI-3_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15		
Analytical Date:	12/22/17 00:13		
Analyst:	MB		

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.408	0.200		2.02	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	2.04	0.200		11.5	1.12			1
Isopropanol	1.94	0.500		4.77	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	1.53	0.200		11.7	1.53			1
trans-1,2-Dichloroethene	ND	0.200		ND	0.793			1
1,1-Dichloroethane	1.15	0.200		4.65	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:USAIProject Number:14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID: Client ID:	L1746327-03 VI-3_171214					Date Date	Collecte Receive	ed: ed:	12/14/17 16:42 12/14/17
Sample Location:	NEW WINDSO	PR, NY				Field	Prep:		Not Specified
Parameter		Boculto	ppov		Posults		MDI	Qualifia	Dilution r Factor
Volatile Organics in	Air - Mansfield I	ah		WDL	Results		MDE	Quanter	
Chloroform		0.000	0.000		4.00	0.077			
Tetrahydrofuran		0.988	0.200		4.82	0.977			1
		ND	0.500		ND	1.47			1
			0.200			0.809			1
		0.633	0.200		2.23	0.705			1
		57.6	0.200		314	1.09			1
Benzene		ND	0.200		ND	0.639			1
Carbon tetrachloride		ND	0.200		ND	1.26			1
Cyclohexane		5.51	0.200		19.0	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		0.337	0.200		1.81	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-Dichloroprope	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		0.435	0.200		1.64	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		128	0.200		868	1.36		Е	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:	USAI
Project Number:	14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID: L1746327-03						Date	Collecte	ed:	12/14/17 16:42	
Client ID: VI-3_171214					Date Received:				12/14/17	
Sample Location:	NEW WINDSO	R, NY				Field	Prep:		Not Specified	
			ppbV			ug/m3			Dilution	
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor	
Volatile Organics in	Air - Mansfield L	.ab								
1,1,2,2-Tetrachloroethar	ne	ND	0.200		ND	1.37			1	
o-Xylene		ND	0.200		ND	0.869			1	
4-Ethyltoluene		ND	0.200		ND	0.983			1	
1,3,5-Trimethylbenzene		ND	0.200		ND	0.983			1	
1,2,4-Trimethylbenzene		ND	0.200		ND	0.983			1	
Benzyl chloride		ND	0.200		ND	1.04			1	
1,3-Dichlorobenzene		ND	0.200		ND	1.20			1	
1,4-Dichlorobenzene		ND	0.200		ND	1.20			1	
1,2-Dichlorobenzene		ND	0.200		ND	1.20			1	
1,2,4-Trichlorobenzene		ND	0.200		ND	1.48			1	
Hexachlorobutadiene		ND	0.200		ND	2.13			1	

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	86		60-140
chlorobenzene-d5	90		60-140



Project Name:	USAI
Project Number:	14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-03 D		Date Collected:	12/14/17 16:42
Client ID:	VI-3_171214		Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified
Matrix:	Soil_Vapor			
Anaytical Method:	48,TO-15			
Analytical Date:	12/22/17 06:40			
Analyst:	MB			
		nnh\/	ua/m2	

	ppbV			ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield L	ab							
Tetrachloroethene	126	0.400		854	2.71			2

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	71		60-140
chlorobenzene-d5	90		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1746327-04	Date Collected:	12/14/17 15:36
Client ID:	VI-4_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15		
Analytical Date:	12/22/17 00:45		
Analyst:	MB		

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.348	0.200		1.72	0.989			1
Chloromethane	0.302	0.200		0.624	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	0.290	0.200		1.63	1.12			1
Isopropanol	0.672	0.500		1.65	1.23			1
1,1-Dichloroethene	ND	0.200		ND	0.793			1
Tertiary butyl Alcohol	ND	0.500		ND	1.52			1
Methylene chloride	ND	0.500		ND	1.74			1
3-Chloropropene	ND	0.200		ND	0.626			1
Carbon disulfide	ND	0.200		ND	0.623			1
Freon-113	ND	0.200		ND	1.53			1
trans-1,2-Dichloroethene	ND	0.200		ND	0.793			1
1,1-Dichloroethane	ND	0.200		ND	0.809			1
Methyl tert butyl ether	ND	0.200		ND	0.721			1
2-Butanone	ND	0.500		ND	1.47			1
cis-1,2-Dichloroethene	ND	0.200		ND	0.793			1
Ethyl Acetate	ND	0.500		ND	1.80			1



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-04					Date	Collecte	ed:	12/14/17 15:36
Sample Location:	NEW WINDSO	OR. NY				Field	Prep:	eu.	Not Specified
		,	ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifie	. Factor
Volatile Organics ir	n Air - Mansfield L	ab							
Chloroform		0.930	0.200		4.54	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-Dichloroprope	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		0.267	0.200		1.01	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:	USAI
Project Number:	14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-04					Date	Collecte	ed:	12/14/17 15:36
Client ID:	ent ID: VI-4_171214 Date Re				Receive	ed:	12/14/17		
Sample Location: NEW WIN		R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air - Mansfield L	.ab							
1,1,2,2-Tetrachloroetha	ne	ND	0.200		ND	1.37			1
o-Xylene		ND	0.200		ND	0.869			1
4-Ethyltoluene		ND	0.200		ND	0.983			1
1,3,5-Trimethylbenzene		ND	0.200		ND	0.983			1
1,2,4-Trimethylbenzene		ND	0.200		ND	0.983			1
Benzyl chloride		ND	0.200		ND	1.04			1
1,3-Dichlorobenzene		ND	0.200		ND	1.20			1
1,4-Dichlorobenzene		ND	0.200		ND	1.20			1
1,2-Dichlorobenzene		ND	0.200		ND	1.20			1
1,2,4-Trichlorobenzene		ND	0.200		ND	1.48			1
Hexachlorobutadiene		ND	0.200		ND	2.13			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	83		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	85		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1746327-05	Date Collected:	12/14/17 15:34
Client ID:	VI-5_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15		
Analytical Date:	12/22/17 01:18		
Analyst:	MB		

		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansf	ield Lab							
Dichlorodifluoromethane	0.407	0.200		2.01	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	1.68	0.200		3.72	0.442			1
Bromomethane	ND	0.200		ND	0.777			1
Chloroethane	ND	0.200		ND	0.528			1
Ethanol	9.64	5.00		18.2	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	15.7	1.00		37.3	2.38			1
Trichlorofluoromethane	0.286	0.200		1.61	1.12			1
Isopropanol	3.75	0.500		9.22	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	0.240	0.200		0.747	0.623			1
Freon-113	ND	0.200		ND	1.53			1
trans-1,2-Dichloroethene	ND	0.200		ND	0.793			1
1,1-Dichloroethane	ND	0.200		ND	0.809			1
Methyl tert butyl ether	ND	0.200		ND	0.721			1
2-Butanone	2.07	0.500		6.11	1.47			1
cis-1,2-Dichloroethene	ND	0.200		ND	0.793			1
Ethyl Acetate	0.720	0.500		2.59	1.80			1



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID: Client ID:	L1746327-05					Date Date	Collecte Receive	ed:	12/14/17 15:34 12/14/17
Sample Location:	NEW WINDSO	R, NY				Field	Prep:		Not Specified
		,	ppbV			ug/m3	•		Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	. Factor
Volatile Organics ir	h Air - Mansfield L	ab							
Chloroform		0.337	0.200		1.65	0.977			1
Tetrahydrofuran		ND	0.500		ND	1.47			1
1,2-Dichloroethane		ND	0.200		ND	0.809			1
n-Hexane		0.227	0.200		0.800	0.705			1
1,1,1-Trichloroethane		ND	0.200		ND	1.09			1
Benzene		0.678	0.200		2.17	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		0.578	0.200		3.11	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-Dichloroprope	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		0.820	0.200		3.09	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		0.457	0.200		3.10	1.36			1
Chlorobenzene		ND	0.200		ND	0.921			1
Ethylbenzene		0.259	0.200		1.12	0.869			1
p/m-Xylene		0.550	0.400		2.39	1.74			1
Bromoform		ND	0.200		ND	2.07			1
Styrene		ND	0.200		ND	0.852			1



Project Name:	USAI
Project Number:	14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	ab ID: L1746327-05					Date	Collecte	ed:	12/14/17 15:34	
Client ID:	VI-5_171214					Date	Receive	ed:	12/14/17	
Sample Location: NEW WIN		R, NY				Field	Prep:		Not Specified	
			ppbV			ug/m3			Dilution	
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor	
Volatile Organics in	Air - Mansfield L	.ab								
1,1,2,2-Tetrachloroetha	ne	ND	0.200		ND	1.37			1	
o-Xylene		0.219	0.200		0.951	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		0.206	0.200		1.01	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	87		60-140
chlorobenzene-d5	92		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1746327-06	Date Collected:	12/14/17 15:33
Client ID:	VI-6_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15		
Analytical Date:	12/22/17 01:50		
Analyst:	MB		

		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansf	ield Lab							
Dichlorodifluoromethane	0.409	0.200		2.02	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	0.239	0.200		0.529	0.442			1
Bromomethane	ND	0.200		ND	0.777			1
Chloroethane	ND	0.200		ND	0.528			1
Ethanol	6.79	5.00		12.8	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	10.3	1.00		24.5	2.38			1
Trichlorofluoromethane	0.227	0.200		1.28	1.12			1
Isopropanol	4.47	0.500		11.0	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	1.30	0.200		4.05	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	1.43	0.500		4.22	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:USAIProject Number:14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-06					Date	Collecte	ed:	12/14/17 15:33
Client ID: Sample Location:	VI-6_171214 NEW WINDSO	RNY				Date Field	Receive Pren:	ed:	12/14/17 Not Specified
			ppbV			ug/m3	r top.		Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics ir	n Air - Mansfield L	ab							
Chloroform		0.209	0.200		1.02	0.977			1
Tetrahydrofuran		ND	0.500		ND	1.47			1
1,2-Dichloroethane		ND	0.200		ND	0.809			1
n-Hexane		0.815	0.200		2.87	0.705			1
1,1,1-Trichloroethane		ND	0.200		ND	1.09			1
Benzene		0.624	0.200		1.99	0.639			1
Carbon tetrachloride		ND	0.200		ND	1.26			1
Cyclohexane		0.318	0.200		1.09	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		0.563	0.200		3.03	1.07			1
2,2,4-Trimethylpentane		ND	0.200		ND	0.934			1
Heptane		0.654	0.200		2.68	0.820			1
cis-1,3-Dichloropropene		ND	0.200		ND	0.908			1
4-Methyl-2-pentanone		0.547	0.500		2.24	2.05			1
trans-1,3-Dichloroprope	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		0.621	0.200		2.34	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		0.340	0.200		2.31	1.36			1
Chlorobenzene		ND	0.200		ND	0.921			1
Ethylbenzene		0.239	0.200		1.04	0.869			1
p/m-Xylene		0.405	0.400		1.76	1.74			1
Bromoform		ND	0.200		ND	2.07			1
Styrene		ND	0.200		ND	0.852			1



Project Name:	USAI
Project Number:	14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-06					Date	Collecte	ed:	12/14/17 15:33
Client ID:	VI-6_171214					Date	Receive	ed:	12/14/17
Sample Location:	NEW WINDSO	R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air - Mansfield L	ab							
1,1,2,2-Tetrachloroethar	ne	ND	0.200		ND	1.37			1
o-Xylene		ND	0.200		ND	0.869			1
4-Ethyltoluene		ND	0.200		ND	0.983			1
1,3,5-Trimethylbenzene		ND	0.200		ND	0.983			1
1,2,4-Trimethylbenzene		ND	0.200		ND	0.983			1
Benzyl chloride		ND	0.200		ND	1.04			1
1,3-Dichlorobenzene		ND	0.200		ND	1.20			1
1,4-Dichlorobenzene		ND	0.200		ND	1.20			1
1,2-Dichlorobenzene		ND	0.200		ND	1.20			1
1,2,4-Trichlorobenzene		ND	0.200		ND	1.48			1
Hexachlorobutadiene		ND	0.200		ND	2.13			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	85		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	90		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1746327-07	Date Collected:	12/14/17 15:37
Client ID:	IA-1_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	12/21/17 20:58		
Analyst:	MB		

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.348	0.200		1.72	0.989			1
Chloromethane	0.558	0.200		1.15	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	86.5	5.00		163	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	13.4	1.00		31.8	2.38			1
Trichlorofluoromethane	0.407	0.200		2.29	1.12			1
Isopropanol	23.6	0.500		58.0	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	0.709	0.500		2.09	1.47			1
Ethyl Acetate	0.670	0.500		2.41	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
1,2-Dichloroethane	ND	0.200		ND	0.809			1



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-07					Date	Collecte	ed:	12/14/17 15:37
Client ID:	IA-1_171214					Date	Receive	ed:	12/14/17
Sample Location:		R, NY	nnhV						Not Specified
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air - Mansfield L	ab							
n-Hexane		ND	0 200		ND	0 705			1
Benzene		ND	0.200		ND	0.639			1
Cyclohexane		ND	0.200		ND	0.688			1
1,2-Dichloropropane		ND	0.200		ND	0.924			1
Bromodichloromethane		ND	0.200		ND	1.34			1
1,4-Dioxane		ND	0.200		ND	0.721			1
2,2,4-Trimethylpentane		ND	0.200		ND	0.934			1
Heptane		ND	0.200		ND	0.820			1
cis-1,3-Dichloropropene		ND	0.200		ND	0.908			1
4-Methyl-2-pentanone		ND	0.500		ND	2.05			1
trans-1,3-Dichloroprope	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		0.797	0.200		3.00	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		0.287	0.200		1.25	0.869			1
p/m-Xylene		0.939	0.400		4.08	1.74			1
Bromoform		ND	0.200		ND	2.07			1
Styrene		0.417	0.200		1.78	0.852			1
1,1,2,2-Tetrachloroetha	ne	ND	0.200		ND	1.37			1
o-Xylene		0.394	0.200		1.71	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



Project Name:	USAI
Project Number:	14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID: Client ID: Sample Location:	L1746327-07 IA-1_171214 NEW WINDSOF	R, NY				Date Date Field	Collecte Receive Prep:	ed: ed:	12/14/17 15:37 12/14/17 Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air - Mansfield La	ab							
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	80		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	83		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name:USAIProject Number:14.4337

Lab ID:	L1746327-07	Date Collected:	12/14/17 15:37
Client ID:	IA-1_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	12/21/17 20:58		
Analyst:	MB		

	ppbV		ug/m3				Dilution	
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - M	ansfield Lab							
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	0.048	0.020		0.262	0.109			1
Carbon tetrachloride	0.086	0.020		0.541	0.126			1
Trichloroethene	ND	0.020		ND	0.107			1
Tetrachloroethene	0.036	0.020		0.244	0.136			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	81		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	82		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1746327-08	Date Collected:	12/14/17 16:39
Client ID:	IA-2_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	12/21/17 21:30		
Analyst:	MB		

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.314	0.200		1.55	0.989			1
Chloromethane	0.558	0.200		1.15	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	116	5.00		219	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	12.9	1.00		30.6	2.38			1
Trichlorofluoromethane	0.294	0.200		1.65	1.12			1
Isopropanol	27.9	0.500		68.6	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	0.646	0.500		1.91	1.47			1
Ethyl Acetate	0.650	0.500		2.34	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
1,2-Dichloroethane	ND	0.200		ND	0.809			1



Project Name: USAI

Project Number: 14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID: Client ID: Sample Location:	L1746327-08 IA-2_171214 NEW WINDSO	R, NY				Date Date Field	Collecte Receive Prep:	ed: ed:	12/14/17 16:39 12/14/17 Not Specified
Parameter		Boculto	ppov		Posults			Qualifia	Dilution Factor
Volatile Organics in	Air - Mansfield I	ab	RL	MDL	Nesuits	NL.		Quaimer	
			0.000		ND	0.705			
Bonzono		ND	0.200		ND	0.705			1
		ND	0.200		ND	0.639			1
		ND	0.200		ND	0.688			1
Remediable remethers		ND	0.200		ND	0.924			1
Bromodicnioromethane		ND	0.200		ND	1.34			1
		ND	0.200		ND	0.721			1
2,2,4- I rimethylpentane		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-Dichloroproper	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		0.638	0.200		2.40	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		0.210	0.200		0.912	0.869			1
p/m-Xylene		0.649	0.400		2.82	1.74			1
Bromoform		ND	0.200		ND	2.07			1
Styrene		0.228	0.200		0.971	0.852			1
1,1,2,2-Tetrachloroethar	ie	ND	0.200		ND	1.37			1
o-Xylene		0.290	0.200		1.26	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



Project Name:	USAI
Project Number:	14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:		Date Collected: 12/14/17			12/14/17 16:39				
Client ID:	IA-2_171214					Date	Receive	ed:	12/14/17
Sample Location:	NEW WINDSOF	R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results RL MDL		Results	RL	MDL	Qualifier	Factor	
Volatile Organics in	Air - Mansfield La	ab							
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	80		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	80		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name:USAIProject Number:14.4337

Lab ID:	L1746327-08	Date Collected:	12/14/17 16:39
Client ID:	IA-2_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	12/21/17 21:30		
Analyst:	MB		

	ppbV			ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - M	lansfield Lab							
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	0.051	0.020		0.278	0.109			1
Carbon tetrachloride	0.087	0.020		0.547	0.126			1
Trichloroethene	ND	0.020		ND	0.107			1
Tetrachloroethene	0.025	0.020		0.170	0.136			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	81		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	79		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1746327-09	Date Collected:	12/14/17 15:41
Client ID:	IA-3_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	12/21/17 22:03		
Analyst:	MB		

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.344	0.200		1.70	0.989			1
Chloromethane	0.542	0.200		1.12	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	269	5.00		507	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	24.3	1.00		57.7	2.38			1
Trichlorofluoromethane	0.336	0.200		1.89	1.12			1
Isopropanol	76.8	0.500		189	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	1.48	0.500		4.36	1.47			1
Ethyl Acetate	1.14	0.500		4.11	1.80			1
Chloroform	ND	0.200		ND	0.977			1
Tetrahydrofuran	ND	0.500		ND	1.47			1
1,2-Dichloroethane	ND	0.200		ND	0.809			1



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID: Client ID: Sample Location:	L1746327-09 IA-3_171214					Date Date Field	Collecte Receive Brop:	ed: ed:	12/14/17 15:41 12/14/17 Not Specified
Sample Location.		N, IN I	ppbV			ug/m3	riep.		Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	. Factor
Volatile Organics ir	n Air - Mansfield L	ab							
n-Hexane		ND	0.200		ND	0.705			1
Benzene		ND	0.200		ND	0.639			1
Cyclohexane		ND	0.200		ND	0.688			1
1,2-Dichloropropane		ND	0.200		ND	0.924			1
Bromodichloromethane		ND	0.200		ND	1.34			1
1,4-Dioxane		ND	0.200		ND	0.721			1
2,2,4-Trimethylpentane		ND	0.200		ND	0.934			1
Heptane		ND	0.200		ND	0.820			1
cis-1,3-Dichloropropene		ND	0.200		ND	0.908			1
4-Methyl-2-pentanone		ND	0.500		ND	2.05			1
trans-1,3-Dichloroprope	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		2.58	0.200		9.72	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		0.486	0.200		2.11	0.869			1
p/m-Xylene		1.64	0.400		7.12	1.74			1
Bromoform		ND	0.200		ND	2.07			1
Styrene		0.531	0.200		2.26	0.852			1
1,1,2,2-Tetrachloroetha	ne	ND	0.200		ND	1.37			1
o-Xylene		0.808	0.200		3.51	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



Project Name:	USAI
Project Number:	14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-09					Date	Collecte	ed:	12/14/17 15:4 ²
Client ID:	IA-3_171214					Date	Receive	ed:	12/14/17
Sample Location:	NEW WINDSO	R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	h Air - Mansfield L	ab							
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	82		60-140
Bromochloromethane	86		60-140
chlorobenzene-d5	82		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1746327-09	Date Collected:	12/14/17 15:41
Client ID:	IA-3_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	12/21/17 22:03		
Analyst:	MB		

	ppbV			ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - Ma	insfield Lab							
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	0.036	0.020		0.196	0.109			1
Carbon tetrachloride	0.112	0.020		0.705	0.126			1
Trichloroethene	0.069	0.020		0.371	0.107			1
Tetrachloroethene	0.068	0.020		0.461	0.136			1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	82		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	81		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1746327-10	Date Collected:	12/14/17 14:05
Client ID:	IA-4_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	12/21/17 22:35		
Analyst:	MB		

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Man	sfield Lab							
Dichlorodifluoromethane	0.512	0.200		2.53	0.989			1
Chloromethane	0.553	0.200		1.14	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	477	5.00		899	9.42			1
Vinyl bromide	ND	0.200		ND	0.874			1
Acetone	17.4	1.00		41.3	2.38			1
Trichlorofluoromethane	0.316	0.200		1.78	1.12			1
Isopropanol	35.5	0.500		87.3	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



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-10					Date	Collecte	ed:	12/14/17 14:05
Client ID: Sample Location:	IA-4_171214					Date	Receive Prop:	ed:	12/14/17 Not Specified
Sample Location.		N, IN I	Vdqq			uq/m3	гтер.		Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	. Factor
Volatile Organics in	Air - Mansfield L	ab							
n-Hexane		ND	0.200		ND	0.705			1
Benzene		0.215	0.200		0.687	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-Dichloroprope	ne	ND	0.200		ND	0.908			1
1,1,2-Trichloroethane		ND	0.200		ND	1.09			1
Toluene		0.499	0.200		1.88	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		0.477	0.400		2.07	1.74			1
Bromoform		ND	0.200		ND	2.07			1
Styrene		ND	0.200		ND	0.852			1
1,1,2,2-Tetrachloroethar	ne	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



Project Name:	USAI
Project Number:	14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-10					Date	Collecte	ed:	12/14/17 14:05
Client ID:	IA-4_171214					Date	Receive	ed:	12/14/17
Sample Location:	NEW WINDSOF	R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air - Mansfield La	ab							
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	81		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	84		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name:USAIProject Number:14.4337

Lab ID:	L1746327-10	Date Collected:	12/14/17 14:05
Client ID:	IA-4_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	12/21/17 22:35		
Analyst:	MB		

	ppbV		ug/m3			Dilution		
Parameter	Results	RL	MDL	Results	RL	RL MDL (Qualifier	Factor
Volatile Organics in Air by SIM - Ma	insfield Lab							
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	0.088	0.020		0.554	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	80		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	82		60-140


Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1746327-11	Date Collected:	12/14/17 15:48
Client ID:	OA-1_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	12/21/17 17:10		
Analyst:	MB		

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.310	0.200		1.53	0.989			1
Chloromethane	0.497	0.200		1.03	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	1.63	1.00		3.87	2.38			1
Trichlorofluoromethane	0.296	0.200		1.66	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



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID: Client ID:	L1746327-11 OA-1 171214					Date Date	Collecte Receive	ed:	12/14/17 15:48 12/14/17
Sample Location:	NEW WINDSO	R, NY				Field	Prep:		Not Specified
·			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	. Factor
Volatile Organics ir	n Air - Mansfield La	ab							
n-Hexane		ND	0.200		ND	0.705			1
Benzene		0.210	0.200		0.671	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-Dichloroprope	ne	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-Tetrachloroetha	ne	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



Project Name:	USAI
Project Number:	14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-11					Date	Collecte	ed:	12/14/17 15:48
Client ID:	OA-1_171214					Date	Receive	ed:	12/14/17
Sample Location:	NEW WINDSOF	R, NY				Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air - Mansfield La	b							
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	65		60-140
Bromochloromethane	80		60-140
chlorobenzene-d5	83		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name:USAIProject Number:14.4337

Lab ID:	L1746327-11	Date Collected:	12/14/17 15:48
Client ID:	OA-1_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	12/21/17 17:10		
Analyst:	MB		

	ppbV			ug/m3				Dilution
Parameter	Results RL		MDL	Results RL		MDL	Qualifier	Factor
Volatile Organics in Air by SIM - Ma	nsfield Lab							
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	0.102	0.020		0.642	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	66		60-140
bromochloromethane	81		60-140
chlorobenzene-d5	83		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name: USAI Project Number: 14.4337

Lab ID:	L1746327-12	Date Collected:	12/14/17 15:50
Client ID:	OA-2_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	12/21/17 17:43		
Analyst:	MB		

		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mar	nsfield Lab							
Dichlorodifluoromethane	0.355	0.200		1.76	0.989			1
Chloromethane	0.520	0.200		1.07	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	1.41	1.00		3.35	2.38			1
Trichlorofluoromethane	0.279	0.200		1.57	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



Project Name:USAIProject Number:14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-12					Date	Collecte	ed:	12/14/17 15:50
Client ID:	OA-2_171214					Date	Receive	ed:	12/14/17
Sample Location:		R, NY	nnhV				Prep:		Not Specified
Parameter		Results	RL	MDI	Results	RL	MDL	Qualifier	. Factor
Volatile Organics ir	n Air - Mansfield La	ab							
n-Hexane		ND	0 200		ND	0 705			1
Benzene		ND	0.200		ND	0.639			1
Cyclohexane		ND	0.200		ND	0.688			1
1,2-Dichloropropane		ND	0.200		ND	0.924			1
Bromodichloromethane		ND	0.200		ND	1.34			1
1,4-Dioxane		ND	0.200		ND	0.721			1
2,2,4-Trimethylpentane		ND	0.200		ND	0.934			1
Heptane		ND	0.200		ND	0.820			1
cis-1,3-Dichloropropene		ND	0.200		ND	0.908			1
4-Methyl-2-pentanone		ND	0.500		ND	2.05			1
trans-1,3-Dichloroprope	ne	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-Tetrachloroetha	ne	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



Project Name:	USAI
Project Number:	14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

Lab ID:	L1746327-12					Date	Collecte	12/14/17 15:50	
Client ID:	OA-2_171214			Date	Receive	ed:	12/14/17		
Sample Location:	NEW WINDSOF		Field	Prep:		Not Specified			
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air - Mansfield La	ab							
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	79		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	79		60-140



 Lab Number:
 L1746327

 Report Date:
 12/22/17

Project Name:USAIProject Number:14.4337

Lab ID:	L1746327-12	Date Collected:	12/14/17 15:50
Client ID:	OA-2_171214	Date Received:	12/14/17
Sample Location:	NEW WINDSOR, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	12/21/17 17:43		
Analyst:	MB		

	ppbV			ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - Ma	nsfield Lab							
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	0.085	0.020		0.535	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	80		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	77		60-140



Method Blank Analysis Batch Quality Control

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mans	field Lab for sample	e(s): 01-	12 Batch:	WG10755	10-4			
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



Method Blank Analysis Batch Quality Control

	ppbV			ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield	Lab for sampl	e(s): 01-	12 Batch:	WG10755	10-4			
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



Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15 Analytical Date: 12/21/17 14:17

	ppbV			ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield I	_ab for samp	ole(s): 01-	12 Batcl	n: WG10755	10-4			
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

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds



Method Blank Analysis Batch Quality Control

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - M	ansfield Lab fo	or sample	e(s): 07-12	Batch: V	VG107551	3-4		
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	0.100		ND	0.264			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



Method Blank Analysis Batch Quality Control

	ppbV			ug/m3			-	Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - N	Mansfield Lab fo	or sample	(s): 07-12	Batch: W	/G107551	3-4		
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



Method Blank Analysis Batch Quality Control

		ppbV			ug/m3			Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - N	lansfield Lab fo	or sample	e(s): 07-12	Batch:	WG107551	3-4		
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: USAI Project Number: 14.4337

Method Blank Analysis Batch Quality Control

		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM - Mans	field Lab fo	or sample((s): 07-1	2 Batch: WO	G107551	3-4		
1,2,3-Trichlorobenzene	ND	0.050		ND	0.371			1
Hexachlorobutadiene	ND	0.050		ND	0.533			1



Batch Quality Control

Project Name: USAI Project Number: 14.4337 Lab Number: L1746327 Report Date: 12/22/17

LCSD LCS %Recovery RPD %Recovery Limits RPD %Recovery Limits Parameter Qual Qual Qual Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-12 Batch: WG1075510-3 Chlorodifluoromethane 82 70-130 --Propylene 86 70-130 --Propane 75 70-130 --Dichlorodifluoromethane 91 70-130 --Chloromethane 92 70-130 --1,2-Dichloro-1,1,2,2-tetrafluoroethane 70-130 107 --Methanol 78 70-130 --Vinyl chloride 100 70-130 --1,3-Butadiene 99 70-130 --70-130 Butane 81 --Bromomethane 107 70-130 --Chloroethane 98 70-130 --Ethyl Alcohol 81 70-130 --Dichlorofluoromethane 70-130 98 --Vinyl bromide 105 70-130 --Acrolein 80 70-130 --103 70-130 Acetone --Acetonitrile 70-130 85 --Trichlorofluoromethane 70-130 120 -iso-Propyl Alcohol 98 70-130 --Acrylonitrile 87 70-130 --70-130 Pentane 84 --70-130 Ethyl ether 76 --



Batch Quality Control

Project Name: USAI Project Number: 14.4337 Lab Number: L1746327 Report Date: 12/22/17

LCSD LCS %Recovery RPD %Recovery Limits RPD %Recovery Limits Parameter Qual Qual Qual Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-12 Batch: WG1075510-3 1,1-Dichloroethene 103 70-130 -tert-Butyl Alcohol 87 70-130 --Methylene chloride 102 70-130 --3-Chloropropene 88 70-130 --Carbon disulfide 95 70-130 --1,1,2-Trichloro-1,2,2-Trifluoroethane 70-130 110 -trans-1.2-Dichloroethene 86 70-130 --1,1-Dichloroethane 87 70-130 --Methyl tert butyl ether 84 70-130 --70-130 Vinyl acetate 87 --2-Butanone 89 70-130 -cis-1,2-Dichloroethene 90 70-130 --Ethyl Acetate 100 70-130 --70-130 Chloroform 108 --Tetrahydrofuran 80 70-130 --2,2-Dichloropropane 93 70-130 --1.2-Dichloroethane 103 70-130 --70-130 n-Hexane 90 --Isopropyl Ether 70-130 92 --Ethyl-Tert-Butyl-Ether 81 70-130 --1,1,1-Trichloroethane 101 70-130 --87 70-130 1,1-Dichloropropene --92 70-130 Benzene --



Batch Quality Control

Project Name: USAI Project Number: 14.4337 Lab Number: L1746327 Report Date: 12/22/17

LCSD LCS %Recovery RPD %Recovery RPD %Recovery Limits Limits Parameter Qual Qual Qual Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-12 Batch: WG1075510-3 Carbon tetrachloride 112 70-130 --Cyclohexane 86 70-130 --Tertiary-Amyl Methyl Ether 79 70-130 --Dibromomethane 99 70-130 --94 70-130 1,2-Dichloropropane --70-130 Bromodichloromethane 104 --1.4-Dioxane 96 70-130 --Trichloroethene 104 70-130 --2,2,4-Trimethylpentane 94 70-130 --70-130 Methyl Methacrylate 93 --Heptane 84 70-130 -cis-1,3-Dichloropropene 96 70-130 --4-Methyl-2-pentanone 88 70-130 --70-130 trans-1,3-Dichloropropene 84 --1,1,2-Trichloroethane 106 70-130 --Toluene 100 70-130 --1,3-Dichloropropane 97 70-130 --70-130 2-Hexanone 95 --Dibromochloromethane 70-130 117 --1,2-Dibromoethane 108 70-130 --**Butyl Acetate** 86 70-130 --70-130 Octane 86 --Tetrachloroethene 109 70-130 --



Batch Quality Control

Project Name: USAI Project Number: 14.4337 Lab Number: L1746327 Report Date: 12/22/17

LCSD LCS %Recovery RPD %Recovery Limits RPD %Recovery Limits Parameter Qual Qual Qual Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-12 Batch: WG1075510-3 1,1,1,2-Tetrachloroethane 106 70-130 --107 Chlorobenzene 70-130 --Ethylbenzene 102 70-130 -p/m-Xylene 104 70-130 --Bromoform 120 70-130 --70-130 Styrene 102 --1,1,2,2-Tetrachloroethane 116 70-130 -o-Xylene 108 70-130 --1,2,3-Trichloropropane 98 70-130 --Nonane (C9) 70-130 88 --Isopropylbenzene 103 70-130 --Bromobenzene 98 70-130 -o-Chlorotoluene 100 70-130 --70-130 n-Propylbenzene 102 -p-Chlorotoluene 98 70-130 --4-Ethyltoluene 108 70-130 --1,3,5-Trimethylbenzene 113 70-130 -tert-Butylbenzene 70-130 110 --1,2,4-Trimethylbenzene 70-130 119 --Decane (C10) 100 70-130 --Benzyl chloride 112 70-130 --122 70-130 1,3-Dichlorobenzene --121 70-130 1,4-Dichlorobenzene --



Lab Control Sample Analysis Batch Quality Control

Project Name: USAI Project Number: 14.4337 Lab Number: L1746327 Report Date: 12/22/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics in Air - Mansfield Lab Asso	ciated sample(s):	01-12	Batch: WG107551	0-3					
sec-Butylbenzene	110		-		70-130	-			
p-Isopropyltoluene	96		-		70-130	-			
1,2-Dichlorobenzene	117		-		70-130	-			
n-Butylbenzene	111		-		70-130	-			
1,2-Dibromo-3-chloropropane	108		-		70-130	-			
Undecane	108		-		70-130	-			
Dodecane (C12)	126		-		70-130	-			
1,2,4-Trichlorobenzene	134	Q	-		70-130	-			
Naphthalene	117		-		70-130	-			
1,2,3-Trichlorobenzene	121		-		70-130	-			
Hexachlorobutadiene	127		-		70-130	-			



Batch Quality Control

Project Name: USAI Project Number: 14.4337 Lab Number: L1746327 Report Date: 12/22/17

LCSD LCS %Recovery RPD %Recovery RPD %Recovery Limits Limits Parameter Qual Qual Qual Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 07-12 Batch: WG1075513-3 Propylene 70-130 25 77 --Dichlorodifluoromethane 25 99 70-130 --Chloromethane 85 70-130 25 --1,2-Dichloro-1,1,2,2-tetrafluoroethane 103 70-130 25 --Vinyl chloride 92 70-130 25 --25 1,3-Butadiene 95 70-130 --Bromomethane 106 70-130 25 --25 Chloroethane 93 70-130 --Ethyl Alcohol 76 70-130 25 --Vinyl bromide 25 103 70-130 --25 Acetone 102 70-130 --25 Trichlorofluoromethane 117 70-130 --25 iso-Propyl Alcohol 102 70-130 --70-130 25 Acrylonitrile 89 --1,1-Dichloroethene 100 70-130 25 --25 tert-Butyl Alcohol1 82 70-130 --25 Methylene chloride 99 70-130 --3-Chloropropene 70-130 25 91 --Carbon disulfide 70-130 25 90 --1,1,2-Trichloro-1,2,2-Trifluoroethane 107 70-130 25 --Halothane 121 70-130 25 --70-130 25 trans-1,2-Dichloroethene 89 --25 1,1-Dichloroethane 98 70-130 --



Lab Control Sample Analysis Batch Quality Control

Project Name: USAI Project Number: 14.4337 Lab Number: L1746327

Report Date: 12/22/17

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recove	ery Qual	Limits	RPD	Qual	Limits	
Volatile Organics in Air by SIM - Mansfield La	b Associated s	ample(s):	07-12 Batch	: WG1075513-	-3				
Methyl tert butyl ether	86		-		70-130	-		25	
Vinyl acetate	90		-		70-130	-		25	
2-Butanone	85		-		70-130	-		25	
cis-1,2-Dichloroethene	90		-		70-130	-		25	
Ethyl Acetate	97		-		70-130	-		25	
Chloroform	105		-		70-130	-		25	
Tetrahydrofuran	75		-		70-130	-		25	
1,2-Dichloroethane	99		-		70-130	-		25	
n-Hexane	81		-		70-130	-		25	
1,1,1-Trichloroethane	102		-		70-130	-		25	
Benzene	90		-		70-130	-		25	
Carbon tetrachloride	107		-		70-130	-		25	
Cyclohexane	81		-		70-130	-		25	
Dibromomethane ¹	85		-		70-130	-		25	
1,2-Dichloropropane	92		-		70-130	-		25	
Bromodichloromethane	98		-		70-130	-		25	
1,4-Dioxane	94		-		70-130	-		25	
Trichloroethene	96		-		70-130	-		25	
2,2,4-Trimethylpentane	88		-		70-130	-		25	
cis-1,3-Dichloropropene	91		-		70-130	-		25	
4-Methyl-2-pentanone	90		-		70-130	-		25	
trans-1,3-Dichloropropene	79		-		70-130	-		25	
1,1,2-Trichloroethane	103		-		70-130	-		25	



Batch Quality Control

Project Name: USAI Project Number: 14.4337 Lab Number: L1746327 Report Date: 12/22/17

LCSD LCS %Recovery RPD %Recovery RPD %Recovery Limits Limits Parameter Qual Qual Qual Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 07-12 Batch: WG1075513-3 Toluene 94 70-130 25 --25 2-Hexanone 88 70-130 --Dibromochloromethane 114 70-130 25 --1,2-Dibromoethane 104 70-130 25 --108 70-130 25 Tetrachloroethene --70-130 25 1,1,1,2-Tetrachloroethane 100 --Chlorobenzene 104 70-130 25 --25 Ethylbenzene 95 70-130 -p/m-Xylene 99 70-130 25 --70-130 25 Bromoform 119 --25 Styrene 96 70-130 --25 1,1,2,2-Tetrachloroethane 109 70-130 --25 o-Xylene 101 70-130 --1,2,3-Trichloropropane1 70-130 25 98 --Isopropylbenzene 98 70-130 25 --Bromobenzene¹ 25 95 70-130 --25 4-Ethyltoluene 100 70-130 --1,3,5-Trimethylbenzene 70-130 25 102 --1,2,4-Trimethylbenzene 70-130 25 106 --Benzyl chloride 98 70-130 25 --1,3-Dichlorobenzene 114 70-130 25 --112 70-130 25 1,4-Dichlorobenzene --25 sec-Butylbenzene 98 70-130 --



Lab Control Sample Analysis Batch Quality Control

Project Name: USAI 14.4337 Project Number:

Lab Number: L1746327 Report Date: 12/22/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics in Air by SIM - Mansfield Lat	b Associated sa	mple(s):	07-12 Batch: WC	G1075513-3					
p-lsopropyltoluene	89		-		70-130	-		25	
1,2-Dichlorobenzene	111		-		70-130	-		25	
n-Butylbenzene	110		-		70-130	-		25	
1,2,4-Trichlorobenzene	136	Q	-		70-130	-		25	
Naphthalene	116		-		70-130	-		25	
1,2,3-Trichlorobenzene	125		-		70-130	-		25	
Hexachlorobutadiene	130		-		70-130	-		25	



Project Name:USAIProject Number:14.4337

Lab Number:

Report Date: 12/22/17

L1746327

Parameter	Native Sample	Duplicate Sample	Units	RPD	F Qual L	RPD .imits
Volatile Organics in Air - Mansfield Lab	Associated sample(s): 01-12	QC Batch ID: WG1075510-5	QC Sample:	L1746238-05	5 Client ID:	DUP Sample
Dichlorodifluoromethane	0.328	0.367	ppbV	11		25
Chloromethane	0.673	0.718	ppbV	6		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	144	147	ppbV	2		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	26.2	26.6	ppbV	2		25
Trichlorofluoromethane	0.274	0.277	ppbV	1		25
iso-Propyl Alcohol	13.0	13.2	ppbV	2		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
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	1.66	1.77	ppbV	6		25



Project Name:USAIProject Number:14.4337

Lab Number:

 Lab Number:
 L1746327

 Report Date:
 12/22/17

arameter	Native Sample	Duplicate Sample	Units	RPD	R Qual Li	PD mits
olatile Organics in Air - Mansfield Lab	Associated sample(s): 01-12	QC Batch ID: WG1075510-5	QC Sample:	L1746238-0	5 Client ID: E	OUP Sample
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	0.331	0.318	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	0.647	0.675	ppbV	4		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25



Project Name:USAIProject Number:14.4337

Lab Number:

Report Date:

L1746327 12/22/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Volatile Organics in Air - Mansfield Lal	o Associated sample(s): 01-12	QC Batch ID: WG1075510-5	QC Sample:	L1746238-	05 Client ID	: DUP Sample	
p/m-Xylene	ND	ND	ppbV	NC		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	ND	ND	ppbV	NC		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: USAI Project Number: 14.4337

Lab Number: L1746327 12/22/17 Report Date:

Parameter	Native Sample	Duplicate Sample	e Units	RPD	RPD Qual Limits	
Volatile Organics in Air by SIM - Mansfield Lab Sample	Associated sample(s): 07-12	QC Batch ID: WC	G1075513-5 (QC Sample: L1	1746238-05 Client ID:	DUP
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	0.175	0.178	ppbV	2	25	
Trichloroethene	ND	ND	ppbV	NC	25	
Tetrachloroethene	0.431	0.432	ppbV	0	25	



Project Name: USAI

Project Number: 14.4337

Serial_No:12221713:20 Lab Number: L1746327

Report Date: 12/22/17

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Lea Check	Initial ak Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1746327-01	VI-1_171214	0747	Flow 5	12/13/17	255327		-	-	-	Pass	4.5	2.2	69
L1746327-01	VI-1_171214	382	2.7L Can	12/13/17	255327	L1745507-01	Pass	-29.4	-18.3	-	-	-	-
L1746327-02	VI-2_171214	0108	#16 AMB	-	-		-	-	-	Pass	4.5	5.3	16
L1746327-02	VI-2_171214	146	2.7L Can	12/13/17	255327	L1745507-01	Pass	-29.6	-6.7	-	-	-	-
L1746327-03	VI-3_171214	0632	Flow 5	12/13/17	255327		-	-	-	Pass	4.5	5.3	16
L1746327-03	VI-3_171214	2178	2.7L Can	12/13/17	255327	L1745507-01	Pass	-29.4	-7.5	-	-	-	-
L1746327-04	VI-4_171214	0956	Flow 5	12/13/17	255327		-	-	-	Pass	4.5	5.0	11
L1746327-04	VI-4_171214	488	2.7L Can	12/13/17	255327	L1745507-01	Pass	-29.4	-7.6	-	-	-	-
L1746327-05	VI-5_171214	0095	Flow 5	12/13/17	255327		-	-	-	Pass	4.5	5.3	16
L1746327-05	VI-5_171214	333	2.7L Can	12/13/17	255327	L1745507-01	Pass	-29.6	-7.7	-	-	-	-
L1746327-06	VI-6_171214	0985	Flow 5	12/13/17	255327		-	-	-	Pass	4.5	4.7	4
L1746327-06	VI-6_171214	132	2.7L Can	12/13/17	255327	L1745507-01	Pass	-29.2	-6.4	-	-	-	-
L1746327-07	IA-1_171214	0017	Flow 5	12/13/17	255327		-	-	-	Pass	4.5	4.3	5
L1746327-07	IA-1_171214	376	2.7L Can	12/13/17	255327	L1745507-01	Pass	-29.2	-8.7	-	-	-	-
L1746327-08	IA-2_171214	0948	Flow 5	12/13/17	255327		-	-	-	Pass	4.5	5.0	11



Project Name: USAI

Project Number: 14.4337

Serial_No:12221713:20 Lab Number: L1746327

Report Date: 12/22/17

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Lea Check	Initial Ik Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1746327-08	IA-2_171214	462	2.7L Can	12/13/17	255327	L1745507-01	Pass	-29.4	-9.3	-	-	-	-
L1746327-09	IA-3_171214	0981	Flow 5	12/13/17	255327		-	-	-	Pass	4.5	4.9	9
L1746327-09	IA-3_171214	2344	2.7L Can	12/13/17	255327	L1745507-01	Pass	-29.2	-6.7	-	-	-	-
L1746327-10	IA-4_171214	0117	Flow 5	12/13/17	255327		-	-	-	Pass	4.5	6.7	39
L1746327-10	IA-4_171214	2430	6.0L Can	12/13/17	255327	L1745507-01	Pass	-28.3	-5.7	-	-	-	-
L1746327-11	OA-1_171214	0594	Flow 5	12/13/17	255327		-	-	-	Pass	4.5	5.3	16
L1746327-11	OA-1_171214	2481	2.7L Can	12/13/17	255327	L1745507-01	Pass	-29.2	-8.0	-	-	-	-
L1746327-12	OA-2_171214	0400	Flow 5	12/13/17	255327		-	-	-	Pass	4.5	4.5	0
L1746327-12	OA-2_171214	2422	2.7L Can	12/13/17	255327	L1745507-01	Pass	-29.6	-5.9	-	-	-	-



		Serial_No:12	2221713:20
Project Name:	BATCH CANISTER CERTIFICATION	Lab Number:	L1745507
Project Number:	CANISTER QC BAT	Report Date:	12/22/17
	Air Canister Certification Results		

Lab ID:	L1745507-01	Date Collected:	12/08/17 16:00
Client ID:	CAN 248 SHELF 2	Date Received:	12/11/17
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	12/11/17 14:38		
Analyst:	MB		

		ppbV		ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air - Mansfield Lab	I							
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 CERTIFICATIONProject Number:CANISTER QC BAT

Lab Number: L1745507 Report Date: 12/22/17

Air Canister Certification Results

Lab ID:	L1745507-01					Date	Collecte	ed:	12/08/17 16:00
Client ID:	CAN 248 SHEI	LF 2				Date	Receive	ed:	12/11/17
Sample Location:						Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
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-Dichloroethen	e	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 CERTIFICATIONProject Number:CANISTER QC BAT

Lab Number: L1745507 Report Date: 12/22/17

Air Canister Certification Results

Lab ID:	L1745507-01					Date	Collecte	ed:	12/08/17 16:00
Client ID:	CAN 248 SHEI	LF 2				Date	Receive	ed:	12/11/17
Sample Location:						Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
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-Dichloroprope	ne	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-Tetrachloroetha	ne	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-Tetrachloroetha	ne	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 CERTIFICATIONProject Number:CANISTER QC BAT

Lab Number: L1745507 Report Date: 12/22/17

Air Canister Certification Results

Lab ID:	L1745507-01					Date	Collecte	ed:	12/08/17 16:00
Client ID:	CAN 248 SHEL	.F 2				Date	Receive	ed:	12/11/17
Sample Location:						Field	Prep:		Not Specified
			ppbV			ug/m3			Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in A	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-chloropro	opane	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



Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
			ppbV			ug/m3			Dilution
Sample Location:						Field	Prep:		Not Specified
Client ID:	CAN 248 SHEL	F 2				Date I	Receive	ed:	12/11/17
Lab ID:	L1745507-01					Date (Collecte	ed:	12/08/17 16:00
		Air Can	ister Ce	rtificatio	on Results				
Project Number:	CANISTER QC E	BAT				R	eport D	ate: 1	2/22/17
Project Name:	BATCH CANIST	ER CERT	FICATION	1		La	ab Num	ber: L	1745507
							Serial	_No:1222	21713:20

Parameter Results Volatile Organics in Air - Mansfield Lab

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	94		60-140



Project Name:BATCH CANISTER CERTIFICATIONProject Number:CANISTER QC BAT

Air Canister Certification Results

Lab ID:	L1745507-01	Date Collected:	12/08/17 16:00
Client ID:	CAN 248 SHELF 2	Date Received:	12/11/17
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	12/11/17 14:38		
Analyst:	MB		

	ррьV			ug/m3				Dilution
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in Air by SIM -	Mansfield Lab							
Dichlorodifluoromethane	ND	0.200		ND	0.989			1
Chloromethane	ND	0.200		ND	0.413			1
Freon-114	ND	0.050		ND	0.349			1
Vinyl chloride	ND	0.020		ND	0.051			1
1,3-Butadiene	ND	0.020		ND	0.044			1
Bromomethane	ND	0.020		ND	0.078			1
Chloroethane	ND	0.100		ND	0.264			1
Acetone	ND	1.00		ND	2.38			1
Trichlorofluoromethane	ND	0.050		ND	0.281			1
Acrylonitrile	ND	0.500		ND	1.09			1
1,1-Dichloroethene	ND	0.020		ND	0.079			1
Methylene chloride	ND	0.500		ND	1.74			1
Freon-113	ND	0.050		ND	0.383			1
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


Serial_No:12221713:20

Project Name:BATCH CANISTER CERTIFICATIONProject Number:CANISTER QC BAT

Lab Number: L1745507 Report Date: 12/22/17

Air Canister Certification Results

Lab ID:	L1745507-01	E 2			Date	Collecte	ed:	12/08/17 16:00	
Sample Location:	CAN 240 SHEL	.Г ∠				Field	Prep:	eu.	Not Specified
·			ppbV			ug/m3	•		Dilution
Parameter		Results	RL	MDL	Results	RL	MDL	Qualifier	Factor
Volatile Organics in	Air by SIM - Mansfi	eld 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-Dichloroprope	ne	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-Tetrachloroetha	ne	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-Tetrachloroethan	ne	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



Serial_No:12221713:20

Project Name:BATCH CANISTER CERTIFICATIONProject Number:CANISTER QC BAT

Lab Number: L1745507 Report Date: 12/22/17

Air Canister Certification Results

Lab ID: Client ID: Sample Location:	F 2			Date Date Field	ed: ed:	12/08/17 16:00 12/11/17 Not Specified		
Parameter		Results	рроу	 Results	ug/m3		Qualifier	Dilution Factor
Volatile Organics in A	ir by SIM - Mansfi	eld 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

			Acceptance
Internal Standard	% Recovery	Qualifier	Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	92		60-140



Project Name: USAI Project Number: 14.4337

Serial_No:12221713:20 Lab Number: L1746327 *Report Date:* 12/22/17

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
N/A	Absent

Container Information

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1746327-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1746327-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1746327-03A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1746327-04A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1746327-05A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1746327-06A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1746327-07A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1746327-08A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1746327-09A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1746327-10A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1746327-11A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1746327-12A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)



Serial_No:12221713:20

Project Name: USAI

Project Number: 14.4337

Lab Number: L1746327

Report Date: 12/22/17

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

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

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. Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after

adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH. Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol 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

Report Format: Data Usability Report



Project Name: USAI

Project Number: 14.4337

Serial_No:12221713:20

Lab Number:	L1746327
Report Date:	12/22/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- C Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- **D** Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- 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: USAI Project Number: 14.4337

 Lab Number:
 L1746327

 Report Date:
 12/22/17

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.



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 9010: NPW and SCM: Amenable Cyanide Distillation EPA 9050A: 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

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.

Serial_No:12221713:20

	AIR AI	ALYSIS	P/	we /	or 2	Date R	ec'd in Lai	:12	115/	17		AL	PHA	Jobi	1:L174	6327	7	
Διρήλ	CHAIN OF CUSTODY	Project Informat	tion	1		Report Information - Data Deliverables						Billing Information						
320 Forbes Blvd, Mansfi TEL: 508-822-9300 FA	ield, MA 02048 X: 508-822-3288	Project Name: ()5	AI	10.00	1000	D FA	<		7	1.1		风s	ame a	s Clien	t info PO	#:		
Client Information	The state of the second	Project Location:	lev Wi	asor.	NY	ADEx Criteria Checker:					A							
Client: C. T. M	ale Associates	Project #: 14,4	337				(Default base	d on Regi	statory Grit	eria Indicate	d)							
uddress: 50 Cen	Fory Hill Dr	Project Manager: J	in Mej	tuer		D EM	AlL (standa	ard pdf	report)	1		Re	egulat	ory R	equireme	nts/Report	Limit	
Letham,	NA 12110	ALPHA Quote #:		- 8	10.00	Add	ASP C	ATB	EG	RUIS		Sta	te/Fed		Program	Res/	Comm	
Phone: 518 78	6 7400	Turn-Around Ti	me			Report	to: cramerent	than Project	t Managor)			t		-				
Fax:		X Standard	RUSH	undersed & errors	Imment	Ì	Don Ac	Hy										
Email: J. McIwie	CTIME.com							'				1	AN	ALY	sis	-		
These samples have be	en previously analyzed by Alpha	Date Due:		Time:								11	1 2	1/	e///			
Project-Specific Ta	arget Compound List:	nents:										[]	-	tans by Te	41			
	A	Il Column	s Bel	ow N	Must	Be f	Fillec	10	ut	L		SIM	Gases	s & Mercar	//			
ALPHA Lab ID (Lab Use Only)	Sample ID	CO End Date Start Time	LLECTIO	N Initial Vacuum	Final	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flaw Controller	Tor	404 4PH	Fibred		Sample	Comments (.e. PID	
16327-01 U	I-1-171214	12/14/17 838	1638	-27.74	17.50	SU	DA	272	382	0747	×							
02 V	I-2-171214	1 890	1540	29.74	-7.07	SU	DA	1	146	0/09	×							
03 11	T-3-171214	842	1642	-31.00	-7.91	50	DA		2178	0632	×							
V	The second s		100.05 12	12 TH	112	1 1			1000	1	35							

(Lab Use Only)	Sample ID	End Date Start T	ime End Time	Vacuum	Vacuum	Matrix*	Initials	Size	Can	Controller	FR	14/1	105/	Sample Comments (i.e. PID)
46327-01	UI-1-171214	12/14/17 838	1638	-27.74	17.50	50	DA	272	38Z	0747	×			
02	VI-Z-171214	1 890	1540	29:74	-7.07	SU	DA	1	146	0/09	×			
03	VI-3-171214	842	1642	-31.00	-7.91	SU	DA		2178	063Z	×			
04	VI-4-171214	836	1536	-29.73	-7.91	50	DA		488	0456	x			
05	VI-5-171214	834	1534	-24.64	-7.34	50	DA		333	0045	*	-		and the second sec
06	VI-6-171214	833	1533	-29.90	7,55	50	DA		132	985	×			
07	TA-1-171214	83	7 1537	-2467	-9.78	AATM	DA		376	0017	×			
08	IA-2-171214	830	1639	29.69	-4.70	AAIN	DA		462	09.48	×			
09	TA-3-171214	84	1 1541	-28.53	-8.83	AAIN	DA	1	2344	0981	x			
10	TA-4-171214	V 83.	5 1905	-28.26	-5,43	AAIN	DA	Y	2/130	0/17	X			
*SAMPL	E MATRIX CODES	A = Ambient Air (In / = Soil Vapor/Land her = Please Specify	door/Outdoor) fill Gas/SVE	The second		5	0	Container	туре		3			Please print clearly, legibly and completely. Samples can not be logged in and turnaround time
	0	Relinquished By	r:	Dat	e/Time	JA.	Rece	ived By:			D	ate/Time	e.	clock will not start until any ambi- guities are resolved. All samples
	Va	the	-	R/14	17 1949	m	ing	Lt.A	AAL	- 4	14	2,2	140	submitted are subject to Alpha's Terms and Conditions.
Page 84 of 85 Form No: 101-02 Rev: (25	iSep-15)	a		2/5/	201700	d	- A	ANA.	A	46	12/15	3/74	2700	V Dee reverse side.

Serial_No:12221713:20

	AIR A	NALY	SIS	P	AGE Z	OF Z	Date Re	c'd in La	b:12	15	117		ALPH	IA Jo	ob#	:11746327
320 Forbes Blvd, Mar TEL: 508-822-9300	CHAIN OF CUSTOD nsfield, MA 02048 FAX: 508-822-3288	Project Project N	Informat	ion SAI			Repor	t Inform	ation -	Data D	eliverable	s	Billin D Sam	ig Info ie as C	orma Client	ation info PO #:
Client Information Client: C.T. M Address: SO Co Lathurn Phone: SIB J Fax: Email: J. McI These samples have Other Project Sp Project-Specific	Nale Associates entry Hill Dr NY. J2110 786 7400 Verect Male.com been previously analyzed by Alph recific Requirements/Co Target Compound List:	Project L Project # Project M ALPHA (Turn-A Standa Date Du mments:	ocation: / : / / , lanager: _ Quote #: tround Tin ard C e:	Vev Win Y <u>337</u> Tim Me me	lsor, 1 Iver continued it pre-ap Time:	UT (roved)	Report	Ex Interia Chi (Default base Other Form AIL (stand itional Def AIL (stand itional Def AIL (stand ICFF) DEA	ecker: d on Regu hats: ard pdf r werable from Prove A Chty	eport) s: E(Manager)	ntia Indicated)		Regu State/	Ilator Fed	y Re P	equirements/Report Limits Program Res / Comm
ALPHA Lab ID (Lab Use Only) 46327-11	Sample ID	End Date	CO Start Time	S Be LLECTIO	N N Vacuum 30.03	Final Vacuum	Be F Sample Matrix*	Sampler's Initials	Can Size	ID Can	1D-Flow Controller	TO.15	APH Summer	Sumbor & Man	\$ 	Sample Comments (i.e. PID)
120	DA-Z_ 17 12 14	V	850	1550	-29.57	-8.17	AAlas	DA	t	2422	0400×		1			
												1				
								2						1	1	
*SAMPLE	MATRIX CODES	AA = Ambie SV = Soil Va Other = Pleas Relingu	nt Air (Indoo por/Landfill e Specify ished By:	r/Outdoor) Gas/SVE	Date	e/Time		Rege	container	Туре	c	Da	te/Time		1	Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambi- outiles are resolved. All samples
Page 85 of 85	In	chog			12/14/11	1214	fil	me	FÀ	AL AAI	0/	14/1	7 2	700	0	submitted are subject to Alpha's Terms and Conditions. See reverse side.

Area 3A (Production Area): Samples IA-2, VI-1 and VI-2									
Applicable	Compound	Concentrations	Recommended						
Matrix		(µg/m³)	Action						
Matrix A	TCE	IA – ND (0.107)	No further action						
		SS – 2.09 and ND (1.07)							
	cis 1,2 DCE	IA – ND (0.079)	No further action						
		SS – ND (1.40 and 0.793)							
	1,1 - DCE	IA – ND (0.079)	No further action						
		SS – ND (1.40 and 0.793)							
	CCl4	IA – 0.547	Monitor						
		SS - 7.8 and ND (1.26)							
Matrix B	PCE	IA – 0.17	No further action						
		SS – ND (2.39 and 1.36)							
	1,1,1 - TCA	IA – 0.278	No further action						
		SS – 22.8 and 1.94							
	MC	IA – ND (1.74)	No further action						
		SS – ND (3.06 and 1.74)							
Matrix C	VC	IA – ND (0.051)	No further action						
	SS – ND (0.900)								
Notes: IA = indo	or air, ND = non-detect	, SS = sub-slab vapor							
Reporting limits	shown in parentheses f	or non-detect concentration	ns.						
Compounds and	concentrations with a	recommended action prese	nted in bold and						

yellow.

Area 2 (Production Area w. Offices): Samples IA-3 and VI-3									
Applicable	Compound	Concentrations	Recommended						
Matrix		(µg/m³)	Action						
Matrix A	TCE	IA - 0.371	No further action						
		SS - 1.81							
	cis 1,2 DCE	IA – ND (0.079)	No further action						
		SS – ND (0.793)							
	1,1 - DCE	IA – ND (0.079)	No further action						
		SS – ND (0.793)							
	CCl4	IA – 0.705	No further action						
		SS – ND (1.26)							
Matrix B	PCE	IA – 0.461	No further action						
		SS - 854							
	1,1,1 - TCA	IA – 0.196	No further action						
		SS - 314							
	MC	IA – ND (1.74)	No further action						
		SS – ND (1.74)							
Matrix C	VC	IA – ND (0.051)	No further action						
		SS – ND (0.511)							
Notes: IA = indoor air, ND = non-detect, SS = sub-slab vapor									
Reporting limits	shown in parentheses f	for non-detect concentration	ns.						

Area 4 (Unfinished Area): Samples IA-1 and VI-4										
Applicable	Compound	Concentrations	Recommended							
Matrix		(µg/m³)	Action							
Matrix A	TCE	IA – ND (0.107)	No further action							
		SS – ND (1.07)								
	cis 1,2 DCE	IA – ND (0.079)	No further action							
		SS – ND (0.793)								
	1,1 - DCE	IA – ND (0.079)	No further action							
		SS – ND (0.793)								
	CCl4	IA - 0.541	No further action							
		SS – ND (1.26)								
Matrix B	PCE	IA – 0.244	No further action							
		SS – ND (1.36)								
	1,1,1 - TCA	IA – 0.262	No further action							
		SS – ND (1.09)								
	MC	IA – ND (1.74)	No further action							
		SS – ND (1.74)								
Matrix C	VC	IA – ND (0.051)	No further action							
		SS – ND (0.511)								
Notes: IA = indoor air, ND = non-detect, SS = sub-slab vapor										
Reporting limits	shown in parentheses f	for non-detect concentration	ns.							

Area 8 (Southernmost Office): Samples IA -4, VI-5 and VI-6										
Applicable	Compound	Concentrations	Recommended							
Matrix		(µg/m³)	Action							
Matrix A	TCE	IA – ND (0.107)	No further action							
		SS – 3.11 and 3.03								
	cis 1,2 DCE	IA – ND (0.079)	No further action							
		SS – ND (0.793)								
	1,1 - DCE	IA – ND (0.079)	No further action							
		SS – ND (0.793)								
	CCl4	IA - 0.5	No further action							
		SS - ND (1.26)								
Matrix B	PCE	IA – ND (0.136)	No further action							
		SS – 3.1 and 2.4								
	1,1,1 - TCA	IA – ND (0.109)	No further action							
		SS – ND (1.09)								
	MC	IA – ND (1.74)	No further action							
		SS – ND (1.74)								
Matrix C	VC	IA – ND (0.051)	No further action							
SS – ND (0.511)										
Notes: IA = indoor air, ND = non-detect, SS = sub-slab vapor										
Reporting limits	shown in parentheses f	for non-detect concentration	ns.							

Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.

652 Route 299, Suite 204B, Highland, NY 12528 845.883.0964 FAX 845.883.0965 ctmale@ctmale.com



March 23, 2018

Mr. Matthew Hubicki Project Manager, Remedial Bureau C NYSDEC, Division of Environmental Remediation 625 Broadway, 11th Floor Albany, New York 12233-7014

Re: Post-remediation Groundwater Sampling Results Summary Letter – February 2018 USAI Lighting Facility Brownfield Cleanup Program (BCP) Site 1126 River Road, New Windsor, New York BCP Site Number: C336087 C.T. Male Project No.: 14.4337

Dear Mr. Hubicki,

C.T. Male Associates Engineering, Surveying, Architecture & Landscape Architecture, D.P.C. (C.T. Male) hereby presents this summary of post-remediation groundwater sampling results related to the above-referenced BCP Site (the Site). Groundwater sampling activities were performed to assess the performance of the remedy and monitor remaining on-site contamination following the 2016 completion of remedial activities at the Site in accordance with the November 2016 Site Management Plan (SMP). The remedy completed at the Site consisted of: removal of contaminated soils above commercial soil cleanup objectives (SCOs), placement of a cover system, installation of vapor intrusion mitigation measures, and implementation of the SMP as documented in the December 2016 Final Engineer Report (FER).

Sampling Methodology

The SMP requires the annual sampling of four (4) groundwater monitoring wells down gradient from the USAI Lighting Facility (USAI Facility): MW-1, MW-2, MW-3 and MW-4. Monitoring wells MW-3 and MW-4 were not sampled as MW-3 appeared to have sustained damage likely due to impact with heavy equipment and MW-4 was not located in the field. NYSDEC approved the sampling of monitoring wells MW-5 and MW-18 in lieu of monitoring wells MW-3 and MW-4 will be replaced prior to the next groundwater sampling event (anticipated in February 2019). In addition to the above-referenced wells, monitoring wells MW-16 and MW-13 were sampled to assess the potential for on-site contamination by off-site sources. These monitoring wells were all sampled on February 21, 2018. Figure 1 depicts the locations of the monitoring wells.

March 23, 2018 Mr. Matthew Hubicki Page - 2

Groundwater samples were collected by purging at least three well using dedicated plastic tubing and a peristaltic pump. The wells were allowed to recover before groundwater samples were collected. Monitoring wells MW-16 and MW-18 produced less water and went dry before three well volumes were removed; however, after recovery, sufficient sample volume was secured for laboratory analysis.

During well purging activities, light petroleum odors and sheen were observed on the surface of groundwater purged from monitoring well MW-2. Faint petroleum odors (no sheen) were observed on the surface of groundwater purged from monitoring well MW-5. No other evidence of contamination was observed on the groundwater purged from the remaining wells. Groundwater samples were collected into the laboratory provided 40 ml VOA vials preserved with HCL and unpreserved 1 liter amber bottles, as appropriate for the specific analysis. Samples were transported to Alpha Analytical (Alpha), a New York State Department of Health-certified laboratory (ELAP Certification Number 11627) for chemical analyses.

The laboratory results were subject to ASP Category B Data Deliverables. The ASP Category B Data Deliverables will not be subjected to Data Usability Summary Report (DUSR) validation unless directed otherwise by NYSDEC. Electronic data deliverables provided by the lab will be submitted to EQuIS.

Analytical Results

Laboratory results for all compounds detected in water are compared to NYSDEC Division of Water Ambient Water Quality Standards and Guidance Values (AWQS), provided in Technical and Operational Guidance Series 1.1.1. Groundwater samples from monitoring wells MW-1, MW-2, MW-5, and MW-18 were analyzed for Total Compound List (TCL) volatile organic compounds (VOCs) using USEPA Method 8260, and TCL semi-volatile organic compounds (SVOCs) using USEPA Method 8270 in accordance with the SMP. Groundwater samples from monitoring wells MW-13 and MW-16 (wells not required to be sampled by the SMP) were analyzed for NYSDEC's CP-51 list of VOCs using USEPA Method 8260 and SVOCs using USEPA Method 8270 only.

March 23, 2018 Mr. Matthew Hubicki Page - 3

In general, only eight SVOCs and one VOC were detected above the limit of laboratory. Two of the SVOCs exceeded their respective NYSDEC TOGS 1.1.1 Ambient Water Quality Guidance Value, as explained below. A data summary table of all compounds analyzed (Table 1), a summary table of detections only (Table 2), and the laboratory report are attached.

Benzo(a)anthracene and benzo(b)fluoranthene were detected in monitoring well MW-16 (0.03 μ g/l and 0.04 μ g/l, respectively) above their guidance level of 0.002 μ g/l for both compounds. These two compounds were not detected above the limit of laboratory detection (method detection limit 0.02 μ g/l for both compounds) in all other samples. The possibility exists for these compounds to be present in groundwater above their respective NYSDEC guidance levels, but the laboratory was unable to analyze to a lower detection limit.

Acetone, with a NYSDEC guidance level 50 μ g/l, was detected in monitoring wells MW-1 (5.8 μ g/l) and MW-2 (2 μ g/l). Acetone was not detected above the limit of laboratory detection (method detection limit 1.5 μ g/l) in monitoring wells MW-5 and MW-18.

Comparison to 2015 Groundwater Analytical Results

Monitoring wells were previously sampled in 2015 during the pre-remedial design investigation (PDI) under the NYSDEC BCP. The 2018 laboratory data for VOCs and SVOCs is generally consistent with the 2015 laboratory data. Benzo(a)anthracene and benzo(b)fluoranthene were not detected above the limit of laboratory detection (method detection limit of 0.32 μ g/l and 0.37 μ g/l, respectively) in the sample collected from MW-16 (and in all other samples, except MW-11) in 2015.

Conclusions and Recommendations

Petroleum impacts (odors and sheen) were observed in the groundwater samples collected from monitoring wells MW-2 and MW-5, located southeast and east of the USAI Facility. Petroleum impacts are likely indicative of residual petroleum-related contamination known to be present at the Site.

The presence of two SVOCs (benzo[a]anthracene and benzo[b]fluoranthene) at concentrations above NYSDEC guidance values in upgradient well MW-16 is likely indicative of a potential off-site source of contamination, based on the presumed

March 23, 2018 Mr. Matthew Hubicki Page - 4

groundwater flow direction towards the Hudson River. No exceedances of VOCs and SVOCs were detected in any of the downgradient wells (MW-1, MW-2 and MW-5) or upgradient wells MW-18 and MW-13 (analyzed for SVOCs only).

Monitoring wells MW-3 and MW-4 were either damaged or not located, and may be replaced prior to the next groundwater sampling event (anticipated in February 2019).

Continued annual groundwater monitoring should be performed as specified in the SMP. Future groundwater monitoring may include the sampling of monitoring well MW-16, even though not required by the SMP, to assess any variations in the concentration of SVOCs that could potentially impact the Site from an off-site source.

If you have questions, please contact Rosaura Andújar-McNeil, P.E. at (845) 883-0964 or <u>r.andujar-mcneil@ctmale.com</u>.

Sincerely C.T. MALE ASSOCIATES

Rosaum Andigon-Milleil

Rosaura Andújar-McNeil, P.E. Project Environmental Engineer

Attachments:	Figure 1: Groundwater Monitoring Well Locations
	Table 1 – Data Summary Table (All Results)
	Table 2 - Data Summary Table (Detections Only)
	Alpha Laboratory Report

ec: Kevin Goggin, iSER Consulting Sue Sullivan, iSER Consulting Sara Bogardus, NYSDOH Jim McIver, C.T. Male Jeff Marx, P.E., C.T. Male John Cappello, Esq., Jacobowitz & Gubits Gerald Jacobowitz, Esq., Jacobowitz & Gubits





Figure 1: Groundwater Monitoring Well Locations

Town of New Windsor

Orange County, New York

FOUNDED IN 1910

C.T. MALE ASSOCIATES ENGINEERING, SURVEYING, ARCHITECTURE & LANDSCAPE ARCHITECTURE, D.P.C 50 CENTURY HILL DRIVE, LATHAM, NEW YORK 12110 (518) 786-7400 * FAX (518) 786-7299 * WWW.CTMALE.COM

TABLE 1 - SUMMARY TABLE ALL RESULTS GROUNDWATER FEBRUARY 2018 USAI LIGHTING FACILITY, NEW WINDSOR, NY

LOCATION			ſ	MW-1		MW-2	2	MW-5		MW-1	3	MW-1	6	MW-18	8	FD-GW1-022	212018	TRANSPORT	BLANK
SAMPLING DATE				2/21/201	8	2/21/20	18	2/21/201	18	2/21/201	18	2/21/202	8	2/21/201	8	2/21/201	18	2/21/20	18
LAB SAMPLE ID				L1806118	-01	L180611	8-02	L1806118	3-03	L1806118	8-04	L1806118	-05	L1806118	-06	L1806118	8-07	L180611	8-08
SAMPLE TYPE				WATE	R	WATE	R	WATE	R	WATE	R	WATE	R	WATE	R	WATE	R	WATE	R
	CasNum	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Semivolatile Organics by GC/MS																			
Bis(2-chloroethyl)ether	111-44-4	1	ug/l	2	U	2	U	2	U	-	-	-	-	2	U	2	U	-	-
3,3'-Dichlorobenzidine	91-94-1	5	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
2,4-Dinitrotoluene	121-14-2	5	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
2,6-Dinitrotoluene	606-20-2	5	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
4-Chlorophenyl phenyl ether	7005-72-3	NS	ug/l	2	U	2	U	2	U	-	-	-	-	2	U	2	U	-	-
4-Bromophenyl phenyl ether	101-55-3	NS	ug/l	2	U	2	U	2	U	-	-	-	-	2	U	2	U	-	-
Bis(2-chloroisopropyl)ether	108-60-1	5	ug/l	2	U	2	U	2	U	-	-	-	-	2	U	2	U	-	-
Bis(2-chloroethoxy)methane	111-91-1	5	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
Hexachlorocyclopentadiene	77-47-4	5	ug/l	20	U	20	U	20	U	-	-	-	-	20	U	20	U	-	-
Isophorone	78-59-1	50	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
Nitrobenzene	98-95-3	0.4	ug/l	2	U	2	U	2	U	-	-	-	-	2	U	2	U	-	-
NDPA/DPA	86-30-6	50	ug/l	2	U	2	U	2	U	-	-	-	-	2	U	2	U	-	-
n-Nitrosodi-n-propylamine	621-64-7	NS	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
Bis(2-ethylhexyl)phthalate	117-81-7	5	ug/l	3	U	3	U	3	U	-	-	-	-	3	U	3	U	-	-
Butyl benzyl phthalate	85-68-7	50	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
Di-n-butylphthalate	84-74-2	50	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
Di-n-octylphthalate	117-84-0	50	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
Diethyl phthalate	84-66-2	50	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
Dimethyl phthalate	131-11-3	50	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
Biphenyl	92-52-4	5	ug/l	2	U	2	U	2	U	-	-	-	-	2	U	2	U	-	-
4-Chloroaniline	106-47-8	5	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
2-Nitroaniline	88-74-4	5	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
3-Nitroaniline	99-09-2	5	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
4-Nitroaniline	100-01-6	5	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
Dibenzofuran	132-64-9	NS	ug/l	2	U	2	U	2	U	-	-	-	-	2	U	2	U	-	-
1,2,4,5-Tetrachlorobenzene	95-94-3	5	ug/l	10	U	10	U	10	U	-	-	-	-	10	U	10	U	-	-
Acetophenone	98-86-2	NS	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
2,4,6-Trichlorophenol	88-06-2	NS	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
p-Chloro-m-cresol	59-50-7	NS	ug/l	2	U	2	U	2	U	-	-	-	-	2	U	2	U	-	-
2-Chlorophenol	95-57-8	NS	ug/l	2	U	2	U	2	U	-	-	-	-	2	U	2	U	-	-
2,4-Dichlorophenol	120-83-2	1	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
2,4-Dimethylphenol	105-67-9	50	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
2-Nitrophenol	88-75-5	NS	ug/l	10	U	10	U	10	U	-	-	-	-	10	U	10	U	-	-
4-Nitrophenol	100-02-7	NS	ug/l	10	U	10	U	10	U	-	-	-	-	10	U	10	U	-	-
2,4-Dinitrophenol	51-28-5	10	ug/l	20	U	20	U	20	U	-	-	-	-	20	U	20	U	-	-
4,6-Dinitro-o-cresol	534-52-1	NS	ug/l	10	U	10	U	10	U	-	-	-	-	10	U	10	U	-	-
Phenol	108-95-2	1	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
3-Methylphenol/4-Methylphenol	108-39-4	NS	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
2,4,5-Trichlorophenol	95-95-4	NS	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
Carbazole	86-74-8	NS	ug/l	2	U	2	U	2	U	-	-	-	-	2	U	2	U	-	-
Atrazine	1912-24-9	7.5	ug/l	10	U	10	U	10	U	-	-	-	-	10	U	10	U	-	-
Benzaldehyde	100-52-7	NS	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-
Caprolactam	105-60-2	NS	ug/l	10	U	10	U	10	U	-	-	-	-	10	U	10	U	-	-
2,3,4,6-Tetrachlorophenol	58-90-2	NS	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	-	-



TABLE 1 - SUMMARY TABLE ALL RESULTS GROUNDWATER FEBRUARY 2018 USAI LIGHTING FACILITY, NEW WINDSOR, NY

LOCATION				MW-1	MV	V-2	MW-5		MW-13	3	MW-10	6	MW-18		FD-GW1-02	2212018	TRANSPORT BLAN	K
SAMPLING DATE				2/21/2018	2/21/	2018	2/21/2018	8	2/21/201	18	2/21/201	8	2/21/201	8	2/21/20	18	2/21/2018	
LAB SAMPLE ID				L1806118-01	L1806	18-02	L1806118-	03	L1806118	3-04	L1806118	-05	L1806118	-06	L180611	8-07	L1806118-08	
SAMPLE TYPE				WATER	WAT	ſER	WATER		WATE	R	WATE	R	WATE	ł	WATE	ER	WATER	
	CasNum	NY-AWQS	Units	Results Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results Qu	ıal
Semivolatile Organics by GC/MS-SI	M														-			
Acenaphthene	83-32-9	20	ug/l	0.1 U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
2-Chloronaphthalene	91-58-7	10	ug/l	0.2 U	0.2	U	0.2	U	-	-	-	-	0.2	U	0.2	U		
Fluoranthene	206-44-0	50	ug/l	0.1 U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Hexachlorobutadiene	87-68-3	0.5	ug/l	0.5 U	0.5	U	0.5	U	-	-	-	-	0.5	U	0.5	U		
Naphthalene	91-20-3	10	ug/l	0.1 U	0.1	U	0.1	U	0.22		0.04	J	0.1	U	0.36			
Benzo(a)anthracene	56-55-3	0.002	ug/l	0.1 U	0.1	U	0.1	U	0.1	U	0.03	J	0.1	U	0.1	U		
Benzo(a)pyrene	50-32-8	0	ug/l	0.1 U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Benzo(b)fluoranthene	205-99-2	0.002	ug/l	0.1 U	0.1	U	0.1	U	0.1	U	0.04	J	0.1	U	0.1	U		
Benzo(k)fluoranthene	207-08-9	0.002	ug/l	0.1 U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Chrysene	218-01-9	0.002	ug/l	0.1 U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Acenaphthylene	208-96-8	NS	ug/l	0.1 U	0.04	J	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Anthracene	120-12-7	50	ug/l	0.1 U	0.1	U	0.1	U	0.1	U	0.1	U	0.04	J	0.1	U		
Benzo(ghi)perylene	191-24-2	NS	ug/l	0.1 U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Fluorene	86-73-7	50	ug/l	0.1 U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Phenanthrene	85-01-8	50	ug/l	0.1 U	0.1	U	0.1	U	0.1	U	0.02	J	0.1	U	0.1	U		
Dibenzo(a,h)anthracene	53-70-3	NS	ug/l	0.1 U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	ug/l	0.1 U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Pyrene	129-00-0	50	ug/l	0.1 U	0.12		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
2-Methylnaphthalene	91-57-6	NS	ug/l	0.1 U	0.1	U	0.1	U	-	-	-	-	0.1	U	0.09	J		
Pentachlorophenol	87-86-5	1	ug/l	0.8 U	0.8	U	0.8	U	-	-	-	-	0.8	U	0.8	U		
Hexachlorobenzene	118-74-1	0.04	ug/l	0.8 U	0.8	U	0.8	U	-	-	-	-	0.8	U	0.8	U		
Hexachloroethane	67-72-1	5	ug/l	0.8 U	0.8	U	0.8	U	-	-	-	-	0.8	U	0.8	U		
Volatile Organics by GC/MS																		
Methylene chloride	75-09-2	5	ug/l	2.5 U	2.5	U	2.5	U	-	-	-	-	2.5	U	2.5	<u> </u>	2.5 U	<u> </u>
1,1-Dichloroethane	75-34-3	5	ug/l	2.5 U	2.5	U	2.5	U	-	-	-	-	2.5	U	2.5	U	2.5 U	<u> </u>
Chloroform	67-66-3	7	ug/l	2.5 U	2.5	U	2.5	U	-	-	-	-	2.5	U	2.5	U	2.5 U	<u> </u>
Carbon tetrachloride	56-23-5	5	ug/l	0.5 U	0.5	U	0.5	U	-	-	-	-	0.5	U	0.5	<u> </u>	0.5 U	<u> </u>
1,2-Dichloropropane	78-87-5	1	ug/l	<u>1 U</u>	1	U	1	U	-	-	-	-	1	<u> </u>	1	<u> </u>	<u>1</u> U	<u>)</u>
Dibromochloromethane	124-48-1	50	ug/l	0.5 U	0.5	U	0.5	U	-	-	-	-	0.5	U	0.5	U	0.5 U	<u> </u>
1,1,2- I richloroethane	79-00-5	1	ug/l	1.5 U	1.5	U	1.5	U	-	-	-	-	1.5	U	1.5	U	1.5 U	<u> </u>
I etrachloroethene	127-18-4	5	ug/l	0.5 U	0.5	U	0.5	U	-	-	-	-	0.5	<u> </u>	0.5	<u> </u>	0.5 U	<u> </u>
Chlorobenzene	108-90-7	5	ug/l	2.5 U	2.5	U	2.5	U	-	-	-	-	2.5	<u> </u>	2.5	<u> </u>	2.5 U	<u>)</u>
Irichlorofluoromethane	75-69-4	5	ug/l	2.5 U	2.5	<u> </u>	2.5	U	-	-	-	-	2.5	<u> </u>	2.5	<u> </u>	2.5 U	<u>,</u>
1,2-Dichloroethane	107-06-2	0.6	ug/I	0.5 U	0.5	<u> </u>	0.5	U	-	-	-	-	0.5	<u> </u>	0.5	<u> </u>	0.5 U	<u> </u>
	/1-55-6	5	ug/I	2.5 U	2.5	<u> </u>	2.5	U	-	-	-	-	2.5	<u> </u>	2.5	<u> </u>	2.5 U	<u>, </u>
Bromodicnioromethane	15-27-4	50	ug/I	0.5 U	0.5	U	0.5	U	-	-	-	-	0.5	<u> </u>	0.5	<u> </u>	0.5 U	<u>/</u>
	10061-02-6	0.4	ug/I	0.5 U	0.5	<u> </u>	0.5	U	-	-	-	-	0.5	<u> </u>	0.5	<u> </u>	0.5 U	<u>/</u>
	75.25.2	0.4	ug/I	0.5 U	0.5	U	0.5	U	-	-	-	-	0.5	<u> </u>	0.5	U	0.5 U	<u>/ </u>
	70-20-2	50	ug/I	<u> </u>	2	U	2	0	-	-	-	-	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u></u>
	74 40 0	C 1	ug/I	0.5 U	0.5	U	0.5	0	-	-	-	-	0.5	<u> </u>	0.5	<u> </u>	0.5 U	<u>/</u>
Teluene	100.00.2	1 5	ug/i	0.5 0	0.5	<u> </u>	0.5	0	0.5	U	0.5	U	0.5	<u> </u>	0.5	<u> </u>	0.5 0	<u>/</u>
	108-88-3	5	ug/i	2.5 U	2.5	<u> </u>	2.5	0	2.5	0	2.5	U	2.5	<u> </u>	2.5	0	2.5 U	<u>/</u>
Chloromothono	74 97 2	5	ug/I	2.5 U	2.5	<u> </u>	2.5	0	2.0	U	2.5	U	2.5	<u> </u>	2.5	<u> </u>	2.5 U	<u></u>
Bromomothana	74-07-3	5	ug/I	2.5 U	2.5	<u> </u>	2.5	0	-	-	-	-	2.5	<u> </u>	2.5	<u> </u>	2.5 U	<u></u>
	75 04 4	5	ug/I	2.0 U	C.2	<u> </u>	∠.⊃ ₄	0	-	-	-	-	C.2		2.3	0	2.0 U	<u>, </u>
	75-01-4	<u> </u>	ug/I	2.5 U	25	U	25	0	-	-	-	-	25) 25		25 1	<u>/</u>
	75-00-3	5	ug/I	2.5 U	2.5	U	2.0	0	-	-	-	-	2.0	<u> </u>	2.5	<u> </u>	2.3 U	<u></u>
trans_1.2-Dichloroothono	156 60 5	5 5	ug/I	0.0 U	0.0		0.0	0	-	-	-	-	0.0		0.0		2.5 U	<u>,</u>
	70.01-6	5	ug/i	2.3 U	2.5		2.5	0	-	-	-	-	2.5		2.5		2.5 0	<u></u>
	05.50.1	5	ug/I	0.0 U	0.0		0.5	0	-	-	-	-	0.0		0.0		2.5 U	<u></u>
	5/1-72-1	3 2	ug/I	2.0 U	2.0		∠.0 2.5	0	-	-	-	-	2.0		2.0		2.0 U	<u>, </u>
	106 46 7	<u>い</u>	ug/I	2.0 U	2.0		2.0	0	-	-	-	-	2.0		2.0	11	2.0 U	<u>, </u>
1,4-DICHIOIODEHZEITE	100-40-7	3	uy/I	2.5 U	2.3	U	2.0	0	-	-	-	-	2.0	0	2.0	U	2.0 U	,



TABLE 1 - SUMMARY TABLE ALL RESULTS GROUNDWATER FEBRUARY 2018 USAI LIGHTING FACILITY, NEW WINDSOR, NY

LOCATION				MW-	1	MW-2	2	MW-5	5	MW-1.	3	MW-10	6	MW-18		FD-GW1-02	212018	TRANSPORT	BLANK
SAMPLING DATE				2/21/20	18	2/21/20	18	2/21/20	18	2/21/201	18	2/21/201	18	2/21/20	18	2/21/201	18	2/21/201	18
LAB SAMPLE ID				L180611	8-01	L180611	8-02	L1806118	8-03	L1806118	8-04	L1806118	8-05	L180611	8-06	L1806118	8-07	L1806118	3-08
SAMPLE TYPE	-	-		WATE	R	WATE	R	WATE	R	WATE	R	WATE	R	WATE	R	WATE	R	WATE	R
	CasNum	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Methyl tert butyl ether	1634-04-4	10	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p/m-Xylene	179601-23-1	5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
o-Xylene	95-47-6	5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	5	ug/l	2.5	U	2.5	U	2.5	U	-	-	-	-	2.5	U	2.5	U	2.5	U
Styrene	100-42-5	5	ug/l	2.5	U	2.5	U	2.5	U	-	-	-	-	2.5	U	2.5	U	2.5	U
Dichlorodifluoromethane	75-71-8	5	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	5	U
Acetone	67-64-1	50	ug/l	5.8		2	J	5	U	-	-	-	-	5	U	5	U	5	U
Carbon disulfide	75-15-0	60	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	5	U
2-Butanone	78-93-3	50	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	5	U
4-Methyl-2-pentanone	108-10-1	NS	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	5	U
2-Hexanone	591-78-6	50	ug/l	5	U	5	U	5	U	-	-	-	-	5	U	5	U	5	U
Bromochloromethane	74-97-5	5	ug/l	2.5	U	2.5	U	2.5	U	-	-	-	-	2.5	U	2.5	U	2.5	U
1,2-Dibromoethane	106-93-4	0.0006	ug/l	2	U	2	U	2	U	-	-	-	-	2	U	2	U	2	U
n-Butylbenzene	104-51-8	5	ug/l	-	-	-	-	-	-	2.5	U	2.5	U	-	-	-	-	-	-
sec-Butylbenzene	135-98-8	5	ug/l	-	-	-	-	-	-	2.5	U	2.5	U	-	-	-	-	-	-
tert-Butylbenzene	98-06-6	5	ug/l	-	-	-	-	-	-	2.5	U	2.5	U	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane	96-12-8	0.04	ug/l	2.5	U	2.5	U	2.5	U	-	-	-	-	2.5	U	2.5	U	2.5	U
Isopropylbenzene	98-82-8	5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p-Isopropyltoluene	99-87-6	5	ug/l	-	-	-	-	-	-	2.5	U	2.5	U	-	-	-	-	-	-
Naphthalene	91-20-3	10	ug/l	-	-	-	-	-	-	2.5	U	2.5	U	-	-	-	-	-	-
n-Propylbenzene	103-65-1	5	ug/l	-	-	-	-	-	-	2.5	U	2.5	U	-	-	-	-	-	-
1,2,3-Trichlorobenzene	87-61-6	5	ug/l	2.5	U	2.5	U	2.5	U	-	-	-	-	2.5	U	2.5	U	2.5	U
1,2,4-Trichlorobenzene	120-82-1	5	ug/l	2.5	U	2.5	U	2.5	U	-	-	-	-	2.5	U	2.5	U	2.5	U
1,3,5-Trimethylbenzene	108-67-8	5	ug/l	-	-	-	-	-	-	2.5	U	2.5	U	-	-	-	-	-	-
1,2,4-Trimethylbenzene	95-63-6	5	ug/l	-	-	-	-	-	-	2.5	U	2.5	U	-	-	-	-	-	-
Methyl Acetate	79-20-9	NS	ug/l	2	U	2	U	2	U	-	-	-	-	2	U	2	U	2	U
Cyclohexane	110-82-7	NS	ug/l	10	U	10	U	10	U	-	-	-	-	10	U	10	U	10	U
1,4-Dioxane	123-91-1	NS	ug/l	250	U	250	U	250	U	-	-	-	-	250	U	250	U	250	U
Freon-113	76-13-1	5	ug/l	2.5	U	2.5	U	2.5	U	-	-	-	-	2.5	U	2.5	U	2.5	U
Methyl cyclohexane	108-87-2	NS	ug/l	10	U	10	U	10	U	-	-	-	-	10	U	10	U	10	U

Notes

*NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004. Yellow shading denotes exceeding NY-AWQS.



TABLE 2 - SUMMARY TABLE DETECTIONS ONLYGROUNDWATER FEBRUARY 2018USAI LIGHTING FACILITY, NEW WINDSOR, NY

LOCATION				FD-GW1-022120)18	MW	-1	MW-	13
SAMPLING DATE				2/21/20)18	2/21/20	18	2/21/20	18
LAB SAMPLE ID				L1806118	-07	L1806118-	01	L1806118-04	
SAMPLE TYPE		WAT	ER	WATE	E R	WATER			
	CasNum	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual
Semivolatile Organics by	GC/MS-SIM								
2-Methylnaphthalene	91-57-6	NS	ug/l	0.09	J	0.1	U	-	-
Acenaphthylene	208-96-8	NS	ug/l	0.1	U	0.1	U	0.1	U
Anthracene	120-12-7	50	ug/l	0.1	U	0.1	U	0.1	U
Benzo(a)anthracene	56-55-3	0.002	ug/l	0.1	U	0.1	U	0.1	U
Benzo(b)fluoranthene	205-99-2	0.002	ug/l	0.1	U	0.1	U	0.1	U
Naphthalene	91-20-3	10	ug/l	0.36		0.1	U	0.22	
Phenanthrene	85-01-8	50	ug/l	0.1	U	0.1	U	0.1	U
Pyrene	129-00-0	50	ug/l	0.1	U	0.1	U	0.1	U
Volatile Organics by GC/N									
Acetone	67-64-1	50	ug/l	5	U	5.8		-	-

Notes

*NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004. Yellow shading denotes exceeding NY-AWQS.

Gray shading denotes the laboratory's reporting limit exceeding NY-AWQS.



TABLE 2 - SUMMARY TABLE DETECTIONS ONLYGROUNDWATER FEBRUARY 2018USAI LIGHTING FACILITY, NEW WINDSOR, NY

LOCATION				MW-	16	MW-	18	MW	-2
SAMPLING DATE				2/21/20	18	2/21/20	18	2/21/20	18
LAB SAMPLE ID				L1806118-	05	L1806118-	06	L1806118-02	
SAMPLE TYPE			WATE	R	WATE	R	WATER		
	CasNum	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual
Semivolatile Organics by O	GC/MS-SIM			•					
2-Methylnaphthalene	91-57-6	NS	ug/l	-	-	0.1	U	0.1	U
Acenaphthylene	208-96-8	NS	ug/l	0.1	U	0.1	U	0.04	J
Anthracene	120-12-7	50	ug/l	0.1	U	0.04	J	0.1	U
Benzo(a)anthracene	56-55-3	0.002	ug/l	0.03	J	0.1	U	0.1	U
Benzo(b)fluoranthene	205-99-2	0.002	ug/l	0.04	J	0.1	U	0.1	U
Naphthalene	91-20-3	10	ug/l	0.04	J	0.1	U	0.1	U
Phenanthrene	85-01-8	50	ug/l	0.02	J	0.1	U	0.1	U
Pyrene	129-00-0	50	ug/l	0.1	U	0.1	U	0.12	
Volatile Organics by GC/M	S								
Acetone	67-64-1	50	ug/l	-	-	5	U	2	J

Notes

*NY-AWQS: New York TOGS 111 Ambient Water Quality Standa

Yellow shading denotes exceeding NY-AWQS.

Gray shading denotes the laboratory's reporting limit exceeding 1



TABLE 2 - SUMMARY TABLE DETECTIONS ONLYGROUNDWATER FEBRUARY 2018USAI LIGHTING FACILITY, NEW WINDSOR, NY

LOCATION				MW	-5	TRANSPORT BLAI	NK	
SAMPLING DATE				2/21/201	18	2/21/20)18	
LAB SAMPLE ID				L1806118-()3	L1806118-08		
SAMPLE TYPE				WATE	R	WATER		
	CasNum	NY-AWQS	Units	Results	Qual	Results	Qual	
Semivolatile Organics by 0	GC/MS-SIM							
2-Methylnaphthalene	91-57-6	NS	ug/l	0.1	U	-	-	
Acenaphthylene	208-96-8	NS	ug/l	0.1	U	-	-	
Anthracene	120-12-7	50	ug/l	0.1	U	-	-	
Benzo(a)anthracene	56-55-3	0.002	ug/l	0.1	U	-	-	
Benzo(b)fluoranthene	205-99-2	0.002	ug/l	0.1	U	-	-	
Naphthalene	91-20-3	10	ug/l	0.1	U	-	-	
Phenanthrene	85-01-8	50	ug/l	0.1	U	-	-	
Pyrene	129-00-0	50	ug/l	0.1	U	-	-	
Volatile Organics by GC/M	S							
Acetone	67-64-1	50	ug/l	5	U	5	U	

Notes

*NY-AWQS: New York TOGS 111 Ambient Water Quality Standa

Yellow shading denotes exceeding NY-AWQS.

Gray shading denotes the laboratory's reporting limit exceeding 1





ANALYTICAL REPORT

Lab Number:	L1806118
Client:	C.T. Male Associates 50 Century Hill Drive Latham, NY 12210
ATTN: Phone:	Jim Mciver (518) 786-7400
Project Name:	USAI
Project Number:	14.4337
Report Date:	02/28/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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



Serial_No:02281818:37

Project Name:USAIProject Number:14.4337

 Lab Number:
 L1806118

 Report Date:
 02/28/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1806118-01	MW-1	WATER	NEW WINDSOR, NY	02/21/18 10:05	02/21/18
L1806118-02	MW-2	WATER	NEW WINDSOR, NY	02/21/18 10:30	02/21/18
L1806118-03	MW-5	WATER	NEW WINDSOR, NY	02/21/18 11:00	02/21/18
L1806118-04	MW-13	WATER	NEW WINDSOR, NY	02/21/18 12:00	02/21/18
L1806118-05	MW-16	WATER	NEW WINDSOR, NY	02/21/18 13:20	02/21/18
L1806118-06	MW-18	WATER	NEW WINDSOR, NY	02/21/18 12:45	02/21/18
L1806118-07	FD-GW1-02212018	WATER	NEW WINDSOR, NY	02/21/18 00:00	02/21/18
L1806118-08	TRANSPORT BLANK	WATER	NEW WINDSOR, NY	02/21/18 00:00	02/21/18



Project Name: USAI Project Number: 14.4337

Lab Number: L1806118 Report Date: 02/28/18

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: USAI Project Number: 14.4337

 Lab Number:
 L1806118

 Report Date:
 02/28/18

Case Narrative (continued)

Report Submission

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

Sample Receipt

L1806118-01 through -07: The sample was received above the appropriate pH for the Metals analysis. The laboratory added additional HNO3 to a pH <2.

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.

609 Sendow Kelly Stenstrom

Authorized Signature:

Title: Technical Director/Representative

Date: 02/28/18



ORGANICS



VOLATILES



			Serial_No	0:02281818:37
Project Name:	USAI		Lab Number:	L1806118
Project Number:	14.4337		Report Date:	02/28/18
		SAMPLE RESULTS		
Lab ID: Client ID: Sample Location: Sample Depth:	L1806118-01 MW-1 NEW WINDSOR, NY		Date Collected: Date Received: Field Prep:	02/21/18 10:05 02/21/18 Not Specified
Matrix: Analytical Method: Analytical Date: Analyst:	Water 1,8260C 02/23/18 14:56 BD			

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



					;	Serial_No	p:02281818:37
Project Name:	USAI				Lab Nu	mber:	L1806118
Project Number:	14.4337				Report	Date:	02/28/18
-		SAMP		5	-		
Lab ID: Client ID: Sample Location: Sample Depth:	L1806118-01 MW-1 NEW WINDSOR, NY				Date Col Date Ree Field Pre	lected: ceived: p:	02/21/18 10:05 02/21/18 Not Specified
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics b	y GC/MS - Westborough L	_ab					
	, ,						
1,4-Dichlorobenzene		ND		ug/l	2.5	0.70	1
Methyl tert butyl ether		ND		ug/l	2.5	0.70	1
p/m-Xylene		ND		ug/l	2.5	0.70	1
o-Xylene		ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene		ND		ug/l	2.5	0.70	1
Styrene		ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane		ND		ug/l	5.0	1.0	1
Acetone		5.8		ug/l	5.0	1.5	1
Carbon disulfide		ND		ug/l	5.0	1.0	1
2-Butanone		ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone		ND		ug/l	5.0	1.0	1
2-Hexanone		ND		ug/l	5.0	1.0	1
Bromochloromethane		ND		ug/l	2.5	0.70	1
1,2-Dibromoethane		ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloroprop	bane	ND		ug/l	2.5	0.70	1
Isopropylbenzene		ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene		ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene		ND		ug/l	2.5	0.70	1
Methyl Acetate		ND		ug/l	2.0	0.23	1
Cyclohexane		ND		ug/l	10	0.27	1
1,4-Dioxane		ND		ug/l	250	61.	1
Freon-113		ND		ug/l	2.5	0.70	1
Methyl cyclohexane		ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	105		70-130	
Toluene-d8	89		70-130	
4-Bromofluorobenzene	84		70-130	
Dibromofluoromethane	103		70-130	



		Serial_No:02281818:37				
Project Name:	USAI		Lab Number:	L1806118		
Project Number:	14.4337		Report Date:	02/28/18		
		SAMPLE RESULTS				
Lab ID:	L1806118-02		Date Collected:	02/21/18 10:30		
Client ID:	MW-2		Date Received:	02/21/18		
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified		
Matrix:	Water					
Analytical Method:	1,8260C					
Analytical Date:	02/23/18 15:24					
Analyst:	BD					

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



					ç	Serial_No	0:02281818:37
Project Name:	USAI				Lab Nu	mber:	L1806118
Project Number:	14.4337				Report	Date:	02/28/18
-		SAMP		6	-		
Lab ID: Client ID: Sample Location: Sample Depth:	L1806118-02 MW-2 NEW WINDSOR, NY				Date Col Date Rec Field Pre	lected: ceived: p:	02/21/18 10:30 02/21/18 Not Specified
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by	y GC/MS - Westborough L	_ab					
1,4-Dichlorobenzene		ND		ua/l	2.5	0.70	1
Methyl tert butyl ether		ND		ug/l	2.5	0.70	1
p/m-Xylene		ND		ug/l	2.5	0.70	1
o-Xylene		ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene		ND		ug/l	2.5	0.70	1
Styrene		ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane		ND		ug/l	5.0	1.0	1
Acetone		2.0	J	ug/l	5.0	1.5	1
Carbon disulfide		ND		ug/l	5.0	1.0	1
2-Butanone		ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone		ND		ug/l	5.0	1.0	1
2-Hexanone		ND		ug/l	5.0	1.0	1
Bromochloromethane		ND		ug/l	2.5	0.70	1
1,2-Dibromoethane		ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloroprop	ane	ND		ug/l	2.5	0.70	1
Isopropylbenzene		ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene		ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene		ND		ug/l	2.5	0.70	1
Methyl Acetate		ND		ug/l	2.0	0.23	1
Cyclohexane		ND		ug/l	10	0.27	1
1,4-Dioxane		ND		ug/l	250	61.	1
Freon-113		ND		ug/l	2.5	0.70	1
Methyl cyclohexane		ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	103		70-130	
Toluene-d8	90		70-130	
4-Bromofluorobenzene	85		70-130	
Dibromofluoromethane	104		70-130	



		Serial_No:02281818:37			
Project Name:	USAI		Lab Number:	L1806118	
Project Number:	14.4337		Report Date:	02/28/18	
		SAMPLE RESULTS			
Lab ID:	L1806118-03		Date Collected:	02/21/18 11:00	
Client ID:	MW-5		Date Received:	02/21/18	
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified	
Sample Depth:					
Matrix:	Water				
Analytical Method:	1,8260C				
Analytical Date:	02/23/18 15:53				
Analyst:	BD				

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



					Ś	Serial_No	0:02281818:37
Project Name:	USAI				Lab Nu	mber:	L1806118
Project Number:	14.4337				Report	Date:	02/28/18
		SAMP		5			
Lab ID: Client ID: Sample Location: Sample Depth:	L1806118-03 MW-5 NEW WINDSOR, NY				Date Col Date Red Field Pre	lected: ceived: p:	02/21/18 11:00 02/21/18 Not Specified
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics b	y GC/MS - Westborough I	_ab					
1 4-Dichlorobenzene		ND		ug/l	25	0 70	1
Methyl tert butyl ether		ND		ug/l	2.5	0.70	1
p/m-Xvlene		ND		ug/l	2.5	0.70	1
o-Xylene		ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene		ND		ug/l	2.5	0.70	1
Styrene		ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane		ND		ug/l	5.0	1.0	1
Acetone		ND		ug/l	5.0	1.5	1
Carbon disulfide		ND		ug/l	5.0	1.0	1
2-Butanone		ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone		ND		ug/l	5.0	1.0	1
2-Hexanone		ND		ug/l	5.0	1.0	1
Bromochloromethane		ND		ug/l	2.5	0.70	1
1,2-Dibromoethane		ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloroprop	bane	ND		ug/l	2.5	0.70	1
Isopropylbenzene		ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene		ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene		ND		ug/l	2.5	0.70	1
Methyl Acetate		ND		ug/l	2.0	0.23	1
Cyclohexane		ND		ug/l	10	0.27	1
1,4-Dioxane		ND		ug/l	250	61.	1
Freon-113		ND		ug/l	2.5	0.70	1
Methyl cyclohexane		ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	105		70-130	
Toluene-d8	89		70-130	
4-Bromofluorobenzene	85		70-130	
Dibromofluoromethane	103		70-130	


			Serial_N	o:02281818:37
Project Name:	USAI		Lab Number:	L1806118
Project Number:	14.4337		Report Date:	02/28/18
		SAMPLE RESULTS		
Lab ID:	L1806118-04		Date Collected:	02/21/18 12:00
Client ID:	MW-13		Date Received:	02/21/18
Sample Location: Sample Depth:	NEW WINDSOR, NY		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	1,8260C			
Analytical Date:	02/23/18 16:21			
Analyst:	BD			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor				
Volatile Organics by GC/MS - Westborough Lab										
Benzene	ND		ug/l	0.50	0.16	1				
Toluene	ND		ug/l	2.5	0.70	1				
Ethylbenzene	ND		ug/l	2.5	0.70	1				
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1				
p/m-Xylene	ND		ug/l	2.5	0.70	1				
o-Xylene	ND		ug/l	2.5	0.70	1				
n-Butylbenzene	ND		ug/l	2.5	0.70	1				
sec-Butylbenzene	ND		ug/l	2.5	0.70	1				
tert-Butylbenzene	ND		ug/l	2.5	0.70	1				
Isopropylbenzene	ND		ug/l	2.5	0.70	1				
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1				
Naphthalene	ND		ug/l	2.5	0.70	1				
n-Propylbenzene	ND		ug/l	2.5	0.70	1				
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1				
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1				

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	102		70-130	
Toluene-d8	89		70-130	
4-Bromofluorobenzene	83		70-130	
Dibromofluoromethane	103		70-130	



			Serial_N	o:02281818:37
Project Name:	USAI		Lab Number:	L1806118
Project Number:	14.4337		Report Date:	02/28/18
		SAMPLE RESULTS		
Lab ID:	L1806118-05		Date Collected:	02/21/18 13:20
Client ID:	MW-16		Date Received:	02/21/18
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Water			
Analytical Method:	1,8260C			
Analytical Date:	02/23/18 16:50			
Analyst:	BD			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor				
Volatile Organics by GC/MS - Westborough Lab										
Benzene	ND		ug/l	0.50	0.16	1				
Toluene	ND		ug/l	2.5	0.70	1				
Ethylbenzene	ND		ug/l	2.5	0.70	1				
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1				
p/m-Xylene	ND		ug/l	2.5	0.70	1				
o-Xylene	ND		ug/l	2.5	0.70	1				
n-Butylbenzene	ND		ug/l	2.5	0.70	1				
sec-Butylbenzene	ND		ug/l	2.5	0.70	1				
tert-Butylbenzene	ND		ug/l	2.5	0.70	1				
Isopropylbenzene	ND		ug/l	2.5	0.70	1				
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1				
Naphthalene	ND		ug/l	2.5	0.70	1				
n-Propylbenzene	ND		ug/l	2.5	0.70	1				
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1				
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1				

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	105		70-130	
Toluene-d8	89		70-130	
4-Bromofluorobenzene	86		70-130	
Dibromofluoromethane	103		70-130	



			Serial_N	o:02281818:37
Project Name:	USAI		Lab Number:	L1806118
Project Number:	14.4337		Report Date:	02/28/18
		SAMPLE RESULTS		
Lab ID:	L1806118-06		Date Collected:	02/21/18 12:45
Client ID:	MW-18		Date Received:	02/21/18
Sample Location: Sample Depth:	NEW WINDSOR, NY		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	1,8260C			
Analytical Date:	02/23/18 17:18			
Analyst:	BD			

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



		Serial_No:02281818:37					0:02281818:37
Project Name:	USAI				Lab Nu	mber:	L1806118
Project Number:	14.4337				Report	Date:	02/28/18
-		SAMPI		6	-		
Lab ID: Client ID: Sample Location: Sample Depth:	L1806118-06 MW-18 NEW WINDSOR, NY				Date Col Date Red Field Pre	Date Collected:02/21/18 12:45Date Received:02/21/18Field Prep:Not Specified	
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics b	y GC/MS - Westborough L	ab					
1,4-Dichlorobenzene		ND		ua/l	2.5	0.70	1
Methyl tert butyl ether		ND		ua/l	2.5	0.70	1
p/m-Xylene		ND		ua/l	2.5	0.70	1
o-Xylene		ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene		ND		ug/l	2.5	0.70	1
Styrene		ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane		ND		ug/l	5.0	1.0	1
Acetone		ND		ug/l	5.0	1.5	1
Carbon disulfide		ND		ug/l	5.0	1.0	1
2-Butanone		ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone		ND		ug/l	5.0	1.0	1
2-Hexanone		ND		ug/l	5.0	1.0	1
Bromochloromethane		ND		ug/l	2.5	0.70	1
1,2-Dibromoethane		ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloroprop	bane	ND		ug/l	2.5	0.70	1
Isopropylbenzene		ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene		ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene		ND		ug/l	2.5	0.70	1
Methyl Acetate		ND		ug/l	2.0	0.23	1
Cyclohexane		ND		ug/l	10	0.27	1
1,4-Dioxane		ND		ug/l	250	61.	1
Freon-113		ND		ug/l	2.5	0.70	1
Methyl cyclohexane		ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	104		70-130	
Toluene-d8	90		70-130	
4-Bromofluorobenzene	84		70-130	
Dibromofluoromethane	103		70-130	



			Serial_N	o:02281818:37
Project Name:	USAI		Lab Number:	L1806118
Project Number:	14.4337		Report Date:	02/28/18
		SAMPLE RESULTS		
Lab ID:	L1806118-07		Date Collected:	02/21/18 00:00
Client ID:	FD-GW1-02212018		Date Received:	02/21/18
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Water			
Analytical Method:	1,8260C			
Analytical Date:	02/23/18 17:47			
Analyst:	BD			

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



					Serial_No:02281818:37			
Project Name:	USAI				Lab Nu	mber:	L1806118	
Project Number:	14.4337				Report Date:		02/28/18	
-		SAMPLE RESULTS						
Lab ID: Client ID: Sample Location: Sample Depth:	L1806118-07 FD-GW1-02212018 NEW WINDSOR, NY				Date Co Date Re Field Pre	llected: ceived: əp:	02/21/18 00:00 02/21/18 Not Specified	
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics b	oy GC/MS - Westborough I	Lab						
1,4-Dichlorobenzene		ND		ug/l	2.5	0.70	1	
Methyl tert butyl ether		ND		ug/l	2.5	0.70	1	
p/m-Xylene		ND		ug/l	2.5	0.70	1	
o-Xylene		ND		ug/l	2.5	0.70	1	
cis-1,2-Dichloroethene		ND		ug/l	2.5	0.70	1	
Styrene		ND		ug/l	2.5	0.70	1	
Dichlorodifluoromethane		ND		ug/l	5.0	1.0	1	
Acetone		ND		ug/l	5.0	1.5	1	
Carbon disulfide		ND		ug/l	5.0	1.0	1	
2-Butanone		ND		ug/l	5.0	1.9	1	
4-Methyl-2-pentanone		ND		ug/l	5.0	1.0	1	
2-Hexanone		ND		ug/l	5.0	1.0	1	
Bromochloromethane		ND		ug/l	2.5	0.70	1	
1,2-Dibromoethane		ND		ug/l	2.0	0.65	1	
1,2-Dibromo-3-chloropro	pane	ND		ug/l	2.5	0.70	1	
Isopropylbenzene		ND		ug/l	2.5	0.70	1	
1,2,3-Trichlorobenzene		ND		ug/l	2.5	0.70	1	
1,2,4-Trichlorobenzene		ND		ug/l	2.5	0.70	1	
Methyl Acetate		ND		ug/l	2.0	0.23	1	
Cyclohexane		ND		ug/l	10	0.27	1	
1,4-Dioxane		ND		ug/l	250	61.	1	
Freon-113		ND		ug/l	2.5	0.70	1	
Methyl cyclohexane		ND		ug/l	10	0.40	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	102	70-130	
Toluene-d8	89	70-130	
4-Bromofluorobenzene	84	70-130	
Dibromofluoromethane	101	70-130	



		Serial_No:02281818:37				
Project Name:	USAI		Lab Number:	L1806118		
Project Number:	14.4337		Report Date:	02/28/18		
		SAMPLE RESULTS				
Lab ID:	L1806118-08		Date Collected:	02/21/18 00:00		
Client ID:	TRANSPORT BLANK		Date Received:	02/21/18		
Sample Location: Sample Depth:	NEW WINDSOR, NY		Field Prep:	Not Specified		
Matrix:	Water					
Analytical Method:	1,8260C					
Analytical Date:	02/23/18 18:15					
Analyst:	BD					

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



					:	Serial_N	0:02281818:37
Project Name:	USAI				Lab Nu	ımber:	L1806118
Project Number:	14.4337				Report	Date:	02/28/18
		SAMP		5			
Lab ID: Client ID: Sample Location: Sample Depth:	L1806118-08 TRANSPORT BLANK NEW WINDSOR, NY				Date Co Date Re Field Pre	llected: ceived: ep:	02/21/18 00:00 02/21/18 Not Specified
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics b	y GC/MS - Westborough L	.ab					
1.4-Dichlorobenzene		ND		ug/l	2.5	0.70	1
Methyl tert butyl ether		ND		ug/l	2.5	0.70	1
p/m-Xylene		ND		ua/l	2.5	0.70	1
o-Xylene		ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene		ND		ug/l	2.5	0.70	1
Styrene		ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane		ND		ug/l	5.0	1.0	1
Acetone		ND		ug/l	5.0	1.5	1
Carbon disulfide		ND		ug/l	5.0	1.0	1
2-Butanone		ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone		ND		ug/l	5.0	1.0	1
2-Hexanone		ND		ug/l	5.0	1.0	1
Bromochloromethane		ND		ug/l	2.5	0.70	1
1,2-Dibromoethane		ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloroprop	bane	ND		ug/l	2.5	0.70	1
Isopropylbenzene		ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene		ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene		ND		ug/l	2.5	0.70	1
Methyl Acetate		ND		ug/l	2.0	0.23	1
Cyclohexane		ND		ug/l	10	0.27	1
1,4-Dioxane		ND		ug/l	250	61.	1
Freon-113		ND		ug/l	2.5	0.70	1
Methyl cyclohexane		ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	103		70-130	
Toluene-d8	89		70-130	
4-Bromofluorobenzene	85		70-130	
Dibromofluoromethane	102		70-130	



 Lab Number:
 L1806118

 Report Date:
 02/28/18

Project Name: USAI Project Number: 14.4337

> Method Blank Analysis Batch Quality Control

Analytical Method:1,8260CAnalytical Date:02/23/18 09:43Analyst:PD

Parameter	Result	Qualifier Units	s RL	MDL	
Volatile Organics by GC/MS -	Westborough Lal	b for sample(s):	01-08 Batch:	WG1092151-5	
Methylene chloride	ND	ug/l	2.5	0.70	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	
Chloroform	ND	ug/l	2.5	0.70	
Carbon tetrachloride	ND	ug/l	0.50	0.13	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	
Dibromochloromethane	ND	ug/l	0.50	0.15	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	
Tetrachloroethene	ND	ug/l	0.50	0.18	
Chlorobenzene	ND	ug/l	2.5	0.70	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	
Bromodichloromethane	ND	ug/l	0.50	0.19	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	
Bromoform	ND	ug/l	2.0	0.65	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	
Benzene	ND	ug/l	0.50	0.16	
Toluene	ND	ug/l	2.5	0.70	
Ethylbenzene	ND	ug/l	2.5	0.70	
Chloromethane	ND	ug/l	2.5	0.70	
Bromomethane	ND	ug/l	2.5	0.70	
Vinyl chloride	ND	ug/l	1.0	0.07	
Chloroethane	ND	ug/l	2.5	0.70	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	
Trichloroethene	ND	ug/l	0.50	0.18	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70	



 Lab Number:
 L1806118

 Report Date:
 02/28/18

Project Name: USAI Project Number: 14.4337

> Method Blank Analysis Batch Quality Control

Analytical Method:1,8260CAnalytical Date:02/23/18 09:43Analyst:PD

Parameter	Result	Qualifier Units	RL	MDL	
Volatile Organics by GC/MS	- Westborough Lab	for sample(s): 01	1-08 Batch:	WG1092151-5	
1,4-Dichlorobenzene	ND	ug/l	2.5	0.70	
Methyl tert butyl ether	ND	ug/l	2.5	0.70	
p/m-Xylene	ND	ug/l	2.5	0.70	
o-Xylene	ND	ug/l	2.5	0.70	
cis-1,2-Dichloroethene	ND	ug/l	2.5	0.70	
Styrene	ND	ug/l	2.5	0.70	
Dichlorodifluoromethane	ND	ug/l	5.0	1.0	
Acetone	ND	ug/l	5.0	1.5	
Carbon disulfide	ND	ug/l	5.0	1.0	
2-Butanone	ND	ug/l	5.0	1.9	
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0	
2-Hexanone	ND	ug/l	5.0	1.0	
Bromochloromethane	ND	ug/l	2.5	0.70	
1,2-Dibromoethane	ND	ug/l	2.0	0.65	
n-Butylbenzene	ND	ug/l	2.5	0.70	
sec-Butylbenzene	ND	ug/l	2.5	0.70	
tert-Butylbenzene	ND	ug/l	2.5	0.70	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70	
Isopropylbenzene	ND	ug/l	2.5	0.70	
p-Isopropyltoluene	ND	ug/l	2.5	0.70	
Naphthalene	ND	ug/l	2.5	0.70	
n-Propylbenzene	ND	ug/l	2.5	0.70	
1,2,3-Trichlorobenzene	ND	ug/l	2.5	0.70	
1,2,4-Trichlorobenzene	ND	ug/l	2.5	0.70	
1,3,5-Trimethylbenzene	ND	ug/l	2.5	0.70	
1,2,4-Trimethylbenzene	ND	ug/l	2.5	0.70	
Methyl Acetate	ND	ug/l	2.0	0.23	
Cyclohexane	ND	ug/l	10	0.27	
1,4-Dioxane	ND	ug/l	250	61.	



Lab Number: L1806118 Report Date: 02/28/18

Project Name: Project Number:

USAI 14.4337

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 02/23/18 09:43 Analyst: PD

Parameter	Result	Qualifier Unit	s	RL	MDL	
Volatile Organics by GC/MS - Westh	orough Lab	o for sample(s):	01-08	Batch:	WG1092151-5	
Freon-113	ND	ug/	1	2.5	0.70	
Methyl cyclohexane	ND	ug/	1	10	0.40	
Toptatively Identified Compounds						
renaively identified compounds						
No Tentatively Identified Compounds	ND		ug/l			

		Acceptance				
Surrogate	%Recovery	Qualifier	Criteria			
1,2-Dichloroethane-d4	101		70-130			
Toluene-d8	91		70-130			
4-Bromofluorobenzene	86		70-130			
Dibromofluoromethane	103		70-130			



Lab Control Sample Analysis Batch Quality Control

Project Name: USAI Project Number: 14.4337 Lab Number: L1806118

Report Date: 02/28/18

	LCS	5		LCSD		%Recovery			RPD	
Parameter	%Reco	very Qua	nl %	Recovery	Qual	Limits	RPD	Qual	Limits	
Volatile Organics by GC/MS	- Westborough Lab Asso	ciated sample	e(s): 01-08	B Batch:	WG1092151-3	WG1092151-4				
Methylene chloride	91			91		70-130	0		20	
1,1-Dichloroethane	91			91		70-130	0		20	
Chloroform	100)		100		70-130	0		20	
Carbon tetrachloride	100)		100		63-132	0		20	
1,2-Dichloropropane	94			94		70-130	0		20	
Dibromochloromethane	92			94		63-130	2		20	
1,1,2-Trichloroethane	88			92		70-130	4		20	
Tetrachloroethene	100)		100		70-130	0		20	
Chlorobenzene	96			95		75-130	1		20	
Trichlorofluoromethane	97			98		62-150	1		20	
1,2-Dichloroethane	100)		100		70-130	0		20	
1,1,1-Trichloroethane	100)		100		67-130	0		20	
Bromodichloromethane	98			100		67-130	2		20	
trans-1,3-Dichloropropene	80			82		70-130	2		20	
cis-1,3-Dichloropropene	91			93		70-130	2		20	
Bromoform	94			95		54-136	1		20	
1,1,2,2-Tetrachloroethane	80			83		67-130	4		20	
Benzene	94			94		70-130	0		20	
Toluene	90			89		70-130	1		20	
Ethylbenzene	95			94		70-130	1		20	
Chloromethane	62	C	2	62	Q	64-130	0		20	
Bromomethane	88			89		39-139	1		20	
Vinyl chloride	69			70		55-140	1		20	



Lab Control Sample Analysis Batch Quality Control

Project Name: USAI Project Number: 14.4337 Lab Number: L1806118

Report Date: 02/28/18

	LCS		LCSD		%Recovery			RPD
Parameter	%Recover	/ Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by GC/MS	- Westborough Lab Associat	ed sample(s):	01-08 Batch:	WG1092151-3	WG1092151-4			
Chloroethane	97		97		55-138	0		20
1,1-Dichloroethene	93		94		61-145	1		20
trans-1,2-Dichloroethene	92		92		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	93		93		70-130	0		20
1,3-Dichlorobenzene	96		95		70-130	1		20
1,4-Dichlorobenzene	94		94		70-130	0		20
Methyl tert butyl ether	84		88		63-130	5		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	96		96		70-130	0		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	64		64		36-147	0		20
Acetone	60		62		58-148	3		20
Carbon disulfide	81		81		51-130	0		20
2-Butanone	72		81		63-138	12		20
4-Methyl-2-pentanone	80		85		59-130	6		20
2-Hexanone	69		72		57-130	4		20
Bromochloromethane	110		110		70-130	0		20
1,2-Dibromoethane	92		95		70-130	3		20
n-Butylbenzene	94		91		53-136	3		20
sec-Butylbenzene	92		89		70-130	3		20
tert-Butylbenzene	92		90		70-130	2		20



Lab Control Sample Analysis Batch Quality Control

Project Name: USAI Project Number: 14.4337 Lab Number: L1806118

Report Date: 02/28/18

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recover	y Qual	Limits	RPD	Qual	Limits	
Volatile Organics by GC/MS - Westborough	Lab Associated	sample(s):	01-08 Batch	: WG1092151-3	WG1092151-4				
1,2-Dibromo-3-chloropropane	82		80		41-144	2		20	
Isopropylbenzene	89		87		70-130	2		20	
p-Isopropyltoluene	97		94		70-130	3		20	
Naphthalene	81		84		70-130	4		20	
n-Propylbenzene	86		85		69-130	1		20	
1,2,3-Trichlorobenzene	89		88		70-130	1		20	
1,2,4-Trichlorobenzene	93		92		70-130	1		20	
1,3,5-Trimethylbenzene	92		90		64-130	2		20	
1,2,4-Trimethylbenzene	91		91		70-130	0		20	
Methyl Acetate	81		87		70-130	7		20	
Cyclohexane	93		94		70-130	1		20	
1,4-Dioxane	92		98		56-162	6		20	
Freon-113	110		100		70-130	10		20	
Methyl cyclohexane	110		100		70-130	10		20	

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qual	%Recovery Qual	Criteria
1.2-Dichloroethane-d4	107	103	70-130
Toluene-d8	91	90	70-130
4-Bromofluorobenzene	87	85	70-130
Dibromofluoromethane	104	105	70-130



Matrix Spike Analysis

Project Name:	USAI	Batch Quality Control	Lab Number:	L1806118
Project Number:	14.4337		Report Date:	02/28/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual Found	MSD %Recovery	' Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS · MW-13	- Westborough	Lab Assoc	ciated sample(s	s): 01-08 Q0	C Batch ID: WG1092	151-6 WG109	2151-7	QC Sample	: L180	6118-04	Client ID:
Benzene	ND	10	11	110	11	110		70-130	0		20
Toluene	ND	10	10	100	10	100		70-130	0		20
Ethylbenzene	ND	10	11	110	10	100		70-130	10		20
Methyl tert butyl ether	ND	10	8.9	89	9.4	94		63-130	5		20
p/m-Xylene	ND	20	22	110	22	110		70-130	0		20
o-Xylene	ND	20	23	115	23	115		70-130	0		20
n-Butylbenzene	ND	10	9.8	98	9.6	96		53-136	2		20
sec-Butylbenzene	ND	10	9.9	99	9.6	96		70-130	3		20
tert-Butylbenzene	ND	10	10	100	9.9	99		70-130	1		20
Isopropylbenzene	ND	10	9.9	99	9.6	96		70-130	3		20
p-Isopropyltoluene	ND	10	10	100	10	100		70-130	0		20
Naphthalene	ND	10	7.6	76	8.4	84		70-130	10		20
n-Propylbenzene	ND	10	9.5	95	9.2	92		69-130	3		20
1,3,5-Trimethylbenzene	ND	10	10	100	9.9	99		64-130	1		20
1,2,4-Trimethylbenzene	ND	10	10	100	9.8	98		70-130	2		20

	MS	MSD	Acceptance
Surrogate	% Recovery Qualifier	% Recovery Qualifier	Criteria
1,2-Dichloroethane-d4	101	100	70-130
4-Bromofluorobenzene	86	85	70-130
Dibromofluoromethane	104	104	70-130
Toluene-d8	89	90	70-130



SEMIVOLATILES



			Serial_No:02281818:37				
Project Name:	USAI		Lab Number:	L1806118			
Project Number:	14.4337		Report Date:	02/28/18			
		SAMPLE RESULTS					
Lab ID:	L1806118-01		Date Collected:	02/21/18 10:05			
Client ID:	MW-1		Date Received:	02/21/18			
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified			
Sample Depth:							
Matrix:	Water		Extraction Methor	d:EPA 3510C			
Analytical Method:	1,8270D		Extraction Date:	02/24/18 00:34			
Analytical Date:	02/27/18 22:36						
Analyst:	PS						
-							

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - We	estborough Lab					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1



						Serial_N	o:02281818:37
Project Name:	USAI				Lab Nu	umber:	L1806118
Project Number:	14.4337				Report	Date:	02/28/18
-		SAMP	LE RESULT	S	-		
Lab ID: Client ID: Sample Location: Sample Depth:	L1806118-01 MW-1 NEW WINDSOR, NY				Date Co Date Re Field Pro	llected: ceived: ep:	02/21/18 10:05 02/21/18 Not Specified
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organ	nics by GC/MS - Westboro	ugh Lab					
2-Chlorophenol		ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol		ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol		ND		ug/l	5.0	1.6	1
2-Nitrophenol		ND		ug/l	10	1.5	1
4-Nitrophenol		ND		ug/l	10	1.8	1
2,4-Dinitrophenol		ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol		ND		ug/l	10	2.1	1
Phenol		ND		ug/l	5.0	1.9	1
3-Methylphenol/4-Methyl	phenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol		ND		ug/l	5.0	0.72	1
Carbazole		ND		ug/l	2.0	0.63	1
Atrazine		ND		ug/l	10	1.8	1
Benzaldehyde		ND		ug/l	5.0	1.1	1
Caprolactam		ND		ug/l	10	3.6	1
2,3,4,6-Tetrachloropheno	ol	ND		ug/l	5.0	0.93	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	58	21-120	
Phenol-d6	44	10-120	
Nitrobenzene-d5	100	23-120	
2-Fluorobiphenyl	89	15-120	
2,4,6-Tribromophenol	103	10-120	
4-Terphenyl-d14	92	41-149	



Serial_No:022818				
Project Name:	USAI		Lab Number:	L1806118
Project Number:	14.4337		Report Date:	02/28/18
		SAMPLE RESULTS		
Lab ID:	L1806118-01		Date Collected:	02/21/18 10:05
Client ID:	MW-1		Date Received:	02/21/18
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified
Sample Depth:				·
Matrix:	Water		Extraction Metho	d:EPA 3510C
Analytical Method:	1,8270D-SIM		Extraction Date:	02/24/18 00:37
Analytical Date:	02/25/18 12:40			
Analyst:	KL			
-				

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS	S-SIM - Westborough La	b				
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1



		Serial_No:02281818:37						
Project Name:	USAI				Lab Nu	umber:	L1806118	
Project Number:	14.4337				Report	t Date:	02/28/18	
		SAMPI		5				
Lab ID:	L1806118-01				Date Co	llected:	02/21/18 10:05	
Client ID:	MW-1				Date Re	ceived:	02/21/18	
Sample Location:	NEW WINDSOR, NY				Field Pre	ep:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organ	Semivolatile Organics by GC/MS-SIM - Westborough Lab							

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	48	21-120	
Phenol-d6	38	10-120	
Nitrobenzene-d5	96	23-120	
2-Fluorobiphenyl	96	15-120	
2,4,6-Tribromophenol	83	10-120	
4-Terphenyl-d14	97	41-149	



			Serial_No	0:02281818:37
Project Name:	USAI		Lab Number:	L1806118
Project Number:	14.4337		Report Date:	02/28/18
		SAMPLE RESULTS		
Lab ID:	L1806118-02		Date Collected:	02/21/18 10:30
Client ID:	MW-2		Date Received:	02/21/18
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Water		Extraction Method	d:EPA 3510C
Analytical Method:	1,8270D		Extraction Date:	02/24/18 00:34
Analytical Date:	02/28/18 01:09			
Analyst:	PS			
-				

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor				
Semivolatile Organics by GC/MS - Westborough Lab										
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1				
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1				
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1				
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1				
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1				
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1				
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1				
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1				
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1				
Isophorone	ND		ug/l	5.0	0.60	1				
Nitrobenzene	ND		ug/l	2.0	0.75	1				
NDPA/DPA	ND		ug/l	2.0	0.64	1				
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1				
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1				
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1				
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1				
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1				
Diethyl phthalate	ND		ug/l	5.0	0.63	1				
Dimethyl phthalate	ND		ug/l	5.0	0.65	1				
Biphenyl	ND		ug/l	2.0	0.76	1				
4-Chloroaniline	ND		ug/l	5.0	0.63	1				
2-Nitroaniline	ND		ug/l	5.0	1.1	1				
3-Nitroaniline	ND		ug/l	5.0	1.2	1				
4-Nitroaniline	ND		ug/l	5.0	1.3	1				
Dibenzofuran	ND		ug/l	2.0	0.66	1				
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1				
Acetophenone	ND		ug/l	5.0	0.85	1				
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1				
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1				



						Serial_N	0:02281818:37
Project Name:	USAI				Lab Nu	umber:	L1806118
Project Number:	14.4337				Report	Date:	02/28/18
		SAMP	LE RESULTS	5			
Lab ID:	L1806118-02				Date Co	llected:	02/21/18 10:30
Client ID:	MW-2				Date Re	ceived:	02/21/18
Sample Location: Sample Depth:	NEW WINDSOR, NY				Field Pre	əp:	Not Specified
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Orgai	nics by GC/MS - Westboro	ugh Lab					
2-Chlorophenol		ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol		ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol		ND		ug/l	5.0	1.6	1
2-Nitrophenol		ND		ug/l	10	1.5	1
4-Nitrophenol		ND		ug/l	10	1.8	1
2,4-Dinitrophenol		ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol		ND		ug/l	10	2.1	1
Phenol		ND		ug/l	5.0	1.9	1
3-Methylphenol/4-Methyl	phenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol		ND		ug/l	5.0	0.72	1
Carbazole		ND		ug/l	2.0	0.63	1
Atrazine		ND		ug/l	10	1.8	1
Benzaldehyde		ND		ug/l	5.0	1.1	1
Caprolactam		ND		ug/l	10	3.6	1
2,3,4,6-Tetrachlorophene	bl	ND		ua/l	5.0	0.93	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	62	21-120	
Phenol-d6	47	10-120	
Nitrobenzene-d5	105	23-120	
2-Fluorobiphenyl	94	15-120	
2,4,6-Tribromophenol	109	10-120	
4-Terphenyl-d14	87	41-149	



			Serial_N	o:02281818:37
Project Name:	USAI		Lab Number:	L1806118
Project Number:	14.4337		Report Date:	02/28/18
		SAMPLE RESULTS		
Lab ID:	L1806118-02		Date Collected:	02/21/18 10:30
Client ID:	MW-2		Date Received:	02/21/18
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Water		Extraction Metho	d:EPA 3510C
Analytical Method:	1,8270D-SIM		Extraction Date:	02/24/18 00:37
Analytical Date:	02/25/18 13:43			
Analyst:	KL			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS	-SIM - Westborough La	b				
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	0.04	J	ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	0.12		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1



						Serial_N	p:02281818:37	
Project Name:	USAI				Lab Nı	umber:	L1806118	
Project Number:	14.4337				Report	Date:	02/28/18	
		SAMPI	E RESULTS	6				
Lab ID:	L1806118-02				Date Co	llected:	02/21/18 10:30	
Client ID:	MW-2				Date Re	ceived:	02/21/18	
Sample Location:	NEW WINDSOR, NY				Field Pre	ep:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organi	ics by GC/MS-SIM - West	borough La	ıb					

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	51	21-120	
Phenol-d6	39	10-120	
Nitrobenzene-d5	101	23-120	
2-Fluorobiphenyl	103	15-120	
2,4,6-Tribromophenol	89	10-120	
4-Terphenyl-d14	99	41-149	



			Serial_N	0:02281818:37
Project Name:	USAI		Lab Number:	L1806118
Project Number:	14.4337		Report Date:	02/28/18
		SAMPLE RESULTS		
Lab ID:	L1806118-03		Date Collected:	02/21/18 11:00
Client ID:	MW-5		Date Received:	02/21/18
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Water		Extraction Metho	d:EPA 3510C
Analytical Method:	1,8270D		Extraction Date:	02/24/18 00:34
Analytical Date:	02/27/18 23:02			
Analyst:	PS			
-				

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor				
Semivolatile Organics by GC/MS - Westborough Lab										
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1				
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1				
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1				
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1				
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1				
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1				
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1				
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1				
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1				
Isophorone	ND		ug/l	5.0	0.60	1				
Nitrobenzene	ND		ug/l	2.0	0.75	1				
NDPA/DPA	ND		ug/l	2.0	0.64	1				
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1				
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1				
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1				
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1				
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1				
Diethyl phthalate	ND		ug/l	5.0	0.63	1				
Dimethyl phthalate	ND		ug/l	5.0	0.65	1				
Biphenyl	ND		ug/l	2.0	0.76	1				
4-Chloroaniline	ND		ug/l	5.0	0.63	1				
2-Nitroaniline	ND		ug/l	5.0	1.1	1				
3-Nitroaniline	ND		ug/l	5.0	1.2	1				
4-Nitroaniline	ND		ug/l	5.0	1.3	1				
Dibenzofuran	ND		ug/l	2.0	0.66	1				
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1				
Acetophenone	ND		ug/l	5.0	0.85	1				
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1				
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1				



						Serial_N	o:02281818:37
Project Name:	USAI				Lab Nu	umber:	L1806118
Project Number:	14.4337				Report	Date:	02/28/18
		SAMP	LE RESULT	S			
Lab ID: Client ID: Sample Location: Sample Depth:	L1806118-03 MW-5 NEW WINDSOR, NY				Date Co Date Re Field Pro	llected: ceived: ep:	02/21/18 11:00 02/21/18 Not Specified
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organ	nics by GC/MS - Westboro	ugh Lab					
2-Chlorophenol		ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol		ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol		ND		ug/l	5.0	1.6	1
2-Nitrophenol		ND		ug/l	10	1.5	1
4-Nitrophenol		ND		ug/l	10	1.8	1
2,4-Dinitrophenol		ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol		ND		ug/l	10	2.1	1
Phenol		ND		ug/l	5.0	1.9	1
3-Methylphenol/4-Methyl	phenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol		ND		ug/l	5.0	0.72	1
Carbazole		ND		ug/l	2.0	0.63	1
Atrazine		ND		ug/l	10	1.8	1
Benzaldehyde		ND		ug/l	5.0	1.1	1
Caprolactam		ND		ug/l	10	3.6	1
2,3,4,6-Tetrachloropheno	ol	ND		ua/l	5.0	0.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	53		21-120	
Phenol-d6	42		10-120	
Nitrobenzene-d5	99		23-120	
2-Fluorobiphenyl	89		15-120	
2,4,6-Tribromophenol	83		10-120	
4-Terphenyl-d14	89		41-149	



			Serial_No:02281818:37		
Project Name:	USAI		Lab Number:	L1806118	
Project Number:	14.4337		Report Date:	02/28/18	
		SAMPLE RESULTS			
Lab ID:	L1806118-03		Date Collected:	02/21/18 11:00	
Client ID:	MW-5		Date Received:	02/21/18	
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified	
Sample Depth:					
Matrix:	Water		Extraction Metho	d:EPA 3510C	
Analytical Method:	1,8270D-SIM		Extraction Date:	02/24/18 00:37	
Analytical Date:	02/25/18 14:15				
Analyst:	KL				

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor			
Semivolatile Organics by GC/MS-SIM - Westborough Lab									
Acenaphthene	ND		ug/l	0.10	0.04	1			
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1			
Fluoranthene	ND		ug/l	0.10	0.04	1			
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1			
Naphthalene	ND		ug/l	0.10	0.04	1			
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1			
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1			
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1			
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1			
Chrysene	ND		ug/l	0.10	0.04	1			
Acenaphthylene	ND		ug/l	0.10	0.04	1			
Anthracene	ND		ug/l	0.10	0.04	1			
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1			
Fluorene	ND		ug/l	0.10	0.04	1			
Phenanthrene	ND		ug/l	0.10	0.02	1			
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1			
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1			
Pyrene	ND		ug/l	0.10	0.04	1			
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1			
Pentachlorophenol	ND		ug/l	0.80	0.22	1			
Hexachlorobenzene	ND		ug/l	0.80	0.03	1			
Hexachloroethane	ND		ug/l	0.80	0.03	1			



						Serial_N	02281818:37	
Project Name:	USAI				Lab Nu	umber:	L1806118	
Project Number:	14.4337				Repor	t Date:	02/28/18	
		SAMPI		5				
Lab ID:	L1806118-03				Date Co	llected:	02/21/18 11:00	
Client ID:	MW-5				Date Re	ceived:	02/21/18	
Sample Location:	NEW WINDSOR, NY				Field Pre	ep:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS-SIM - Westborough Lab								

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	46	21-120	
Phenol-d6	37	10-120	
Nitrobenzene-d5	101	23-120	
2-Fluorobiphenyl	101	15-120	
2,4,6-Tribromophenol	81	10-120	
4-Terphenyl-d14	102	41-149	



			Serial_No:02281818:37		
Project Name:	USAI		Lab Number:	L1806118	
Project Number:	14.4337		Report Date:	02/28/18	
		SAMPLE RESULTS			
Lab ID:	L1806118-04		Date Collected:	02/21/18 12:00	
Client ID:	MW-13		Date Received:	02/21/18	
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified	
Sample Depth:					
Matrix:	Water		Extraction Method	I:EPA 3510C	
Analytical Method:	1,8270D-SIM		Extraction Date:	02/24/18 13:40	
Analytical Date:	02/27/18 18:45				
Analyst:	KL				

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Semivolatile Organics by GC/MS-SIM - Westborough Lab								
Acenaphthene	ND		ug/l	0.10	0.03	1		
Fluoranthene	ND		ug/l	0.10	0.04	1		
Naphthalene	0.22		ug/l	0.10	0.04	1		
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1		
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1		
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1		
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1		
Chrysene	ND		ug/l	0.10	0.04	1		
Acenaphthylene	ND		ug/l	0.10	0.03	1		
Anthracene	ND		ug/l	0.10	0.03	1		
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1		
Fluorene	ND		ug/l	0.10	0.04	1		
Phenanthrene	ND		ug/l	0.10	0.02	1		
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1		
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1		
Pyrene	ND		ug/l	0.10	0.04	1		

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	48		21-120	
Phenol-d6	37		10-120	
Nitrobenzene-d5	83		23-120	
2-Fluorobiphenyl	72		15-120	
2,4,6-Tribromophenol	58		10-120	
4-Terphenyl-d14	80		41-149	



			Serial_No:02281818:37		
Project Name:	USAI		Lab Number:	L1806118	
Project Number:	14.4337		Report Date:	02/28/18	
		SAMPLE RESULTS			
Lab ID:	L1806118-05		Date Collected:	02/21/18 13:20	
Client ID:	MW-16		Date Received:	02/21/18	
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified	
Sample Depth:					
Matrix:	Water		Extraction Methor	d:EPA 3510C	
Analytical Method:	1,8270D-SIM		Extraction Date:	02/24/18 13:40	
Analytical Date:	02/27/18 19:15				
Analyst:	KL				

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Semivolatile Organics by GC/MS-SIM - Westborough Lab								
Acenaphthene	ND		ug/l	0.10	0.03	1		
Fluoranthene	ND		ug/l	0.10	0.04	1		
Naphthalene	0.04	J	ug/l	0.10	0.04	1		
Benzo(a)anthracene	0.03	J	ug/l	0.10	0.02	1		
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1		
Benzo(b)fluoranthene	0.04	J	ug/l	0.10	0.02	1		
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1		
Chrysene	ND		ug/l	0.10	0.04	1		
Acenaphthylene	ND		ug/l	0.10	0.03	1		
Anthracene	ND		ug/l	0.10	0.03	1		
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1		
Fluorene	ND		ug/l	0.10	0.04	1		
Phenanthrene	0.02	J	ug/l	0.10	0.01	1		
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1		
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1		
Pyrene	ND		ug/l	0.10	0.04	1		

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	34		21-120	
Phenol-d6	27		10-120	
Nitrobenzene-d5	59		23-120	
2-Fluorobiphenyl	51		15-120	
2,4,6-Tribromophenol	41		10-120	
4-Terphenyl-d14	56		41-149	



			Serial_No:02281818:37		
Project Name:	USAI		Lab Number:	L1806118	
Project Number:	14.4337		Report Date:	02/28/18	
		SAMPLE RESULTS			
Lab ID:	L1806118-06		Date Collected:	02/21/18 12:45	
Client ID:	MW-18		Date Received:	02/21/18	
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified	
Sample Depth:					
Matrix:	Water		Extraction Method	I:EPA 3510C	
Analytical Method:	1,8270D		Extraction Date:	02/24/18 00:34	
Analytical Date:	02/27/18 23:27				
Analyst:	PS				

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - W	/estborough Lab					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1



					Serial_No:02281818:37				
Project Name:	USAI				Lab Nu	umber:	L1806118		
Project Number:	14.4337				Report	t Date:	02/28/18		
		SAMP	LE RESULT	S					
Lab ID: Client ID: Sample Location: Sample Depth:	L1806118-06 MW-18 NEW WINDSOR, NY				Date Co Date Re Field Pro	llected: ceived: ep:	02/21/18 12:45 02/21/18 Not Specified		
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor		
Semivolatile Organ	nics by GC/MS - Westboro	ugh Lab							
2-Chlorophenol		ND		ug/l	2.0	0.63	1		
2,4-Dichlorophenol		ND		ug/l	5.0	0.77	1		
2,4-Dimethylphenol		ND		ug/l	5.0	1.6	1		
2-Nitrophenol		ND		ug/l	10	1.5	1		
4-Nitrophenol		ND		ug/l	10	1.8	1		
2,4-Dinitrophenol		ND		ug/l	20	5.5	1		
4,6-Dinitro-o-cresol		ND		ug/l	10	2.1	1		
Phenol		ND		ug/l	5.0	1.9	1		
3-Methylphenol/4-Methyl	Iphenol	ND		ug/l	5.0	1.1	1		
2,4,5-Trichlorophenol		ND		ug/l	5.0	0.72	1		
Carbazole		ND		ug/l	2.0	0.63	1		
Atrazine		ND		ug/l	10	1.8	1		
Benzaldehyde		ND		ug/l	5.0	1.1	1		
Caprolactam		ND		ug/l	10	3.6	1		
2,3,4,6-Tetrachlorophene	ol	ND		ug/l	5.0	0.93	1		

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	61		21-120	
Phenol-d6	48		10-120	
Nitrobenzene-d5	110		23-120	
2-Fluorobiphenyl	98		15-120	
2,4,6-Tribromophenol	95		10-120	
4-Terphenyl-d14	96		41-149	



		0:02281818:37		
Project Name:	USAI		Lab Number:	L1806118
Project Number:	14.4337		Report Date:	02/28/18
		SAMPLE RESULTS		
Lab ID:	L1806118-06		Date Collected:	02/21/18 12:45
Client ID:	MW-18		Date Received:	02/21/18
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Water		Extraction Methor	d:EPA 3510C
Analytical Method:	1,8270D-SIM		Extraction Date:	02/24/18 00:37
Analytical Date:	02/25/18 14:47			
Analyst:	KL			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor			
Semivolatile Organics by GC/MS-SIM - Westborough Lab									
Acenaphthene	ND		ug/l	0.10	0.04	1			
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1			
Fluoranthene	ND		ug/l	0.10	0.04	1			
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1			
Naphthalene	ND		ug/l	0.10	0.04	1			
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1			
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1			
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1			
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1			
Chrysene	ND		ug/l	0.10	0.04	1			
Acenaphthylene	ND		ug/l	0.10	0.04	1			
Anthracene	0.04	J	ug/l	0.10	0.04	1			
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1			
Fluorene	ND		ug/l	0.10	0.04	1			
Phenanthrene	ND		ug/l	0.10	0.02	1			
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1			
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1			
Pyrene	ND		ug/l	0.10	0.04	1			
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1			
Pentachlorophenol	ND		ug/l	0.80	0.22	1			
Hexachlorobenzene	ND		ug/l	0.80	0.03	1			
Hexachloroethane	ND		ug/l	0.80	0.03	1			



Semivolatile Organics by GC/MS-SIM - Westborough Lab								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Sample Depth:								
Sample Location:	NEW WINDSOR, NY				Field Pre	эр:	Not Specified	
Client ID:	MW-18				Date Re	ceived:	02/21/18	
Lab ID:	L1806118-06				Date Co	llected:	02/21/18 12:45	
		SAMP	LE RESULTS	6				
Project Number:	14.4337				Report	Date:	02/28/18	
Project Name:	USAI				Lab Nu	umber:	L1806118	
	Serial_No:02					0:02281818:37		

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	52	21-120	
Phenol-d6	43	10-120	
Nitrobenzene-d5	111	23-120	
2-Fluorobiphenyl	112	15-120	
2,4,6-Tribromophenol	89	10-120	
4-Terphenyl-d14	114	41-149	



			Serial_No:02281818:37			
Project Name:	USAI		Lab Number:	L1806118		
Project Number:	14.4337		Report Date:	02/28/18		
		SAMPLE RESULTS				
Lab ID:	L1806118-07		Date Collected:	02/21/18 00:00		
Client ID:	FD-GW1-02212018		Date Received:	02/21/18		
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified		
Sample Depth:						
Matrix:	Water		Extraction Method	d:EPA 3510C		
Analytical Method:	1,8270D		Extraction Date:	02/24/18 00:34		
Analytical Date:	02/27/18 23:53					
Analyst:	PS					

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - West	tborough Lab					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1



					Serial_No:02281818:37				
Project Name:	USAI				Lab Nu	umber:	L1806118		
Project Number:	14.4337				Report	t Date:	02/28/18		
		SAMP	LE RESULT	S					
Lab ID: Client ID: Sample Location: Sample Depth:	L1806118-07 FD-GW1-02212018 NEW WINDSOR, NY				Date Co Date Re Field Pro	llected: ceived: ep:	02/21/18 00:00 02/21/18 Not Specified		
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor		
Semivolatile Organ	nics by GC/MS - Westboro	ugh Lab							
2-Chlorophenol		ND		ug/l	2.0	0.63	1		
2,4-Dichlorophenol		ND		ug/l	5.0	0.77	1		
2,4-Dimethylphenol		ND		ug/l	5.0	1.6	1		
2-Nitrophenol		ND		ug/l	10	1.5	1		
4-Nitrophenol		ND		ug/l	10	1.8	1		
2,4-Dinitrophenol		ND		ug/l	20	5.5	1		
4,6-Dinitro-o-cresol		ND		ug/l	10	2.1	1		
Phenol		ND		ug/l	5.0	1.9	1		
3-Methylphenol/4-Methyl	phenol	ND		ug/l	5.0	1.1	1		
2,4,5-Trichlorophenol		ND		ug/l	5.0	0.72	1		
Carbazole		ND		ug/l	2.0	0.63	1		
Atrazine		ND		ug/l	10	1.8	1		
Benzaldehyde		ND		ug/l	5.0	1.1	1		
Caprolactam		ND		ug/l	10	3.6	1		
2,3,4,6-Tetrachloropheno	bl	ND		ug/l	5.0	0.93	1		

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	52	21-120	
Phenol-d6	39	10-120	
Nitrobenzene-d5	94	23-120	
2-Fluorobiphenyl	86	15-120	
2,4,6-Tribromophenol	91	10-120	
4-Terphenyl-d14	85	41-149	


		Serial_No:02281818:37			
Project Name:	USAI		Lab Number:	L1806118	
Project Number:	14.4337		Report Date:	02/28/18	
		SAMPLE RESULTS			
Lab ID:	L1806118-07		Date Collected:	02/21/18 00:00	
Client ID:	FD-GW1-02212018		Date Received:	02/21/18	
Sample Location:	NEW WINDSOR, NY		Field Prep:	Not Specified	
Sample Depth:					
Matrix:	Water		Extraction Method	d:EPA 3510C	
Analytical Method:	1,8270D-SIM		Extraction Date:	02/24/18 00:37	
Analytical Date:	02/25/18 15:19				
Analyst:	KL				

Parameter	Result	Result Qualifier		RL	MDL	Dilution Factor				
Semivolatile Organics by GC/MS-SIM - Westborough Lab										
Acenaphthene	ND		ug/l	0.10	0.04	1				
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1				
Fluoranthene	ND		ug/l	0.10	0.04	1				
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1				
Naphthalene	0.36		ug/l	0.10	0.04	1				
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1				
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1				
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1				
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1				
Chrysene	ND		ug/l	0.10	0.04	1				
Acenaphthylene	ND		ug/l	0.10	0.04	1				
Anthracene	ND		ug/l	0.10	0.04	1				
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1				
Fluorene	ND		ug/l	0.10	0.04	1				
Phenanthrene	ND		ug/l	0.10	0.02	1				
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1				
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1				
Pyrene	ND		ug/l	0.10	0.04	1				
2-Methylnaphthalene	0.09	J	ug/l	0.10	0.05	1				
Pentachlorophenol	ND		ug/l	0.80	0.22	1				
Hexachlorobenzene	ND		ug/l	0.80	0.03	1				
Hexachloroethane	ND		ug/l	0.80	0.03	1				



					Serial_No:02281818:37			
Project Name:	USAI				Lab Number	L1806118		
Project Number:	14.4337				Report Date:	02/28/18		
		SAMP		6				
Lab ID:	L1806118-07				Date Collected	: 02/21/18 00:00		
Client ID:	FD-GW1-02212018				Date Received	: 02/21/18		
Sample Location: Sample Depth:	NEW WINDSOR, NY				Field Prep:	Not Specified		
Parameter		Result	Qualifier	Units	RL MD	L Dilution Factor		
Semivolatile Organics by GC/MS-SIM - Westborough Lab								

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	43	21-120	
Phenol-d6	34	10-120	
Nitrobenzene-d5	94	23-120	
2-Fluorobiphenyl	95	15-120	
2,4,6-Tribromophenol	83	10-120	
4-Terphenyl-d14	94	41-149	



Project Name:	USAI	Lab Number:	L1806118
Project Number:	14.4337	Report Date:	02/28/18

Method Blank Analysis Batch Quality Control

Analytical Method:	1,8270D	Extraction Method:	EPA 3510C
Analytical Date:	02/26/18 17:17	Extraction Date:	02/24/18 00:34
Analyst:	SZ		

Parameter	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/MS · 1	- Westborougł	n Lab for s	ample(s):	01-03,06-07	Batch:	WG1092044-
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	
Isophorone	ND		ug/l	5.0	0.60	
Nitrobenzene	ND		ug/l	2.0	0.75	
NDPA/DPA	ND		ug/l	2.0	0.64	
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	
Di-n-butylphthalate	ND		ug/l	5.0	0.69	
Di-n-octylphthalate	ND		ug/l	5.0	1.1	
Diethyl phthalate	ND		ug/l	5.0	0.63	
Dimethyl phthalate	ND		ug/l	5.0	0.65	
Biphenyl	ND		ug/l	2.0	0.76	
4-Chloroaniline	ND		ug/l	5.0	0.63	
2-Nitroaniline	ND		ug/l	5.0	1.1	
3-Nitroaniline	ND		ug/l	5.0	1.2	
4-Nitroaniline	ND		ug/l	5.0	1.3	
Dibenzofuran	ND		ug/l	2.0	0.66	
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	
Acetophenone	ND		ug/l	5.0	0.85	
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	



Project Name:	USAI		Lab Number:	L1806118
Project Number:	14.4337		Report Date:	02/28/18
		Mathed Dlank Analysia		

Method Blank Analysis Batch Quality Control

Analytical Method:	1,8270D	Extraction Method:	EPA 3510C
Analytical Date:	02/26/18 17:17	Extraction Date:	02/24/18 00:34
Analyst:	SZ		

Parameter	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/MS - V	Vestborougł	n Lab for s	ample(s):	01-03,06-07	Batch:	WG1092044-
2-Chlorophenol	ND		ug/l	2.0	0.63	
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	
2-Nitrophenol	ND		ug/l	10	1.5	
4-Nitrophenol	ND		ug/l	10	1.8	
2,4-Dinitrophenol	ND		ug/l	20	5.5	
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	
Phenol	ND		ug/l	5.0	1.9	
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1	
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	
Carbazole	ND		ug/l	2.0	0.63	
Atrazine	ND		ug/l	10	1.8	
Benzaldehyde	ND		ug/l	5.0	1.1	
Caprolactam	ND		ug/l	10	3.6	
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93	

Tentatively Identified Compounds

No Tentatively Identified Compounds

ND

ug/l



Project Name: Project Number:	USAI 14.4337		Lab Number: Report Date:	L1806118 02/28/18
		Method Blank Analysis Batch Quality Control		
Analytical Method: Analytical Date: Analyst:	1,8270D 02/26/18 17:17 SZ		Extraction Method: Extraction Date:	EPA 3510C 02/24/18 00:34

Parameter	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/MS - V	Vestborough	Lab for sa	ample(s):	01-03,06-07	Batch:	WG1092044-

	Acceptance				
Surrogate	%Recovery	Qualifier	Criteria		
	E 4		21.120		
2-Fluorophenol	54		21-120		
Phenol-d6	39		10-120		
Nitrobenzene-d5	88		23-120		
2-Fluorobiphenyl	82		15-120		
2,4,6-Tribromophenol	74		10-120		
4-Terphenyl-d14	86		41-149		



02/24/18 00:37

Lab Number: L1806118 Report Date: 02/28/18

Project Name: USAI Project Number: 14.4337

Method Blank Analysis Batch Quality Control

1,8270D-SIM Analytical Method: Extraction Method: EPA 3510C Analytical Date: 02/25/18 08:27 Extraction Date: Analyst: KL

Parameter	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/MS-S	IM - Westbo	orough Lab	for sample(s)): 01-07	Batch: WG1092045	5-1
Acenaphthene	ND		ug/l	0.10	0.04	
2-Chloronaphthalene	ND		ug/l	0.20	0.04	
Fluoranthene	ND		ug/l	0.10	0.04	
Hexachlorobutadiene	ND		ug/l	0.50	0.04	
Naphthalene	ND		ug/l	0.10	0.04	
Benzo(a)anthracene	ND		ug/l	0.10	0.02	
Benzo(a)pyrene	ND		ug/l	0.10	0.04	
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	
Chrysene	ND		ug/l	0.10	0.04	
Acenaphthylene	ND		ug/l	0.10	0.04	
Anthracene	ND		ug/l	0.10	0.04	
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	
Fluorene	ND		ug/l	0.10	0.04	
Phenanthrene	ND		ug/l	0.10	0.02	
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	
Pyrene	ND		ug/l	0.10	0.04	
2-Methylnaphthalene	ND		ug/l	0.10	0.05	
Pentachlorophenol	ND		ug/l	0.80	0.22	
Hexachlorobenzene	ND		ug/l	0.80	0.03	
Hexachloroethane	ND		ug/l	0.80	0.03	



Project Name:	USAI		Lab Number:	L1806118
Project Number:	14.4337	Method Blank Analysis Batch Quality Control	Report Date:	02/28/18
Analytical Method: Analytical Date: Analyst:	1,8270D-SIM 02/25/18 08:27 KL		Extraction Method: Extraction Date:	EPA 3510C 02/24/18 00:37

Parameter	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/MS-SI	M - Westbo	rough Lab	for sample(s):	01-07	Batch:	WG1092045-1

	Acceptance					
Surrogate	%Recovery	Qualifier Criteria				
2-Fluorophenol	43	21-120				
Phenol-d6	34	10-120				
Nitrobenzene-d5	80	23-120				
2-Fluorobiphenyl	81	15-120				
2,4,6-Tribromophenol	67	10-120				
4-Terphenyl-d14	81	41-149				



Project Name: USAI Project Number: 14.4337 Lab Number: L1806118

Report Date: 02/28/18

	LCS	LCSD		%Recovery			RPD	
Parameter	%Recovery Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	
Semivolatile Organics by GC/MS	- Westborough Lab Associated sample(s): 01-03,06-07	Batch:	WG1092044-2 \	NG1092044-3			
Bis(2-chloroethyl)ether	73	70		40-140	4		30	
3,3'-Dichlorobenzidine	69	65		40-140	6		30	
2,4-Dinitrotoluene	103	98		48-143	5		30	
2,6-Dinitrotoluene	114	111		40-140	3		30	
4-Chlorophenyl phenyl ether	86	82		40-140	5		30	
4-Bromophenyl phenyl ether	89	86		40-140	3		30	
Bis(2-chloroisopropyl)ether	73	70		40-140	4		30	
Bis(2-chloroethoxy)methane	78	74		40-140	5		30	
Hexachlorocyclopentadiene	85	77		40-140	10		30	
Isophorone	78	74		40-140	5		30	
Nitrobenzene	87	84		40-140	4		30	
NDPA/DPA	85	82		40-140	4		30	
n-Nitrosodi-n-propylamine	77	73		29-132	5		30	
Bis(2-ethylhexyl)phthalate	89	84		40-140	6		30	
Butyl benzyl phthalate	87	86		40-140	1		30	
Di-n-butylphthalate	85	81		40-140	5		30	
Di-n-octylphthalate	89	86		40-140	3		30	
Diethyl phthalate	85	82		40-140	4		30	
Dimethyl phthalate	88	84		40-140	5		30	
Biphenyl	87	82		40-140	6		30	
4-Chloroaniline	58	59		40-140	2		30	
2-Nitroaniline	114	108		52-143	5		30	
3-Nitroaniline	78	79		25-145	1		30	



Lab Number: L1806118

Report Date: 02/28/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Semivolatile Organics by GC/MS - Westboro	ugh Lab Associ	ated sample(s):	01-03,06-07	Batch:	WG1092044-2 \	NG1092044-3			
4-Nitroaniline	99		95		51-143	4		30	
Dibenzofuran	85		80		40-140	6		30	
1,2,4,5-Tetrachlorobenzene	87		83		2-134	5		30	
Acetophenone	81		75		39-129	8		30	
2,4,6-Trichlorophenol	95		91		30-130	4		30	
p-Chloro-m-cresol	86		82		23-97	5		30	
2-Chlorophenol	78		75		27-123	4		30	
2,4-Dichlorophenol	88		83		30-130	6		30	
2,4-Dimethylphenol	78		70		30-130	11		30	
2-Nitrophenol	106		100		30-130	6		30	
4-Nitrophenol	66		62		10-80	6		30	
2,4-Dinitrophenol	102		97		20-130	5		30	
4,6-Dinitro-o-cresol	119		112		20-164	6		30	
Phenol	42		40		12-110	5		30	
3-Methylphenol/4-Methylphenol	73		68		30-130	7		30	
2,4,5-Trichlorophenol	97		92		30-130	5		30	
Carbazole	84		80		55-144	5		30	
Atrazine	92		87		40-140	6		30	
Benzaldehyde	71		71		40-140	0		30	
Caprolactam	27		27		10-130	0		30	
2,3,4,6-Tetrachlorophenol	93		87		40-140	7		30	



Project Name: USAI Project Number: 14.4337 Lab Number: L1806118

Report Date: 02/28/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	, RPD	Qual	RPD Limits	
Semivolatile Organics by GC/MS - Westborou	ugh Lab Associa	ted sample(s):	01-03,06-07	Batch:	WG1092044-2	WG1092044-3			

LCS %Recovery Qua	LCSD I %Recovery Qual	Acceptance Criteria
61	58	21-120
45	43	10-120
95	92	23-120
87	84	15-120
92	88	10-120
90	86	41-149
	LCS %Recovery Qua 61 45 95 87 92 90	LCS %Recovery LCSD %Recovery Qual 61 58 45 43 95 92 87 84 92 88 90 86



Project Name: USAI Project Number: 14.4337 Lab Number: L1806118

Report Date: 02/28/18

	LCS		LCSD		%Recover	У		RPD	
Parameter	%Recovery	' Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	
Semivolatile Organics by GC/MS-SIM	- Westborough Lab	Associated sample	ole(s): 01-07	Batch: V	VG1092045-2	WG1092045-3			
Acenaphthene	72		76		40-140	5		40	
2-Chloronaphthalene	64		68		40-140	6		40	
Fluoranthene	81		79		40-140	3		40	
Hexachlorobutadiene	57		58		40-140	2		40	
Naphthalene	68		70		40-140	3		40	
Benzo(a)anthracene	88		85		40-140	3		40	
Benzo(a)pyrene	89		86		40-140	3		40	
Benzo(b)fluoranthene	92		88		40-140	4		40	
Benzo(k)fluoranthene	88		84		40-140	5		40	
Chrysene	91		88		40-140	3		40	
Acenaphthylene	68		73		40-140	7		40	
Anthracene	80		82		40-140	2		40	
Benzo(ghi)perylene	87		84		40-140	4		40	
Fluorene	74		77		40-140	4		40	
Phenanthrene	80		81		40-140	1		40	
Dibenzo(a,h)anthracene	88		84		40-140	5		40	
Indeno(1,2,3-cd)pyrene	91		87		40-140	4		40	
Pyrene	81		79		40-140	3		40	
2-Methylnaphthalene	66		68		40-140	3		40	
Pentachlorophenol	76		76		40-140	0		40	
Hexachlorobenzene	75		76		40-140	1		40	
Hexachloroethane	59		61		40-140	3		40	



Project Name: USAI Project Number: 14.4337 Lab Number: L1806118

Report Date: 02/28/18

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	
Semivolatile Organics by GC/MS-SIM - We	estborough Lab As	sociated sa	mple(s): 01-07	Batch: WG	1092045-2 WG1	092045-3			

LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
46	47	21-120
37	38	10-120
79	84	23-120
81	86	15-120
74	74	10-120
92	89	41-149
	LCS %Recovery Qual 46 37 79 81 74 92	LCS %Recovery LCSD Qual LCSD %Recovery Qual 46 47 37 38 37 38 9 84 81 86 74 74 92 89 89 9



Matrix Spike Analysis

Project Name: USAI Batch Quality Control Lab
--

Project Number: 14.4337

-

 Lab Number:
 L1806118

 Report Date:
 02/28/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qua	MSD I Found	MSD %Recovery	R Qual	ecovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/ Client ID: MW-13	MS-SIM - We	stborough Lab	Associated	d sample(s): 01	-07 (QC Batch ID: \	WG1092045-4	WG1092	2045-5 G	QC Sam	ole: L180	06118-04
Acenaphthene	ND	48.8	24	49		30	62		40-140	22		40
Fluoranthene	ND	48.8	24	49		30	62		40-140	22		40
Naphthalene	0.22	48.8	25	51		32	65		40-140	25		40
Benzo(a)anthracene	ND	48.8	28	57		34	70		40-140	19		40
Benzo(a)pyrene	ND	48.8	30	62		39	80		40-140	26		40
Benzo(b)fluoranthene	ND	48.8	30	62		38	78		40-140	24		40
Benzo(k)fluoranthene	ND	48.8	28	57		35	72		40-140	22		40
Chrysene	ND	48.8	28	57		34	70		40-140	19		40
Acenaphthylene	ND	48.8	28	57		37	76		40-140	28		40
Anthracene	ND	48.8	26	53		30	62		40-140	14		40
Benzo(ghi)perylene	ND	48.8	31	64		40	82		40-140	25		40
Fluorene	ND	48.8	26	53		31	64		40-140	18		40
Phenanthrene	ND	48.8	26	53		35	72		40-140	30		40
Dibenzo(a,h)anthracene	ND	48.8	33	68		42	86		40-140	24		40
Indeno(1,2,3-cd)pyrene	ND	48.8	32	66		41	84		40-140	25		40
Pyrene	ND	48.8	24	49		29	59		40-140	19		40

	MS		MSD	Acceptance	
Surrogate	% Recovery	Qualifier % Recov	ery Qualifier	Criteria	
2,4,6-Tribromophenol	44	55		10-120	
2-Fluorobiphenyl	64	80		15-120	
2-Fluorophenol	41	48		21-120	
4-Terphenyl-d14	55	67		41-149	



L1806118

Matrix Spike Analysis	
Batch Quality Control	
	Lab Number:

34

Project Name:USAIProject Number:14.4337

Report Date: 02/28/18

10-120

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	y Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	y RPD	Qual	RPD Limits
Semivolatile Organics by GC Client ID: MW-13	C/MS-SIM - Wes	stborough Lab	Associate	ed sample(s): (01-07 Q0	C Batch ID:	WG1092045-4	WG10	092045-5	QC Sam	ole: L18	06118-04
				MS			MSD		Ассер	otance		
Surrogate			% I	Recovery C	Qualifier	% Rec	overy Qua	lifier	Crit	teria		
Nitrobenzene-d5				56			69		23	3-120		

28



Phenol-d6

Project Name: USAI Project Number: 14.4337

Serial_No:02281818:37 *Lab Number:* L1806118 *Report Date:* 02/28/18

Sample Receipt and Container Information

YES

Were project specific reporting limits specified?

Cooler Information

Cooler	Custody Seal
A	Present/Intact
В	Present/Intact

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	pН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1806118-01A	Vial HCI preserved	В	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1806118-01B	Vial HCI preserved	В	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1806118-01C	Vial HCI preserved	В	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1806118-01D	Amber 1000ml unpreserved	В	7	7	2.6	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1806118-01E	Amber 1000ml unpreserved	В	7	7	2.6	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1806118-01X	Plastic 120ml HNO3 preserved split	В	7	<2	2.6	Ν	Absent		BA-6020T(180),FE-6020T(180),SE- 6020T(180),TL-6020T(180),CA-6020T(180),CR- 6020T(180),K-6020T(180),NI-6020T(180),CU- 6020T(180),BE-6020T(180),ZN-6020T(180),PB- 6020T(180),AB-6020T(180),MN- 6020T(180),AG-6020T(180),SB-6020T(180),CD- 6020T(180),AG-6020T(180),AL-6020T(180),CD- 6020T(180),HG-T(28),HOLD-METAL(180),MG- 6020T(180),CO-6020T(180)
L1806118-02A	Vial HCI preserved	В	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1806118-02B	Vial HCl preserved	В	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1806118-02C	Vial HCI preserved	В	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1806118-02D	Amber 1000ml unpreserved	В	7	7	2.6	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1806118-02E	Amber 1000ml unpreserved	В	7	7	2.6	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1806118-02X	Plastic 120ml HNO3 preserved split	В	7	<2	2.6	Ν	Absent		BA-6020T(180),FE-6020T(180),SE- 6020T(180),TL-6020T(180),CA-6020T(180),CR- 6020T(180),K-6020T(180),NI-6020T(180),CU- 6020T(180),NA-6020T(180),ZN-6020T(180),PB- 6020T(180),AS-6020T(180),MN- 6020T(180),AG-6020T(180),SB-6020T(180),V- 6020T(180),AG-6020T(180),AL-6020T(180),CD- 6020T(180),HG-T(28),HOLD-METAL(180),MG- 6020T(180),CO-6020T(180)
L1806118-03A	Vial HCI preserved	В	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1806118-03B	Vial HCI preserved	В	NA		2.6	Y	Absent		NYTCL-8260-R2(14)



Project Name: USAI Project Number: 14.4337

Serial_No:02281818:37 *Lab Number:* L1806118 *Report Date:* 02/28/18

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	pН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1806118-03C	Vial HCl preserved	В	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1806118-03D	Amber 1000ml unpreserved	В	7	7	2.6	Υ	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1806118-03E	Amber 1000ml unpreserved	В	7	7	2.6	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1806118-03X	Plastic 120ml HNO3 preserved split	В	7	<2	2.6	Ν	Absent		BA-6020T(180),FE-6020T(180),SE- 6020T(180),TL-6020T(180),CA-6020T(180),CR- 6020T(180),K-6020T(180),NI-6020T(180),CU- 6020T(180),NA-6020T(180),ZN-6020T(180),PB- 6020T(180),BE-6020T(180),SB-6020T(180),V- 6020T(180),AG-6020T(180),SB-6020T(180),CD- 6020T(180),HG-T(28),HOLD-METAL(180),MG- 6020T(180),CO-6020T(180)
L1806118-04A	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-04A1	Vial HCI preserved	А	NA		3.5	Υ	Absent		NYTCL-8260-R2(14)
L1806118-04A2	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-04B	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-04B1	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-04B2	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-04C	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-04C1	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-04C2	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-04D	Amber 1000ml unpreserved	А	7	7	3.5	Y	Absent		NYTCL-8270-SIM(7)
L1806118-04D1	Amber 1000ml unpreserved	А	7	7	3.5	Y	Absent		NYTCL-8270-SIM(7)
L1806118-04D2	Amber 1000ml unpreserved	А	7	7	3.5	Y	Absent		NYTCL-8270-SIM(7)
L1806118-04E	Amber 1000ml unpreserved	А	7	7	3.5	Y	Absent		NYTCL-8270-SIM(7)
L1806118-04E1	Amber 1000ml unpreserved	А	7	7	3.5	Y	Absent		NYTCL-8270-SIM(7)
L1806118-04E2	Amber 1000ml unpreserved	А	7	7	3.5	Y	Absent		NYTCL-8270-SIM(7)
L1806118-04X	Plastic 120ml HNO3 preserved split	A	7	<2	3.5	Ν	Absent		BA-6020T(180),FE-6020T(180),SE- 6020T(180),TL-6020T(180),CA-6020T(180),CR- 6020T(180),K-6020T(180),NI-6020T(180),CU- 6020T(180),NA-6020T(180),ZN-6020T(180),PB-

6020T(180),R4-6020T(180),R1-6020T(180),R0-6020T(180),BE-6020T(180),RN-6020T(180),AS-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),HOLD-METAL(180),MG-6020T(180),CO-6020T(180)



Project Name:USAIProject Number:14.4337

Serial_No:02281818:37 *Lab Number:* L1806118 *Report Date:* 02/28/18

Container Info	rmation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	pН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1806118-04X1	Plastic 500ml HNO3 preserved	A	7	<2	3.5	Ν	Absent		BA-6020T(180),FE-6020T(180),SE- 6020T(180),TL-6020T(180),CA-6020T(180),CR- 6020T(180),K-6020T(180),NI-6020T(180),CU- 6020T(180),NA-6020T(180),ZN-6020T(180),PB- 6020T(180),BE-6020T(180),SB-6020T(180),V- 6020T(180),AS-6020T(180),SB-6020T(180),CD- 6020T(180),HG-T(28),HOLD-METAL(180),MG- 6020T(180),CO-6020T(180)
L1806118-04X2	Plastic 500ml HNO3 preserved	A	7	<2	3.5	Ν	Absent		BA-6020T(180),FE-6020T(180),SE- 6020T(180),TL-6020T(180),CA-6020T(180),CR- 6020T(180),K-6020T(180),NI-6020T(180),CU- 6020T(180),NA-6020T(180),ZN-6020T(180),PB- 6020T(180),BE-6020T(180),MN- 6020T(180),AS-6020T(180),SB-6020T(180),V- 6020T(180),AG-6020T(180),AL-6020T(180),CD- 6020T(180),HG-T(28),HOLD-METAL(180),MG- 6020T(180),CO-6020T(180)
L1806118-05A	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-05B	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-05C	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-05D	Amber 1000ml unpreserved	А	7	7	3.5	Y	Absent		NYTCL-8270-SIM(7)
L1806118-05E	Amber 1000ml unpreserved	А	7	7	3.5	Y	Absent		NYTCL-8270-SIM(7)
L1806118-05X	Plastic 120ml HNO3 preserved split	A	7	<2	3.5	Ν	Absent		BA-6020T(180),FE-6020T(180),SE- 6020T(180),TL-6020T(180),CA-6020T(180),CR- 6020T(180),K-6020T(180),NI-6020T(180),CU- 6020T(180),NA-6020T(180),ZN-6020T(180),PB- 6020T(180),BE-6020T(180),MN- 6020T(180),AS-6020T(180),SB-6020T(180),V- 6020T(180),AG-6020T(180),AL-6020T(180),CD- 6020T(180),HG-T(28),HOLD-METAL(180),MG- 6020T(180),CO-6020T(180)
L1806118-06A	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-06B	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-06C	Vial HCI preserved	А	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L1806118-06D	Amber 1000ml unpreserved	А	7	7	3.5	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1806118-06E	Amber 1000ml unpreserved	А	7	7	3.5	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)



Project Name:USAIProject Number:14.4337

Serial_No:02281818:37 *Lab Number:* L1806118 *Report Date:* 02/28/18

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	рН рН		Pres	Seal	Date/Time	Analysis(*)
L1806118-06X	Plastic 120ml HNO3 preserved split	A	7	<2	3.5	Ν	Absent		BA-6020T(180),FE-6020T(180),SE- 6020T(180),TL-6020T(180),CA-6020T(180),CR- 6020T(180),K-6020T(180),NI-6020T(180),CU- 6020T(180),NA-6020T(180),ZN-6020T(180),PB- 6020T(180),BE-6020T(180),MN- 6020T(180),AS-6020T(180),SB-6020T(180),V- 6020T(180),AG-6020T(180),AL-6020T(180),CD- 6020T(180),HG-T(28),HOLD-METAL(180),MG- 6020T(180),CO-6020T(180)
L1806118-07A	Vial HCl preserved	В	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1806118-07B	Vial HCl preserved	В	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1806118-07C	Vial HCl preserved	В	NA		2.6	Υ	Absent		NYTCL-8260-R2(14)
L1806118-07D	Amber 1000ml unpreserved	В	7	7	2.6	Υ	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1806118-07E	Amber 1000ml unpreserved	В	7	7	2.6	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1806118-07X	Plastic 120ml HNO3 preserved split	В	7	<2	2.6	Ν	Absent		BA-6020T(180),FE-6020T(180),SE- 6020T(180),TL-6020T(180),CA-6020T(180),CR- 6020T(180),K-6020T(180),NI-6020T(180),CU- 6020T(180),NA-6020T(180),ZN-6020T(180),PB- 6020T(180),BE-6020T(180),MN- 6020T(180),AS-6020T(180),SB-6020T(180),V- 6020T(180),AG-6020T(180),AL-6020T(180),CD- 6020T(180),HG-T(28),HOLD-METAL(180),MG- 6020T(180),CO-6020T(180)
L1806118-08A	Vial HCl preserved	В	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1806118-08B	Vial HCI preserved	В	NA		2.6	Y	Absent		NYTCL-8260-R2(14)



Serial_No:02281818:37

Project Name: USAI

Project Number: 14.4337

Lab Number: L1806118

Report Date: 02/28/18

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

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.

list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum. Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after

adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH. Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol 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

Report Format: DU Report with 'J' Qualifiers



Project Name: USAI

Project Number: 14.4337

Serial_No:02281818:37

Lab Number:	L1806118
Report Date:	02/28/18

Data Qualifiers

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 which was detected above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- C -Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- **D** Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- 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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.



Project Name: USAI Project Number: 14.4337

 Lab Number:
 L1806118

 Report Date:
 02/28/18

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: 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: <u>NPW</u>: Dimethylnaphthalene, 1,4-Diphenylhydrazine; <u>SCM</u>: Dimethylnaphthalene, 1,4-Diphenylhydrazine. EPA 300: DW: Bromide EPA 6860: SCM: Perchlorate EPA 9010: <u>NPW</u> and SCM: Amenable Cyanide Distillation SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3. **Mansfield Facility**

SM 2540D: TSS EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187. EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene. Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, 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: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, 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, SM9222D.

Mansfield Facility:

Drinking Water EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water EPA 200.7: AI, 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.

Serial_No:02281818:37

	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Wh Albany, NY 12205: 14 Walk Tonawanda, NY 14150: 275	itney Rd, Suite 5 ter Way 5 Cooper Ave, Suite 1	ney Rd, Suite 5 'Way Cooper Ave, Suite 105		Page / of /		Date Rec'd in Lab			2/22/18		ALPHA Job # L1806118		
8 Walkup Dr.	Mansfield, MA 0204 320 Forbes Blvd	Project Information					Deliverables					100	Billing Information		
TEL: 508-898-9220 FAX: 508-898-9103	TEL: 508-822-9300	Project Name: USAI					ASP-A ASP-B						Same as Client Info	,	
1700.000-0155	FAA. 000-022-3200	Project Location: N	ew Wind	GAR N	Y			EQu	IS (1 File		EQUIS (4 File)	PO# 111 11 20 -		
Client Information		Project # 14, 433	17	1			1 E	Othe	er	<i>.</i>	d	60 S (200 C (20) C (200 C (200 C (200 C (200 C (20) C (200 C (20) C (200 C (200 C (200 C (200 C (20) C (20) C (200 C (20) C (20) C (200 C (20) C (20) C (20) C (200 C (20)	14.4337		
Client: CT Male	2 Accociates	(Use Project name as Project #)						Regulatory Requirement					Disposal Site Information	50	
Address: 50 Cent	tury Hill Dr.	Project Manager: Tim MCIVER Prove Alle WALL						NY TOGS NY Part 375							
Latham	NY 12110	ALPHAQuote #:						AWQ Standards NY CP-51					Please identify below location applicable disposal facilities.	n of	
Phone: 518 - 780	6-7460	Turn-Around Time											Dispagal Eaglithe		
Fax: 518 - 79	(0- 7299	Stand	Standard Due Date:						prostricted	Lies	1 one				
Email: J. MCIVEROC	TMALE . COM . DO	Rush (only if pre approv	Rush (only if pre approved) # of Dave						Count Die	shares					
These samples have h	neen previously analy	red by Alpha	d by Alpha						Sewei Dis	charge		Other:	10		
Other project specific	c requirements/com	ments:					ANA	T	,			_	Sample Filtration		
Please specify Metal	s or TAL.	ha Recondigue P	l.andujar	-monei (hypher	(/@c+n /)	vale com	1-8260	1-8270	Matals Hg				Done Lab to do Preservation Lab to do	ta Bo	
ALPHA Lab ID			Collection		Sample Sampler's		22	12	5				in the opening wording		
(Lab Use Only)	(Lab Use Only)		Date	Time	Matrix	Initials	S	3	1.2				Sample Specific Comments	- 0	
06118 - 01	MW-1		02/21/203	10:05	Gut	TC	X	N	×	-		-	oample specific comments		
02	MW-2		1 21/2010	10:20	1	TC	~	1	13	-	++	-		5	
03	MINI-5			10.50		Te	-	5	T	+		-		0	
ou	MW-13			12:00		JC		3	~		\vdash	-	A STATISTICS AND A STATISTICS	2	
6	MW-110			12:20		JD		- X	X	-		-	MS/MSD	15	
04	14 45 - 10			13.20		JC	~	X	X			-	-	5	
00	ED-GW11	A2212010		12.45		36	X	X	K			-		5	
04	PU-GNI	02212010	EDV .	-	V.	JC	X	X	×	-		-		5	
00	IXONSPORT)	Blank	100 121 21		-	-	X			1				2	
			_												
Pasanatiun Codo:	Container Code														
x = None 3 = HCl 2 = HNO ₃ 0 = H ₂ SO ₄	P = Plastic A = Amber Glass V = Vial G = Glass	Westboro: Certification Mansfield: Certification	No: MA935 No: MA015	lo: MA935 lo: MA015		Container Type		A					Please print clearly, legibly and completely. Samples can not be logged in and		
= NaOH	B = Bacteria Cup					10001VBUVB	P	A					start until anu amhicuitia	not not	
= MeOH = NaHSO.	C = Cube O = Other	Relinquished	d By:	Date/Time F			eceived By:			-	Date/Time		resolved. BY EXECUTIN	VG	
= Na ₂ S ₂ O ₃ /E = Zn Ac/NaOH = Other	E = Encore D = BOD Bottle	Banjan hog	iver AAL	02-21-2018 02-21-18	1610	D	m Wiga At			D2-21-18 1605 2/22/18 czz		THIS COC, THE CLIEN HAS READ AND AGRE TO BE BOUND BY ALP	T ES HA'S		
orm No: 01-25 HC (rev. 30)-Sept-2013)												TERMS & CONDITIONS (See reverse side.)	5.	

